BEFORE THE BOARD OF COMMISSIONERS OF LANE COUNTY, OREGON

ORDINANCE NO: PA 1345

IN THE MATTER OF ADOPTING AN ORDINANCE ESTABLISHING THE EUGENE URBAN GROWTH BOUNDARY, INCLUDING AN EXPANSION FOR EMPLOYMENT, PARKS AND SCHOOLS BY: AMENDING TEXT AND MAPS IN THE EUGENE-SPRINGFIELD METROPOLITAN AREA GENERAL PLAN; ADOPTING THE ENVISION EUGENE COMPREHENSIVE PLAN FOR THE URBANIZABLE LAND WITHIN THE EUGENE URBAN GROWTH BOUNDARY; REPEALING THE EUGENE COMMERCIAL LANDS STUDY; AMENDING THE PUBLIC FACILITIES AND SERVICES PLAN; AMENDING THE EUGENE 2035 TRANSPORTATION SYSTEM PLAN; AMENDING THE GOAL 5 WATER RESOURCES AND CONSERVATION PLAN; AND AMENDING THE LANE COUNTY RURAL COMPREHENSIVE PLAN TO MODIFY OFFICIAL COUNTY PLAN AND ZONE MAPS TO REFLECT THE EXPANSION OF THE EUGENE URBAN GROWTH BOUNDARY.

WHEREAS, historically, the urban growth boundary ("UGB") for the City of Eugene and the City of Springfield was a shared UGB, referred to as the "Metropolitan UGB," within which Eugene's jurisdictional area of responsibility was the land on the west side of Interstate 5 and Springfield's jurisdictional area of responsibility was the land on the east side of Interstate 5; and

WHEREAS, House Bill 3337, passed by the Oregon State Legislature in 2007 and codified at ORS 197.304, provides: "Notwithstanding an intergovernmental agreement...or acknowledged comprehensive plan provisions to the contrary, a city within Lane County that has a population of 50,000 or more within its boundaries shall, separately from any other city: (a) Establish an urban growth boundary, consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan."; and

WHEREAS, in 2011 the City of Springfield and Lane County took actions that established the Springfield UGB by adopting a division of the Metropolitan UGB along Interstate 5, with the land east of Interstate 5 thereafter included in the Springfield UGB and the remainder land on the west of Interstate 5 to be included in a UGB for Eugene; and

WHEREAS, with this Ordinance, Lane County approves the establishment and expansion of the Eugene UGB to accommodate the City's 20-year (2012-2032) need for additional employment, park and a school land; and
WHEREAS, in 1992, by Ordinances No. 19852 and 19879, the Eugene City Council adopted the Eugene Commercial Lands Study as a refinement of the Eugene-Springfield Metropolitan Area General Plan to pertain to the Eugene portion of the Metropolitan UGB. The Lane County Board of Commissioners also adopted the Eugene Commercial Lands Study by PA 1018 in 1992. The Eugene Commercial Lands Study concluded that the Eugene side of the Metropolitan UGB had a surplus of commercial land to meet Eugene's needs for commercial land through, at least, 2010; and

WHEREAS, in 1992, by Ordinance No. 19866, the Eugene City Council approved the Metropolitan Industrial Lands Special Study Inventory Report and Metropolitan Industrial Lands Special Study Policy Recommendations Draft Report, pertaining to the entire Metropolitan UGB. The City of Springfield and Lane County Board of Commissioners also approved both reports (Lane County did so by PA 1022 in 1992). The Report and Study concluded the Metropolitan UGB had a surplus of industrial land to meet both Cities' needs through, at least, 2010. The Report and Study are no longer valid for Eugene; and

WHEREAS, the City of Eugene has taken numerous "efficiency measures" to increase the likelihood of new employment opportunities inside the Eugene UGB; and

WHEREAS, as explained in detail by the findings attached as an exhibit to this Ordinance, the City and County have determined that the City's entire need for employment land cannot be satisfied through "efficiency measures" and the Eugene UGB must be expanded to include additional land to meet the employment needs of Eugene's population through 2032; and

WHEREAS, as explained in detail by the findings attached as an exhibit to this Ordinance, the City and County have determined that the Eugene UGB must be expanded to include additional land for two community parks and a school to meet the park and school needs of Eugene's population through 2032; and

WHEREAS, it is now necessary to amend the Lane County RCP to remove territory from its planning jurisdiction as depicted on official plan and zone maps and to add that territory to the Eugene UGB; and

WHEREAS, it is also necessary to reflect the City of Eugene's revised Urban Growth Boundary location on the official Lane County RCP plan and zone maps.

NOW, THEREFORE, the Board of County Commissioners of Lane County ORDAINS as follows:

1. The Eugene-Springfield Metropolitan Area General Plan is amended as follows:

   (a) The text of the Eugene-Springfield Metropolitan Area General Plan is amended as shown on Exhibit A-1 this Ordinance.

   (b) The Eugene-Springfield Metropolitan Area General Plan "Plan Boundaries" map is amended to add "Eugene Urban Growth Boundary" to the legend and to provide an illustrative depiction of the Eugene UGB as shown on Exhibit A-2 to
this Ordinance. All other features of that map remain unchanged by this Ordinance.

(c) The Eugene-Springfield Metropolitan Area General Plan "Plan Diagram" map is amended to:

(1) Add "Eugene Urban Growth Boundary" to the legend and to provide an illustrative depiction of the Eugene UGB as shown on Exhibit A-2 to this Ordinance; and

(2) Apply Metro Plan land use designations to the land added to the Eugene UGB as described on the table at Exhibit A-3 and as shown on the maps at Exhibit A-4 to this Ordinance.

All other features of the Plan Diagram remain unchanged by this Ordinance.

2. The Envision Eugene Comprehensive Plan at Exhibit B-1 to this Ordinance is hereby adopted for application to the Eugene urbanizable lands (land located outside the Eugene City Limits and within the Eugene UGB).

(a) The Eugene Urban Growth Boundary Location Map on the compact disc at Exhibit B-2 to this Ordinance is adopted as Appendix A to the Envision Eugene Comprehensive Plan and is the official Eugene Urban Growth Boundary Location Map. The depiction of the Eugene UGB included on the Eugene Urban Growth Boundary map in the body of the Envision Eugene Comprehensive Plan is a representative depiction of the UGB location shown on Exhibit B-2 (Appendix A to the Envision Eugene Comprehensive Plan), and is provided only for illustrative purposes.

(b) The Envision Eugene Employment Land Supply Study at Exhibit B-3 to this Ordinance is adopted by Lane County as Appendix B to the Envision Eugene Comprehensive Plan solely to support the actions taken by this Ordinance. This Study is not applicable to and is not intended to provide support for County actions in other areas in Lane County.

3. The Eugene Commercial Lands Study adopted by Lane County Ordinance No. PA 1018 and amended by Lane County Ordinance No. PA 1018-A is repealed.

4. The Eugene-Springfield Metropolitan Area Public Facilities and Services Plan text is amended as shown in Exhibit C-1 to this Ordinance, and Maps 1, 2, 3 and 8 are amended as shown on the maps at Exhibit C-2 to this Ordinance.

5. The Eugene 2035 Transportation System Plan is amended as shown in Exhibit D to this Ordinance.

6. The Goal 5 Water Resources Conservation Plan is amended as shown in Exhibit E to this Ordinance.

7. Policies and plan designation amended by this Ordinance remain in force to authorize a punishment, penalty or forfeiture incurred, or a suit, prosecution or proceeding pending when the amendment takes effect, for an offense or violation
committed under the amended Ordinance or regulation prior to the effective date of this Ordinance.

8. The Official Lane County Rural Comprehensive Plan ("RCP") plan designation maps # 1604, 1703, 1704, 1803, and 1804, included as Exhibits F-1 through F-5, are hereby repealed and replaced with the amended RCP plan designation maps # 1604, 1703, 1704, 1803, and 1804, included as Exhibits F-6 through F-10.

9. The RCP zone maps # 1604, 1703, 1704, 1803, and 1804, included as Exhibits F-11 through F-15, are hereby repealed and replaced with the amended RCP zone maps # 1604, 1703, 1704, 1803, and 1804, included as Exhibits F-16 through F-20.

10. The prior plan and zone diagram designations repealed or changed by this Ordinance remain in full force and effect to authorize prosecution of persons in violation thereof prior to the effective date of this Ordinance.

11. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion constitutes a separate, distinct and independent provision, and such holding does not affect the validity of the remaining portions hereof.

FURTHER, although not part of this Ordinance, the findings set forth in Exhibit G to this Ordinance, are provided in support of the actions taken by this Ordinance.

ENACTED this 8th day of August, 2017.

Pat Farr, Chair
Lane County Board of Commissioners

Recording Secretary for this Meeting of the Board

APPROVED AS TO FORM
Date

LANE COUNTY OFFICE OF LEGAL COUNSEL.
A. The second paragraph of the introductory text in Chapter II of the Metro Plan is amended to provide as follows:

As explained in the Metro Plan Preface and Chapter I, Eugene, Springfield and Lane County [are taking incremental steps to] have transitioned from a single “metropolitan UGB” to two separate UGBs, “the Eugene UGB” and “the Springfield UGB.” The general references to “the UGB” within this Chapter II shall be interpreted as applying to any UGB within the Metro Plan area, unless the text specifically refers to the metropolitan UGB, the Springfield UGB or the Eugene UGB. [When] Because both the Springfield UGB and the Eugene UGB have been established, the metropolitan UGB [will cease to] no longer exists but references to the metropolitan UGB remain in the Metro Plan for historic reference.

B. The third paragraph of Section E in Chapter II of the Metro Plan is amended, with footnotes renumbered as needed, to provide as follows:

[With] To make the transition mandated in 2007 by ORS 197.304, the shared metropolitan UGB [will be] has been replaced with two separate UGBs (the Eugene UGB and the Springfield UGB). This changed the land use work programs for the three jurisdictions. Evaluation of the sufficiency of the 2015 metropolitan UGB was replaced with an in-depth analysis of each city’s independent needs and the supplies of land that exist with respect to the separate areas of jurisdictional responsibility. That process began with the three jurisdictions’ adoption of city-specific population forecasts in Chapter I of the Metro Plan. In 2011, the City of Springfield, with co-adoption by Lane County, amended the Metro Plan to establish its own UGB consistent with ORS 197.304.7 The City of Eugene, with co-adoption by Lane County, amended the Metro Plan to establish its own UGB in 2017.\[fn\]

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7 Springfield Ordinance No. 6268 and Lane County Ordinance No. PA 1274.

[fn] Eugene Ordinance No.20584 and Lane County Ordinance No. PA 1345.
C. The first footnote in Section G of Chapter II of the Metro Plan is amended to provide as follows:

As part of the adoption of the City of Springfield’s city-specific UGB (through Springfield Ordinance No. 6268 and Lane County Ordinance No. PA 1274 in 2011), the Metro Plan Diagram was amended so that the area west of Interstate 5 is no longer included in Springfield’s UGB. In 2017, the area included in the City of Eugene’s UGB (the area west of Interstate 5) was expanded (through Eugene Ordinance No. 20584 and Lane County Ordinance No. PA 1345).

D. The second paragraph in “Campus Industrial” under “Land Use Designations” of Section G in Chapter II of the Metro Plan is amended to provide as follows:

Conceptual development planning, performance standards, or site review processes shall be applied to ensure adequate circulation, functional coordination among uses on each site, a high quality environmental setting, and compatibility with adjacent areas. **Except in Eugene,** [A] a 50-acre minimum lot size shall be applied to ownerships of 50 or more acres to protect undeveloped sites from piecemeal development until a site development plan has been approved by the responsible city.

E. The last paragraph in “Factor 7” under “Urban Growth Boundary” of Section G in Chapter II of the Metro Plan is amended to provide as follows:

On the east side of Interstate 5, the location of the UGB is either tax lot-specific (coterminal with tax lot boundaries) or specifically identified by a metes and bounds description. On the west side of I-5, the **location of the Eugene UGB is [tax lot specific where it is coterminal with city limits, where it has been determined through the annexation process, and where it falls on the outside edge of existing or planned rights-of-way] mapped in the Envision Eugene Comprehensive Plan at a scale sufficient to determine which particular lots or parcels, or portions of them, are included in the Eugene UGB. The Eugene UGB location shown on the Metro Plan Diagram and Metro Plan Boundaries Map is for illustrative purposes only. In other places on the west side of I-5, the UGB is determined on a case-by-case basis through interpretation of the Metro Plan Boundaries Map in this Metro Plan and the following factors (see Metro Plan Boundaries Map Key):

- Protection of Agricultural Lands
- Protection of Forest Lands
• Ridgeline (Drainage Basin)
• Orderly and Economic Public Services
• Floodway Fringe
• Protection of Wetlands
• Protection of Sand and Gravel Resources
• Airport Protection
• Existing Development and Services (City Limits)
• Meet Economic Goals
• Meet Housing Goals

11 The location of the Springfield UGB is set out on the table entitled “List of tax lots which are adjacent to and inside, or split by the UGB” and the document entitled “Summary of Methodology Utilized to Refine the Location of the Springfield Urban Growth Boundary.” The table and methodology document were added to the Metro Plan in 2011 as part of the adoption of the City of Springfield’s city-specific UGB (through Springfield Ordinance No. 6268 and Lane County Ordinance No. PA 1274 in 2011.

F. The section titled “Urban Growth Boundary Location Description Keyed to Metro Plan Plan Boundary Map” of Section G in Chapter II of the Metro Plan is deleted as follows:

[Urban Growth Boundary Location Description Keyed to Metro Plan Plan Boundaries Map]

For up-to-date information regarding the areas west of Interstate 5 where the UGB is tax lot-specific (i.e., where the UGB and city limits are the same, through annexations or to the outside edge of existing rights-of-way), contact the planning offices of the City of Eugene or Lane County. As explained in Chapter II-G, the metropolitan UGB was developed considering the seven factors that were then set out in LCDC Statewide Planning Goal 14: Urbanization. The following matrix outlines key factors that will be considered to determine the location of the metropolitan UGB west of Interstate 5 Highway where it is not tax lot specific.

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Metro Plan Metropolitan Urban Growth Boundary Map Key

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<th>Protect Agricultural Lands</th>
<th>Protect Forest Lands</th>
<th>Protect Wetlands</th>
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G. The heading of Section B in Chapter III of the Metro Plan is amended, a new first paragraph is added with footnotes renumbered as needed, to provide as follows:

B. Economic Element (Not Applicable to Eugene)

\[\text{The Economic Element of the Metro Plan no longer applies on the west side of Interstate 5. The Envision Eugene Comprehensive Plan sets out the Economic Development policies that apply within the Eugene UGB}^{[fn]}\]

\^[fn] See the Envision Eugene Comprehensive Plan, originally adopted by Eugene Ordinance No. 20584 and Lane County Ordinance PA 1345.\]

H. Footnotes throughout the Metro Plan are renumbered to be consistent with the amendments made herein.
*This map is depicted at an imprecise scale, and is for illustrative purposes only. For Eugene’s official adopted urban growth boundary, please see the digital Appendix A to the Envision Eugene Comprehensive Plan.*
## Clear Lake UGB Expansion Area:

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<th>Zoning Districts + Overlays</th>
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* The majority of tax lot 170408001401 is located out of the UGB expansion area.
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.
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1 Policies associated with topics in grayed out chapters can be found in the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). Future phases of the Envision Eugene Comprehensive Plan will include Eugene-specific policies to address these areas.
Introduction

Overview

We envision Eugene as a city where future growth is in alignment with the values of the community, supporting the health, wellbeing, and prosperity of all community members.

The Envision Eugene Comprehensive Plan pursues this vision by guiding the City in its land use planning for future growth within Eugene’s urban growth boundary. The policy direction in the Envision Eugene Comprehensive Plan is based on the community’s vision. It is intended to address the needs and desires of Eugene’s residents, as well as the requirements of Oregon’s Statewide Planning Goals. It is a state-mandated land use plan, adopted by the City to serve as Eugene’s city-specific comprehensive land use plan.

Background

Prior to the adoption of the Envision Eugene Comprehensive Plan, the City of Eugene (the City) addressed its comprehensive land use planning needs through the regional Eugene-Springfield Metropolitan Area General Plan (Metro Plan). Many of the Metro Plan policies were based on the fact that Eugene and Springfield shared a single, regional urban growth boundary.
Oregon Revised Statute (ORS) 197.304, adopted by the Oregon Legislature in 2007 with the passage of House Bill 3337, required Eugene and Springfield to divide their shared urban growth boundary, so that each of the cities would have its own, separate urban growth boundary and separate policies for land uses within it.

The Envision Eugene Comprehensive Plan is the result of Eugene’s efforts to implement ORS 197.304 by adopting Eugene-specific policies to address land use issues that would no longer be addressed as a region. The full development and adoption of all chapters of the Envision Eugene Comprehensive Plan will take place in several steps, over several years. This first phase of the comprehensive plan focuses on those policies and elements required to adopt a Eugene-specific urban growth boundary. As each new chapter of the Envision Eugene Comprehensive Plan is adopted, the Metro Plan will be amended to identify the Metro Plan provisions that will no longer apply to Eugene and to refer readers to the Envision Eugene Comprehensive Plan instead. Ultimately, the Metro Plan will continue to serve as Eugene’s comprehensive plan only as needed to address those land use planning responsibilities that remain regional in nature.² The relationship between the Envision Eugene Comprehensive Plan and the Metro Plan is addressed below.

How to Use the Comprehensive Plan

The Envision Eugene Comprehensive Plan is a formally adopted, legally binding land use plan. Policies in the Envision Eugene Comprehensive Plan direct the City as it considers future legislative actions. A policy should not be applied as a criterion for approving or denying an individual land use

² In addition to the continued collaboration through the Metro Plan and other regional land use plans, such as the regional transportation system plan and the regional public facilities and services plan, Eugene remains committed to working collaboratively with Springfield and Lane County through other initiatives, such as regional economic prosperity planning.
development application unless such direction is specifically stated in the policy. The City’s land use code, which implements the policies of this comprehensive plan through detailed regulation, includes the determining criteria for individual land use applications. For some development applications, there may be policies in the Metro Plan and/or refinement plans that specifically apply as criteria.

The Envision Eugene Comprehensive Plan will ultimately contain a set of chapters that address a full range of specific aspects of land use planning. Each chapter begins with an introductory section, followed by goals and/or policies. The introductory text is provided for general explanatory purposes only. In the future, the Envision Eugene Comprehensive Plan will also include a land use diagram and descriptions of land use designations. The terms “goal” and “policy” are used specifically in this comprehensive plan to mean:

- **Goals** articulate the overarching aspirations of the community. The Envision Eugene Comprehensive Plan goals are broad statements that describe our collective hopes for the way in which our community will grow. A goal is aspirational and may not be fully attained within a particular time frame.

- **Policies** are statements adopted to provide a consistent course of action and move the community toward attainment of its goals. Policies in the Envision Eugene Comprehensive Plan guide the work of the City Manager and staff in formulating proposed changes to the Eugene Code and other regulatory documents, to guide other work programs and long range planning projects, and preparation of the budget and capital improvement program. These policies will not be used in determining whether the City shall approve or deny individual land use development applications unless such direction is specifically stated in the policy. New land use plans and changes to the City’s land use code and land use plans must be consistent with the policies in the Envision Eugene Comprehensive Plan.

The policies of the various chapters are interrelated and, together, create the City’s policy framework for land use planning. There may be conflicts and inconsistencies between and among some policies. When making decisions based on the Envision Eugene Comprehensive Plan, not all of the policies can be met to the same degree in every instance. Use of the Envision Eugene Comprehensive Plan requires a balancing of its various policies on a case-by-case basis, with an emphasis on those policies most pertinent to the issue at hand.

The policies in the Envision Eugene Comprehensive Plan vary in their scope and implications. Some call for a specific City action; others call for a City-led study aimed at developing more specific policies later; and still others are directives the City must address when adopting or amending its land use code or plans. The common theme of all the policies is that each represents the City’s approach toward land use problem-solving and goal
realization. Adoption of the Envision Eugene Comprehensive Plan does not necessarily commit the City to immediately carry out each policy to the letter. The City will carry out the policies to the best of its ability, given sufficient time and resources.

**Relationship to Other Adopted Plans**

The Envision Eugene Comprehensive Plan is one plan among a family of land use plans at the state, regional and local level. As a state-mandated land use plan, the comprehensive plan has defined relationships to other adopted plans.

At the state level, Statewide Planning Goals, related statues and administrative rules provide a framework for all local land use planning. All policies in the Envision Eugene Comprehensive Plan must comply with these rules, providing a local framework for the broader vision of planning in Oregon.

At the regional and local level, the two applicable comprehensive plans are the Envision Eugene Comprehensive Plan and the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). The Envision Eugene Comprehensive Plan is the basic guiding policy document for land use planning within the urban growth boundary for the City of Eugene. The Eugene-Springfield Metropolitan Area General Plan is the basic guiding land use policy document for regional land use planning.

As noted above, the full development and adoption of all chapters of the Envision Eugene Comprehensive Plan will take place in several steps, over several years. During that time, Metro Plan policies that have not been explicitly replaced with policies in the Envision Eugene Comprehensive Plan will continue to apply to Eugene. If inconsistencies occur between the Envision Eugene Comprehensive Plan and the Metro Plan, the Envision Eugene Comprehensive Plan is the prevailing policy document.

Within the urban growth boundary, some adopted plans refine the policies of the comprehensive plans to a greater level of detail in some way. Eugene’s refinement plans (including all adopted land use studies and plans) must be consistent with applicable provisions in both the Envision Eugene Comprehensive Plan and the Metro Plan. As is true for the Metro Plan, if inconsistencies occur between the Envision Eugene Comprehensive Plan and a refinement plan, the Envision Eugene Comprehensive Plan is the prevailing policy document, as required by state law.
Closing

The Envision Eugene Comprehensive Plan translates the values of our community into land use policy. Some of those values come from our local community, articulated through the Envision Eugene pillars.

1. Provide ample ECONOMIC OPPORTUNITIES for all community members
2. Provide HOUSING AFFORDABLE to all income levels
3. Plan for CLIMATE CHANGE and ENERGY RESILIENCY
4. Promote COMPACT URBAN DEVELOPMENT and EFFICIENT TRANSPORTATION OPTIONS
5. Protect, repair and enhance NEIGHBORHOOD LIVABILITY
6. Protect, restore and enhance NATURAL RESOURCES
7. Provide for ADAPTABLE, FLEXIBLE and COLLABORATIVE implementation

Other values come from our state-wide community, and the way we as Oregonians have chosen to care for our resources. While certain chapters, goals or policies may be more obviously related to some values than others, the common foundation of all values are reflected throughout the plan. Over time, these policies can shape our city, bringing us closer to realizing the goals of our community.
Economic Development

Introduction

Economic opportunity is essential for a high quality of life, both as individuals and the community as a whole. A healthy economy allows community members to reach their full potential, promotes the health and well-being of individuals, households, and the broader community, and supports a strong tax base for public services.

Throughout the history of Eugene, the types of economic opportunities available have shifted dramatically. The city is becoming more integrated into the global marketplace, and is growing away from a primarily natural resource-based economy to a more diverse base of industry, commerce, and entrepreneurship. The City of Eugene has a role in promoting economic opportunity that is equitable, environmentally sensitive, and reflects local culture and values.

There are considerable challenges to tackle with wages that lag behind national and state averages, unemployment, homelessness, and equity issues that require strategic attention. Economic development is an effort with partners in public, nonprofit and private sectors. The City is committed to collaborating with those partners to pursue initiatives that leverage resources to the greatest effect. The Regional Prosperity Economic Development Plan provides a foundation for initiatives that
enhance the prosperity of the greater area, with further analysis provided in the Employment Land Supply Study (Appendix B).

This chapter lays out goals and policies to guide City efforts to enhance prosperity for households, businesses, and the broader community. The City of Eugene supports economic opportunity through an array of activities. Zoning and the land use code affect the geographic distribution and the built environment that supports economic activities, while incentives and other forms of programmatic support enable projects that otherwise might not happen. All seven pillars of Envision Eugene are balanced in the development of the policies of this comprehensive plan, though some pillars may be more topical than others for any given chapter.

The City of Eugene’s goals for economic development are:

1. **Household Prosperity**
   
   Broaden and diversify the Eugene economy so all residents have ample employment opportunities with increased average income, improving individual and household quality of life.

2. **Business Development**

   Encourage business development that leads to a higher employment rate and an economic climate where business ventures grow and thrive with the land, zoning, and infrastructure they require.
3. Community Vitality

Provide appropriate support for the variety of distinct economic activity centers in the community, including downtown Eugene, key corridors and core commercial areas, neighborhood business districts, and the region as a multijurisdictional entity.

The policies guiding economic development are organized into the following topic areas:

- Overall Economic Development Objectives
- Targeted Industries
- Land Supply
- Short-term Land Supply
- Infrastructure, Facilities and Transportation Planning
- Downtown, Key Corridors and Core Commercial Areas

Policies

Overall Economic Development Objectives – Policies in this section focus on issues that are a priority for the community as a whole.

3.1 Employment growth. Plan for an employment growth rate that is identified in the current adopted Economic Opportunities Analysis. Strive to capture a majority of the region’s employment growth within the City of Eugene.

3.2 Economic advantages. Strengthen and capitalize on Eugene’s comparative economic advantages, including:

- Our highly educated and skilled workforce
- Partnerships with the University of Oregon, Lane Community College and other educational institutions
- Growing national presence in the specialty food and beverage, software, heavy machinery, advanced materials, and wood products industries
- Access to natural resources and open spaces
- High quality of life

3.3 Expanding Eugene’s assets. Recognize and enhance special areas of strength and local assets that attract sectors such as tourism, hospitality, and retirement living. These include:

- A healthy, outdoor-oriented lifestyle and Track Town USA branding
• Easy access to outdoor recreation opportunities and agricultural tourism
• Local food and beverage manufacturing and restaurants
• Walkable and livable neighborhoods served by transit
• City and University sponsored arts, cultural and athletic events

3.4 Business incubators. Encourage the formation of new business ventures in the creative arts, small scale industry, technology, food and beverage, and other sectors by supporting a variety of flexible, collaborative and incubator spaces accessible to residents throughout the city.

3.5 Business retention and expansion. Facilitate the retention and growth of existing businesses in the community.

3.6 Responsible economic development. Support economic development initiatives that reflect long-term priorities, improve community resilience to climate change and natural hazards, improve energy efficiency or reduce greenhouse gas emissions, and enhance opportunities to borrow, rent, or otherwise make better use of underutilized public and private assets.

3.7 Home-based and microenterprises. Promote the development of small, locally-owned businesses that have minimal adverse impacts on their surrounding neighborhoods.

3.8 Industry clusters. Support networks among associated targeted industry clusters for innovative networking, information sharing, and to provide opportunities for business growth.

Targeted Industries – Policies in this section identify established and emerging industries that are a particular focus for the City.
3.9 **Advanced manufacturing.** Encourage the expansion of existing and the location of new manufacturing activities, especially in advanced technology and manufacturing, heavy machinery, advanced materials, and advanced wood products.

3.10 **Food and beverage manufacturing.** Promote the expansion of food and beverage manufacturing and processing facilities, including beer and wine, frozen desserts, agricultural products, and natural foods.

3.11 **Health and wellness.** Promote the development of expanded opportunities in the health and wellness sectors, including health care, biomedical research and development, and facets of healthy living, such as active transportation and outdoor recreation.

3.12 **Clean technology and renewable energy.** Support the development of an industry cluster in renewable energy and clean technology.

3.13 **Software and educational technology.** Support the expansion of the local software development field, including educational, gaming, and other types of computer software.

3.14 **Biomedical and biotechnology.** Support the development and expansion of an industry cluster in advanced biological technology.

**Land Supply** – *Policies in this section address City strategies for the appropriate designation and assembly of available land for development.*

3.15 **Adequate land supply.** Designate an adequate number of sites within the urban growth boundary to accommodate growing local
businesses and new targeted industries, especially a diversified manufacturing base that includes advanced manufacturing, food and beverages, wood products manufacturing, regional distribution, trade, and services such as offices, software developers, educational technology, corporate headquarters, and other employment uses.

3.16 **Parcel size and suitability.** Designate land for industrial sites in the various sizes needed to accommodate the City’s identified target industries. Additionally, provide appropriate area for the development of smaller-scale support industries and services in close proximity to large lot industrial and employment users.

3.17 **Large lot preservation.** Apply, monitor and maintain regulations that protect and preserve large lot industrial and employment sites (greater than 10 acres) in the Clear Lake area, and prevent re-designations or land divisions into lots smaller than 10 acres in accordance with the stated land needs of the 2012-2032 Economic Opportunity Analysis, as shown in the following table.

<table>
<thead>
<tr>
<th>Site Size Range</th>
<th>Number of sites needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>4</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>2</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>3</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

3.18 **Multimodal freight accessibility.** Encourage maximum use of industrial land by businesses that rely on access and adjacency to multimodal (rail, highway, airport) freight infrastructure and services.

3.19 **Industrial land preservation.** Protect and retain the West Eugene and Highway 99 Industrial Corridors as industrial land, particularly parcels with access to rail infrastructure. Foster opportunities for a variety of heavy
industrial development in existing heavy industrial areas.

3.20 **Brownfields**. Promote brownfield redevelopment in partnership with the City of Springfield and Lane County by pursuing opportunities to acquire industrial lands or secure funding to assist property owners with assessment and cleanup costs of environmentally contaminated lands.

3.21 **Parcel assembly**. Facilitate reconfiguration of smaller vacant or underutilized industrial parcels to create redevelopment opportunities within the urban growth boundary.

3.22 **West Eugene employment areas**. Protect industrial areas in west Eugene, while supporting their evolution into diverse places of commerce with a flexible regulatory approach that offers a broad mix of employment and industrial uses, thereby accommodating increased employment densities and services to surrounding neighborhoods.

3.23 **Flexible campus employment areas**. Recognize changing market demands and accommodate land needs through flexible zoning for light industrial/campus employment areas, including Greenhill Technology Park, Willow Creek Circle and Chad Drive.

3.24 **Environmental justice and compatibility**. To promote compatibility between industrial lands and adjacent areas, apply and maintain land use regulations to avoid the siting of new heavy industrial uses in areas that already accommodate a disproportionate amount of such uses or near residentially
designated lands, schools, day care centers, and community recreational facilities such as athletic fields, pools and playgrounds; or, mitigate typical associated impacts when adjacency cannot be avoided.

**Short-term Land Supply** – *Policies in this section present strategies for optimizing developable sites.*

3.25 **Short-term supply.** Provide a competitive short-term supply of land for the industrial and other employment uses identified in the Economic Opportunities Analysis and monitor the short-term supply of employment land through the Growth Monitoring Program. If a Growth Monitoring Program comprehensive report shows that less than 25% of the vacant employment land supply in the Eugene UGB meets the State’s definition of “short-term supply,” the city shall identify land that can be converted to short-term employment land supply and strategies, including potential funding mechanisms, for preparation of such employment land as competitive short-term supply.

3.26 **Urban services.** Provide urban services to employment lands inside the urban growth boundary in order to increase the short-term land supply.

3.27 **Site preparedness.** Work with property owners of current vacant or underutilized industrial lands, especially those larger than 25 acres, to reduce the financial and regulatory obstacles to development, with a goal of making these sites ready for development. In particular, explore a private/public partnership to address wetland permitting issues and mitigation costs on larger industrial sites.

**Infrastructure, Facilities and Transportation Planning** – *Policies in this section identify key physical elements of City investment.*

3.28 **Infrastructure.** Accommodate future employment and industrial land needs within the urban growth boundary where public facilities are already present or can be efficiently extended. Plan for the extension of infrastructure services through amendments to the regional public services and facilities plan and the local transportation system plan.

3.29 **Transportation services.** Encourage the development of transportation facilities which improve access to employment areas and improve freight movement capabilities by implementing the policies and projects in the local transportation system plan and the local airport master plan.

3.30 **Technological support.** Collaborate with partners to instate technological systems such as broadband internet service, both current and as needed in the future, as a means to accelerate high technology firm development.
3.31 **Public investment.** Use public infrastructure investment and other financial incentives in strategically prioritized locations – downtown, neighborhood centers, key corridors, core commercial areas, and employment and industrial areas – as a catalyst to foster private development and site intensification to support employment growth, economic competitiveness, and increased access to opportunity.

**Downtown, Key Corridors, and Core Commercial Areas** – *Policies in this section support geographic areas of particular economic intensity.*

3.32 **Priority development areas.** Promote redevelopment and reuse in prioritized areas including downtown, key corridors, and core commercial areas.

3.33 **Urban economy.** Promote downtown as a hub of creative, entrepreneurial activity that can attract new investment and retain and grow existing businesses that thrive in the urban environment.

3.34 **Multifaceted, regional center.** Strengthen downtown’s role as a destination and the functional center for government, business and commerce, entertainment and the arts, and education in Eugene and the Southern Willamette Valley.

3.35 **Neighborhood vitality.** Recognize the vital role of commercial facilities that provide services and goods in complete, walkable neighborhoods throughout the community. Encourage the preservation and creation of affordable neighborhood commercial space to support a broad range of small business owners across all neighborhoods.
Transportation

Introduction

To realize our community’s vision for a future growth pattern that makes the most efficient use of land and financial resources, land use planning must be integrated with transportation planning. The Eugene 2035 Transportation System Plan was developed to address the future transportation needs of the community as envisioned in the Envision Eugene Comprehensive Plan.

The Eugene 2035 Transportation System Plan complies with Statewide Planning Goal 12, Transportation: “To provide and encourage a safe, convenient, and economic transportation system.” By addressing all modes of travel, either directly or by reference to other plans such as the local airport master plan and Lane Transit District’s long range plan, the Eugene 2035 Transportation System Plan is designed to meet Eugene’s transportation needs as they evolve in the future and to increase transportation choices available throughout the community. Additionally, the regional and state-wide transportation needs of Eugene’s residents are addressed in two regional transportation plans, numerous transportation plans adopted by surrounding communities, and state plans, such as the Oregon Highway Plan.

Policies

9.1 Local transportation planning. The Eugene 2035 Transportation System Plan, not including the transportation financing program, serves as the transportation element of the Envision Eugene Comprehensive Plan and amendments to that plan shall constitute amendments to this plan.
Administration and Implementation

Introduction

The Envision Eugene Comprehensive Plan is a result of the Envision Eugene community visioning project. This local comprehensive plan reflects the long-term vision for Eugene, describes implementation tools to achieve this vision, and sets a Eugene-specific urban growth boundary. Because the Envision Eugene Comprehensive Plan is based in part on assumptions and projections, its effectiveness depends upon its responsiveness to changing conditions and community needs. As the City of Eugene maintains and implements this plan, it will adhere to the community’s vision, comply with state laws and goals, and strive for efficient, responsible administration.

In addition to administering the plan and implementing its goals and policies, the City recognizes the need to provide information to the community and decision makers so that both may periodically assess the validity of growth planning assumptions and the effectiveness of the City’s growth management strategies. This will take the form of monitoring efforts that are flexible enough to address changing conditions and needs in the community. Because quantitative analysis and qualitative analysis require different programmatic approaches, the City’s monitoring efforts will include different frameworks to address these types of analysis.

The Growth Monitoring Program focuses on quantitative analysis, and represents a renewed commitment by the City to track changing conditions and policy outcomes. This program is intended to provide information to inform future policy decisions related to growth management. It will provide a recurring feedback loop by collecting data about the way in which Eugene is actually growing, comparing that data to growth assumptions that were previously made, sharing and seeking feedback on the results
through a public process, and then bringing actions to the City Council to address differences between the actual growth and the growth assumptions. The cycle then continues by collecting new data about the way in which Eugene is growing, and so on into the future.

This chapter lays out goals and policies for management and implementation of the Envision Eugene Comprehensive Plan in a way that supports the seven pillars of Envision Eugene. Responsible administration relies on clear, consistent processes, while effective implementation relies on solid partnerships and a diverse array of tools. Many of the tools that the City will use in this effort are noted in policies below, ranging from regulations and programs to partnerships. Ongoing monitoring and adjustment of the plan and implementation tools allow them to remain effective, desirable and relevant. This chapter introduces some of the mechanisms by which policy direction of the Envision Eugene Comprehensive Plan is implemented through regulations and land use application criteria in City code, as well as City programs. All seven pillars of Envision Eugene are balanced in the development of the policies of this comprehensive plan, though some pillars may be more topical than others for any given chapter.

The City of Eugene’s goals for administration and implementation are:
1. **Clear and Effective Process**

Administer the Envision Eugene Comprehensive Plan efficiently, effectively, and in accordance with state laws and goals, through processes that are clear and accessible to the community.

2. **Adaptability and Responsiveness**

Provide mechanisms for amending and updating the Envision Eugene Comprehensive Plan and its implementation programs and tools to reflect the changing conditions, needs and attitudes of the community.

3. **Coordination and Collaboration with Partners**

Align planning efforts with local and regional jurisdictions and agencies in support of the goals and values of the community as expressed in the Envision Eugene Comprehensive Plan.

The policies guiding administration and implementation are organized into the following topic areas:

- **Administration**
- **Implementation**
- **Monitoring**

**Policies**

**Administration** – *Policies in this section address the legal responsibilities of maintaining and updating this plan.*
10.1 **Comprehensive Plan amendments.** Periodically review factual information regarding Eugene’s growth and, if necessary, make corresponding amendments to the Envision Eugene Comprehensive Plan. Amendments may include updates or additions to policies and supporting text, changes to the urban growth boundary, changes to land use regulations and incentives, or changes to the land use designation map.

10.2 **Comprehensive Plan review process.** Process the review and recommendations for proposed amendments to the Envision Eugene Comprehensive Plan and its implementation measures through the City of Eugene Planning Commission and City Council (and through Lane County when necessary) in accordance with the procedures set out in Chapter 9 of the Eugene Code.

10.3 **School facility planning.** The Eugene School District 4J Facilities Long-Range Plan and the Bethel School District Long Range Facilities Plan adopted by the school districts in consultation with the City of Eugene serve as an element of this comprehensive plan, meaning that those school district plans form the basis for school facility planning in the Eugene urban growth boundary.

10.4 **Local planning coordination.** Collaborate with local planning partners, both among City staff and beyond, to enhance alignment between the Envision Eugene Comprehensive Plan and other planning efforts in the region.

**Implementation** – *Policies in this section outline key strategies for achieving the community vision, goals and policies.*

10.5 **Implementation tools.** Utilize a broad spectrum of tools to implement
the policies of the Envision Eugene Comprehensive Plan, including facilitative, regulatory, and financial tools developed through a public planning process.

10.6 **Community partnerships.** Continue to plan collaboratively with partner agencies to develop implementation and planning efforts that reflect the community vision and make efficient use of regional resources.

10.7 **Code Improvement Program.** Create and maintain a program for the evaluation and regular adjustment of regulations in Eugene’s Land Use Code through collaborative, ongoing code improvement.

**Monitoring – Policies in this section identify the goals and overall process of the City’s monitoring efforts.**

10.8 **Quality-of-life indicators.** Develop and maintain monitoring efforts that provide a means for evaluating whether development is achieving Envision Eugene’s more qualitative goals and objectives, such as creating walkable, compatible and affordable neighborhoods and a beautiful, active and prosperous downtown and key corridors. A diverse set of interested parties, such as City boards and commissions, the (growth monitoring) technical advisory committee, and community and neighborhood groups will be involved in developing the analysis and reviewing the results.

10.9 **Growth Monitoring Program.** Develop and maintain a Growth Monitoring Program that shall include such components as: data collection, analysis and reporting, consideration of actions to address the data, and evaluation of the Growth Monitoring Program itself. Examples of relevant data and trends to be collected/monitored include, but are not limited to:

- Official population forecasts
- Housing trends such as the mix of housing types, housing density and housing affordability
- Economic development trends such as employment growth rate
- Rate of development of the city’s employment and residential land

“Develop and maintain monitoring efforts that provide a means for evaluating whether development is achieving Envision Eugene’s more qualitative goals and objectives, such as creating walkable, compatible and affordable neighborhoods and a beautiful, active and prosperous downtown and key corridors.”

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3 The City’s monitoring efforts will include both quantitative and qualitative assessments of growth and development. Monitoring is integral to a responsive, adaptable, and transparent growth plan. The policies in this section initiate these efforts through commitments to specific monitoring strategies.
• The number of homes or jobs developed through the city’s growth management or “efficiency” strategies

10.10 Growth Monitoring Program reporting. The City Manager shall report to the City Council and the community on relevant Growth Monitoring Program data as follows:

• Provide an annual report on key data
• Provide a comprehensive report three years after the Eugene-specific urban growth boundary has been acknowledged by the State and, thereafter, every five years
• Provide additional reports on an as-needed basis

10.11 Growth Monitoring Program analysis. The City’s review and analysis of Growth Monitoring Program data shall include input from an advisory committee appointed by the City Manager, as well as other interested parties, boards and commissions, such as the Planning and Sustainability Commissions. The advisory committee shall be comprised of community members with diverse interests and areas of technical expertise concerning growth management.

10.12 Growth Monitoring Program evaluation. The Growth Monitoring Program shall include a schedule for its periodic evaluation so that it is adaptable to changing needs and trends and to enhance its efficiency, accuracy and achievement of key program objectives. Key objectives are to:

• Have growth-related data that is complete and relevant to future needs
• Efficiently collect the growth-related data
• Provide growth-related information to the community
• Regularly assess current status of the City’s land supply
• Regularly assess the effectiveness of land use efficiency strategies
• Identify growth planning trends
• Regularly assess and adjust the program in response to changing needs
Eugene Urban Growth Boundary

Introduction

The Eugene urban growth boundary identifies the land that is likely to be needed by Eugene’s growing population over a specific period of time. Eugene’s urban growth boundary, adopted by Eugene and Lane County, is expected to accommodate Eugene’s land needs through 2032. It includes all land inside Eugene’s city limits and some additional land that is likely to annex to the City over time. Land located between the city limits and the urban growth boundary, an area referred to as the “urban transition area,” will remain in rural use until the land is annexed to the City.

The location of the Eugene urban growth boundary was identified with careful consideration of the forecasted population growth for the City of Eugene and the corresponding need for additional employment opportunities, parks, schools and public infrastructure. The City’s Growth Monitoring Program, discussed in the Administration and Implementation chapter of this comprehensive plan, will be used to evaluate new information for purposes of determining whether future adjustments to the urban growth boundary are needed.

The Employment Land Supply Study, located at Appendix B to this comprehensive plan, includes a supply and demand analysis of buildable employment land within the Eugene urban growth boundary area for the
2012-2032 planning period. The study demonstrates that, based on the best information available at the time of the study, Eugene’s 2012 urban growth boundary did not include sufficient buildable employment land to meet demands through 2032, and had to be expanded.

The Eugene-Springfield Metropolitan Area General Plan (Metro Plan) includes the “Metro Plan Diagram,” the land use designation map that assigns general land use designations to all land within the Eugene urban growth boundary (See Metro Plan Chapter II-G). The designations shown on the Metro Plan Diagram will continue to apply to Eugene until such time as a Eugene-specific land use designation map is adopted by the City of Eugene.

Policies

11.1 Urban Growth Boundary Map. The official, precise location of the Eugene urban growth boundary is shown in the Eugene Urban Growth Boundary Shapefile at Appendix A to this Envision Eugene Comprehensive Plan (on compact disc). The location of the urban growth boundary depicted on printed maps in this Envision Eugene Comprehensive Plan and in the Metro Plan is shown for illustrative purposes only.
This map is depicted at an imprecise scale, and is for illustrative purposes only. For Eugene's official adopted urban growth boundary, please see the digital Appendix A to the Envision Eugene Comprehensive Plan.
The words and phrases below are defined as used in the context of the Envision Eugene Comprehensive Plan.

**Business incubator.** An organization that provides services such as operating space, mentoring, networking, management training and shared administrative needs with the goal of fostering companies through a startup phase to the point where they can thrive independently.

**City.** Where the word City is capitalized, it refers to the City of Eugene as a governing body and organization. Where the word city is not capitalized, it refers to the physical or social community of Eugene.

**Core commercial areas.** Long established commercial areas that accommodate a majority of the large-scale retail businesses in Eugene. These areas are typically located along or at intersections of major arterial streets and are identified on the Key Corridors and Core Commercial Areas map in the Eugene 2035 Transportation System Plan.

**Development ready or Ready for development.** A term used to categorize land supply within the urban growth boundary that has urban services and is free of regulatory barriers to development.

**Industry cluster.** A group of businesses that are concentrated in a geographic area, and benefit from a corresponding concentration of suppliers, talent and associated institutions, as well as intangible benefits like culture (e.g. brewery cluster that benefits from strengths in local agriculture, water, market, culture and regional reputation).

**Key corridors.** The six corridors – Highway 99, River Road, Coburg Road, South Willamette, Franklin Boulevard, and West 11th Avenue – that are intended to have frequent transit service connecting downtown to numerous core commercial areas. See Key Corridors and Core Commercial Areas Map in the Eugene 2035 Transportation System Plan.

**Underutilized sites.** Properties that are vacant, or partially vacant with low value or low intensity development, where the land use regulations allow for significantly greater entitlements.

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4 For additional terms related to other adopted policies and regulations, see Glossaries in the City of Eugene Municipal Code and the Eugene Springfield Metropolitan Area General Plan.
Envision Eugene • Comprehensive Plan
Appendix A

EUGENE URBAN
GROWTH BOUNDARY

FINAL
This dataset was compiled relative to numerous data sources (e.g., tax parcel boundaries) and the quality may be variable. Boundaries on the map represent approximate property line location and should NOT be interpreted as or used in lieu of a survey or property boundary description. This map is not suitable for legal, engineering, or surveying purposes. This map is subject to license and copyright limitations and further distribution or resale is prohibited. This map in no way attempts to predict, determine, or require what happens on individual lots.
ENVISION EUGENE • COMPREHENSIVE PLAN

APPENDIX B

EMPLOYMENT LAND SUPPLY STUDY
Envision Eugene

Employment Land Supply Study (2012-2032)

July 2017

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Part IV. Measures to Increase Employment Development (2012-2032)

Part V. UGB Expansion Areas to Address Industrial Land Deficit

Part VI. Employment Buildable Lands Inventory (2012-2032)
Introduction to Eugene’s Employment Land Supply Study

Eugene’s Employment Land Supply Study includes six Parts. Parts I-V are the steps that lead to Part VI, which establishes Eugene’s 20-year supply of land for residential use. In Part I, “2012 Employment Land Supply,” the City identifies the employment land supply that exists inside Eugene’s urban growth boundary (“UGB”) in 2012. Part II, “Eugene Economic Opportunities Analysis,” determines whether the land identified in Part I is enough to accommodate Eugene’s economic growth over a 20-year planning period based on application of recent trends. Part III, “Public and Semi-Public Uses on Employment Land (2012-2032),” determines the amount of additional residential land that will be needed during the 20-year period due to public and semi-public uses that are likely be located on employment land inside the UGB. It then determines whether the 2012 employment land supply can accommodate the projected demands on employment land for the next 20 years if Eugene continues to develop according to recent trends and existing codes and programs.

In Part IV, “Measures to Increase Employment Development,” the City explains the efficiency measures it has taken to increase its supply of employment land inside its UGB. In Part V, “UGB Expansion Areas to Address Industrial Land Deficit,” the City identifies the urban growth boundary expansion needed to accommodate the remaining employment land needs. Part VI, “Employment Buildable Land Inventory (2032),” provides the City’s 2012-2032 Buildable Land Inventory intended to serve Eugene’s need for employment land through 2032 including the final land supply maps and density/capacity assumptions for the different categories of land on the supply maps.

Acknowledgements and Appreciation

The City of Eugene wishes to thank the many members of the community, staff and consultants that contributed to this work over the 2010-2016 period. This work is better because of your participation.

Community Members


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1 For purposes of this Study, the “Eugene UGB” is the portion of the former Eugene –Springfield regional UGB that lies west of Interstate 5. Springfield took action in 2011 to lawfully withdraw the land east of Interstate 5 from the, previously, regional UGB, as directed by ORS 197.304.
Agency Members

City Staff: Carolyn Burke, Jason Dedrick, Zach Galloway, Lisa Gardner, Alissa Hansen, Terri Harding, Robin Hostick, Emily Jerome, Heather O’Donnell, Doug Terra

Consultants

EcoNorthwest: Bob Parker and Beth Goodman

Lane Council of Governments: Nick Siegel and David Richey
Part I. 2012 Employment Land Supply

Part I includes the following sections, figures and tables:
1. Introduction
2. Purpose
3. Data & Methods
4. The Process
5. Short Term Supply of Employment Land
6. Conclusion

Table 1 Committed & Protected Employment Land, Eugene 2012
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Figure 1 Plan Designations (2012)
Figure 2 Plan Designations for Employment Land (2012)
Figure 3 Committed and Protected Land (2012)
Figure 4 Employment Land Supply (2012)
Figure 5 Employment Land Supply (2012) (tiles 1 through 10)
Figure 6 Developed Employment Land (2012)

1. Introduction

The first step in establishing a complete and final 20 year employment Buildable Lands Inventory (2012-2032) is the identification of the employment land supply that exists inside Eugene’s urban growth boundary ("UGB") in 2012, the outset of the 20 year planning period. For Eugene, the 2012 land supply is documented in this Part I of the Envision Eugene / Employment Land Supply Study. The 2012 employment land supply forms the basis for Parts II, III and IV of this Study that determine the capacity of the 2012 employment land supply to meet the City’s needs for additional employment development over the 2012-2032 planning period. In Part V, the City identifies the urban growth boundary expansion needed to accommodate the remaining employment land needs. The final Buildable Lands Inventory ("BLI") for the 2012-2032 planning period is located in Part VI of this Study.
2. Purpose

One of the primary goals of the Envision Eugene project is to determine how Eugene will accommodate the community’s growth through 2032, as required by state law. Eugene is expected to grow and will need to accommodate more people and jobs. Determining how to accommodate this future demand requires Eugene to first identify its 2012 supply of the land available for jobs.\(^1\)

The 2012 employment land supply analysis informs several questions:

- Most significantly, how much employment land is available in 2012 for development within the area of Eugene’s current UGB?
- Where is that developable employment land located?
- What is the distribution of the developable employment land by the comprehensive plan land use designation categories (e.g., commercial, industrial)?

The methods used for, and results of, the 2012 employment land supply were reviewed by multiple stakeholder groups, including a citizen advisory committee during the 2008 Eugene Comprehensive Lands Assessment process and the Envision Eugene Technical Resource Group (TRG) during the subsequent Envision Eugene process.\(^2\) The TRG’s work was integral to the Envision Eugene analysis. The TRG included members with local and regional expertise on issues like economic and residential market conditions and development trends, land use conservation, and sustainability, as well as members from other local boards and commissions. The TRG met regularly over the course of five years, volunteering hundreds of hours, to examine the assumptions and methodologies related to all Envision Eugene analysis, including the 2012 land supply, demand projections, capacity analysis and measures to increase development and UGB expansion. Where the TRG’s work was particularly significant in the preparation of the 2012 employment land supply, its work is highlighted below. The following describes the data, analysis and results of the 2012 employment land supply.

3. Data & Methods

Most of the data files needed to determine the 2012 employment land supply are from local government systems, while other data was created or calculated or the result of location (geospatial) based processing. All data files were current as of 2012 where possible. These data layers and mapped features include:

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\(^1\) Eugene’s process for establishing the 2012 employment land supply included the simultaneous establishment of its 2012 residential land supply, taking into account all plan designations to create consistency in methodology and terminology between the inventories of residential and employment land. See Envision Eugene/Residential Land Supply Study.

\(^2\) An initial 2008 land supply was prepared by the Lane Council of Governments. City staff and LCOG updated the 2008 work in 2012. Following the full run of the land model in 2012, in May 2013 any vacant land that had an address assigned to it was classified as “developed.” Address points are typically assigned to lots when a building permit is applied for and is, therefore, a reasonable proxy for development.
4. The Process

The foundation for identifying Eugene’s 2012 employment land supply is a location-based (geospatial\(^3\)) model that was used to create the land supply layer. The land supply process is divided into five (5) main steps or phases. The first three steps were completed within the model and steps 4 and 5 used the results of the model:

1) **Acquire and evaluate the data**; obtain and review the data layers as to their suitability for use in the analysis, including resolving any quality issues, and develop a methodology for applying that data.

2) **Create a land supply layer**; combine all the geographic features together to create a single integrated land supply layer.

3) **Classify land into types**; do a sub-tax lot level analysis that classifies the thousands of pieces of the land supply layer into one of four types of land (committed, protected, developed, vacant—specific definitions are presented in Step 3, below) by comprehensive plan designation.

4) **Identify additional capacity**; identify underdeveloped sites that the model initially classified as developed.

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\(^3\) “Geospatial analysis is an approach to applying statistical analysis and other informational techniques to data which has a geographical or geospatial aspect. Such analysis would typically employ software capable of geospatial representation and processing, and apply analytical methods to terrestrial or geographic datasets, including the use of geographic information systems and geomatics.” (Wikipedia contributors. "Geospatial analysis." Wikipedia, The Free Encyclopedia. Wikipedia, The Free Encyclopedia, 7 Apr. 2015. Web. 19 May. 2015)
5) Summarize the results; summarize the 2012 land supply using tables, charts and maps and provide information to help answer the larger question – how do we meet the demand for land of different types over the next 20 years?

The illustration below provides a simplified view of the model analysis used to create the land supply, showing how numerous sources of data and assumptions were processed using a series of geographic models.

Step 1: Acquire and evaluate the data

The data layers described earlier were acquired from several sources, including local, state and federal agencies. The data layers used are the result of considering the type of data needed to develop an employment land inventory and locating the best available data. For example, Figures 1 and 2 at the end of this Part I show the 2012 comprehensive plan designations used for Eugene. A processing methodology was developed, as described further in steps 2 through 5, for how the selected data layers are integrated into the geospatial model, processed, and result in a land supply. Evaluation of the data and developing the analysis processes (the methodology) was completed by government staff, with support from consultants and the TRG that spent many hours vetting the data and analysis.
**Step 2: Create a land supply layer**

The overlay of all the data layers together in the geospatial model creates one integrated layer – the land supply – which divides the UGB into tens of thousands of individual pieces or polygons based on their different characteristics. Some people have described the final map layer as looking like “fabric” or “shattered glass” or a quilt. Each piece of land in the land supply fabric carries with it all of the characteristics from the different layers that were overlaid together; land uses and boundaries (e.g., tax lots, plan designation, acreage) and land constraints (e.g., rights-of-way, wetlands). The result is 34,503 acres of a sub-tax lot level analysis of the characteristics for all land within the 2012 Eugene UGB. Of this, 11,963 acres are employment land. This sub-tax lot analysis is then used to identify what pieces of land are suitable for development (Step 3).

**Step 3: Classify land into types**

Each of the thousands of individual pieces of land in the land supply inventory are then classified as one of four types of land based on the data characteristics (e.g., comprehensive plan designation, wetlands) of that piece of land. The four types of land are protected, committed, vacant and developed.

Then, the acres of the four land types are categorized by comprehensive plan designation to provide a total number of acres by land type and by plan designation for all of Eugene’s 34,503 acre UGB. Out of the 34,503 acres in the UGB, 11,963 are in designations that will accommodate future employment (e.g. industrial, commercial office, retail and government). The data layers that make up the four types of land and the total acreage of the land types by plan designation are as follows:

- **Protected** land is reserved to protect natural resources or because of natural hazards and therefore has no development or redevelopment potential. These development constraints temporarily or permanently limit or prevent the use of land for economic development. Lands defined as protected include the following:

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4 This means that in the geospatial model, a lot or subarea is not identical with a tax lot. Instead, it is a subarea of a tax lot that shares certain characteristics. For instance, if a lot has more than one plan designation, barring any other differing characteristics the tax lot would be split into subareas by, at minimum, the number of plan designations on the site.

5 Rather than the term “vacant,” the Envision Eugene geoprocessing model uses the term “undeveloped” to include all employment land that has no permanent buildings or improvements. In this Study, however, “vacant” is used instead of “undeveloped” for consistency with State law terminology. OAR 660-009-0005(14) defines “vacant land” as “a lot or parcel: (a) equal to or larger than one half-acre not currently containing permanent buildings or improvements; or (b) equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements.” Part (b) of the definition is addressed in the Envision Eugene model and in this Study by the land category “partially vacant.”

6 This definition is consistent with OAR 660-009-0005(2) definition: “Development constraints“ means factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, cultural and archeological resources, infrastructure deficiencies, parcel fragmentation, or natural hazard areas.”
- Federal Emergency Management Agency (FEMA) Floodway (Flood Insurance Rate Map - FIRM, 1999 publication year )
- Eugene’s Adopted Goal 5 Riparian Corridors and Surrounding Protection Areas
- Eugene’s Adopted Goal 5 Wetlands and Surrounding Protection Areas
- Eugene’s Adopted West Eugene Wetlands and Surrounding Protection Areas
- Eugene’s Adopted Goal 5 Upland Wildlife Habitat and Surrounding Protection Areas
- Eugene’s Adopted Goal 6 Water Quality Protection Areas
- Historic and Cultural Resources (City Landmark, National Register, or Primary Ranked Cultural Resource)
- Natural Resource (NR) Zoned Areas
- Wildlife Habitat (federally listed threatened and endangered species)
- Steep Slopes\(^7\)
  - Industrial: > 15%
  - Commercial: > 30%

- **Committed** land is devoted to special uses like parks, schools, government offices, cemeteries, and rights-of-way and therefore has no development or redevelopment potential for (non-public sector) jobs. Based on tax assessor data and the Lane County land use code system, lands defined as committed include the following:
  - Government Property (e.g. city, county, state, federal)
  - City, County and State Parks
  - School District Property (e.g. 4J and Bethel)
  - Transportation Rights-of-Way (e.g. streets, rail)
  - Cemeteries
  - Bonneville Power Administration (BPA) easements

- **Vacant** land is land suitable for development that is identified with a “vacant” land use code in the regional land use code system or has insignificant improvements of less than $1,000 in 2012 assessed value.\(^8\)

- **Developed** land is identified with a “developed” type of land use code in the regional land use classification system or with significant improvements of at least $1,000 in 2012 assessed value. Developed land may also have redevelopment potential and, as discussed below, additional capacity if the land is larger.

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7 As found during the Eugene Comprehensive Lands Assessment analysis, in Eugene, above these slope levels are where each of these basic development types have not occurred historically. Instead, most Industrial land development was found to occur below 5% slope and most Commercial land development was found to occur below 10% slope.

8 The land model was run in August of 2012. In an effort to make the 2012 land supply as current as possible, in May 20, 2013 any vacant sites with an address point in GIS as of that date were removed from the vacant land inventory. An address point is typically applied to a property in the regional GIS system when a building permit is submitted. Therefore for this analysis, it was assumed that the address point meant the property was under development in 2012 and no longer available as vacant land.
The land model results\(^9\) by land type are as follows:

**Protected & Committed Land**

- Lands can be classified as committed or protected, or both (e.g., government owned land with protected wetlands) and as such these classes are not mutually exclusive and are reported on as one combined category.\(^{10}\)
- Additionally, analysis was done after the land model was run to address government surplus land. Some government owned land has been officially designated as surplus land, meaning it is anticipated for disposal and will not be committed to public use in the future. Since these sites\(^{11}\) are still in public ownership, the model initially classifies them as committed. To correct this, for confirmed surplus sites the public ownership characteristic in the model is overridden so that the land type is assigned as if it were in private ownership. This did not result in additional capacity for non-government employment as many of these sites are fully developed and what they would re-develop with in the future is unknown.
- The combined committed and protected acres is 13,880 acres for all of the plan designations in the UGB which equates to approximately 40% of Eugene’s 34,503 acres. The combined committed and protected acres on employment is 6,750 acres which equates to about 56% of all employment land in the UGB as follows in Table 1 and shown on Figure 3:

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>629.3</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>55.5</td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>508.5</td>
</tr>
<tr>
<td>Government &amp; Education</td>
<td>756.5</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>693.0</td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>1,004.7</td>
</tr>
<tr>
<td>Major Retail Center</td>
<td>113.7</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>44.8</td>
</tr>
<tr>
<td>Parks and Open Space</td>
<td>2,621.0</td>
</tr>
<tr>
<td>Parks/OpenSpace Mixed Use</td>
<td>4.6</td>
</tr>
<tr>
<td>Special Heavy Industrial</td>
<td>221.1</td>
</tr>
<tr>
<td>University Heavy Industrial</td>
<td>97.6</td>
</tr>
</tbody>
</table>

---

\(^9\) For the purposes of this Study, acreage totals from the model are usually rounded to the closest whole number unless otherwise necessary to include one decimal.

\(^{10}\) When land is both committed and protected, the default is to identify that portion of land as committed.

\(^{11}\) See the Technical Support portion of the public record for sites.
Vacant Land

- The acres of all vacant employment land are as follows in Table 2 and are as shown on Figures 4 and 5:

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Vacant Land Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>96.9</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>3.8</td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>175.7</td>
</tr>
<tr>
<td>Government &amp; Education</td>
<td>0.2</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>102.5</td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>319.7</td>
</tr>
<tr>
<td>Major Retail Center</td>
<td>3.9</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>3.1</td>
</tr>
<tr>
<td>Parks and Open Space</td>
<td>63.0</td>
</tr>
<tr>
<td>Parks and Open Space Mixed Use</td>
<td>0</td>
</tr>
<tr>
<td>Special Heavy Industrial</td>
<td>5.7</td>
</tr>
<tr>
<td>University Research</td>
<td>2.6</td>
</tr>
</tbody>
</table>

- The inventory of vacant land includes sites of all sizes.
  - The City’s Envision Eugene Economic Opportunities Analysis EOA included at Part II of this Employment Land Supply Study shows a demand for larger industrial parcels. Therefore, City staff and the TRG engaged in a parcel-by-parcel review of all Industrial parcels 10 acres or greater to ensure the City’s supply of large employment sites is accurately classed by size and land category type. Aerial photos, natural resource inventories and local knowledge were used to evaluate which sites are entirely vacant and which sites have constraints limiting the amount of buildable “vacant” area. Of all the industrial sites 10 acres or greater in size that were reviewed, eight sites were confirmed as vacant sites; five of the eight sites are classified as entirely vacant; and

12 The acres by plan designation reflected in the 2012 land supply are the plan designations as of 2012 and do not reflect any changes to plan designations that occurred after the land model was run (e.g., as a result of a measure to increase employment or residential development discussed in Part V of this Employment Land Supply Study).

13 Due to geospatial processing imprecision where the plan designation layer intersects with the UGB boundary, the land supply acres indicate that there are some acres of land in plan designations that are actually not within Eugene’s UGB (Agriculture, Forest Land, Rural Residential, Sand and Gravel). These geospatial processing “slivers” of plan designations are not actually within Eugene’s UGB and are therefore excluded from capacity reporting.
three of the eight sites have protected streams and wetlands located in a manner that bisects properties and limits the usable acres of the site (in addition to other non-protected wetlands in some locations). As a result of this analysis, Table 3 shows the vacant Industrial sites 10 acres or larger based on their vacant, non-protected acres as represented in the land supply model (e.g., acres in supply) and based on the likely usable acres remaining on the sites after the portions separated from the access by natural resources are discounted.

- Sites smaller than 10 acres were not further analyzed and were assumed to be buildable.

### Developed Land

#### Table 3. Vacant Industrial Land, Eugene 2012

<table>
<thead>
<tr>
<th>Acres on sites smaller than 10 acres</th>
<th>+/- 404</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres on sites larger than 10 acres</td>
<td>+/- 207</td>
</tr>
<tr>
<td>10-20 acres</td>
<td>55.9</td>
</tr>
<tr>
<td>20-50 acres</td>
<td></td>
</tr>
<tr>
<td>1 site</td>
<td>24</td>
</tr>
<tr>
<td>2 sites with wetland and configuration constraints</td>
<td>70</td>
</tr>
<tr>
<td>1 site with wetland and configuration constraints</td>
<td>56.9</td>
</tr>
<tr>
<td>50-75 acres</td>
<td>0</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>+/- 611</td>
</tr>
<tr>
<td><strong>Sites</strong></td>
<td>8</td>
</tr>
</tbody>
</table>

14 All Industrial lots or parcels at least 10 acres in size were further reviewed to confirm their actual usable acres for the large employment site analysis. Usable acres reflects that some of the larger Industrial lots are bisected by natural resources in a manner that limits access to and usability of a portion of the property. The “usable acres” category acknowledges these limitations by reflecting a reduced acreage to use for analyzing the adequacy of Eugene’s large employment sites by size. For more information, see the Technical Support portion of the record.

15 The total amount of Industrial vacant acres is 604 as shown in Table 2 (Campus Industrial 175.7 + Heavy Industrial 102.5 + Light Medium Industrial 319.7 + Special Heavy Industrial 5.7 equals 603.6 acres). At the model’s sub-taxlot level, these 604 acres include 404 acres that are less than 10 acres in size and 200 acres that are 10 acres or greater in size. The large site Industrial analysis reviewed each site as a whole (rather than sub-taxlot) so the land supply acres were aggregated for the whole tax lot; the 207 acres shown in Table 3 is the land supply acres on each site 10 acres or greater in size. This results in a seven acre difference at the sub-taxlot level (200 acres are 10 acres or greater) compared to the tax lot level (207 acres of sites that are 10 acres or greater) because there is one Industrial lot (tax lot 1704040000902) that at a sub-taxlot has a 7 acre portion that falls into the less than 10 acre size category, but all of the site is included in the 10 acre or greater size category.
• The acres of all developed employment land are as follows in Table 4 and are as shown on Figure 6:

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Developed Land Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>1108.1</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>64.1</td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>303.9</td>
</tr>
<tr>
<td>Government &amp; Education</td>
<td>21.4</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>1097.5</td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>1320.2</td>
</tr>
<tr>
<td>Major Retail Center</td>
<td>182.9</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>58.6</td>
</tr>
<tr>
<td>Parks and Open Space</td>
<td>261.3</td>
</tr>
<tr>
<td>Parks and Open Space Mixed Use</td>
<td>0</td>
</tr>
<tr>
<td>Special Heavy Industrial</td>
<td>11.2</td>
</tr>
<tr>
<td>University Research</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Step 4: Identify additional capacity

Although the model initially identifies thousands of acres as developed, some of these acres may have additional capacity to accommodate more jobs. Using the results of the geospatial model for developed land, a separate analysis was completed of larger sites that the model initially classified as developed. These sites are further reviewed to determine if they are fully developed (and remain classified as developed land). If a portion of the site is undeveloped with room for additional development capacity it was reclassified as partially vacant land. Analysis was also completed to identify if redevelopment potential exists on some developed land. The sites that make up this additional capacity of developed land are classified as follows:

Partially Vacant Land

• City staff and the TRG engaged in a parcel-by-parcel review of all larger sub-tax lot pieces that were initially categorized as developed to determine if any of these sites have additional room

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16 The second part of the “vacant land” definition in OAR 660-009-0005(14)(b), states that “vacant land” can also mean a lot or parcel “equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements.” The Envision Eugene partially vacant land category is consistent with this definition; although the Envision Eugene land model originally identifies these lots as “developed,” they are Commercial lots of at least an acre and Industrial lots of at least 10 acres with some development but room for more. The term “partially vacant” is used in this Study for consistency between the terminologies of other Eugene land inventories being completed at the same time.
for development (i.e., partially vacant land) or if they are fully developed (e.g., buildings, parking areas, infrastructure, developed multi-family open space areas). Several resources were used to complete this analysis including aerial photos, tax assessor information, regional land use codes, and local knowledge.

- Commercial partially vacant land. All developed Commercial parcels 1 acre or larger were reviewed. The vast majority of commercially designated lots were fully developed. This review identified about 17 acres\(^ {17}\) of partially vacant commercial land as shown in Table 5 and on Figures 4 and 5.
- Industrial partially vacant land. No partially vacant Industrial land was identified.

### Table 5. Commercial Land, Partially Vacant, Eugene 2012

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Partially Vacant Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>+/- 17</td>
</tr>
<tr>
<td>Commercial</td>
<td>16.2</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>1</td>
</tr>
</tbody>
</table>

- Government & Education and University Research. Analysis for partially vacant land was not necessary for these plan designations because the demand and capacity analysis for public land needs is estimated in Part III of this Study.

**Redevelopment Potential of Developed Employment Land\(^ {18}\)**

- Redevelopment potential exists for some of the developed land shown on Figure 6. An estimate of redevelopment potential has been assumed for those developed lands that are Commercial and Industrial sites smaller than 10 acres that are likely to redevelop during the planning period, and redevelopment/infill sites have been identified for Industrial sites 10 acres or greater in size. These lands provide additional development capacity. Redevelopment means to expand or replace buildings on land that is already developed but not to its full capacity, and in a manner that creates room for more jobs than the site originally held. Redevelopment potential means property that due to present or expected market forces there exists the strong likelihood that this property will redevelop over the next 20 years compared to other developed land in the UGB. Baseline redevelopment is the natural amount of redevelopment expected to occur without additional actions taken by the City to encourage it, compared to redevelopment that is

\(^{17}\) Partially vacant acres refers to the site acreage excluding acreage with existing development.  
\(^{18}\) Per OAR 660-009-0005(1), “developed land” means “non-vacant land that is likely to be redeveloped during the planning period.” The Envision Eugene employment “redevelopment” land category is consistent with this definition; these are lands that have been identified with the potential to redevelop during the planning period.
enabled due to City actions (e.g., because of enacting measures that increase employment development). The redevelopment potential is shown in Table 6 as follows:

- **Industrial land with redevelopment potential.**
  - Sites smaller than 10 acres. This analysis assumes that the industrial land base for sites smaller than 10 acres can accommodate about 5% of new employment through redevelopment, or about 31 acres of redevelopment capacity.\(^{19}\)
  - Sites 10 acres or greater. All developed Industrial sites 10 acres or larger were reviewed. This review, coupled with local knowledge from an industrial land-focused subcommittee,\(^ {20}\) identified four sites with redevelopment potential that are assumed to provide redevelopment/infill capacity. Three of the sites are between 10-20 acres and they were found to have redevelopment potential because each site has only a small amount of development (e.g., a single dwelling or a parking lot) with room for infill or redevelopment. Eugene also has one site with redevelopment potential (the former Hynix site) between 20-50 acres which was found to have redevelopment/infill potential because a large portion of the site is undeveloped with one large building at the front that may need to be altered given the specific nature of the previous use.

- **Commercial land with redevelopment potential.** The Commercial redevelopment estimates looked at two types of baseline redevelopment.\(^ {21}\)
  - “Partial redevelopment”— a small amount of redevelopment potential was identified after review of the building permit database. Small building additions and conversions such as converting storage area to retail space or adding an office wing add employment capacity, but do not meet the definition of a full redevelopment. Assuming an average of 450 square feet per employee (excluding large retail), partial redevelopment projects have added space for about 270 jobs city-wide over the past 10 years. The City assumes that at least this same amount will occur over the next 20 years (270 jobs).
  - “Market-driven redevelopment”— a larger amount of redevelopment potential was identified using a “redevelopment estimating tool.”\(^ {22}\) This tool is based on a 2010 market study by Johnson/Reid Associates and was developed by staff and TRG members with input by local experts. The redevelopment estimating tool uses a market-based approach to estimate redevelopment potential by examining different “prototype” projects – including office, retail, rental housing, and mixed use buildings- for market viability on every tax lot, city-wide, located within commercial land use designations. The results of that analysis.

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19 See Part II of this Study, the EOA, at section 6.1.3.3.\(^ {20}\) This group included members of the TRG as well as other local economic development experts.

20 This group included members of the TRG as well as other local economic development experts.

21 See the Envision Eugene Commercial Employment Supply Technical Report (July 2015) which is included in the Technical Support portion of the public record for more information on baseline redevelopment.

22 For the redevelopment estimating tool, see the Technical Support portion of the public record.
show that some baseline redevelopment potential exists for general commercial (55 jobs) and medical office development (1,004 jobs).

- The total number of commercial jobs to be accommodated through baseline redevelopment is 1,329 jobs. Assuming the same split of office vs. retail jobs that is projected in the overall employment demand and the same employees per acre used for employment land capacity analysis, this results in 29 acres of commercial demand that can be absorbed on existing developed land through baseline redevelopment.\(^2\)

- Government & Education and University Research. Analysis for redevelopment/infill land was not necessary for these plan designations because the demand and capacity analysis for public land needs is estimated in a separate analysis within the Economic Opportunities Analysis in Part II of this Study.

### Table 6. Employment Land, Partially Vacant & Redevelopment, Eugene 2012

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Partially Vacant Acres</th>
<th>Redevelopment/ Infill Acres or Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>17</td>
<td>29 acres (not mapped)</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>0</td>
<td>See below</td>
</tr>
<tr>
<td>Sites smaller than 10 acres</td>
<td>0</td>
<td>31 acres (not mapped)</td>
</tr>
<tr>
<td>Sites larger than 10 acres</td>
<td>0</td>
<td>4 sites (mapped)</td>
</tr>
</tbody>
</table>

**Step 5: Summarize the results**

The results of the 2012 employment land supply project are tables, charts and maps that depict the land supply by location, size, and plan designation. Table 7 is a summary of the 2012 land supply by

\(^2\) The 29 acres of baseline redevelopment assumed to be accommodated on development land is based on the split of commercial jobs forecasted in the 2011 Oregon Employment Department forecast; the commercial demand is projected to be 59.09% office jobs and 40.72% retail jobs. The employees per acre is the same assumption used to calculate capacity on employment land; 68 EPA for (non-retail) commercial jobs and 23 EPA for retail jobs. For partial redevelopment (55 jobs) and market-drive general commercial redevelopment (270 jobs), 59.09% of these 325 jobs is about 192 jobs divided by 68 EPA is about 2.82 acres and 40.72% of the 325 jobs is about 132 retail jobs divided by 23 EPA is 5.75 acres. This 8.58 acres divided by 0.8 acre for the net-to-gross conversion is 10.72 acres of conventional market driven or partial redevelopment (additions) redevelopment. For market-driven medical office redevelopment, the entire amount is assumed to be office jobs. 1,004 office jobs divided by 68 EPA is 14.8 acres, divided by 0.8 acre for the net to gross conversion is 18.45 acres of medical office redevelopment. 10.72 acres plus 18.45 acres is about 29 acres of commercial jobs accommodated through baseline redevelopment. See the Technical Support portion of the public record for more information.
employment land category on vacant and partially vacant land and includes estimates for some redevelopment potential which is further discussed in Part II (EOA), section 6.1.2 and 6.1.3.3.

Table 7. Summary of Existing Land Supply for Employment Lands, Eugene 2012

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Vacant Acres</th>
<th>Partially Vacant Acres</th>
<th>Redevelopment/ Infill Acres or Sites^24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>108</td>
<td>17</td>
<td>29 acres (not mapped)</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>96.9</td>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td>Major Retail Center</td>
<td>3.9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Mixed Use</td>
<td>3.1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>404</td>
<td>0</td>
<td>31 acres (not mapped)</td>
</tr>
<tr>
<td>(Sites smaller than 10 acres)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>123.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>78.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>196.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Heavy Industrial</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Sites 10 acres or larger)</td>
<td>207 (8 sites)</td>
<td>0</td>
<td>4 sites (mapped)</td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>52.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>130.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Heavy Industrial</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government &amp; Education^25</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>University Research</td>
<td>3</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

5. Short Term Supply of Employment Land

OAR 660-009-005(10) defines short-term supply as follows:

“...means suitable land that is ready for construction within one year of an application for a building permit or request for service extension. Engineering feasibility is sufficient to qualify land for the short-term supply of land. Funding availability is not required.”

^24 Redevelopment / Infill sites were only mapped at the site level for the purposes of studying land for its suitability to meet the Industrial land need of 10 acres or greater in size. Employment land redevelopment / Infill sites are not otherwise required to be mapped.

^25 Analysis of partially vacant capacity or redevelopment capacity for Commercial or Industrial use on Government & Education or University Research land was not completed.
term Supply” means the short-term supply of land provides a range of site sizes and locations to accommodate the market needs of a variety of industrial and other employment uses.”

- Eugene conducted a short term supply analysis of all lands within the 2012 Eugene UGB. Eugene Water and Electric Board staff and City wastewater and stormwater staff were provided with the City’s 2012 employment land supply and identified the vacant and partially vacant employment land that is not served or would take significant improvements to be served with utilities. For some service deficiencies that were identified, and the City’s Public Facilities and Services Plan is proposed to be amended to include those significant needed projects. About 51 acres of employment land was identified as needing significant water facilities and about 229 acres of land was identified as needing significant wastewater facilities. When overlapped, about 215 acres of employment land may not qualify as short term.

- The 2035 Envision Eugene Transportation System Plan includes two changes to existing standards that will reduce barriers to development and provide that all employment land will be serviceable for transportation. These include reducing the minimum level of service (LOS) that streets are required to perform at for all City streets citywide to LOS E and adopting alternative performance measures for Oregon Department of Transportation facilities citywide. Furthermore, local streets can be developed within one year because they are usually improved by the developer shortly following a development approval.

- Despite the issues staff identified related to water and wastewater, all areas within the Eugene UGB can be considered to technically meet the Goal 9 Rule criteria of “engineering feasibility.” Staff identified few areas where it was not possible to extend services within one year—provided that funding is available. Funding is a much broader and more complicated issue, but falls outside of the Goal 9 rule as written.

- Table 8 shows that about 71% percent of the land in the 2012 employment land supply qualifies as short-term supply. 26 This exceeds the minimum 25 percent requirement.

---

26 This does not include analysis of the redevelopment portion of the 2012 employment land supply. Developed land is assumed to already be served and therefore, if included in the short term supply analysis, would increase the City’s short term supply.
6. Conclusion

The key findings from the 2012 employment land supply are that, in 2012 Eugene had:

- For the Commercial land supply about: 108 vacant acres, 17 partially vacant acres and 29 redevelopment acres
- For the Industrial land supply less than 10 acres in size, about 404 Industrial vacant acres
- For the Industrial land supply 10 acres or greater in size, 8 Industrial sites, totaling about 207 acres
- About 71% of Eugene’s employment land supply qualifies as short term employment supply

In Part II and Part III of this Study, the City determines how much capacity for employment the 2012 employment land supply holds and analyzes the 20-year demands for employment land to accommodate new jobs and to accommodate public and semi-public uses.

After consideration of these impacts on the capacity of Eugene’s employment land, the City’s 20-year land needs are determined and indicated in the conclusion of Part III of the Envision Eugene Employment Land Supply Study: “Public and Semi-Public Uses on Employment Land (2012-2032).”
In Part IV of the Envision Eugene Employment Land Supply Study: “Measures to Increase Employment Development,” the City explains the efficiency measures it has taken to increase its supply of employment land inside its UGB. In Part V, the City identifies the urban growth boundary expansion needed to accommodate the remaining employment land needs. Part VI, “Employment Buildable Land Inventory (2032),” provides the City’s 2012-2032 Buildable Land Inventory intended to serve Eugene’s need for employment land through 2032. The Employment Buildable Land Inventory ("BLI") located in Part VI of this Study is the official BLI for making future determinations as to whether a property is on the City’s employment land inventory. The supply study in this Part I of the Study is produced solely as a baseline for use in determining the (in)sufficiency of the 2012 supply of employment land.
Figure 1. Plan Designations (2012)

Plan Designation
- Low Density Residential
- Medium Density Residential
- Medium Density Res. Mixed
- High Density Residential
- High Density Res. Mixed Use
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks/Open Space Mixed Use
- Natural Resource
- Parks and Open Space
- Mixed Use
Figure 2. Plan Designations for Employment Land (2012)

Plan Designation

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Legend:
- Urban Growth Boundary
- Water Bodies
- Roads
Figure 4. Employment Land Supply (2012)

Plan Designation - Vacant Employment Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Mixed Use
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant (PV) / redevelopment
- Commercial (COM) Partially Vacant (PV)

Caution: This map is not suitable for legal, engineering, or surveying purposes.
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Mixed Use
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
Figure 5. Employment Land Supply (2012)

Map tile 2 of 18

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- University Research
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
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Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use
- Light Medium Industrial
- University Research

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) vacant >= 10 acres
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

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Figure 5. Employment Land Supply (2012)
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- Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands
- Commercial
- Special Heavy Industrial
- Government & Education
- Light Medium Industrial
- Parks and Open Space
- Commercial Mixed Use
- Campus Industrial
- Parks/Open Space Mixed Use
- Heavy Industrial
- University Research
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Final

- 2012 BLI Taxlots
- Major Streets
- Rail Road

- Water Bodies

- Miles

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
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- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
Figure 5. Employment Land Supply (2012)

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- University Research
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2, Employment Land Supply (2012-2032).
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
Figure 5. Employment Land Supply (2012)

Plan Designations - Vacant Employments Lands
- Commercial
- Special Heavy Industrial
- Government & Education
- Light Medium Industrial
- Parks and Open Space
- Commercial Mixed Use
- Campus Industrial
- Parks/Open Space Mixed Use
- University Research
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) vacant >= 10 acres
- Developed Commercial & Industrial Lands
- Commercial (COM) Partially Vacant
- Committed or Protected Lands (in UGB)

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).
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Figure 5. Employment Land Supply (2012)
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Figure 5. Employment Land Supply (2012)

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

Industrial (IND) vacant >= 10 acres
Developed Commercial & Industrial Lands
Committed or Protected Lands (in UGB)
- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use
- Industrial (IND) vacant >= 10 acres

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Figure 5. Employment Land Supply (2012)

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Figure 5. Employment Land Supply (2012)

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Plan Designations - Vacant Employments Lands
- Commercial
- Special Heavy Industrial
- Government & Education
- Light Medium Industrial
- Parks and Open Space
- Commercial Mixed Use
- Campus Industrial
- Parks/Open Space Mixed Use
- Heavy Industrial
- University Research
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).
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Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Figure 5. Employment Land Supply (2012)

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Mixed Use
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

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Data Sources: City of Eugene, RLID.

The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Figure 5. Employment Land Supply (2012)
Figure 5. Employment Land Supply (2012)

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- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use
- Major Retail Center
- Light Medium Industrial
- Campus Industrial
- University Research
- Commercial Mixed Use
- Heavy Industrial

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Figure 5. Employment Land Supply (2012)

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The location of the UGB line on these maps is imprecise; for the precise location see Figure 2. Employment Land Supply (2012-2032).
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use
- Industrial (IND) vacant >= 10 acres
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
Figure 6. Developed Employment Land (2012)

Plan Designation
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use
PART II. **EUGENE ECONOMIC OPPORTUNITIES ANALYSIS**

This economic opportunities analysis (EOA) for the City of Eugene is Part II of the Envision Eugene/Employment Land Supply Study, a larger project to determine whether Eugene has enough land to accommodate the City’s need for employment opportunities through 2032, based on the best information available or collectable at the time of this analysis.

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   - 2.2 Framework for Determining Whether Employment Land in Current UGB is Sufficient (State Requirements) .................. 15
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1 INTRODUCTION

In 2008, the City of Eugene initiated the “Eugene Comprehensive Land Assessment” (ECLA) in response to House Bill 3337, which required that the City of Eugene establish an urban growth boundary (UGB) and demonstrate that there is enough land within the UGB to accommodate estimated housing needs for 20 years. The Eugene City Council chose also to address the community’s need for employment, parks and schools. The purpose of ECLA was to develop a factual basis for policy conversations about land need in Eugene. In 2010, a draft of the ECLA report was completed and presented to the Eugene City Council. The City Council accepted the Eugene Comprehensive Lands Assessment Executive Summary and directed City staff to use the estimates and data in the Envision Eugene Project.1

The City of Eugene started the next phase of the discussion about Eugene’s land needs in May 2010. This project, called Envision Eugene, had two primary goals: (1) to determine how Eugene will accommodate the next 20 years of growth as required by State law and (2) to create a future that is livable, sustainable, beautiful, and prosperous. Envision Eugene incorporated input into the technical analysis from two key groups:

- **The Community Resource Group** was a series of in-depth conversations with a wide variety of thoughtful and knowledgeable community members.

- **The Technical Resource Group** was a committee of community members with technical expertise, who spent hundreds of hours vetting data and analysis.

In March 2011, City of Eugene staff presented a draft proposal, titled “Envision Eugene: A Legacy of Livability” to the community and City Council. The foundation of the proposal is a framework for the vision and desired outcomes of Eugene’s growth over the next 20 years, called the “Seven Pillars.”

In March 2012, City staff presented the document “Envision Eugene: A Community Vision for 2032.” This document refined the seven pillars in “Envision Eugene: A Legacy of Livability” and established the community vision for managing growth through specific strategies and proposed actions. City Council accepted this document in June 2012 and formally

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1 Resolution 5004 passed by the Eugene City Council on April 21, 2010.
initiated the legislative review of Eugene’s UGB by notifying the Oregon Department of Land Conservation and Development.

This EOA is based, in large part, on the “Envision Eugene: A Community Vision for 2032.” The EOA presents Eugene’s employment land demand for the 2012 to 2032 period. It does not address the community’s need for housing, parks or schools.

This document presents an EOA for the City of Eugene consistent with the requirements of statewide planning Goal 9, the Goal 9 and Goal 14 administrative rules (OAR 660 Divisions 9 and 24) and the court decisions that have interpreted them. Goal 9 describes the EOA as “an analysis of the community’s economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends” and states that “a principal determinant in planning for major industrial and commercial developments should be the comparative advantage of the region within which the developments would be located.”

Goal 9 requires the City to state its objectives for economic development (OAR 660-009-0020(1)(a)), to identify the types of industrial and other employment uses it can reasonably expect to locate in Eugene, and to identify the characteristics of sites needed to accommodate those reasonably expected industrial and other employment uses to implement the economic development objectives (OAR 660-009-0025(1)) over the 20-year planning period.
2 FRAMEWORK FOR ECONOMIC DEVELOPMENT

The purpose of the economic opportunities analysis (EOA) is to determine if there is enough land inside the City’s UGB to support economic growth over a 20-year planning period based on application of recent trends. To make this determination, the City must assess how much and what types of economic growth may occur in Eugene.

2.1 Factors that Affect Economic Development

The fundamental purpose of Goal 9 is to make sure that a local government plans for economic development. The planning literature provides many definitions of economic development, both broad and narrow. Broadly,

“Economic development is the process of improving a community’s well-being through job creation, business growth, and income growth (factors that are typical and reasonable focus of economic development policy), as well as through improvements to the wider social and natural environment that strengthen the economy.”

That definition acknowledges that a community’s well-being depends in part on narrower measures of economic well-being (e.g., jobs and income) and on other aspects of quality of life (e.g., the social and natural environment).

In practice, cities and regions trying to prepare an economic development strategy typically use a narrower definition of economic development: they take it to mean business development, job growth, and job opportunity. The assumptions are that:

- Business and job growth are contributors to and consistent with economic development, increased income, and increased economic welfare.
- The evaluation of tradeoffs and balancing of policies to decide whether such growth is likely to lead to overall gains in well-being (on average and across all citizens and businesses in a jurisdiction, and all aspects of well-being) is something that

decision makers do after an economic strategy has been presented to them for consideration.

That logic is consistent with the tenet of the Oregon land-use planning program: that all goals matter, no goal dominates, and the challenge is to find a balance of conservation and development that is acceptable to a local government and state. Goal 9 does not dominate, but it legitimizes and requires that a local government focus on the narrower view of economic development: the one that focuses on economic variables.

In that context, a major part of local economic development policy is about local support for business development and job growth; that growth comes from the creation of new firms, the expansion of existing firms, and the relocation or retention of existing firms. Thus, a key question for economic development policy is, What are the factors that influence business and job growth, and what is the relative importance of each? This document addresses that question in depth.3

2.1.1 What Factors Matter?

Why do firms locate where they do? There is no single answer—different firms choose their locations for different reasons. Key determinates of a location decision are a firm’s factors of production. For example, a firm that spends a large portion of total costs on unskilled labor will be drawn to locations where labor is relatively inexpensive. A firm with large energy demands will give more weight to locations where energy is relatively inexpensive. In general, firms choose locations they believe will allow them to maximize net revenues: if demand for goods and services are held roughly constant, then revenue maximization is approximated by cost minimization.

The typical categories that economists use to describe a firm’s production function are:

- **Labor.** Labor is often and increasingly the most important factor of production. Other things equal, firms look at productivity—labor output per dollar. Productivity can decrease if certain types of labor are in short supply, which increases the costs by requiring either more pay to acquire the labor that is available,

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3 The information in this section is based on previous Goal 9 studies conducted by ECONorthwest and the following publication: An Economic Development Toolbox: Strategies and Methods, Terry Moore, Stuart Meck, and James Ebenhoh, American Planning Association, Planning Advisory Service Report Number 541, October 2006.
the recruiting of labor from other areas, or the use of the less productive labor that is available locally.

- **Land.** Demand for land depends on the type of firm. Manufacturing firms need more space and tend to prefer suburban locations where land is relatively less expensive and less difficult to develop. Warehousing and distribution firms need to locate close to interstate highways.

- **Local infrastructure.** An important role of government is to increase economic capacity by improving quality and efficiency of infrastructure and facilities, such as roads, bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications.

- **Access to markets.** Though part of infrastructure, transportation merits special attention. Firms need to move their product, either goods or services, to the market, and they rely on access to different modes of transportation to do this. While transportation has become relatively inexpensive compared to other inputs, and transportation costs have become a less important location factor, access to transportation is still critical. That long-run trend, however, could shift because of decreasing funds to highway construction, increasing congestion, and increasing energy prices.

- **Materials.** Firms producing goods, and even firms producing services, need various materials to develop products that they can sell. Some firms need natural resources: lumber manufacturing requires trees. Or, farther down the line, firms may need intermediate materials: for example, dimensioned lumber to build manufactured housing.

- **Entrepreneurship.** This input to production may be thought of as good management, or even more broadly as a spirit of innovation, optimism, and ambition that distinguishes one firm from another even though most of their other factor inputs may be quite similar.

The supply, cost, and quality of any of these factors obviously depend on market factors: on conditions of supply and demand locally, nationally, and even globally. But they also depend on public policy. In general, public policy can affect these factors of production through:

- **Regulation.** Regulations protect the health and safety of a community and help maintain the quality of life. Overly burdensome regulations, however, can be disincentives for businesses to locate in a community. Simplified bureaucracies
and straightforward regulations can reduce the burden on businesses and help them react quickly in a competitive marketplace.

- **Taxes.** Firms tend to seek locations where they can optimize their after-tax profits. Tax rates are not a primary location factor— they matter only after businesses have made decisions based on labor, transportation, raw materials, and capital costs. The costs of these production factors are usually similar within a region. Therefore, differences in tax levels across communities within a region are more important in the location decision than are differences in tax levels between regions.

- **Financial incentives.** Governments can offer firms incentives to encourage growth. Most types of financial incentives have had little significant effect on firm location between regions. For manufacturing industries with significant equipment costs, however, property or investment tax credit or abatement incentives can play a significant role in location decisions. Incentives are more effective at redirecting growth within a region than they are at providing a competitive advantage between regions.

This discussion may make it appear that a location decision is based entirely on a straight-forward accounting of costs, with the best location being the one with the lowest level of overall costs. Studies of economic development, however, have shown that location decisions depend on a variety of other factors that indirectly affect costs of production. These indirect factors include agglomerative economies (also known as industry clusters), quality of life, and innovative capacity.

- **Industry clusters.** Firms with similar business activities can realize operational savings when they congregate in a single location or region. Clustering can reduce costs by creating economies of scale for suppliers. For this reason, firms tend to locate in areas where there is already a presence of other firms engaged in similar or related activities.

- **Quality of life.** A community that features many quality amenities, such as access to recreational opportunities, culture, low crime, good schools, affordable housing, and a clean environment can attract people simply because it is a nice place to be. A region’s quality of life can attract skilled workers, and if the amenities lure enough potential workers to the region, the excess labor supply pushes their wages down so that firms in the region can find skilled labor for a relatively low cost. The characteristics of local communities can affect the distribution of
economic development within a region, with different communities appealing to different types of workers and business owners. Sometimes location decisions by business owners are based on an emotional or historical attachment to a place or set of amenities, without much regard for the cost of other factors of production.

- **Innovative capacity.** Increasing evidence suggests that a culture promoting innovation, creativity, flexibility, and adaptability is essential to keeping U.S. cities economically vital and internationally competitive. Innovation is particularly important in industries that require an educated workforce. High-tech companies need to have access to new ideas typically associated with a university or research institute. Innovation affects both the overall level and type of economic development in a region.

Government can be a key part of a community’s innovative culture, through the provision of services and regulation of development and business activities that are responsive to the changing needs of business.

### 2.1.2 How Important Are These Factors?

To understand how changes in public policies affect local job growth, economists have attempted to identify the importance for firms of different locational factors. They have used statistical models, surveys, and case studies to examine detailed data on the key factors that enter the business location decision.

Economic theory says that firms locate where they can reduce the costs of their factors of production (assuming demand for products and any other factors are held constant). Firms locate in regions where they have access to inputs that meet their quality standards, at a relatively low cost. Because firms are different, the relative importance of different factors of production varies both across industries and, even more importantly, across firms.

No empirical analysis can completely quantify firm location factors because numerous methodological problems make any analysis difficult. For example, some would argue simplistically that firms will prefer locating in a region with a low tax rate to reduce tax expenses. However, the real issue is the value provided by the community for the taxes collected. Because taxes fund public infrastructure that firms need, such as roads, water, and sewer systems, regions with low tax rates may end up with poor infrastructure, making it less attractive to firms. When competing jurisdictions have roughly comparable public services (type,
cost, and quality) and quality of life, then tax rates (and tax breaks) can make a difference.

Further complicating any analysis is the fact that many researchers have used public expenditures as a proxy for infrastructure quality. But large expenditures on roads do not necessarily equal a quality road system. It is possible that the money has been spent ineffectively and the road system is in poor condition.

An important aspect of this discussion is that the business function at a location matters more than a firm’s industry. A single company may have offices spread across cities, with headquarters located in a cosmopolitan metropolitan area, the research and development divisions located near a concentration of universities, the back office in a suburban location, and manufacturing and distribution located in areas with cheap land and good interstate access.

The location decisions of businesses are primarily based on the availability and cost of labor, transportation, raw materials, and capital. The availability and cost of these production factors are usually similar within a region. Most economic development strategies available to local governments, however, only indirectly affect the cost of these primary location factors. Local governments can most easily affect tax rates, public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest affect on the level and type of economic development in the community.

Local governments in Oregon also play a central role in the provision of buildable land through inclusion of lands in the Urban Growth Boundary, as well as through determination of plan designations and zoning, and through provision of public services. Obviously, businesses need buildable land to locate or expand in a community. Providing buildable land alone is not sufficient to guarantee economic development in a community — market conditions must create demand for this land, and local factors of production must be favorable for business activity. In the context of expected economic growth and the perception of a constrained land supply in Lane County, the provision of buildable land has the potential to strongly influence the level and type of economic development in Eugene. The provision of buildable land is one of the most direct ways that the City of Eugene can affect the level and type of economic development in the community.
2.1.3 What Drives Long-run Economic Development?

A regional economic system is complex and is difficult to model, much less to predict without the benefits of models, on the basis of intuition alone. Nonetheless, that is how the large majority of economic development policies get adopted. In light of that reality, the purpose of this section and the following figures is to provide a framework for thinking about causes and effects that will make the intuitions more informed.

Figure 1 shows the primary drivers of urban growth as generally accepted by urban and regional economists. It illustrates that households are attracted to different regions based on their estimation (explicit or implicit, accurate or not) of the tradeoffs among three categories of variables: availability of jobs, wages, cost of living, and everything else (which is a broad definition of quality of life). The phrase 2nd paycheck refers to all those other things that households want. The arrows and signs illustrate the tradeoffs.

Figure 1. Drivers of urban growth

For example, if wages increase, other things equal, a region becomes more attractive and growth is stimulated (migration occurs, and ultimately the
residential and commercial development to accommodate that growth). Other things, of course, are not equal. That growth can cause the cost of living to increase, which decreases regional attractiveness (but also creates pressure to increase wages). To the extent that households believe that a region offers natural and cultural amenities (quality of life) that are valuable, they will be willing to pay more (cost of living) or accept less (the first paycheck) to live in the region.

Figure 1 greatly oversimplifies the dynamics of growth. Each of its elements could be expanded into another diagram. For example, there is a feedback from growth to wages: more growth usually means more demand for labor, which means higher wages to ration an increasingly scarce supply.

As another example, if one were to expand the element labeled 2nd paycheck, one would find that regional economic growth does not have unambiguous effects on the second-paycheck components of quality of life. Business growth affects components of quality of life either directly or indirectly through its impact on population growth. If a generalization is required, urban growth probably tends to increase urban amenities (shopping, entertainment, and organized recreational opportunities) and decrease the environmental quality and the capacity of infrastructure.

Figure 2. The role of public policy

Categories of public policy and key factors they influence

<table>
<thead>
<tr>
<th>Policy Categories</th>
<th>Factors Influenced by Policies</th>
<th>Policy Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air and Water Quality</td>
<td>ENVIRONMENTAL QUALITY</td>
<td>Transportation</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>URBAN AMENITY</td>
<td>Water and Sewer</td>
</tr>
<tr>
<td>Farmland</td>
<td>INFRASTRUCTURE AND SERVICES</td>
<td>Housing</td>
</tr>
<tr>
<td>Urban Design</td>
<td>BUSINESS PRODUCTION COSTS</td>
<td>Land Development</td>
</tr>
<tr>
<td>Arts, Culture, &amp; Recreation</td>
<td>COST OF LIVING</td>
<td>Park &amp; Open Space</td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td>Schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic Development</td>
</tr>
</tbody>
</table>

Source: ECONorthwest

Figure 2 shows that there are many policies a region can adopt to influence the factors that affect economic development. Taking just one example, if a region decided it wanted to affect urban form (for example, because of supposed beneficial effects on the cost of infrastructure and quality of life) there are many categories of policies (e.g., land use, transportation, other public facilities) and many subcategories (e.g., for
land use: traditional zoning, minimum-density zoning, design standards, etc.; for public facilities: design standards, concurrency requirements, financial incentives, system development charges and exactions, etc.).

To summarize the conclusions:

- At a regional level, three categories of variables interact to make a region grow: wages, quality of life, and cost of living.
- This simple categorization quickly gets complex: many sub-categories exist, which interact in complicated ways not only within categories, but also across them.
- Quality-of-life factors have been demonstrated empirically to influence residential and business location decisions.

Thus, public policymakers must consider a multitude of factors as they try to adopt optimal economic development policies. It is no longer as simple as just recruiting big industries.
2.2 Framework for Determining Whether Employment Land in Current UGB is Sufficient (State Requirements)

The assessment of Eugene’s employment land is designed to meet the requirements of Oregon Statewide Planning Goal 9, the administrative rules that implement it (Oregon Administrative Rule (OAR) 660-009), and the court decisions that interpret the Goal and rules. The intents of Goal 9 are: (1) to “provide an adequate land supply for economic development and economic growth in Oregon”; (2) to link planning for an adequate land supply to planning for development of infrastructure and community development; and (3) to assure that comprehensive plan policies and land-use regulations are updated and provide economic opportunities throughout the State and are based on analysis of economic trends.4

To satisfy the requirements of Goal 9, the State requires a city determine whether the employment land in its UGB (land supply) can accommodate the employment growth forecasted for a 20-year planning period (land demand, or need).5 If not, a city must take steps to increase land-use efficiency or it must expand the UGB to provide more employment land.

In the context of Goal 9, the measure of employment land is “sites” needed for employment uses. A site is a parcel or group of parcels of land designated for uses that accommodate employment. Cities will have need for a variety of site types, sizes, and locations based on the amount and type of employment growth expected. Sites have varying characteristics, such as size, location, or topography, and may be suited to meet the land need for one or more types of employment.

Eugene’s assessment of employment land and site needs is based on these requirements. The key results of the assessment are: (1) an inventory of Eugene’s employment land in 2012 (contained in Part I of the City’s Employment Land Supply Study), (2) an estimate of the number of sites needed for employment uses over the 20-year planning period and a factual basis supporting this estimate, and (3) a comparison of the supply of and the need for employment sites with a conclusion about whether

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4 OAR 660-009-0000

5 The City of Eugene is included within a metropolitan UGB that also includes the City of Springfield. Due to the State Legislature’s adoption of HB 3337 in 2007 (ORS 197.304), the metropolitan UGB is being replaced by two separate UGBs, with Interstate 5 serving as the dividing line between the Eugene UGB and the Springfield UGB. Therefore, the Goal 9 determination for Eugene is whether the employment land in the UGB, on the west side of Interstate 5, can accommodate the employment growth forecasted for a 20-year planning period.
Eugene has enough land for employment uses. The estimate and comparison described in (2) and (3) are set out in this document, the Eugene Economic Opportunities Analysis (contained in Part II of the City’s Employment Land Study).

Figure 3 shows the basic process for determining whether there is enough employment land on Eugene’s side of the metropolitan UGB to accommodate Eugene’s growth over the 20-year planning period. The basic steps shown in Figure 3 correspond to the more detailed process for conducting the assessment that follows.

**Figure 3. Process for assessing the sufficiency of employment land**

The steps in this assessment are:

1. **Inventory current (2012) stock of employment land.** (OAR 660-009-0015(3), OAR 660-024-0050(1)). Cities are required to develop an
inventory of vacant and developed lands within the planning area designated for industrial or other employment use. This inventory was produced for Eugene as part of the 2012 Employment Land Supply Study (2012 employment land supply). The 2012 employment land supply is contained in Part I of the Envision Eugene Employment Land Study.

2. **Forecast Employment Growth.** (OAR 660-09-0015(2), 660-024-0040(9)(a)). Cities are required to forecast the number of new employees they will need to accommodate (employment growth) over the 20-year planning period. The forecast is used to identify the number of employment sites the City will need (See 3D, below). The employment forecast for Eugene is included in this Economic Opportunities Analysis (EOA).

3. **Determine the Need for Employment Land.** Cities are required to identify the number and types of employment sites they will need to accommodate the forecasted employees with employers that can reasonably be expected to expand or locate in the area in the 20-year planning period. This analysis has the following steps:

   A) **Analyze Economic Trends** (OAR 660-09-0015(1)). Cities are required to review national, state, regional, county and local trends to identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the Urban Growth Boundary (UGB). This trend analysis is included in this EOA document.

   B) **Assess Economic Development Potential** (Statewide Planning Goal 9, OAR 660-09-0015(1) and (4)). Cities are required to consider their economic advantages and disadvantages to more precisely identify the employment uses that could reasonably be expected to expand or locate in the planning area. This assessment is included in this EOA document.

   C) **Adopt Economic development policies.** (OAR 660-009-0020, 660-009-0025). The City’s comprehensive plan must include policies that are based on the work above. These comprehensive plan policies must: state the overall objectives for economic development in the planning area; state that designating a competitive short term supply of land is a community objective; and commit the city or county to designate an adequate number of employment sites of suitable sizes, types and locations. The plan must also include policies to provide necessary public facilities and transportation facilities for the planning area. Finally, the plan must include strategies for preparing the total land
supply for development and for replacing the short-term supply of land as it is developed. These plan provisions will be adopted in the comprehensive plan.

D) **Identify the Number / Characteristics of Needed Sites (OAR 660-09-0015(2), 660-009-0025(1))**. To determine the City’s need for employment land, the EOA must identify the number of sites by type reasonably expected to be needed to accommodate the forecast of employment growth (2, above). This identification must be based on the site characteristics typical of, and with some meaningful connection to, the expected employment uses. According to OAR 660-009-0005(11), the site characteristics may include such things as: a minimum acreage or site configuration (e.g. shape or topography), visibility, need for specialized services or infrastructure, and proximity to needed transportation. The identification of needed sites and site characteristics is included in this EOA document.

4. **Determine Employment land sufficiency.** (OAR 660-009-0025(2)). Cities must compare the need for employment land developed as described in 2 and 3, above, with the inventory of available employment sites described in 1, above.
Eugene exists as part of the larger economy of the southern Willamette Valley and is strongly influenced by regional economic conditions. For many factors, such as labor, Eugene does not differ significantly from the broader region. For other factors, such as income, it does. Thus, Eugene benefits from being a part of the larger regional economy and plays a specific role in the regional economy.

This chapter summarizes national, state, county, and local trends and other factors affecting economic growth in Eugene. Each heading in this chapter represents a key trend or economic factor that will affect Eugene’s economy and economic development potential.

3.1 National, State, and Regional Trends

3.1.1 Short-term Trends

The focus of the economic opportunities analysis is long-term economic opportunities and need for land to accommodate employment growth. The EOA generally focuses on long-term economic cycles (Goal 9 requires a 20-year forecast). The recent recession, however, is severe enough that it may continue to affect Oregon’s economy over the next five years, possibly longer. This section briefly summarizes big-picture, short-term economic trends.

- The U.S. economy continues to recover from the deepest recession since World War II. The recession was brought about by instability of financial and housing markets and has impacted Oregon in a variety of ways, most notably with the labor market showing high unemployment and the housing market’s oversupply of homes. While the national economy may begin to recover from the recession in 2010, the recovery may be a “jobless” recovery, where job growth is sluggish, even as production of goods and services begin to increase and the housing market begins to show signs of recovery. Oregon has seen gradual employment increases since the beginning of 2010.6

- According to the Oregon Employment Department, Oregon’s employment peaked in the first quarter of 2008 (at more than 1.74

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million jobs) and hit its lowest point in the first quarter of 2010 (at about 1.59 million jobs), losing 146,000 jobs over the two-year period. Between early 2010 and December 2012, Oregon added about 52,000 jobs.

- According to the Oregon Office of Economic Analysis (OEA) job growth since mid-2011 has been slow but continuous, at about 1.2% per year, which is less than half of the average growth rate during an expansion year. The OEA predicts continued slow growth.

- Nationally, housing demand decreased precipitously during 2008 and continued to decline through 2009. This decrease is the result of a number of factors, including the sub-prime lending crisis, difficulties with the financial industry and resulting tightening of credit availability, the impact of decreases in home value for existing homeowners, and the impact of job losses.

The national housing market appears to be stabilizing, with housing starts beginning to increase. While housing prices are increasing in some markets, they are holding stable or continuing to decrease in some housing markets. The OEA expects that Oregon’s housing market should recover more easily than other states that had greater increases in housing prices during the recent housing boom.7

- The Oregon Index of Leading Indicators grew in late 2011 through early 2012 but declined sharply in June 2012. The overall decline was driven by large decreases in a few indicators, particularly those related to global economic slowdown in the manufacturing sector. In general, recent trends in the Index suggest near-term economic growth.8

- Governments across the globe attempted to stabilize the economy through economic stimulus. In the U.S. government stimulation that has directly impacted Oregon includes government subsidies for the housing market and the return of federal timber payments to Oregon’s counties. But the federal timber payments were phased out over a four-year period which ended in 2011. The withdrawal of

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these forms of stimulus may have adverse impacts on economic activity. 

- Oregon’s economic health is dependent on the export market. Oregon’s exports in the first half of 2012 decreased by 5.1% relative to 2011 levels. The countries that Oregon has the most exports to are China, Canada, Malaysia, Japan, and Taiwan. These economies were all affected by the global recession. Exports to China and Malaysia, which accounted for 30% of Oregon’s exports in 2011, are down 28% in the first half of 2012. The manufacturing slowdown in China and the euro zone recession have negatively impacted Oregon exports. As foreign economies recover from the recession, their increased purchasing power will aid U.S. producers looking to export, including export firms in Oregon.

### 3.1.2 Long-term National Trends

Economic development in Eugene over the next twenty years will occur in the context of long-run national trends. The most important of these trends include:

- **Continued slow economic growth.** Analysis from the Congressional Budget Office (CBO) shows that the national economy expanded modestly in 2010, continuing the slow recovery from the 2007-2009 recession. The CBO forecasts continued slow growth through 2013. Between 2014 and 2018, the CBO forecasts growth rates of about 3.5% annually and average annual growth of about 2.25% between 2019 and 2023.

- The national economy is expected to start growing again in 2010. The U.S. Gross Domestic Product (GDP) decreased by 2.5% in 2009 but grew at more than 5% in the fourth quarter of 2009. The Congressional Budget Office (CBO) forecasts that the GDP is forecast to grow at about 2.2% for 2010, averaging to 4.4% for 2012-2014 and 2.4% for 2015-2020. The CBO projects that the unemployment rate will peak in 2010, declining to an average of about 6.5% over 2012-2014 and averaging 5.0% over 2015-2020. In comparison, the average unemployment

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9 Ibid., 50.

10 Ibid., 19-22.

rate from 1999 to 2008 was 5.0%. The CBO projects that inflation will continue to average about 1% annually, gradually increasing as the economy approaches full employment. The CBO projects long-term inflation to average about 1.7% per year per year from 2015 to 2020.\textsuperscript{12}

- **The aging of the baby boom generation, accompanied by increases in life expectancy.** The number of people age 65 and older will more than double by 2050, while the number of working age people under age 65 will grow only 19 percent. The economic effects of this demographic change include a slowing of the growth of the labor force, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.\textsuperscript{13}

Baby boomers are expecting to work longer than previous generations. An increasing proportion of people in their early to mid-50s expect to work full-time after age 65. In 2004, about 40% of these workers expect to work full-time after age 65, compared with about 30% in 1992.\textsuperscript{14} This trend can be seen in Oregon, where the share of workers 65 years and older grew from 2.9% of the workforce in 2000 to 4.1% of the workforce in 2010, an increase of 41%. Over the same ten-year period, workers 45 to 64 years increased by 15%.\textsuperscript{15}

- **Need for replacement workers.** The need for workers to replace retiring baby boomers will outpace job growth. According to the Bureau of Labor Statistics, net replacement needs will be 33.7 million job openings over the 2010-2020 period, compared with growth in employment of 21.1 million jobs. The occupations with the greatest need for replacement workers includes: retail sales, food service, registered nurses, office workers and teachers.\textsuperscript{16}

\begin{itemize}
\item \textsuperscript{12} Ibid., 38.
\item \textsuperscript{15} Analysis of 2000 Decennial Census data and 2010 U.S. Census American Community Survey, 1-Year Estimates for the table Sex by Age by Employment Status for the Population 16 Years and Over
\end{itemize}
• **The importance of education as a determinant of wages and household income.** According to the Bureau of Labor Statistics, a majority of the fastest growing occupations will require an academic degree, and on average they will yield higher incomes than occupations that do not require an academic degree. The fastest growing of occupations requiring an academic degree will be: health care service, computer programing, management and business services, college teachers, and architectural and engineering services. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for more than two-thirds of all new jobs by 2020. These occupations typically have lower pay than occupations requiring an academic degree.\(^\text{17}\)

The national median income in 2010 was about $40,700. Workers without a high school diploma earned $17,600 less than the median income and workers with a high school diploma earned $8,100 less than median income. Workers with some college earned slightly less than median and workers with a bachelor’s degree earned $13,300 more than median. Workers in Oregon experience the same patterns as the nation but pay is generally lower in Oregon than the national average.\(^\text{18}\)

• **Need for diversity in the skills of workers.** While workers with academic degree or “high” skills are forecast to continue to be in demand (e.g., managers, lawyers, engineers, or health care practitioners), businesses will need other skilled workers. These workers, termed “middle-skill,” are in occupations such as sales, administrative support, construction, maintenance, or transportation. Middle-skill workers may have a high school diploma or may have completed an Associate’s degree but are less likely to have a Bachelor’s degree. Middle-skill workers have specialized skills and need more training that a high school diploma.


The Oregon Department of Employment projects that about 28% of job openings in Oregon between 2010 and 2020 will be in middle-skill occupations.¹⁹

- **Increases in labor productivity.** Productivity, as measured by output per hour, increased over the 1995 to 2005 period. The largest increases in productivity occurred over the 1995 to 2000 period, led by industries that produced, sold, or intensively used information technology products. Productivity increased over the 2000 to 2005 period but at a slower rate than during the later half of the 1990’s. The sectors that experienced the largest productivity increases over the 2000 to 2005 period were: Information, Manufacturing, Retail Trade, and Wholesale Trade. Productivity in mining decreased over the five-year period. ²⁰

- **Continued shift of employment from manufacturing and resource-intensive industries to the service-oriented sectors of the economy.** Increased worker productivity and the international outsourcing of routine tasks lead to declines in employment in the major goods-producing industries. Projections from the Bureau of Labor Statistics indicate that U.S. employment growth will continue to be strongest in healthcare and social assistance, professional and business services, and other service industries. Construction employment will also grow but manufacturing employment will decline.²¹

- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. High-quality natural resources continue to be important in some states, especially in the Western U.S. Increases in the population and in households’ incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such

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¹⁹ “A careful Analysis of Oregon’s middle-Skill Jobs,” July 2012 Oregon Employment Department.


amenities contribute to a region’s quality of life and play an important role in attracting both households and firms.22

- **Continued increase in demand for energy.** Energy prices are forecast to remain at relatively high levels, with continued, gradual increased prices over the planning period. Energy consumption is expected to grow from industrial and (to a lesser extent) commercial users and remain flat by residential users. Energy consumption for transportation is expected to decrease, as Federal standards for energy efficiency in vehicles increases.

Energy consumption by type of fuel is expected to change over the planning period. By 2040, the US will consume a little less oil and more natural gas and renewables. Despite increases in energy efficiency and decreases in demand for energy by some industries, demand for energy is expected to increase over the 2013 to 2040 period because of increases in population and economic activity. Growth will remain slow early in the planning period, as the economy continues a gradual recovery from the recent recession.23

- **Impact of rising energy prices on commuting patterns.** Energy prices may continue to be high (relative to historic energy prices) or continue to rise over the planning period.24 The increases in energy prices may impact willingness to commute long distances.

- **Possible effect of rising transportation and fuel prices on globalization.** Increases in globalization are related to the cost of transportation: When transportation is less expensive, companies move production to areas with lower labor costs. Oregon has benefited from this trend, with domestic outsourcing of call centers and other back office functions. In other cases, businesses in Oregon (and the nation) have “off-shored” employment to other countries, most frequently manufacturing jobs.

Increases in either transportation or labor costs may impact globalization. When the wage gap between two areas is larger than

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the additional costs of transporting goods, companies are likely to shift operations to an area with lower labor costs. Conversely, when transportation costs increase, companies may have incentive to relocate to be closer to suppliers or consumers.

This effect occurs incrementally over time and it is difficult to measure the impact in the short-term. If fuel prices and transportation costs decrease over the planning period, businesses may not make the decision to relocate (based on transportation costs) because the benefits of being closer to suppliers and markets may not exceed the costs of relocation.

- **Growing opportunities for “green” businesses.** Businesses are increasingly concerned with “green” business opportunities and practices. These business practices include “the design, commercialization, and use of processes and products that are feasible and economical while reducing the generation of pollution at the source and minimizing the risk to human health and the environment.”25

Defining what constitutes a green job or business is difficult because most industries can have jobs or business practices that are comparatively environmentally beneficial. A 2009 study by the Pew Charitable Trust defines the clean energy economy as an economy that “generates jobs, businesses and investments while expanding clean energy production, increasing energy efficiency, reducing greenhouse gas emissions, waste and pollution, and conserving water and other natural resources.”26

The Pew study classifies businesses in the clean energy economy into five separate categories:

- **Clean Energy.** Building sustainable energy for the future.
- **Energy Efficiency.** Reducing and managing our energy demand.
- **Environmentally Friendly Production.** Improving our products and processes.
- **Conservation and Pollution Mitigation.** Recycling and remediating waste.

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25 Urban Green Partnership at urbangreenpartnership.org

Training and Support. Helping develop our clean energy economy.

The study found that clean energy jobs grew about two and one-half times faster than all jobs over the 1998 to 2007 period. Pew found that clean energy jobs grew at 9.1% annually between 1998 and 2007, compared with total job growth of 3.7% over the same period. In Oregon, clean energy jobs grew faster than the national average, with 50.7% annual growth, compared to total job growth of 7.5% annually. In 1998, Oregon had about 1,600 clean businesses and about 19,000 clean jobs by 2007.²⁷

- Potential impacts of global climate change. There is a consensus among the scientific community that global climate change is occurring and will have important ecological, social, and economic consequences over the next decades and beyond.²⁸ Extensive research shows that Oregon and other western states already have experienced noticeable changes in climate, and predicts that more change will occur in the future.²⁹

In the Pacific Northwest, climate change is likely to (1) increase average annual temperatures, (2) increase the number and duration of heat waves, (3) increase the amount of precipitation falling as rain during the year, (4) increase the intensity of rainfall events, and (5) increase sea level. These changes are also likely to reduce winter snowpack and shift the timing of spring runoff earlier in the year.³⁰

²⁷ Ibid., 8.
These anticipated changes point toward some of the ways that climate change is likely to impact ecological systems and the goods and services they provide. There is considerable uncertainty about how long it would take for some of the impacts to materialize, and the magnitude of the associated economic consequences. Assuming climate change proceeds as today’s models predict, however, some of the potential economic impacts of climate change in the Pacific Northwest will likely include:

- **Potential impact on agriculture and forestry.** Climate change may impact Oregon’s agriculture through changes in: growing season, temperature ranges, and water availability. Climate change may impact Oregon’s forestry through increase in wildfires, decrease in the rate of tree growth, change in mix of tree species, and increases in disease and pests that damage trees.

- **Potential impact on tourism and recreation.** Impacts on tourism and recreation may range from: (1) decreases in snow-based recreation if snow-pack in the Cascades decreases, (2) negative impacts to tourism along the Oregon Coast as a result of damage and beach erosion from rising sea levels, (3) negative impacts on availability of water summer river recreation (e.g., river rafting or sports fishing) as a result of lower summer river flows, and (4) negative impacts on the availability of water for domestic and business uses.

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31 The issue of global climate change is complex and there is a substantial amount of uncertainty about climate change. This discussion is not intended to describe all potential impacts of climate change but to present a few ways that climate change may impact the economy of cities in Oregon and the Pacific Northwest.


• Potential impacts arising from efforts to address global climate change. The prospect of global climate change has prompted many proposals for changes in socioeconomic and political structures at the global, national, regional, and local level. These proposals are geared towards reducing the emissions of greenhouse gases and to preparing for changes in climate that cannot be avoided. Some of the most prominent proposals include:
  o *Tax on burning fossil fuels.* One approach is to impose a tax (or something equivalent to a tax, such as a cap-and-trade program) on activities that burn coal, petroleum, or other fossil fuels. For example, the Western Climate Initiative, a collaboration of western states (including Oregon) and Canadian provinces committed to working together to reduce greenhouse gas emissions at a regional level, recently released a design for a regional cap-and-trade program to be implemented by 2015.\(^{35}\)
  o *Tax carbon emissions.* Climate change legislation has also been introduced in Congress, and several current proposals would involve a tax on carbon emissions or a cap-and-trade program to limit emissions.\(^{36}\)
  o *Promote development of alternative energy sources.* Other local, regional, and national efforts seek to improve the energy efficiency of household, commercial, and industrial activities, and to promote the development of technologies that generate electricity from wind and other renewable sources of energy.\(^{37}\)

How these and other proposals, if enacted, would affect the local and regional economies remains unknown, but the proposals could lead to substantial changes in consumer-expenditure patterns and business practices.

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\(^{36}\) Pew Center on Global Climate Change website: http://www.pewclimate.org/what_s_being_done/in_the_states/

\(^{37}\) See, for example, some of the state-level initiatives in Oregon at http://www.oregon.gov/ENERGY/GBLWRM/index.shtml
Global climate change may offer economic opportunities. The search for alternative energy sources may result in increased investment and employment in “green” energy sources, such as wind, solar, and biofuels. Firms in the Northwest are well positioned to lead efforts on climate change mitigation, which may result in export products, such as renewable technologies or green manufacturing.  

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times these trends may run counter to the long-term trends described above. A recent example is the downturn in economic activity in 2008 and 2009 following declines in the housing market and the mortgage banking crisis. The result of the economic downturn has been a decrease in employment related to the housing market, such as construction and real estate. Employment in these industries will recover as the housing market recovers and will continue to play a significant role in the national, state, and local economy over the long run. This report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run national business cycles on employment or economic activity.

3.1.3 State, Regional, and Local Trends

State, regional, and local trends will also affect economic development in Eugene over the next twenty years. The most important of these trends includes: continued in-migration from other states, distribution of population and employment across the State, and change in the types of industries in Oregon.

- **Continued in-migration from other states.** Oregon will continue to experience in-migration from other states, especially California and Washington. According to a U.S. Census study, Oregon had net interstate in-migration (more people moved to Oregon than moved from Oregon) during the period 1990-2010. Oregon had an annual average of 26,290 more in-migrants than out-migrants during the period 1990-2000. The annual average dropped to 9,800 during the

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- **Concentration of population and employment in the Willamette Valley.** Nearly 70% of Oregon’s population lives in the Willamette Valley. About 10% of Oregon’s population lives in Southern Oregon, 9% lives in Central Oregon, and 6% live in Coastal counties. The Oregon Office of Economic Analysis (OEA) forecasts that population will continue to be concentrated in the Willamette Valley through 2040, increasing slightly to 71% of Oregon’s population.

  Employment growth generally follows the same trend as population growth. Employment growth varies between regions even more, however, as employment reacts more quickly to changing economic conditions. Total employment increased in each of the state’s regions over the period 1970-2006 but over 70% of Oregon’s employment was located in the Willamette Valley.

- **Change in the type of the industries in Oregon.** As Oregon has transitioned away from natural resource-based industries, the composition of Oregon’s employment has shifted from natural resource based manufacturing and other industries to service industries. The share of Oregon’s total employment in Service industries increased from its 1970s average of 19% to 45% in 2011, while employment in Manufacturing declined from an average of 18% in the 1970s to an average of 10% in 2011.

- **Shift in manufacturing from natural resource-based to high-tech and other manufacturing industries.** Since 1970, Oregon started to transition away from reliance on traditional resource-extraction industries. A significant indicator of this transition is the shift within Oregon’s manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry and concurrent growth of employment in other manufacturing industries.

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40 Oregon Department of Motor Vehicles collects data about state-of-origin for drivers licenses surrendered by people applying for an Oregon drivers license from out-of-state. Between 2000 and 2007, about one-third of licenses surrendered were from California, 15% to 18% were surrendered from Washington, and about 17% to 19% were from the following states: Arizona, Idaho, Nevada, Colorado, and Texas.
industries, such as high-technology manufacturing (Industrial Machinery, Electronic Equipment, and Instruments), Transportation Equipment manufacturing, and Printing and Publishing. 41

- **Continued importance of manufacturing to Oregon’s economy.** Oregon’s exports totaled $19.4 billion in 2008, nearly doubling since 2000. Oregon’s largest export industries were computer and electronic products and agricultural products, account for nearly 60% of Oregon’s exports. Manufacturing employment is concentrated in five counties in the Willamette Valley or Portland area: Washington, Multnomah, Lane, Clackamas, and Marion Counties.42

- **Small businesses continue to account for over 50% of employment in Oregon.** Small business, with 100 or fewer employees, account for 51% of private sector employment in Oregon in 2009, up from about 50.2% of private employment in 2000 and down from 52.5% in 1996. Workers of small businesses typically had lower wages than the state average, with average wages of $33,977 compared to the statewide average of for large businesses about $45,814 in 2009. 43

The changing composition of employment has not affected all regions of Oregon evenly. Growth in high-tech and Services employment has been concentrated in urban areas of the Willamette Valley and Southern Oregon, particularly in Washington, Benton, and Josephine Counties. The brunt of the decline in Lumber & Wood Products employment was felt in rural Oregon, where these jobs represented a larger share of total employment and an even larger share of high-paying jobs than in urban areas.

**3.1.3.1 Availability of Labor**

The availability of trained workers in Eugene will impact development of Eugene’s economy over the planning period. Key trends that will affect

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41 Although Oregon’s economy has diversified since the 1970’s, natural resource-based manufacturing accounts for more than nearly 40% of employment in manufacturing in Oregon in 2010, with the most employment in Wood Product and Food manufacturing.

42 Business Oregon, “Economic Data Packet”

43 Business Oregon, “Economic Data Packet”
the workforce in Eugene over the next 20 years include Eugene’s growing population, aging population, and commuting trends.

**Growing Population**

Population growth in Oregon tends to follow economic cycles. Historically, Oregon’s economy is more cyclical than the nation’s, growing faster than the national economy during expansions, and contracting more rapidly than the nation during recessions. Oregon grew more rapidly than the U.S. in the 1990s (which was generally an expansionary period) but lagged behind the U.S. in the 1980s. Oregon’s slow growth in the 1980s was primarily due to the nationwide recession early in the decade. As the nation’s economic growth slowed during 2007, Oregon’s population growth began to slow.

Oregon’s population grew from 2.8 million people in 1990 to 3.9 million people in 2012, an increase of over 1,000,000 people at an average annual rate of 1.43%. Oregon’s growth rate slowed to 1.06% annual growth between 2000 and 2012.

Table 1 shows that Lane County grew slower than the State between 1990 and 2012, growing at 1.03% annually and adding over 71,000 people. About 45% of the County’s population lived in Eugene in 2012. Eugene’s population grew faster than the County average, at 1.56% annually, adding 45,666 residents over the twenty-two year period.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>248,709,873</td>
<td>281,421,906</td>
<td>313,914,040</td>
<td>65,204,167 26% 1.06%</td>
</tr>
<tr>
<td>Oregon</td>
<td>2,842,321</td>
<td>3,421,399</td>
<td>3,883,735</td>
<td>1,041,414 37% 1.43%</td>
</tr>
<tr>
<td>Willamette Valley</td>
<td>1,962,816</td>
<td>2,380,606</td>
<td>2,729,660</td>
<td>766,844 39% 1.51%</td>
</tr>
<tr>
<td>Lane County</td>
<td>282,912</td>
<td>322,959</td>
<td>354,200</td>
<td>71,288 25% 1.03%</td>
</tr>
<tr>
<td>Eugene</td>
<td>112,669</td>
<td>137,893</td>
<td>158,335</td>
<td>45,666 41% 1.56%</td>
</tr>
</tbody>
</table>


Notes: Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties represent the Willamette Valley Region.

Migration is the largest component of population growth in Oregon. Between 1990 and 2010, in-migration accounted for 68% of Oregon’s population growth. Over the same period, in-migration accounted for 75% of population growth in Lane County, adding more than 51,000 residents over the twenty-year period.
**Aging Population**

The number of people age 65 and older in the U.S. is expected to double by 2050, while the number of people under age 65 will only grow by 12%. The economic effects of this demographic change include a slowing of the growth of the labor force, need for workers to replace retirees, aging of the workforce for seniors that continue working after age 65, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.44

The average age of Eugene residents is increasing. Table 2 shows the change in age distribution for Eugene between 2000 and 2011. All age groups gained population, except for people five to 17 years old. The largest growing age group in terms of percentage was those between the ages of 18 and 24, gaining 33% or 7,883 people over the period.

Table 2. Change in age distribution, Eugene, 2000-2011

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Under 5</td>
<td>7,367</td>
<td>5%</td>
<td>8,367</td>
</tr>
<tr>
<td>5-17</td>
<td>20,686</td>
<td>15%</td>
<td>19,487</td>
</tr>
<tr>
<td>18-24</td>
<td>23,868</td>
<td>17%</td>
<td>31,751</td>
</tr>
<tr>
<td>25-44</td>
<td>39,247</td>
<td>28%</td>
<td>41,482</td>
</tr>
<tr>
<td>45-64</td>
<td>30,068</td>
<td>22%</td>
<td>34,808</td>
</tr>
<tr>
<td>65 and over</td>
<td>16,657</td>
<td>12%</td>
<td>21,026</td>
</tr>
<tr>
<td>Total</td>
<td>137,893</td>
<td>100%</td>
<td>156,921</td>
</tr>
</tbody>
</table>


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Figure 4 shows the age structure for Oregon, Lane County, and Eugene in 2011. Eugene had a larger share of residents between the ages of 20 and 29 than the County or the State, which can be attributed to the influence of the University of Oregon. Eugene has a smaller share of residents 40 years and older, compared with the County and State.

Figure 4. Population by age, Oregon, Lane County, and Eugene, 2011

Source: 2011 American Community Survey 1-year estimates B01001.
Figure 5 shows the population for age in Lane County in 2000 and the Oregon Office of Economic Analysis’ (OEA) projection for 2040. The OEA projects the share of the population over the age of 59 in Lane County will grow from 17% in 2000 to 27% in 2040. In comparison, the OEA forecasts a similar shift in population over the age of 59 for the State, increasing from 17% of the population in 2000 to 26% in 2040.

**Figure 5. Population by age, Lane County, 2000 and 2040**

**Income**

This section presents indicators that describe income in Eugene and Lane County in four categories of income:

- Per capita income is income per person, including non-working people such as children or the elderly.
- Average wage is the amount paid per job per worker.
- Household income is income for all people in the household, whether they are related to each other or not.
- Family income is income for a family of related people who live together.\(^{45}\)

Figure 6 shows the change in per capita personal income for the U.S., Oregon, and Lane County between 1980 and 2011 (in constant 2011 dollars). Per capita income grew most years during the 31-year period, with the exception of a decrease during the 2007-2009 recession. Since 1980, Oregon’s per capita personal income was consistently lower than the U.S. average. In 1980, Oregon’s per capita person income was 100% of the national average. By 2011, Oregon’s per capita income was 90% of the national average.

Lane County’s per capita income was consistently lower than the State or national average. In 1980, Lane County’s per capital income was 92% of the national average, decreasing to 83% by 2011. In 2011, Lane County’s per capita income as $35,561, compared to the State average of $37,527 and the national average of $41,560.

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\(^{45}\) The Census defines a household as: “A household includes all the people who occupy a housing unit as their usual place of residence.” The Census defines a family as “A group of two or more people who reside together and who are related by birth, marriage, or adoption.”
Figure 6. Per capita personal income in the U.S., Oregon, and Lane County, 1980-2011, (2011 dollars)

Figure 7 shows the major sources of per capita personal income for Oregon and Lane County between 1990 and 2011. Since the late-1980’s, compared to State averages, Lane County residents have had a smaller share of personal income from net earnings and a larger share from transfer payments and dividends, interest, and rent. Figure 7 shows that the share of income from earnings decreased in Lane County and the State as a result of the 2007-2009 recession and has started to rebound.

Lane County’s share of personal income from net earnings was 56% in 2011, lower than Oregon’s average of 62%. The County’s share of personal income from transfer payments and dividends, interest, and rent was about 44% in 2011, compared with the State average of 38%.

Retirees are most likely to have personal income from current transfers and dividends, interest, and rent. The larger share of personal income from these sources makes sense because Lane County has a larger share of people over 60 years of age than the State average. Figure 4 shows that Lane County has a higher percentage of residents over 60 years old than the State average. In addition, the share of population aged 65 and older increased by 16% between 1990 and 2000 in Lane County, compared with a 12% statewide increase in population 65 and older.

Figure 7. Per capita personal income by major sources, Oregon and Lane County, 1990-2011
Table 3 shows average annual pay per employee in the U.S., Oregon, and Lane County for 2000 to 2011. The national average wage grew faster than State or County averages. The average U.S. wage increased by 36% (more than $12,000), compared to the State increase of 31% (over $10,300) or the County increase of 32% (nearly $8,900). Wages in Lane County relative to the U.S. decreased by 2% over the eleven-year period.

Lane County’s average pay fluctuated relative to the State average, rising as high as 88% of the state average in the 2002-2004 period. In 2011, wages in Lane County were 85% of the State average.

Table 3. Average annual pay, U.S., Oregon, and Lane County (nominal dollars), 2000-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S.</th>
<th>Oregon</th>
<th>Lane County</th>
<th>% of U.S.</th>
<th>% of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$35,323</td>
<td>$32,776</td>
<td>$27,878</td>
<td>79%</td>
<td>85%</td>
</tr>
<tr>
<td>2001</td>
<td>$36,219</td>
<td>$33,202</td>
<td>$28,982</td>
<td>80%</td>
<td>87%</td>
</tr>
<tr>
<td>2002</td>
<td>$36,764</td>
<td>$33,685</td>
<td>$29,427</td>
<td>80%</td>
<td>87%</td>
</tr>
<tr>
<td>2003</td>
<td>$37,765</td>
<td>$34,455</td>
<td>$30,325</td>
<td>80%</td>
<td>88%</td>
</tr>
<tr>
<td>2004</td>
<td>$39,354</td>
<td>$35,627</td>
<td>$31,339</td>
<td>80%</td>
<td>88%</td>
</tr>
<tr>
<td>2005</td>
<td>$40,677</td>
<td>$36,593</td>
<td>$32,302</td>
<td>79%</td>
<td>88%</td>
</tr>
<tr>
<td>2006</td>
<td>$42,535</td>
<td>$38,070</td>
<td>$33,240</td>
<td>78%</td>
<td>87%</td>
</tr>
<tr>
<td>2007</td>
<td>$44,450</td>
<td>$39,566</td>
<td>$34,328</td>
<td>77%</td>
<td>87%</td>
</tr>
<tr>
<td>2008</td>
<td>$45,563</td>
<td>$40,486</td>
<td>$35,363</td>
<td>78%</td>
<td>87%</td>
</tr>
<tr>
<td>2009</td>
<td>$45,559</td>
<td>$40,742</td>
<td>$35,475</td>
<td>78%</td>
<td>87%</td>
</tr>
<tr>
<td>2010</td>
<td>$46,751</td>
<td>$41,669</td>
<td>$35,889</td>
<td>77%</td>
<td>86%</td>
</tr>
<tr>
<td>2011</td>
<td>$48,040</td>
<td>$43,092</td>
<td>$36,773</td>
<td>77%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Change 2000 to 2011

Nominal Change  $12,717  $10,316  $8,895
Percent Change  36%    31%    32%


Table 4 shows three measures of income for Oregon, Lane County, and Eugene: per capita income, median household income, and median family income. Eugene’s incomes are lower than the State averages. The gap between median household and median family income is bigger for Eugene than the State average, which is likely attributable to Eugene’s relatively large share of student households with lower incomes.

Table 4. Per Capita Income, Median Household Income, Median Family Income, Oregon, Lane County, and Eugene, 2011

<table>
<thead>
<tr>
<th></th>
<th>Per Capita Income</th>
<th>Median Household Income</th>
<th>Median Family Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>$25,228</td>
<td>$46,816</td>
<td>$58,356</td>
</tr>
<tr>
<td>Lane County</td>
<td>$22,187</td>
<td>$40,584</td>
<td>$53,086</td>
</tr>
<tr>
<td>Eugene</td>
<td>$22,625</td>
<td>$37,339</td>
<td>$55,063</td>
</tr>
</tbody>
</table>

Source: 2011 American Community Survey, B19013, B19113, B19301
Figure 8 shows the distribution of household income in Oregon, Lane County, and Eugene in 2011. About 64% of Eugene’s households had income of less than $50,000, compared with 59% of County households and 53% of State households. About one-third of Eugene’s households had income less than $25,000, compared with about a quarter of households in Oregon.

**Figure 8. Distribution of household income of Oregon, Lane County, and Eugene, 2011**

Eugene’s incomes are generally lower than State averages for a number of reasons:

- Eugene’s mix of businesses includes a comparatively high share of lower-wage jobs. For example, Eugene has a concentration of call center employment, which has relatively low wages. Eugene also has a concentration of video game developers, which is one of the lower paying forms of software development. In contrast, businesses locating in the Portland Region have higher than average wages. For example, Hillsboro has a higher than average concentration of engineering jobs, with wages of $100,000 per year or more.
Eugene’s lower per capita and median household income can be attributed, in part, to Eugene’s large share of young households, the majority of which are students at the University of Oregon. In 2011, 14% of Eugene’s householders were younger than 25 years old, compared with the County average of 8% and the State average of 5%.

These younger households typically have lower income compared with older households. Figure 9 shows household income by household age in Eugene in 2011. Approximately two-thirds of households younger than 25 years of age had income of less than $25,000. In contrast, about one-quarter of households between 25 and 64 years had income of less than $25,000.

![Figure 9. Household income by age of householder, Eugene, 2011](image)

The low average income in Lane County and Eugene, relative to Oregon and the U.S., make Eugene attractive to some firms considering moving within the U.S. Firms continue to outsource back-office functions, such as call centers or administrative functions, within the U.S. Lane County’s relatively low labor costs and the availability of trained workers make Lane County attractive to firms considering relocating back-office functions. Eugene may be attractive to firms that need university student workers.
Educational Attainment

The availability of trained, educated workers affects the quality of labor in a community. Educational attainment is an important labor force factor because firms need to be able to find educated workers. Figure 10 shows the share of population by education level completed in Oregon, Lane County, and Eugene in 2011. In 2011, Eugene had a higher share of residents above the age of 25 with a bachelor’s degree or higher (38%) than residents of Lane County or Oregon (27% and 29% respectively). Twenty-six percent of Eugene residents above the age of 25 did not attend any college, compared to 34% of Lane County residents and 36% of Oregon residents.

Figure 10. Educational attainment for the population 25 years and over, Oregon, Lane County and Eugene, 2011

Opportunities for workforce training and post-secondary education for residents of the Eugene-Springfield area include: the University of Oregon, Lane Community College, Pacific University, Northwest Christian College, and Gutenberg College.
Workforce Participation and Unemployment

The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2011 American Community Survey, Eugene has over 77,000 people in its labor force.

The unemployment rate is one indicator of the relative number of workers who are actively seeking employment. Figure 11 shows the unemployment rate for the United States, Oregon, Lane County, and Eugene for the past decade. During this period, Lane County’s unemployment was similar to or lower than the statewide unemployment rate. The County and State unemployment rates were consistently higher than the national average. Eugene’s unemployment rate was generally lower than the County or State average but above the national average. From 2010 to 2012, Eugene’s unemployment rate was generally below the national average.

Figure 11. Unemployment rates for the U.S., Oregon, Lane County, and Eugene, January 2002 to June 2012

Note: unemployment data is not seasonally adjusted
Commuting Patterns

Commuting plays an important role in Eugene’s economy. Figure 12 shows a comparison of the commute time to work for residents 16 years and older for Oregon, Lane County, and Eugene in 2011. Eighty-nine percent of Eugene residents have a commute of less than 30 minutes compared to 82% of Lane County residents and 71% of Oregon residents.

Figure 12. Commuting time to work in minutes for residents 16 years and older, Oregon, Lane County, and Eugene, 2011

Source: 2011 American Community Survey, B08303
Table 5 and Figure 13 show the places where residents of Eugene were employed in 2010. Eighty-one percent of Eugene’s 57,000 working residents worked in Lane County, 60% worked within Eugene city limits, and 10% worked in Springfield.

Table 5. Places that residents of Eugene were employed, 2010

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane County</td>
<td>46,365</td>
<td>81%</td>
</tr>
<tr>
<td>Eugene</td>
<td>34,195</td>
<td>60%</td>
</tr>
<tr>
<td>Springfield</td>
<td>5,836</td>
<td>10%</td>
</tr>
<tr>
<td>Multnomah County</td>
<td>2,231</td>
<td>4%</td>
</tr>
<tr>
<td>Portland</td>
<td>1,955</td>
<td>3%</td>
</tr>
<tr>
<td>Washington County</td>
<td>1,435</td>
<td>3%</td>
</tr>
<tr>
<td>Marion County</td>
<td>1,376</td>
<td>2%</td>
</tr>
<tr>
<td>Linn County</td>
<td>847</td>
<td>1%</td>
</tr>
<tr>
<td>Clackamas County</td>
<td>774</td>
<td>1%</td>
</tr>
<tr>
<td>Jackson County</td>
<td>540</td>
<td>1%</td>
</tr>
<tr>
<td>Douglas County</td>
<td>524</td>
<td>1%</td>
</tr>
<tr>
<td>Benton County</td>
<td>506</td>
<td>1%</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>506</td>
<td>1%</td>
</tr>
<tr>
<td>All Other Locations</td>
<td>2,015</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>57,119</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau; LED on the Map, http://onthemap.ces.census.gov/
Table 6 and Figure 14 show where employees of firms located in Eugene lived in 2010. Eighty percent of Eugene’s workers lived in Lane County. Forty-four percent lived in Eugene, and 12% lived in Springfield. Roughly 21% of Eugene’s workers lived in unincorporated areas of Lane County and 20% lived outside of Lane County.
Table 6. Places where workers in Eugene lived, 2010

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane County</td>
<td>62,435</td>
<td>80%</td>
</tr>
<tr>
<td>Eugene</td>
<td>34,195</td>
<td>44%</td>
</tr>
<tr>
<td>Springfield</td>
<td>9,011</td>
<td>12%</td>
</tr>
<tr>
<td>Unincorporated Lane County</td>
<td>16,465</td>
<td>21%</td>
</tr>
<tr>
<td>Linn County</td>
<td>2,113</td>
<td>3%</td>
</tr>
<tr>
<td>Multnomah County</td>
<td>1,985</td>
<td>3%</td>
</tr>
<tr>
<td>Washington County</td>
<td>1,558</td>
<td>2%</td>
</tr>
<tr>
<td>Douglas County</td>
<td>1,328</td>
<td>2%</td>
</tr>
<tr>
<td>Marion County</td>
<td>1,261</td>
<td>2%</td>
</tr>
<tr>
<td>Benton County</td>
<td>1,190</td>
<td>2%</td>
</tr>
<tr>
<td>Clackamas County</td>
<td>1,019</td>
<td>1%</td>
</tr>
<tr>
<td>Jackson County</td>
<td>885</td>
<td>1%</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>773</td>
<td>1%</td>
</tr>
<tr>
<td>All Other Locations</td>
<td>3,228</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>77,775</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


Figure 14. Places where workers in Eugene lived, 2010

These commuting patterns show that Eugene firms have access to workforce living throughout the Eugene-Springfield region. Even though commutes in Eugene are generally shorter than the State average, these commuting patterns create demand for automotive and other forms of transportation, both within Eugene and on roads throughout the Eugene-Springfield region.

Increasing energy prices may impact commuting patterns within the Eugene-Springfield area. The impact is most likely to be greatest for workers living in the smaller cities around the Eugene-Springfield area (e.g., Veneta or Oakridge) because the commute to Eugene is longer from these outlying cities. Willingness to commute by most workers living and working within Eugene and Springfield is likely to have relatively little impact from fuel prices, unless prices increase dramatically.
3.1.3.2 Changes in Employment

The economy of the nation changed substantially between 1980 and 2012. These changes affected the composition of Oregon’s economy, including Lane County and Eugene. The most important shift during this period at the national-level was the shift in employment from a focus on manufacturing to services. The most important shift in Oregon, including Lane County and Eugene, has been the shift from a timber-based economy to a more diverse economy, with the greatest employment in services. The most important trends and changes in employment for Eugene over the next 20-years are: shifts in employment, growing importance of health care, continued importance of manufacturing, and outlook for growth in Eugene.

Lane County Employment Trends

Over the past few decades, employment in the U.S. has shifted from manufacturing and resource-intensive industries to service-oriented sectors of the economy. Increased worker productivity and the international outsourcing of routine tasks have lead to declines in employment in the major goods-producing industries.

In the 1970s Oregon started to transition away from reliance on traditional resource-extraction industries. An important indicator of this transition is the shift within Oregon’s manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry and concurrent growth of employment in high-technology manufacturing industries (Industrial Machinery, Electronic Equipment, and Instruments).

As Oregon has transitioned away from natural resource-based industries, the composition of Oregon’s employment has shifted from natural resource based manufacturing and other industries to service industries. The share of Oregon’s total employment in Service industries increased from its 1970s average of 19% to 30% in 2000, while employment in Manufacturing declined from an average of 18% of total employment in the 1970s to an average of 12% in 2000.

The changes in employment in Lane County have followed similar trends as changes in national and state employment. Between 1980 and 2006, Lane County added more than 53,000 jobs. The sectors with the greatest change in share of employment were Services and Retail Trade, adding

46 Lumber and Wood Products manufacturing is in Standard Industrial Classification (SIC) 24
47 SIC 35, 36, 38
more than 38,500 or 73% of new jobs. Over the 26-year period, manufacturing added more than 4,000 jobs (8% of new jobs), with the greatest growth in: Transportation Equipment manufacturing (R.V. manufacturing), Computer and Electronics manufacturing, and Machinery manufacturing.

Some industries in the region’s employment base have volatile employment cycles. These industries typically have boom and bust cycles, which result in cycles of hiring and layoffs. The lumber and wood products industry is tied to national housing market cycles, with decreased productivity and employment in slow housing markets. The RV manufacturing industry is tied to broader national economic trends and energy price changes. Finally, the region’s high-tech companies are subject to market trends in the high-tech industry, including changes in production methods and consumer purchasing patterns. Two major high-tech firms, Hynix and Sony, located in the Eugene-Springfield region and closed their production facilities between the mid-1990’s and 2008.

Table 7 and Table 8 present data from the Oregon Employment Department that show changes in covered employment for Lane County between 1980 and 2011. The changes in sectors and industries are shown in two tables: (1) between 1980 and 2000 and (2) between 2001 and 2011. The analysis is divided in this way because of changes in industry and sector classification that made it difficult to compare information about employment collected after 2001 with information collected prior to 2000.

Employment data in this section is summarized by sector, each of which includes several individual industries. For example, the Retail Trade sector includes General Merchandise Stores, Motor Vehicle and Parts Dealers, Food and Beverage Stores, and other retail industries.

Table 7 shows the changes in covered employment by sector in Lane County between 1980 and 2000. Covered employment in the County grew from 97,600 to 139,696, an increase of 43% or 42,096 jobs. Every sector added jobs during this period, except for Mining. The sectors with the greatest change in employment were Services and Retail Trade, adding a total of 29,423 jobs or about 70% of all new jobs.

Manufacturing grew by 4,020 jobs during the twenty-year period. The industries with the largest manufacturing growth were Transportation

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48 Covered employment refers to jobs covered by unemployment insurance, which includes most wage and salary jobs but does not include sole proprietors, seasonal farm workers, and other classes of employees.
equipment manufacturing (R.V. manufacturing), computer and electronics manufacturing, and machinery manufacturing.

Average pay per employee increased from about $13,700 in 1980 to $27,900 in 2000. The sectors that grew the fastest generally paid less than average, with Services paying between 80% to 90% of average and Retail Trade paying about 60% of average. Manufacturing jobs generally paid more than the average, varying between 140% of average in 1980 to 124% of average by 2000.

Table 7. Covered employment in Lane County, 1980-2000

<table>
<thead>
<tr>
<th>Sector</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>Difference</th>
<th>Percent</th>
<th>AAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry &amp; Fishing</td>
<td>1,137</td>
<td>1,863</td>
<td>2,101</td>
<td>964</td>
<td>85%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Mining</td>
<td>231</td>
<td>179</td>
<td>154</td>
<td>-77</td>
<td>-33%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Construction</td>
<td>4,600</td>
<td>3,992</td>
<td>6,834</td>
<td>2,234</td>
<td>49%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>19,638</td>
<td>20,654</td>
<td>23,658</td>
<td>4,020</td>
<td>20%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Trans., Comm., &amp; Utilities</td>
<td>3,836</td>
<td>3,750</td>
<td>3,845</td>
<td>9</td>
<td>0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>5,578</td>
<td>5,900</td>
<td>6,422</td>
<td>844</td>
<td>15%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>20,299</td>
<td>24,429</td>
<td>28,758</td>
<td>8,459</td>
<td>42%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Finance, Insurance &amp; Real Estate</td>
<td>4,217</td>
<td>4,523</td>
<td>6,198</td>
<td>1,981</td>
<td>47%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Services</td>
<td>18,272</td>
<td>27,817</td>
<td>39,236</td>
<td>20,964</td>
<td>115%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Nonclassifiable/all others</td>
<td>13</td>
<td>50</td>
<td>37</td>
<td>24</td>
<td>185%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Government</td>
<td>19,779</td>
<td>20,219</td>
<td>22,453</td>
<td>2,674</td>
<td>14%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total</td>
<td>97,600</td>
<td>113,376</td>
<td>139,696</td>
<td>42,096</td>
<td>43%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Table 8 shows the change in covered employment by sector for Lane County between 2001 and 2011. Employment decreased by 1,869 jobs or 1% during this period. The sectors that lost the greatest number of employees during this period were Manufacturing and Construction. The private sectors with the largest increases in numbers of employees were Health and Social Assistance, and Accommodations and Food Services.

<table>
<thead>
<tr>
<th>Sector</th>
<th>2001</th>
<th>2011</th>
<th>Difference</th>
<th>Percent</th>
<th>AAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources and Mining</td>
<td>2,338</td>
<td>1,898</td>
<td>-440</td>
<td>-19%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>6,366</td>
<td>5,058</td>
<td>-1,308</td>
<td>-21%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>19,697</td>
<td>12,267</td>
<td>-7,430</td>
<td>-38%</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Wholesale</td>
<td>5,300</td>
<td>5,278</td>
<td>-22</td>
<td>0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Retail</td>
<td>17,912</td>
<td>18,246</td>
<td>334</td>
<td>2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>2,606</td>
<td>2,635</td>
<td>29</td>
<td>1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Information</td>
<td>3,729</td>
<td>3,260</td>
<td>-469</td>
<td>-13%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>3,963</td>
<td>3,827</td>
<td>-136</td>
<td>-3%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Real Estate Rental &amp; Leasing</td>
<td>2,508</td>
<td>2,087</td>
<td>-421</td>
<td>-17%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Professional, Scientific &amp; Tech. Srv.</td>
<td>5,571</td>
<td>5,202</td>
<td>-369</td>
<td>-7%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Management of Companies</td>
<td>1,818</td>
<td>1,970</td>
<td>152</td>
<td>8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Admin. Support &amp; Cleaning Srv.</td>
<td>6,399</td>
<td>7,399</td>
<td>1,000</td>
<td>16%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Education</td>
<td>1,067</td>
<td>1,495</td>
<td>428</td>
<td>40%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Health &amp; Social Assistance</td>
<td>16,871</td>
<td>20,517</td>
<td>3,646</td>
<td>22%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>1,542</td>
<td>1,762</td>
<td>220</td>
<td>14%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Accomodations &amp; Food Services</td>
<td>11,746</td>
<td>12,488</td>
<td>742</td>
<td>6%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Other Services</td>
<td>5,552</td>
<td>5,411</td>
<td>-141</td>
<td>-3%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Private Non-Classified</td>
<td>49</td>
<td>30</td>
<td>-19</td>
<td>-39%</td>
<td>-4.8%</td>
</tr>
<tr>
<td>Government</td>
<td>22,398</td>
<td>24,733</td>
<td>2,335</td>
<td>10%</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137,432</td>
<td>135,563</td>
<td>-1,869</td>
<td>-1%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>


Table 9 shows a summary of employment in Lane County in 2011. Table 9 shows the ten largest sectors in bold are the top ten employers, sectors with below average pay per employee in red, and sectors with above average pay per employee in blue. Table 9 shows:

- Manufacturing, Government, and Health and Social Assistance were among the sectors with the greatest employment in Lane County and have above average pay per employee. These sectors accounted for 42% of employment or over 57,000 employees in Lane County.

- Retail, Accommodations and Food Services, and Administration and Support and Waste Management were among the sectors with the greatest employment in Lane County and have below average pay per employee. These sectors accounted for 28% of employment or more than 38,000 employees in Lane County.
### Table 9. Covered employment in Lane County, 2011

<table>
<thead>
<tr>
<th>Sector/Industry</th>
<th>Establishments</th>
<th>Employment</th>
<th>Percent of Employment</th>
<th>Average Pay per Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources &amp; Mining</td>
<td>220</td>
<td>1,898</td>
<td>1%</td>
<td>$32,944</td>
</tr>
<tr>
<td>Construction</td>
<td>991</td>
<td>5,058</td>
<td>4%</td>
<td>$44,468</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>548</td>
<td>12,267</td>
<td>9%</td>
<td>$45,114</td>
</tr>
<tr>
<td>Wood product manufacturing</td>
<td>65</td>
<td>3,401</td>
<td>3%</td>
<td>$44,413</td>
</tr>
<tr>
<td>Food manufacturing</td>
<td>57</td>
<td>1,500</td>
<td>1%</td>
<td>$37,358</td>
</tr>
<tr>
<td>Machinery manufacturing</td>
<td>44</td>
<td>1,421</td>
<td>1%</td>
<td>$52,591</td>
</tr>
<tr>
<td>Wholesale</td>
<td>559</td>
<td>5,278</td>
<td>4%</td>
<td>$46,852</td>
</tr>
<tr>
<td>Retail</td>
<td>1,186</td>
<td>18,246</td>
<td>13%</td>
<td>$25,131</td>
</tr>
<tr>
<td>Motor vehicle &amp; parts dealers</td>
<td>148</td>
<td>2,321</td>
<td>2%</td>
<td>$39,172</td>
</tr>
<tr>
<td>Building material &amp; garden supply stores</td>
<td>84</td>
<td>1,420</td>
<td>1%</td>
<td>$28,928</td>
</tr>
<tr>
<td>Food &amp; beverage stores</td>
<td>210</td>
<td>3,985</td>
<td>3%</td>
<td>$21,516</td>
</tr>
<tr>
<td>General merchandise stores</td>
<td>50</td>
<td>3,863</td>
<td>3%</td>
<td>$24,222</td>
</tr>
<tr>
<td>Miscellaneous store retailers</td>
<td>147</td>
<td>1,436</td>
<td>1%</td>
<td>$20,555</td>
</tr>
<tr>
<td>Transportation, Warehousing &amp; Utilities</td>
<td>244</td>
<td>2,635</td>
<td>2%</td>
<td>$39,484</td>
</tr>
<tr>
<td>Information</td>
<td>165</td>
<td>3,260</td>
<td>2%</td>
<td>$55,206</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>522</td>
<td>3,827</td>
<td>3%</td>
<td>$53,904</td>
</tr>
<tr>
<td>Real Estate Rental &amp; Leasing</td>
<td>496</td>
<td>2,087</td>
<td>2%</td>
<td>$28,344</td>
</tr>
<tr>
<td>Professional, Scientific &amp; Technical Svcs</td>
<td>1,023</td>
<td>5,202</td>
<td>4%</td>
<td>$44,977</td>
</tr>
<tr>
<td>Management of Companies</td>
<td>84</td>
<td>1,970</td>
<td>1%</td>
<td>$62,168</td>
</tr>
<tr>
<td>Admin. &amp; Support &amp; Waste Mgmt</td>
<td>496</td>
<td>7,399</td>
<td>5%</td>
<td>$25,800</td>
</tr>
<tr>
<td>Private Education</td>
<td>147</td>
<td>1,495</td>
<td>1%</td>
<td>$25,275</td>
</tr>
<tr>
<td>Health &amp; Social Assistance</td>
<td>1,067</td>
<td>20,517</td>
<td>15%</td>
<td>$43,904</td>
</tr>
<tr>
<td>Ambulatory health care services</td>
<td>634</td>
<td>6,897</td>
<td>5%</td>
<td>$55,705</td>
</tr>
<tr>
<td>Nursing &amp; residential care facilities</td>
<td>214</td>
<td>4,343</td>
<td>3%</td>
<td>$22,965</td>
</tr>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>137</td>
<td>1,762</td>
<td>1%</td>
<td>$13,920</td>
</tr>
<tr>
<td>Accomodations &amp; Food Services</td>
<td>871</td>
<td>12,488</td>
<td>9%</td>
<td>$14,641</td>
</tr>
<tr>
<td>Other Services</td>
<td>1,504</td>
<td>5,411</td>
<td>4%</td>
<td>$23,244</td>
</tr>
<tr>
<td>Private Non-Classified</td>
<td>40</td>
<td>30</td>
<td>0%</td>
<td>$35,129</td>
</tr>
<tr>
<td>Government</td>
<td>363</td>
<td>24,733</td>
<td>18%</td>
<td>$43,215</td>
</tr>
<tr>
<td>Federal</td>
<td>71</td>
<td>1,697</td>
<td>1%</td>
<td>$62,956</td>
</tr>
<tr>
<td>State</td>
<td>55</td>
<td>7,717</td>
<td>6%</td>
<td>$44,530</td>
</tr>
<tr>
<td>Local</td>
<td>237</td>
<td>15,320</td>
<td>11%</td>
<td>$40,362</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>139</td>
<td>8,405</td>
<td>6%</td>
<td>$33,794</td>
</tr>
<tr>
<td>Public Administration</td>
<td>47</td>
<td>4,023</td>
<td>3%</td>
<td>$53,224</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,660</strong></td>
<td><strong>135,564</strong></td>
<td><strong>100%</strong></td>
<td><strong>$36,773</strong></td>
</tr>
</tbody>
</table>


Notes: Sectors in **bold** are the top ten employers, sectors in **red** have below average pay per employee, and sectors in **blue** have above average pay per employee.

---

**Employment in Eugene**

Table 10 shows a summary of confidential employment data for Eugene in 2010. Eugene had 80,438 jobs at 6,667 establishments in 2010, with an average firm size of 12 employees. The sectors with the greatest employees were: Government (18%), Health Care and Social Assistance (14%), Retail (14%), Accommodation and Food Service (9%), and Manufacturing (9%). These sectors accounted for 51,914 or 65% of Eugene’s jobs.
### Table 10. Covered employment in Eugene, 2010

<table>
<thead>
<tr>
<th>Sector / Industry</th>
<th>Establishments</th>
<th>Employees</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, Fishing, Hunting, and Mining</td>
<td>25</td>
<td>197</td>
<td>0%</td>
</tr>
<tr>
<td>Construction</td>
<td>469</td>
<td>2,191</td>
<td>3%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>333</td>
<td>7,338</td>
<td>9%</td>
</tr>
<tr>
<td>- Wood Product Manufacturing</td>
<td>28</td>
<td>1,753</td>
<td>2%</td>
</tr>
<tr>
<td>- Machinery Manufacturing</td>
<td>31</td>
<td>1,065</td>
<td>1%</td>
</tr>
<tr>
<td>- Food Manufacturing</td>
<td>47</td>
<td>998</td>
<td>1%</td>
</tr>
<tr>
<td>- Fabricated Metal Product Manufacturing</td>
<td>54</td>
<td>643</td>
<td>1%</td>
</tr>
<tr>
<td>- Computer and Electronic Product Manufacturing</td>
<td>16</td>
<td>634</td>
<td>1%</td>
</tr>
<tr>
<td>- Chemical Manufacturing</td>
<td>13</td>
<td>501</td>
<td>1%</td>
</tr>
<tr>
<td>- Furniture and Related Product Manufacturing</td>
<td>31</td>
<td>411</td>
<td>1%</td>
</tr>
<tr>
<td>- Printing and Related Support Activities</td>
<td>24</td>
<td>264</td>
<td>0%</td>
</tr>
<tr>
<td>- Other Manufacturing</td>
<td>89</td>
<td>1,069</td>
<td>1%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>408</td>
<td>3,499</td>
<td>4%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>740</td>
<td>11,445</td>
<td>14%</td>
</tr>
<tr>
<td>- Food and Beverage Stores</td>
<td>113</td>
<td>2,294</td>
<td>3%</td>
</tr>
<tr>
<td>- General Merchandise Stores</td>
<td>22</td>
<td>2,218</td>
<td>3%</td>
</tr>
<tr>
<td>- Motor Vehicle and Parts Dealers</td>
<td>84</td>
<td>1,354</td>
<td>2%</td>
</tr>
<tr>
<td>- Building Material, Garden Equipment &amp; Supplies Dealers</td>
<td>53</td>
<td>1,070</td>
<td>1%</td>
</tr>
<tr>
<td>- Clothing and Clothing Accessories Stores</td>
<td>98</td>
<td>968</td>
<td>1%</td>
</tr>
<tr>
<td>- Sporting Goods, Hobby, Book, and Music Stores</td>
<td>68</td>
<td>805</td>
<td>1%</td>
</tr>
<tr>
<td>- Health and Personal Care Stores</td>
<td>51</td>
<td>521</td>
<td>1%</td>
</tr>
<tr>
<td>- Other Retail</td>
<td>251</td>
<td>2,215</td>
<td>3%</td>
</tr>
<tr>
<td>Transportation, Warehousing, and Utilities</td>
<td>113</td>
<td>996</td>
<td>1%</td>
</tr>
<tr>
<td>Information</td>
<td>121</td>
<td>1,633</td>
<td>2%</td>
</tr>
<tr>
<td>- Publishing Industries (except Internet)</td>
<td>66</td>
<td>1,090</td>
<td>1%</td>
</tr>
<tr>
<td>- Other Information Services</td>
<td>55</td>
<td>543</td>
<td>1%</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>400</td>
<td>2,610</td>
<td>3%</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>320</td>
<td>1,341</td>
<td>2%</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>824</td>
<td>4,419</td>
<td>5%</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>60</td>
<td>1,342</td>
<td>2%</td>
</tr>
<tr>
<td>Admin. &amp; Support &amp; Waste Management Srv.</td>
<td>283</td>
<td>4,361</td>
<td>5%</td>
</tr>
<tr>
<td>Private Education Services</td>
<td>108</td>
<td>1,191</td>
<td>1%</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>770</td>
<td>11,114</td>
<td>14%</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>71</td>
<td>1,094</td>
<td>1%</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>517</td>
<td>7,362</td>
<td>9%</td>
</tr>
<tr>
<td>Other Services</td>
<td>922</td>
<td>3,640</td>
<td>5%</td>
</tr>
<tr>
<td>Government</td>
<td>183</td>
<td>14,665</td>
<td>18%</td>
</tr>
<tr>
<td>- Federal Government</td>
<td>28</td>
<td>690</td>
<td>1%</td>
</tr>
<tr>
<td>- State Government</td>
<td>28</td>
<td>5,899</td>
<td>7%</td>
</tr>
<tr>
<td>- Local Government</td>
<td>127</td>
<td>8,076</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>6,667</td>
<td>80,438</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW). Summary by industry and percentages calculated by ECONorthwest
Regional Business Activity

Eugene exists within with Eugene-Springfield regional economy. Regional business activity and trends will affect the types of businesses that are attracted to the region and choose to locate in Eugene. This section presents the large-scale regional business activities.

Continued Importance of Manufacturing

Manufacturing is a traded sector industry, which brings revenue into Oregon and Lane County from outside the State. The following manufacturing industries accounted for two-thirds ($18.3 billion) of revenue from exports in Oregon in 2012: Computer & Electronic Production, Machinery Manufacturers, Chemicals, Transportation Equipment, Food and Kindred Products, Wood Products, and Fabricated Metal Products. These industries are all present in Lane County, accounting for 75% of manufacturing employment in the County.

Manufacturing continues to be important to the economy in Eugene and in Lane County. Manufacturing accounted for 9% of employment (more than 12,000 jobs) in Lane County and in Eugene (more than 7,000 jobs) in 2010. Manufacturing employment decreased between 2006 and 2010, as a result of the national recession, from 14% of employment in Lane County and 12% in Eugene. Manufacturing industries continue to offer jobs with above-average wages, making these jobs more desirable.

Continuing changes in the economy may impact manufacturing in Lane County. For example, the economic downturn and high energy prices were factors that contributed to the decrease of RV manufacturing in Lane County, which has resulted in the layoff of employees beginning in 2006. In addition, the economic downturn and consolidation of the paper manufacturing industry may result in layoffs in firms that manufacture wood products and paper.

Although much of the employment in these industries is located outside of Eugene, it affects residents of Eugene, either directly through job layoffs or indirectly through decreases in economic activity.


50 Oregon Employment Department
Tourism in Lane County

Tourism brings economic activity into Lane County from outside sources. Table 11 shows that tourism expenditures in East Lane County\textsuperscript{51} in 2011 were $602 million. Tourism related spending resulted in 7,200 jobs, with earnings of $136.8 million, in Lane County in 2011. Tax receipts from tourism spending was $23.6 million in 2011.

Table 11. Direct Travel Spending, East Lane County, Fiscal Years 2000 to 2011

<table>
<thead>
<tr>
<th>Years</th>
<th>Direct travel spending ($million)</th>
<th>Employment</th>
<th>Employment Earnings ($million)</th>
<th>Tax Receipts ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$430.6</td>
<td>6,340</td>
<td>$100.0</td>
<td>$15.3</td>
</tr>
<tr>
<td>2001</td>
<td>$432.4</td>
<td>6,470</td>
<td>$101.8</td>
<td>$15.5</td>
</tr>
<tr>
<td>2002</td>
<td>$440.7</td>
<td>6,570</td>
<td>$105.8</td>
<td>$15.8</td>
</tr>
<tr>
<td>2003</td>
<td>$434.6</td>
<td>6,400</td>
<td>$105.1</td>
<td>$15.8</td>
</tr>
<tr>
<td>2004</td>
<td>$467.3</td>
<td>6,570</td>
<td>$110.2</td>
<td>$17.0</td>
</tr>
<tr>
<td>2005</td>
<td>$501.0</td>
<td>6,750</td>
<td>$117.0</td>
<td>$18.6</td>
</tr>
<tr>
<td>2006</td>
<td>$550.2</td>
<td>6,920</td>
<td>$123.8</td>
<td>$19.9</td>
</tr>
<tr>
<td>2007</td>
<td>$557.1</td>
<td>7,210</td>
<td>$131.1</td>
<td>$20.9</td>
</tr>
<tr>
<td>2008</td>
<td>$594.0</td>
<td>7,700</td>
<td>$140.4</td>
<td>$22.0</td>
</tr>
<tr>
<td>2009</td>
<td>$564.6</td>
<td>6,930</td>
<td>$128.4</td>
<td>$19.9</td>
</tr>
<tr>
<td>2010</td>
<td>$605.1</td>
<td>6,930</td>
<td>$129.0</td>
<td>$20.2</td>
</tr>
<tr>
<td>2011</td>
<td>$602.4</td>
<td>7,200</td>
<td>$136.8</td>
<td>$23.6</td>
</tr>
</tbody>
</table>

Change 2000-2011

| Amount | 171.8 | 860 | 36.8 | 8.3 |
| Percent | 40% | 14% | 37% | 54% |
| AAGR | 3.1% | 1.2% | 2.9% | 4.0% |


Eugene levies a 9.5% transient lodging tax on overnight accommodations. Table 12 shows transient lodging tax revenue for Lane County and Eugene for fiscal year 2000 through 2012. Eugene’s lodging tax revenue varied from $2.7 million in fiscal year 2000 to over $3.5 million in fiscal year 2012. Eugene’s transient lodging tax revenues accounted for about half of total County lodging tax revenues in every year after 2000.

\textsuperscript{51} East Lane County includes areas east of the Coastal Mountains and Siuslaw National Forest.
Table 12. Local lodging tax revenues, Lane County and Eugene, Fiscal Years 2000 to 2012

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Lane County</th>
<th>Eugene</th>
<th>Eugene’s % of County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$5,095,869</td>
<td>$2,742,012</td>
<td>54%</td>
</tr>
<tr>
<td>2001</td>
<td>$5,378,361</td>
<td>$2,876,024</td>
<td>53%</td>
</tr>
<tr>
<td>2002</td>
<td>$6,016,364</td>
<td>$3,136,485</td>
<td>52%</td>
</tr>
<tr>
<td>2003</td>
<td>$6,611,718</td>
<td>$3,529,159</td>
<td>53%</td>
</tr>
<tr>
<td>2004</td>
<td>$5,095,869</td>
<td>$2,742,012</td>
<td>54%</td>
</tr>
<tr>
<td>2005</td>
<td>$5,378,361</td>
<td>$2,876,024</td>
<td>53%</td>
</tr>
<tr>
<td>2006</td>
<td>$6,016,364</td>
<td>$3,136,485</td>
<td>52%</td>
</tr>
<tr>
<td>2007</td>
<td>$6,611,718</td>
<td>$3,529,159</td>
<td>53%</td>
</tr>
<tr>
<td>2008</td>
<td>$7,229,995</td>
<td>$3,742,933</td>
<td>52%</td>
</tr>
<tr>
<td>2009</td>
<td>$6,769,782</td>
<td>$3,543,640</td>
<td>52%</td>
</tr>
<tr>
<td>2010</td>
<td>$6,273,289</td>
<td>$3,204,731</td>
<td>51%</td>
</tr>
<tr>
<td>2011</td>
<td>$6,879,677</td>
<td>$3,500,579</td>
<td>51%</td>
</tr>
<tr>
<td>2012</td>
<td>$7,242,202</td>
<td>$3,560,301</td>
<td>49%</td>
</tr>
</tbody>
</table>

Source: Convention & Visitors Association of Lane County Oregon, CVALCO

Significance of Agriculture in Lane County

Agriculture continues to be important in Lane County’s economy. Table 13 shows the market value of agricultural products and the top five agricultural products in Lane County in 2002 and 2007. In 2007, Lane County had approximately $131 million in total gross sales from agriculture, a nearly 50% increase over the $88 million in total gross sales in 2002.

The top five agricultural products in Lane County in 2007 were: Nursery and greenhouse ($33 million); fruits, tree nuts, and berries ($13.8 million); poultry and eggs ($12.8 million); milk and dairy ($11.1 million); and cattle and calves ($9.9 million). The agricultural products that had the largest increase in sales between 2002 and 2007 were nursery and greenhouse (increase of $11.8 million or 56%) and fruits, tree nuts, and berries (increase of $7.1 million or 107%).
While agriculture is an important source of economic activity in Lane County, Eugene has relatively little employment directly involved with agriculture within the UGB. In 2010, less than 1% of Eugene’s covered employment (212 employees) were employed in the Agriculture, Forestry, Fishing, and Mining sectors. About half of these jobs were in Forestry and Logging.

Consistent with statewide land use policy, land within the Eugene UGB is committed for future urban uses, rather than agricultural uses. The types of natural resource related jobs that might locate in Eugene include: agricultural services, food processors, wineries and breweries, and manufacturers that depend on natural resources (e.g., lumber mills, furniture manufacturing, or fabricated metal products).

Table 13. Six agricultural products with the highest sales value, Lane County 2002 and 2007

<table>
<thead>
<tr>
<th>Item</th>
<th>2007 Total Sales</th>
<th>Average Value of Sales per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery, greenhouse, floriculture, &amp; sod</td>
<td>$32,810,000</td>
<td>$160,833</td>
</tr>
<tr>
<td>Fruits, tree nuts, &amp; berries</td>
<td>$13,811,000</td>
<td>$40,740</td>
</tr>
<tr>
<td>Poultry &amp; eggs</td>
<td>$12,794,000</td>
<td>$29,547</td>
</tr>
<tr>
<td>Milk &amp; other dairy products from cows</td>
<td>$11,135,000</td>
<td>$347,969</td>
</tr>
<tr>
<td>Cattle &amp; calves</td>
<td>$9,895,000</td>
<td>$10,651</td>
</tr>
<tr>
<td>Vegetables, melons, potatoes, &amp; sweet potatoes</td>
<td>$5,743,000</td>
<td>$52,209</td>
</tr>
<tr>
<td>2002 Total Sales</td>
<td>$87,824,000</td>
<td>$34,080</td>
</tr>
<tr>
<td>Nursery, greenhouse, floriculture, &amp; sod</td>
<td>$21,001,000</td>
<td>$100,966</td>
</tr>
<tr>
<td>Milk &amp; other dairy products from cows</td>
<td>$10,290,000</td>
<td>$1,143,333</td>
</tr>
<tr>
<td>Cattle &amp; calves</td>
<td>$7,622,000</td>
<td>$9,784</td>
</tr>
<tr>
<td>Fruits, tree nuts, &amp; berries</td>
<td>$6,683,000</td>
<td>$17,495</td>
</tr>
<tr>
<td>Vegetables, melons, potatoes, &amp; sweet potatoes</td>
<td>$5,955,000</td>
<td>$38,419</td>
</tr>
<tr>
<td>Poultry &amp; eggs</td>
<td>$5,919,000</td>
<td>$27,151</td>
</tr>
</tbody>
</table>


---

52 Oregon Employment Department Quarterly Census of Employment and Wages, 2010
Notable Business Sectors in Eugene

One way to assess the types of businesses that are likely to have future growth in Eugene is to understand existing specialties of employment in Eugene.

- **Natural resource manufacturing.** Eugene’s industrial heritage is tied to natural resource extraction, forestry and agriculture. Eugene has concentrations of employment in wood and forestry products, construction building materials and production technologies, fabricated metals, farm machinery, and motor driven product industries. The legacy of investment in natural resource manufacturing, both capital and human capital investments, are innovated natural resource manufacturing firms.

- **Food and beverage manufacturing and distribution.** Eugene is located in a region with exceptional agricultural production. Eugene has a long history of growing foods, such as berries or mushrooms, and natural food production, such as organic ice creams, non-dairy frozen desserts. Eugene is also a center for wine and beer production. In addition, Eugene’s retail chains and distribution businesses allow local food producers to grow. Examples of firms involved in food manufacturing and distribution include: Emerald Valley, Glory Bee, Hummingbird, McDonald Wholesale, Mountain Rose Herbs, Mycological, and SnoTemp. Examples of breweries include: Hop Valley, Falling Sky, Ninkasi, and Oakshire.

- **Sporting goods.** Eugene is the birthplace of Nike and is the home of firms that are part of the larger state’s athletic goods and apparel cluster, such as Bike Friday, Sporthill, Burley, and Bowtech Archery.

- **Social science research.** Since the 1970s, numerous non-profit or grant-based research social and behavioral science institutions have spun off from the University of Oregon’s College of Education, including the Oregon Research Institute, Oregon Social Learning Center, DIBELS, EPIC (Educational Policy Improvement Center) and ORCAS (formerly Oregon Center for Applied Science). As a center of social science research and innovation, the region has an above-average concentration of expertise in its workforce in these fields and an opportunity to encourage complementary employment within related industries or firms with related technical or scientific skill sets, such as software publishing.
Sustainability

The Oregon Employment Department’s (OED) *The Greening of Oregon’s Workforce* report details the growth of green or sustainable jobs in the Oregon economy in recent years. Oregon had over 43,000 green jobs in 2010, or 3% of the statewide total. The OED notes that these jobs are not in confined green industry sectors; they are spread across the entire economy. Oregon industries with the largest number of green jobs were construction, natural resources and mining, manufacturing, professional and technical services, and state and local government. These sectors are feasible in any region.

The idea of “attracting sustainable jobs” usually focuses more on attracting green firms to an area, though green jobs are emerging from industries that are already present in Lane County. Demand for green services will alter the mix of services offered by existing businesses and ultimately drive the growth of green jobs in the County. The effects are difficult to isolate on a small regional level, though the growth of green jobs on a statewide level appears to be healthy.53

Domestic Outsourcing

The trend towards domestic outsourcing of back-office functions has led several companies to locate call centers in the Eugene-Springfield area. Companies that have located call centers or back-office functions in the Eugene-Springfield region include: Levi Strauss, Symantec, Enterprise, and Royal Caribbean. The Eugene-Springfield’s trained labor pool of relatively low-cost workers for call centers gives the region an advantage for attracting additional call centers.

3.1.3.3 Outlook for Growth in Lane County

Table 14 shows the population forecast developed by the Office of Economic Analysis for Oregon and Lane County for 2000 through 2040. Lane County is forecast to grow at a slower rate than Oregon over the 2005 to 2030 period. The forecast shows Lane County’s population will grow by about 96,600 people over the 25-year period, a 29% increase. Over the same period, Oregon is forecast to grow by more than 1.2 million people, a 35% increase.

Table 14. State population forecast, Oregon and Lane County, 2000 to 2040

<table>
<thead>
<tr>
<th>Year</th>
<th>Oregon</th>
<th>Lane County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3,436,750</td>
<td>323,950</td>
</tr>
<tr>
<td>2005</td>
<td>3,618,200</td>
<td>333,855</td>
</tr>
<tr>
<td>2010</td>
<td>3,843,900</td>
<td>347,494</td>
</tr>
<tr>
<td>2015</td>
<td>4,095,708</td>
<td>365,639</td>
</tr>
<tr>
<td>2020</td>
<td>4,359,258</td>
<td>387,574</td>
</tr>
<tr>
<td>2025</td>
<td>4,626,015</td>
<td>409,159</td>
</tr>
<tr>
<td>2030</td>
<td>4,891,225</td>
<td>430,454</td>
</tr>
<tr>
<td>2035</td>
<td>5,154,793</td>
<td>451,038</td>
</tr>
<tr>
<td>2040</td>
<td>5,425,408</td>
<td>471,511</td>
</tr>
</tbody>
</table>

Change 2005 to 2030

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>1,273,025</td>
<td>35%</td>
</tr>
<tr>
<td>Lane County</td>
<td>96,599</td>
<td>29%</td>
</tr>
</tbody>
</table>

AAGR 1.2% 1.0%

Table 15 shows the Oregon Employment Department’s forecast for employment growth by industry for Lane County over the 2012 to 2022 period.54 The sectors that will lead employment growth in Lane County for the ten-year period are Health Care & Social Assistance (adding 3,800 jobs), Government (adding 3,700 jobs), Leisure & Hospitality (adding 2,900 jobs), Professional and Business Services (adding 2,700 jobs), and Retail Trade (adding 2,100 jobs). Together, these sectors are expected to add 15,200 new jobs or 70% of employment growth in Lane County.

Table 15. Nonfarm employment forecast by industry in Lane County, 2012-2022

<table>
<thead>
<tr>
<th>Sector / Industry</th>
<th>2012</th>
<th>2022</th>
<th>Amount</th>
<th>% Change</th>
<th>AAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources &amp; Mining</td>
<td>2,100</td>
<td>2,500</td>
<td>400</td>
<td>19%</td>
<td>1.76%</td>
</tr>
<tr>
<td>Construction</td>
<td>5,100</td>
<td>6,400</td>
<td>1,300</td>
<td>25%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12,300</td>
<td>13,900</td>
<td>1,600</td>
<td>13%</td>
<td>1.23%</td>
</tr>
<tr>
<td>Durable Goods</td>
<td>8,400</td>
<td>9,700</td>
<td>1,300</td>
<td>15%</td>
<td>1.45%</td>
</tr>
<tr>
<td>Wood prodct mfg.</td>
<td>3,300</td>
<td>3,900</td>
<td>600</td>
<td>18%</td>
<td>1.68%</td>
</tr>
<tr>
<td>Transportation equip. mfg.</td>
<td>600</td>
<td>700</td>
<td>100</td>
<td>17%</td>
<td>1.55%</td>
</tr>
<tr>
<td>Nondurable goods</td>
<td>3,900</td>
<td>4,200</td>
<td>300</td>
<td>8%</td>
<td>0.74%</td>
</tr>
<tr>
<td>Transportation, &amp; utilities</td>
<td>3,000</td>
<td>3,400</td>
<td>400</td>
<td>13%</td>
<td>1.26%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>5,400</td>
<td>6,000</td>
<td>600</td>
<td>11%</td>
<td>1.06%</td>
</tr>
<tr>
<td>Retail trade</td>
<td>18,600</td>
<td>20,700</td>
<td>2,100</td>
<td>11%</td>
<td>1.08%</td>
</tr>
<tr>
<td>Information</td>
<td>3,200</td>
<td>3,500</td>
<td>300</td>
<td>9%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Financial activities</td>
<td>7,000</td>
<td>8,000</td>
<td>1,000</td>
<td>14%</td>
<td>1.34%</td>
</tr>
<tr>
<td>Professional &amp; business svr.</td>
<td>14,800</td>
<td>17,500</td>
<td>2,700</td>
<td>18%</td>
<td>1.69%</td>
</tr>
<tr>
<td>Administrative &amp; support svr.</td>
<td>7,200</td>
<td>8,500</td>
<td>1,300</td>
<td>18%</td>
<td>1.67%</td>
</tr>
<tr>
<td>Education</td>
<td>1,700</td>
<td>2,000</td>
<td>300</td>
<td>18%</td>
<td>1.64%</td>
</tr>
<tr>
<td>Health care &amp; social assist.</td>
<td>20,700</td>
<td>24,500</td>
<td>3,800</td>
<td>18%</td>
<td>1.70%</td>
</tr>
<tr>
<td>Health care</td>
<td>17,900</td>
<td>21,160</td>
<td>3,260</td>
<td>18%</td>
<td>1.69%</td>
</tr>
<tr>
<td>Leisure &amp; hospitality</td>
<td>14,500</td>
<td>17,400</td>
<td>2,900</td>
<td>20%</td>
<td>1.84%</td>
</tr>
<tr>
<td>Accommodation &amp; food svr.</td>
<td>12,700</td>
<td>15,300</td>
<td>2,600</td>
<td>20%</td>
<td>1.88%</td>
</tr>
<tr>
<td>Other svr.</td>
<td>4,800</td>
<td>5,400</td>
<td>600</td>
<td>13%</td>
<td>1.18%</td>
</tr>
<tr>
<td>Government</td>
<td>29,100</td>
<td>32,800</td>
<td>3,700</td>
<td>13%</td>
<td>1.20%</td>
</tr>
<tr>
<td>Federal government</td>
<td>1,600</td>
<td>1,700</td>
<td>100</td>
<td>6%</td>
<td>0.61%</td>
</tr>
<tr>
<td>State government</td>
<td>12,300</td>
<td>14,200</td>
<td>1,900</td>
<td>15%</td>
<td>1.45%</td>
</tr>
<tr>
<td>State education</td>
<td>9,800</td>
<td>11,000</td>
<td>1,200</td>
<td>12%</td>
<td>1.16%</td>
</tr>
<tr>
<td>Local government</td>
<td>15,200</td>
<td>16,900</td>
<td>1,700</td>
<td>11%</td>
<td>1.07%</td>
</tr>
<tr>
<td>Local education</td>
<td>8,200</td>
<td>9,300</td>
<td>1,100</td>
<td>13%</td>
<td>1.27%</td>
</tr>
<tr>
<td><strong>Total nonfarm employment</strong></td>
<td><strong>142,300</strong></td>
<td><strong>164,000</strong></td>
<td><strong>21,700</strong></td>
<td><strong>15%</strong></td>
<td><strong>1.43%</strong></td>
</tr>
</tbody>
</table>


54 The employment growth rate for Eugene’s UGB is addressed in Chapter 5 of this EOA.
3.2 Implications of National, State and Regional Trends on Economic Development within Eugene

This section presents the implications of national, state, and regional economic trends on economic growth in Eugene.

Table 16. Implications of national, state, and regional economic and demographic trends on economic growth in Eugene

<table>
<thead>
<tr>
<th>National, State, and Regional Economic Trends</th>
<th>Implications for economic growth in Eugene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects of the national recession</td>
<td>The national recession is likely to result in slower than average employment growth in Eugene over the next two to five years. The higher levels of unemployment and slow employment growth are likely to slow growth in wages over the next two to five years throughout Oregon, including in Eugene.</td>
</tr>
<tr>
<td>The national recession that started at the end of 2007 has affected businesses and workers alike. Unemployment at the national level has been at or above 9% since January 2009, with Oregon’s unemployment rate at or above 10% since January 2009. The federal government’s economic forecast suggests slow economic growth, with gradual increases of employment starting in the second quarter of 2010 and continuing through 2011. Economic growth in Oregon typically lags behind national growth</td>
<td></td>
</tr>
<tr>
<td>National, State, and Regional Economic Trends</td>
<td>Implications for economic growth in Eugene</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td><strong>Growth of service-oriented sectors</strong></td>
<td>The changes in employment in Lane County have followed similar trends as changes in national and state employment. The sectors with the greatest change in share of employment since 1980 were Services, adding more than 45,500 or 85% of new jobs. Industrial sectors and Government added more than 8,000 jobs, accounting for about 15% of new jobs. Oregon Employment Department forecasts that the sectors likely to have the most employment growth over the 2010 to 2010 period are: Health Care &amp; Social Assistance, Local and State Government, Retail Trade, Professional and Business Service, and Accommodation and Food Services. These sectors represent employment opportunities for Lane County.</td>
</tr>
<tr>
<td>Increased worker productivity and the international outsourcing of routine tasks led to declines in employment in the major goods-producing industries. Projections from the Bureau of Labor Statistics indicate that U.S. employment growth will continue to be strongest in healthcare and social assistance, professional and business services, and other service industries. Construction employment will grow with the economy but manufacturing employment will decline. These trends are also expected to affect the composition of Oregon’s economy.</td>
<td></td>
</tr>
<tr>
<td><strong>Lack of diversity in Oregon’s economy</strong></td>
<td>Employment in Eugene is concentrated in a few sectors: Government, Health Care and Social Assistance, Retail Trade, and Manufacturing. Employment in the government and health care sectors tends to be stable, well-paying employment. Employment in Manufacturing is generally well-paying but may be volatile. Eugene’s employment in traded-sectors is concentrated in Government (the University of Oregon), Health Care, Manufacturing and Professional Services. Opportunities for growth of traded-sector employment include: manufacturing of “green” products, specialty food processing; high tech; traded-sector services; and forest products.</td>
</tr>
<tr>
<td>Oregon’s economy has diversified since the 1960’s but Oregon continues to rank low in economic diversity among states. A recent analysis, based on 2007 data, ranked Oregon 31st. These rankings suggest that Oregon is still heavily dependent on a limited number of industries. Relatively low economic diversity increases the risk of economic volatility as measured by changes in output or employment.</td>
<td></td>
</tr>
<tr>
<td>National, State, and Regional Economic Trends</td>
<td>Implications for economic growth in Eugene</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td><strong>Importance of small businesses in Oregon’s economy</strong>&lt;br&gt;Small business, with 100 or fewer employees, account for 51% of private sector employment in Oregon. Workers of small businesses typically have had lower wages than the state average.</td>
<td>Businesses with 100 or fewer employees account for 70% of private employment in Eugene. Businesses with 9 or fewer employees account for 18% of private employment in Eugene. Growth of small businesses presents opportunities for economic growth in Eugene.</td>
</tr>
<tr>
<td><strong>Availability of trained and skilled labor</strong>&lt;br&gt;Businesses in Oregon are generally able to fill jobs, either from available workers living within the State or by attracting skilled workers from outside of the State.&lt;br&gt;Availability of labor depends, in part, on population growth and in-migration. Oregon added more than 980,000 new residents and about 475,000 new jobs between 1990 and 2008. The population-employment ratio for the State was about 1.6 residents per job over the 18-year period.&lt;br&gt;Availability of labor also depends on workers’ willingness to commute. Workers in Oregon typically have a commute that is 30 minutes or shorter.&lt;br&gt;Availability of skilled workers depends, in part, on education attainment. About 28% of Oregon’s workers have a Bachelor’s degree or higher.</td>
<td>Employment in Lane County grew at about 1.7% annually over the 1990 to 2007 period, while population grew at about 1.1% over the same period. Eugene’s population, however, grew at 1.8% annually over the 18 year period. This growth pattern is consistent with Eugene’s status as the regional employment center.&lt;br&gt;Eighty-five percent of workers in the Eugene lived in Lane County, with nearly half of workers living within Eugene.&lt;br&gt;Firms in Eugene attracted workers from the Willamette Valley, from Portland southward.&lt;br&gt;Eugene’s residents were more likely to have a Bachelor’s degree or higher (41%) than the State average (28%).</td>
</tr>
<tr>
<td>National, State, and Regional Economic Trends</td>
<td>Implications for economic growth in Eugene</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td><strong>Aging of the population</strong>&lt;br&gt;The number of people age 65 and older will more than double between 2010 and 2050, while the number of people under age 65 will grow only 20 percent. The economic effects of this demographic change include a slowing of the growth of the labor force, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.&lt;br&gt;People are retiring later than previous generations, continuing to work past 65 years old. This trend is seen both at the national and State levels. Even given this trend, the need for workers to replace retiring baby boomers will outpace job growth. Management occupations and teachers will have the greatest need for replacement workers because these occupations have older-than-average workforce.</td>
<td>The changes in the age structure in Eugene are similar to the State, with the most growth in people 45 years and older. Eugene had a larger share of people aged 20 to 29 and a smaller share of people between 40 and 69 years than the State average.&lt;br&gt;The State projects the share of the population over the age of 60 in Lane County will double between 2000 and 2030.&lt;br&gt;Firms in Eugene will need to replace workers as they retire. Demand for replacement workers is likely to outpace job growth in Eugene, consistent with State trends.</td>
</tr>
<tr>
<td><strong>Increases in energy prices</strong>&lt;br&gt;Energy prices are forecast to return to relatively high levels, such as those seen in the 2006 to 2008 period, possibly increasing further over the planning period.</td>
<td>Increases in energy prices are likely to affect the mode of commuting before affecting workers’ willingness to commute. For example, commuters may choose to purchase a more energy efficient car, use the train, bus, or carpool.&lt;br&gt;Very large increases in energy prices may affect workers’ willingness to commute, especially workers living the furthest from Eugene or workers with lower paying jobs.</td>
</tr>
</tbody>
</table>
Comparatively low wages

The income of a region affects the workforce and the types of businesses attracted to the region. Average income affects workers and businesses in different ways. Workers may be attracted to a region with higher average wage or high wage jobs. Businesses, however, may prefer to locate in regions with lower wages, where the cost of doing business may be lower.

Since the early 1980’s, Oregon’s per capita personal income has been consistently lower than the U.S. average. In 2007, Oregon’s per capita wage was 91% of the national average.

Per capita income in Lane County was lower than the State and national averages. Income in Oregon has historically been below national averages and income in Lane County has been below state averages. There are four basic reasons that income has been lower in Oregon and Lane County than in the U.S.: (1) wages for similar jobs are lower; (2) the occupational mix of employment is weighted towards lower paying occupations; (3) a higher proportion of the population has transfer payments (e.g. social security payments for retirees), which are typically lower than earnings; and (4) lower labor force participation among working age residents (in part due to the presence of a large number of college students). To a certain degree, these factors are all true for both Oregon and Lane County and result in lower income.

In addition, wages in Lane County and Oregon tend to be more volatile than the national average. The major reason for this volatility is that the relative lack of diversity in the State and County economy. Wages in Oregon and Lane County are impacted more than the national average by downturns in either the national economy or in industries in Oregon and Lane County that are dependent on natural resources (e.g., timber and wood processing or R.V. manufacturing).

The lower wages in Eugene may be attractive to firms that typically pay lower wages, such as call centers or firms that outsource professional services such as accounting or technical support.
<table>
<thead>
<tr>
<th>National, State, and Regional Economic Trends</th>
<th>Implications for economic growth in Eugene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education as a determinant of wages</strong></td>
<td>Eugene’s residents were more likely to have a Bachelor’s degree or higher (41%) than the State average (28%).</td>
</tr>
<tr>
<td>The majority of the fastest growing occupations will require an academic degree, and on average they will yield higher incomes than occupations that do not require an academic degree. The fastest growing of occupations requiring an academic degree will be: computer software application engineers, elementary school teachers, and accountants and auditors. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for about half of all jobs by 2018. These occupations typically have lower pay than occupations requiring an academic degree.</td>
<td>The relatively low wages in Eugene are the result of the composition of the regional economy, rather than the availability of workers with an academic degree. Increasing the relatively low wages in the region are dependent on changing the composition of the regional economy, through growing or attracting businesses with higher paying occupations.</td>
</tr>
<tr>
<td><strong>Importance of high quality natural resources</strong></td>
<td>The region’s high quality natural resources present economic growth opportunities for Eugene, ranging from food and beverage production to amenities that attract visitors and contribute to the region’s high quality of life.</td>
</tr>
<tr>
<td>The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. Increases in the population and in households’ incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region’s quality of life and play an important role in attracting both households and firms.</td>
<td></td>
</tr>
</tbody>
</table>
4 ASSESSMENT OF EUGENE’S ECONOMIC POTENTIAL

Each economic region has different combinations of productive factors: land (and natural resources), labor (including technological expertise), and capital (investments in infrastructure, technology, and public services). While all areas have these factors to some degree, the mix and condition of these factors vary. The mix and condition of productive factors may allow firms in a region to produce goods and services more cheaply, or to generate more revenue, than firms in other regions.

By affecting the cost of production and marketing, competitive advantages affect the pattern of economic development in a region relative to other regions. Goal 9 and OAR 660-009-0015(4) recognize this by requiring plans to include an analysis of the relative supply and cost of factors of production. An analysis of competitive advantage depends on the geographic areas being compared. In general, economic conditions in Eugene will be largely shaped by national and regional economic conditions affecting the Willamette Valley. Many of these are discussed in the preceding chapter.

Oregon and Eugene to help establish the context for economic development in Eugene. Local economic factors will help determine the amount and type of development in Eugene relative to other communities in the Willamette Valley and Oregon. This chapter focuses on the competitive advantages of Eugene for attracting businesses relative to the Willamette Valley and Oregon.

4.1 Location

Eugene, the second-largest city in Oregon with a population of approximately 157,010 people in the city limits in 2011 plus approximately 20,000 people living within Eugene’s portion of the UGB, is located in the Southern Willamette Valley. Interstate 5 runs to the east of Eugene, Highway 126 runs east-west through Eugene, and Highway 99 runs north-south through Eugene. Eugene is located generally south and west

55 OAR 660-009-0015(4) requires assessment of the “community economic development potential.” This assessment must consider economic advantages and disadvantages—or what Goal 9 broadly considers “comparative advantages.” This Chapter of the EOA considers potential advantages and disadvantages referenced in the OAR and Goal, along with other factors important for assessing Eugene’s economic potential for accommodating the needs of possible employers.

of the Willamette River. Eugene’s location will impact Eugene’s future economic development:

- Eugene shares a border with Springfield, the 9th largest city in the State of Oregon, with approximately 59,695 people in the city limits in 2011. The Eugene-Springfield Metropolitan Statistical Area (MSA), which includes all of Lane County, had more than 353,000 people in 2011, accounting for 9% of Oregon’s population.

- Eugene has easy access to the State’s highway system and other transportation opportunities. In addition to the multiple freeways running by and through the City, residents and businesses can access other modes of transportation in Eugene, including the Eugene Airport, Greyhound bus service, and Amtrak passenger rail service.

- Eugene is located at the southern end of the Willamette Valley. It is the largest city on I-5 between Portland and Sacramento.

- Residents of Eugene have easy access to shopping, cultural activities, indoor and outdoor recreational activities, and other amenities in Eugene, Springfield, and rural Lane County.

- Eugene residents have several nearby opportunities for post-secondary education, including: the University of Oregon, Lane Community College, Northwest Christian University, and Gutenberg College.

- Businesses in Eugene have access to natural resources, such as wood products or agricultural products, from resource lands in western Oregon.

Eugene’s location, access to I-5, urban amenities, the presence of the University of Oregon, and access to natural resources are primary competitive advantages for economic development in Eugene.
4.2 Availability of Transportation Facilities

Businesses and residents in Eugene have access to a variety of modes of transportation: automotive (Interstate 5, multiple State highways and local roads); rail (Union Pacific and Amtrak); transit (LTD); and air (Eugene Airport).

Eugene has excellent automotive access for commuting and freight movement. Eugene is located along Interstate 5, the primary north-south transportation corridor on the West Coast, linking Eugene to domestic markets in the United States and international markets via West Coast ports. In west Eugene, Highway 99 connects Eugene with Junction City, Harrisburg, and rural areas to the north. Businesses and residents of Eugene also have access to Highway 126, connecting Florence to the Bend/Redmond area, and Highway 58 in Pleasant Hill.

Other transportation options in Eugene are:

- **Rail.** Union Pacific rail lines serve Eugene, providing freight service. Amtrak passenger service is also available, connecting Eugene to cities all across the west coast. The train station is located immediately northwest of downtown Eugene. Union Pacific Railroad provides freight service to Eugene businesses. The Eugene Rail yard is located in northwest Eugene off the NW Expressway.

- **Transit.** The Lane Transit District (LTD) provides transit service to the Eugene-Springfield region. LTD serves Eugene with multiple bus lines, both within Eugene and connecting Eugene to Springfield and other outlying communities such as Junction City, Coburg, Veneta, and Cottage Grove. LTD’s bus rapid transit (BRT) system, called EmX, provides service between Eugene Station and Springfield Station as well as between Springfield Station and the RiverBend Hospital/Gateway Mall area. LTD is currently in the design phase for expanding EmX service to West Eugene via 6th/7th, Garfield, and West 11th Avenues.

- **Air.** The Eugene Airport provides both passenger and freight service for Eugene and Springfield residents. The airport is the second busiest in the state, and the fifth largest in the Pacific Northwest. The airport is served by four commercial airlines, and is the primary airport for a six county region.

Transportation is a competitive advantage that primarily affects the overall type of employment and its growth in Eugene.
4.3 Public Facilities and Services

Provision of public facilities and services can impact a firm’s decision on location within a region but ECO’s past research has shown that businesses make locational decisions primarily based on factors that are similar within a region. These factors are: the availability and cost of labor, transportation, raw materials, and capital. The availability and cost of these production factors are usually similar within a region.

Once a business has chosen to locate within a region, they consider the factors that local governments can most directly affect: tax rates, the cost and quality of public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest effect on the level and type of economic development in the community.

The public facilities in this section describe Eugene’s pollution control measures, which are designed to comply with the standards and requirements of Oregon’s Department of Environmental Quality (DEQ) and national regulations such as the Clean Water Act or the Clean Air Act.

4.3.1 Water

Eugene’s water provider is the Eugene Water and Electric Board (EWEB). EWEB provides water from the McKenzie River to nearly 200,000 consumers. EWEB’s Hayden Bridge Water Filtration Plant is the largest full-treatment plant in the State. The plant added an extra 15 million gallon reservoir and a 120 million-gallon-per-day pump station in May 2003. The plant can sustain treating 72 million gallons of river water per day. EWEB maintains 35 miles of pipelines and 754 miles of mains, and relies on 27 covered reservoirs, holding nearly 100 million gallons of water.

EWEB’s Water Management Services (WMS) leads the efforts to manage water resources and the supply infrastructure to ensure an adequate supply for the City of Eugene. WMS focuses on maintaining an adequate supply and product education. WMS works to ensure that water system capital investments are timed to match growth and are not installed before necessary. WMS also coordinates product education to provide customers the information they need to efficiently manage their water use.57

EWEB currently has rights on the McKenzie River for 300 cubic feet of water per second and has seen peak usage of around 100 cubic feet of water per second. EWEB’s contractual water rights are projected to be sufficient for 100 years.

The Hayden Bridge Filtration Plant in east Springfield is EWEB’s water treatment plant. The plant is currently undergoing an expansion that will increase the capacity to more than 80 million gallons per day. Peak summertime water demand has come close to the pre-expansion capacity of 68 million gallons per day. The Hayden Bridge expansion meets Eugene’s water needs for the next 30 years, and similar expansions are planned for 2039 and 2050.58

4.3.2 Wastewater

The Metropolitan Wastewater Management Commission (MWMC) manages the wastewater treatment facilities serving Eugene. The Water Pollution Control Facility in Eugene is designed to treat 50 million gallons of wastewater per day during dry weather and 200 million gallons per day during wet weather.

MWMC facilities were recently expanded to satisfy projected growth through 2025. The expanded system has a 277 million gallon peak day wet weather capacity.

4.3.3 Air Quality

Air quality is regulated by the Lane Regional Air Protection Agency (LRAPA) for Lane County. LRAPA complies with national air quality laws, as well as maintaining clean air consistent with local priority and goals. LRAPA carries out its mission to protect and enhance air quality through a combination of regulatory and non regulatory programs and activities. LRAPA’s compliance activities include permitting, compliance and enforcement.

4.4 Land Supply

Businesses locating or growing in Eugene require land with a wide range of site characteristics. OAR 660-009 describes site characteristics as including (but not limited to): “a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a

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particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.” Each business has preferences for site characteristics that are unique to the business.

Business’ locational decisions are an indicator of whether Eugene’s land base meets the needs of businesses that want to expand or locate within the Willamette Valley in general and in Eugene in particular. Many businesses have grown, expanded, and located in Eugene over the past decade. This section presents examples of businesses that have considered expanding or locating in Eugene but chose to locate elsewhere. It includes discussion of the types of sites, focusing on size of site, that these types of businesses require when deciding where to locate.

### 4.4.1 Businesses that Relocated Outside of Eugene

The limited land supply in Eugene, especially in industrial zoned lands of a certain parcel size (10 acres and greater) with easy access to utilities and transportation may be a constraining factor for future employment growth opportunities. Industrial and general employment businesses that have relocated because of limited land supply or regulatory barriers include:

- **Rexius** is a local wood products, yard debris recycling, and landscaping company which has been headquartered in West Eugene since the early 1930s. Over time, the company’s growing production and shop facilities became surrounded by incompatible commercial and residential development. In the mid 2000’s, Rexius began looking for a suitable site on which to relocate these aspects of the business. After attempting to locate in the industrially zoned northwest corridor of Eugene, Rexius moved its operations to a suitable site in Coburg in 2011. The total size of that site is over 100 acres. There was no such site available in Eugene.

- **Grain Millers** is a manufacturer of grains produced in the Willamette Valley. Grain Millers has been located near Eugene’s downtown since the 1980’s, although the silos it used were constructed in the 40’s. In the mid-2000’s, Grain Millers started searching for a new location for their operation. They needed a larger site that would allow them more room for train cars and other processing operations.

  They searched for sites in Eugene and other parts of the Willamette
Valley. They could not find a site in Eugene to match their needs. The site they identified for expansion is located in Junction City, along Highway 99. The site is about 100 acres in size, with about 50 acres of land suitable for development. The site gives Grain Millers access to rail lines, as well as the space to maneuver trains within the site.

- **Symantec** is a software company that operated a service center in downtown Eugene until 2002. At that time the company moved approximately 550 high tech jobs to a 14+ acre Springfield parcel.

- **Peace Health** is one of two organizations with hospital facilities in the Eugene-Springfield area. Peace Health established a hospital in Eugene in the 1930’s. Around 2004, Peace Health started searching for a site to build a new, larger hospital facility in the Eugene-Springfield region.

  PeaceHealth considered different sites in Eugene, including a Crescent Drive site, a downtown redevelopment site, and a 2nd and Chambers redevelopment site, but these sites required land assembly and/or ran into political opposition at the local level based, primarily, on compatibility issues.

  Peace Health ultimately built its new hospital in Springfield, the Sacred Heart Medical Center at RiverBend on 180 acres. Peace Health’s facility in Eugene continues to function at a reduced capacity, as the Sacred Heart Medical Center University District.
4.4.2 Businesses That Considered Locating in Oregon

One of the key factors that businesses consider when making decisions about where to locate is the availability of vacant, large, and flat parcels of land. Table 17 shows examples of traded-sector firms that considered locating in Oregon and Southern Washington since 1997. Table 17 shows that firms looking for office or flex space required sites from 30 acres up to more than 100 acres. Warehouse and distribution firms looked for sites between about 50 and 200 acres. Manufacturing firms required sites from 25 acres to 250 acres in size.

These firms are similar to the types of firms with potential growth in the Eugene area. Few, if any, of these firms considered locating in Eugene, in part, because the City does not have a selection of sites meeting the requirements of these businesses.

These firms worked with Business Oregon, the State of Oregon’s economic development agency, to find suitable sites in Oregon. Some of the firms chose to locate in Oregon and some chose to locate elsewhere. One of the key factors that influenced decisions to locate elsewhere was availability of large parcels of land with infrastructure services (e.g., transportation access, wastewater, etc.).
Table 17. Examples of firms that considered locating in Oregon and Southern Washington between 1997 and 2010

<table>
<thead>
<tr>
<th>Type of business</th>
<th>General Location Considered</th>
<th>Site size (acres)</th>
<th>Building Size (square feet)</th>
<th>Located in Oregon ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office or Flex space</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private technology firm</td>
<td>Northern Oregon I-5</td>
<td>100+</td>
<td>1 msf</td>
<td></td>
</tr>
<tr>
<td>Facebook Data Center</td>
<td>Prineville</td>
<td>118</td>
<td>147,000 sf</td>
<td>Yes</td>
</tr>
<tr>
<td>Siliconics</td>
<td>Portland Harbor</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nautilus</td>
<td>Vancouver</td>
<td>35</td>
<td>489,000</td>
<td>Yes</td>
</tr>
<tr>
<td>Google Data Center</td>
<td>The Dalles</td>
<td>30</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Warehouse and Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowes</td>
<td>Lebanon</td>
<td>204</td>
<td>1.3 to 2.2 msf</td>
<td>Yes</td>
</tr>
<tr>
<td>NOAH-PepsiCo</td>
<td>Albany</td>
<td>204</td>
<td>2.5 msf</td>
<td>No</td>
</tr>
<tr>
<td>Wal-Mart</td>
<td>Hermiston</td>
<td>200</td>
<td>1.3 msf</td>
<td>Yes</td>
</tr>
<tr>
<td>Target</td>
<td>Albany</td>
<td>175</td>
<td>1.3 msf</td>
<td>Yes</td>
</tr>
<tr>
<td>Fed Ex</td>
<td>Troutdale</td>
<td>78</td>
<td>500,000 sf</td>
<td>Yes</td>
</tr>
<tr>
<td>Dollar-Tree</td>
<td>Ridgefield, Wa</td>
<td>75</td>
<td>800,000 sf</td>
<td>Yes</td>
</tr>
<tr>
<td>Home Depot</td>
<td>Salem</td>
<td>50 to 100</td>
<td>400,000+</td>
<td>Yes</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apricus</td>
<td>Northern Oregon</td>
<td>250</td>
<td>Very large</td>
<td>No</td>
</tr>
<tr>
<td>Navitas</td>
<td>Oregon</td>
<td>150 to 200</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Pacific Ethanol</td>
<td>Boardman</td>
<td>137</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>SolarWorld</td>
<td>Hillsboro</td>
<td>75</td>
<td>1 msf</td>
<td>Yes</td>
</tr>
<tr>
<td>Schott Solar</td>
<td>I-5 corridor</td>
<td>50+</td>
<td>up to 800,000 sf</td>
<td>No</td>
</tr>
<tr>
<td>Genentech</td>
<td>Hillsboro</td>
<td>50</td>
<td>500,000 sf</td>
<td>Yes</td>
</tr>
<tr>
<td>Amy's Kitchen</td>
<td>White City</td>
<td>50</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Sanyo Solar</td>
<td>Salem</td>
<td>25</td>
<td>150,000 sf</td>
<td>Yes</td>
</tr>
<tr>
<td>Spectrawatt</td>
<td>Hillsboro</td>
<td>25</td>
<td>225,000 sf</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Business Oregon

According to information from Business Oregon and the Lane Metro Partnership, the following types of businesses considered locating in the Eugene-Springfield region over the last five to seven years:

- **Solar module and energy chemical manufactures.** One firm was looking for a 10 to 20 acre site for about 400 jobs (for an employment density of between 20 to 40 employees per acre). The other firm was looking for a 65 acre site (for about 300 jobs for an employment density of about 5 employees per acre).

- **Food processing and distribution firms.** One firm was looking for a 30 acre or larger site for about 200 jobs (for an employment density of about 7 employees per acre).

- **Life science and biopharmaceutical manufacturing.** The firm was looking for a site of about 60 acres with an estimate of 1,000 jobs (for an employment density of about 17 employees per acre).
Other manufacturing. Several other manufacturing firms considered locating in the region, with site needs ranging from about 10 acres to 25 acres, with one firm looking for more than 200 acres. The employment density for manufactures was generally between 2 to 12 employees per acre, averaging about 6 employees per acre.

4.4.3 Site Needs of Businesses that May Consider Locating in Oregon or the Eugene-Springfield Region

Table 18 shows the characteristics required to make a site competitive for businesses considering locating or expanding in Oregon, based on information from Business Oregon. Sites for most manufacturing uses are generally between 10 acres to 50 acres. Some large industrial uses, such as businesses in the renewable and clean energy sector, require sites of 100 acres. Regional distribution centers require sites of 200 acres. Industrial users need sites that are relatively flat, generally with a slope of 5% or less.

Table 18. Site characteristics of common business types in Oregon

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Site size* (Acres)</th>
<th>Site Topography (Slope)</th>
<th>Site Access Max distance in miles to interstate or major arterial</th>
<th>Utilities (Min. line size in inches)</th>
<th>Water / Sanitary Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regionally to Nationally Scaled Clean-Tech Manufacturer</td>
<td>50</td>
<td>0-5%</td>
<td>10</td>
<td>10 / 10</td>
<td></td>
</tr>
<tr>
<td>Globally Scaled Clean Technology Campus</td>
<td>100</td>
<td>0-5%</td>
<td>10</td>
<td>10 / 10</td>
<td></td>
</tr>
<tr>
<td>Heavy Industrial/ Manufacturing</td>
<td>25</td>
<td>0-5%</td>
<td>10</td>
<td>8 / 8</td>
<td></td>
</tr>
<tr>
<td>General Manufacturing</td>
<td>10</td>
<td>0-5%</td>
<td>20</td>
<td>8 / 8</td>
<td></td>
</tr>
<tr>
<td>Food Processing</td>
<td>20</td>
<td>0-5%</td>
<td>30</td>
<td>10 / 10</td>
<td></td>
</tr>
<tr>
<td>High-tech Manufacturing or Campus Industrial</td>
<td>25</td>
<td>0-7%</td>
<td>15</td>
<td>10 / 10</td>
<td></td>
</tr>
<tr>
<td>Regional (multistate) Distribution Center</td>
<td>200</td>
<td>0-5%</td>
<td>10</td>
<td>4 / 4</td>
<td></td>
</tr>
<tr>
<td>Warehouse/Distribution</td>
<td>25</td>
<td>0-5%</td>
<td>5</td>
<td>4 / 4</td>
<td>Only Interstate highway or equivalent</td>
</tr>
<tr>
<td>Call Center / Business Services</td>
<td>3</td>
<td>0 to 12%</td>
<td>Not applicable</td>
<td>4 / 4</td>
<td></td>
</tr>
</tbody>
</table>

Source: Business Oregon
*Note: Site size is the competitive acreage that would meet the site selection requirements of the majority of industries in this sector
Some industrial and large-scale commercial businesses may prefer to locate in an industrial or business park. Business parks are developments with multiple buildings, designed to accommodate a range of uses, from heavy industry to light industry to office uses. Most industrial parks, a subset of business parks, have large-scale manufacturing, distribution, and other industrial uses, with relatively little office space.

Table 19 shows examples of business park sites in the Portland Metro area. Business parks in the Portland area generally range in size from 25 acres to 75 or 100 acres in size. Some of the business parks are primarily industrial (e.g., Beaverton Creek, Columbia Commerce Park, or Southshore Corporate Park), some are primarily commercial (e.g., Creekside Corporate Park or Nimbus Corporate Center), and some are office and flex space (e.g., Cornell Oaks Corporate Center).

Table 19. Examples of business park sites, Portland Metro area

<table>
<thead>
<tr>
<th>Business Park</th>
<th>Site Acres</th>
<th>Building Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmberGlen Business Center</td>
<td>72</td>
<td>572,685</td>
</tr>
<tr>
<td>AmberGlen East and West</td>
<td>44</td>
<td>536,000</td>
</tr>
<tr>
<td>Beaverton Creek</td>
<td>56</td>
<td>512,852</td>
</tr>
<tr>
<td>Columbia Commerce Park</td>
<td>31</td>
<td>562,888</td>
</tr>
<tr>
<td>Cornell Oaks Corporate Center</td>
<td>107</td>
<td>684,000</td>
</tr>
<tr>
<td>Creekside Corporate Park</td>
<td>50</td>
<td>615,113</td>
</tr>
<tr>
<td>Kruse Woods Corporate Center</td>
<td>76</td>
<td>1,652,105</td>
</tr>
<tr>
<td>Lincoln Center</td>
<td>22</td>
<td>728,770</td>
</tr>
<tr>
<td>Nimbus Corporate Park</td>
<td>47</td>
<td>688,632</td>
</tr>
<tr>
<td>Oregon Business Park 1</td>
<td>36</td>
<td>782,294</td>
</tr>
<tr>
<td>Oregon Business Park 3</td>
<td>35</td>
<td>501,029</td>
</tr>
<tr>
<td>PacTrust Business Center</td>
<td>40</td>
<td>570,539</td>
</tr>
<tr>
<td>Pacific Business Park (South)</td>
<td>26</td>
<td>340,864</td>
</tr>
<tr>
<td>Pacific Corporate Center</td>
<td>56</td>
<td>601,542</td>
</tr>
<tr>
<td>Parkside Business Center</td>
<td>52</td>
<td>687,829</td>
</tr>
<tr>
<td>Southshore Corporate Park</td>
<td>312</td>
<td>1,630,000</td>
</tr>
<tr>
<td>Tualatin Business Center I and II</td>
<td>33</td>
<td>383,305</td>
</tr>
<tr>
<td>Wilsonville Business Center</td>
<td>30</td>
<td>710,000</td>
</tr>
<tr>
<td>Woodside Corporate Park</td>
<td>37</td>
<td>579,845</td>
</tr>
</tbody>
</table>

Source: Metro UGR, Appendix 5 Multi-tenant (business park)/Large lot analysis

In addition, the Portland Metro area has the following types of major employment sites, on sites ranging from 25 to more than 500 acres:

- **General industrial.** The Portland region has 21 general industrial major employment sites, ranging in size from 25 acres to 164 acres and averaging 53 acres. Firms on these sites range from beverage

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59 These examples are documented in the Portland Metro 2009-2030 Urban Growth Report, Appendix 4
manufacturers to construction product manufacturers to specialty manufacturing enterprises.

- **Warehouse and distribution.** The Portland region has 15 warehouse and distribution major employment sites, ranging in size from 25 acres to 452 acres and averaging 74 acres. Firms on these sites range from wholesalers to general warehouse and distribution to company-specific distributors.

- **Flex.** The Portland region has 14 flex major employment sites, ranging in size from 25 acres to 522 acres and averaging 112 acres. Firms on these sites include small and large semiconductor manufacturing and other high tech manufacturing.

### 4.5 Eugene’s Competitive Advantages

Economic development opportunities in Eugene will be affected by local conditions as well as the national and state economic conditions addressed above. Economic conditions in Eugene relative to these conditions in other portions of the Southern Willamette Valley form Eugene’s competitive advantage for economic development. Eugene’s competitive advantages have implications for the types of firms most likely to locate and expand in Eugene.

There is little that Eugene can do to influence national and state conditions that affect economic development. However, Eugene can influence local factors that affect economic development. Eugene’s primary competitive advantages are: location, access to transportation, access to highly educated and skilled labor, University of Oregon, existing business clusters, quality of life, and public policy. These factors make Eugene attractive to residents and businesses that want a high quality of life where they live and work.

Eugene’s location within the Willamette Valley and proximity to natural resources (e.g., lumber or ocean-products), access to outdoor recreational opportunities, and reputation as “Track Town” make Eugene a unique place to live and do business. These factors are key to Eugene’s competitive advantages, as summarized below:

- **Location.** Eugene is located in Lane County, west of I-5 and adjacent to Springfield. Eugene is Oregon’s second largest city, located in one of Oregon’s most populous metropolitan areas, with more than 350,000 people or about 9% of the state population. Eugene is home to the University of Oregon, the largest state university in Oregon. Businesses in the City have
access to natural resources from surrounding rural areas, such as agricultural products, lumber, and other resources.

- **Transportation.** Businesses and residents in Eugene have access to a variety of modes of transportation: automotive (I-5, Highways 99 and 126, and local roads); rail (freight service from Union Pacific and passenger service with Amtrak); transit (LTD buses and bus rapid transit); and air (Eugene Airport).

Businesses that need relatively easy automotive access to I-5 and other major roads in the region may be attracted to Eugene. The distance from some industrial areas, especially those in western Eugene, to I-5 may discourage some types of firms, such as warehousing and distribution, from locating in Eugene.

- **Labor market.** The availability of labor is critical for economic development. Availability of labor depends not only on the number of workers available, but the quality, skills, and experience of available workers as well.

Businesses in Eugene have access to highly educated skilled workers, University of Oregon students, and unskilled workers. The University of Oregon may result in spin-off companies or attract entrepreneurs to Eugene. These businesses will need access to Eugene’s pool of skilled labor.

Commuting is common in the Eugene-Springfield region. More than half of Eugene’s workers live outside of Eugene. The commuting patterns show that businesses in Eugene are able to attract skilled and unskilled workers from across the Eugene-Springfield region.

- **University of Oregon.** The University of Oregon creates a range of economic advantages for Eugene. Businesses that need access to educated workers (e.g., software publishers, engineering companies, and other professional, technical services) benefit from access to graduating students. The University contributes to Eugene’s quality of life through its cultural amenities and sporting events, making Eugene more attractive to businesses that want to locate in a high-quality setting and likely to hire advanced degree-holders. The University increases Eugene’s visibility and national profile.

- **Existing business clusters.** Eugene has existing clusters of natural resource manufacturing (e.g., wood products manufacturing or metals manufacturing), food and beverage manufacturing and distribution, sporting goods manufacturing,
and social science research. These business clusters provide opportunities for the growth of additional businesses in these and related businesses.

- **Access to natural resources.** Eugene is located in an agricultural valley, about one hour from the Oregon Coast and a little more than an hour from the Cascade Mountains. Businesses that need natural resource inputs (e.g., lumber, forest products, seafood or ocean products, or agricultural products) may choose to locate in Eugene.

- **Quality of life.** Eugene’s high quality of life and urban amenities are a competitive advantage for attracting businesses to the City. Eugene’s quality of life attributes include: access to outdoor recreation, a mild climate, cultural amenities (e.g., the Hult Center for the Performing Arts, programs at the University of Oregon, and other performing arts venues), sporting events, shopping opportunities, quality of the school system, and availability of parks and open space. Eugene’s high quality of life is likely to attract businesses and entrepreneurs that want to locate in a high-amenity area.

- **Attraction to visitors.** Eugene’s access to outdoor recreation, “Track Town” athletic identity and events, presence of viniculture, and fast-paced growth among its craft breweries make Eugene attractive to tourists. Industries that serve tourists, such as food services and accommodations, are likely to grow if tourism increases.

- **Public policy.** Public policy can impact the amount and type of economic growth in a community. The City can impact economic growth through its policies about the provision of land and redevelopment. Success at attracting or retaining firms may depend on availability of attractive sites for development and public support for redevelopment. In addition, businesses may choose to locate in Eugene (rather than in a different part of the Southern Willamette Valley) based on: City’s tax policies, development charges (i.e., systems development charges), availability of public infrastructure (i.e., transportation or sanitary sewer), and attitudes towards businesses.

Eugene’s comparative advantages, as they relate to the nation, are similar to Oregon’s comparative advantages. Compared to Oregon, Eugene’s labor force has higher levels of educational attainment and lower unemployment but lower than average pay. Some businesses in Eugene are experiencing difficulties in finding or recruiting some types of skilled
workers to the region, but many of its high-tech firms are still managing to hire sufficiently skilled workers to grow their businesses. As a regional center, the City of Eugene has a full range of services to support businesses and a full complement of amenities to offer a high quality of life.

Factors that will influence the quality of future employment growth include: (1) the quality of local education, the success of local and state “P-20” (an educational concept of pre-Kindergarten through postsecondary education and workforce participation) initiatives, (2) job retraining services, and (3) an ability to develop and retain high-tech firms.

The factors that may constrain employment and economic growth in Eugene are: (1) availability of affordable housing, especially workforce housing, (2) a comparatively small commercial and industrial land supply, and (3) lack of large sites for industrial and other large employers.

The limited land supply in Eugene, especially in industrial zoned lands of a certain parcel size (10 acres and greater) with easy access to utilities and transportation may be a constraining factor for future employment growth opportunities. Businesses that have relocated because of limited land supply or regulatory barriers include Rexius, Grain Millers, Symantec, and Peace Health. In addition, Oregon Business reported between June 2010 and September 2011 that 2 of the 10 development opportunities lost required more than 50 acres, a site size of which Eugene has no inventory in 2012.

4.6 Summary of Production Factors That May Affect Economic Development in Eugene

Table 20 provides a summary of production factors in Eugene as well as comments on local opportunities and constraints. It also discusses implications of each factor for future economic development in Eugene.
Table 20. Summary of production factors and their implications for Eugene

<table>
<thead>
<tr>
<th>Category</th>
<th>Opportunities</th>
<th>Challenges</th>
<th>Implications</th>
</tr>
</thead>
</table>
| Labor    | • Access to labor from across the Eugene-Springfield Region  
           • Highly educated labor force | • Commuting within the Eugene-Springfield region | The City has access to labor from the region. Commuting patterns may be negatively impacted by increases in energy prices. The impact is likely to be less in the immediate Eugene-Springfield area but is likely to be greater for commuters that live further from Eugene and Springfield. Firms that need access to the regional labor market may benefit from additional sites located near I-5. |
| Land     | • Opportunities for redevelopment, especially in Downtown  
           • Availability of commercial land and parcels larger than 25 acres of commercial or industrial land  
           • Distance between I-5 and undeveloped industrial land | | Firms that prefer large, undeveloped parcels near highways or major arterials such as warehousing and distribution or manufacturers that require freight access are unlikely to locate in Eugene under current conditions because of a lack of suitable sites larger than 10 acres with necessary transportation access. |
<table>
<thead>
<tr>
<th>Category</th>
<th>Opportunities</th>
<th>Challenges</th>
<th>Implications</th>
</tr>
</thead>
</table>
| Local infrastructure| • Proximity to I-5 and Highways 99 and 126 and availability of freight shipping by rail  
• Opportunities for transportation via transit, bicycle, and pedestrian  
• Access to electricity produced in the Northwest, which is typically less expensive than electricity produced in other regions  
• Access to the national energy distribution system, including distribution of natural gas, gasoline, heating oil, and electricity  
• Availability of existing infrastructure in areas for redevelopment | • Cost of providing new infrastructure  
• Cost of providing transportation infrastructure in support of the existing commuting patterns within the region  
• Cost of energy, both electricity and gasoline, is subject to increases in prices at the regional level (the Pacific Northwest) and the national level | The cost of providing infrastructure to support employment growth will be an issue for both greenfield development and areas with redevelopment.  
The City Council will need to make policy decisions about how to fund infrastructure to accommodate employment growth.  
There is a larger, regional issue that the City will need to work with Lane County and neighboring communities to address: If Eugene continues to be the economic center of the region and workers continue to commute to Eugene from outlying cities, how will the necessary upgrades to transportation infrastructure be funded?  
Updates to Eugene’s Transportation System Plan are underway to implement Eugene’s local Comprehensive Plan. |
| Access to markets   | • Proximity to I-5 and Highways 99 and 126 and availability of freight shipping by rail  
• Availability of air transportation from the Eugene Airport for transportation of people and small quantities of goods | • Lack of sites with good transportation access, especially to I-5 | Eugene’s highway and rail access is sufficient to attract firms that need access to markets via highways.  
Eugene is relatively unlikely to attract firms that need to move large quantities of freight via trucks on I-5.  
Eugene may attract firms that ship products via air freight if additional sites are provided near the Eugene airport. |
<table>
<thead>
<tr>
<th>Category</th>
<th>Opportunities</th>
<th>Challenges</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials</strong></td>
<td>• Proximity to natural resources (e.g., timber or agricultural products)</td>
<td>• Cost of shipping raw and finished products</td>
<td>Eugene may be attractive to manufacturers that need access to natural resources. However, firms dependent on highway access to transport large quantities of materials may not locate in Eugene until infrastructure needs are addressed.</td>
</tr>
<tr>
<td></td>
<td>• Access to multiple rail lines</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Support Services</strong></td>
<td>• Existing businesses that provide professional, construction, retail, telecommunication, and other necessary support services</td>
<td>• Businesses that have specialized support service needs not currently met in the region may need to work with other businesses or organizations in the region to develop new support services</td>
<td>Eugene is the economic center of the Southern Willamette Valley. Businesses in Eugene have access to a full range of business services.</td>
</tr>
<tr>
<td><strong>Entrepreneurship</strong></td>
<td>• Presence of the University of Oregon</td>
<td>• Lack of existing business clusters to support some growth industries that may appeal to entrepreneurs, such as biotech, software development, or clean energy manufacturing</td>
<td>Eugene may be attractive to entrepreneurs who value the City’s quality of life attributes, access to outdoor recreation, and other locational attributes.</td>
</tr>
<tr>
<td></td>
<td>• Quality of life</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Availability of skilled workers at a cost that is lower than the national average</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
<td>• Eugene has an existing policy framework that describes the development process in the City</td>
<td>• The City may have difficulty overcoming the perception that Eugene is not business friendly.</td>
<td>The City has the opportunity to develop a regulatory framework that can promote economic activity through economic development policies, plans for providing infrastructure, and provision of a variety of housing types. The City plans to adopt its Economic Development Goals and Policies as part of the new comprehensive plan.</td>
</tr>
<tr>
<td>Category</td>
<td>Opportunities</td>
<td>Challenges</td>
<td>Implications</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Taxes and Fees</td>
<td>• Taxes and fees can be used to fund infrastructure improvements necessary to retain and attract businesses.</td>
<td>• Comparatively high System Development Charges (SDCs)</td>
<td>Eugene needs revenue sources for providing public services and infrastructure, just as other cities do. The City has options about how to raise these funds: through property taxes, development fees, and other fees or taxes. Firms may choose to locate on land that investments and incentives are directed towards.</td>
</tr>
</tbody>
</table>
| Industry clusters  | • Existing business clusters in the region, such as business services, food and beverage manufacturing, and wood products | • Developing new clusters  
• Availability of sites  
• Transportation access  
• Labor availability | Eugene can build off of existing business clusters, such as business services, to promote economic development. Elected officials have expressed a desire to develop businesses in targeted industries in Eugene. |
| Quality of life    | • High quality of life, including access to recreation, proximity to cultural amenities, regional shopping opportunities and environmental quality | • Growth management challenges, such as balancing development with protection of environmental quality | Eugene’s policy choices will affect the City’s quality of life, such as decisions regarding development of natural areas, housing policies, or policies that lead to redevelopment of downtown. |
| Innovative capacity| • Educated regional workforce  
• Existing professional and business service firms  
• Proximity to the University of Oregon  
• Existing businesses, clusters, and innovators in the Region | • Attracting and retaining good workers in the region  
• Availability of higher-end housing and cultural amenities to attract creative class workers | Government can be a key part of a community’s innovative culture, through the provision of services and regulation of development and business activities that are responsive to the changing needs of business. |
4.7 Summary of Issues Considered in Developing Eugene’s Economic Development Policies

Goal 9 requires that cities must consider the following issues when developing comprehensive plan policies for economic development. The following summary describes the factors and where they are addressed in the EOA or other City of Eugene policies.

- **The health of the current economic base.** Chapter 3 describes the implications of national, state, and regional trends for Eugene’s economy. Sub-section 3.1.3 provides specific information about Eugene’s economic base.

- **Materials and energy availability and cost.** Sub-section 3.1.2 describes the importance to access to materials and long-range trends in energy availability and costs.

- **Labor market factors.** Subsection 3.1.3.1 describes the labor market factors that affect availability of workers for businesses in Eugene.

- **Educational and technical training programs.** Subsection 3.1.3.1 describes educational attainment for residents of Eugene and educational and training opportunities in Eugene.

- **Availability of key public facilities.** Subsection 4.3 describes availability of transportation facilities and Subsection 4.3 describes availability water and wastewater facilities.

- **Necessary support facilities.** Subsection 4.2 and 4.3 describe support facilities necessary for businesses, such as access to the Eugene Airport or access to rail, as well as access to public facilities.

- **Current market forces.** Subsection 3.1.3.2 describe market forces and long-term employment trends in Lane County and Eugene.

- **Location relative to markets.** Subsection 4.1 describes Eugene’s location relative to markets and Subsection 4.2 describes transportation facilities that businesses in Eugene use to access markets.

- **Availability of renewable and non-renewable resources.** In Eugene, the renewable and non-renewable resource that the City’s target
industries may need are available within the Southern Willamette Valley region.

- **Availability of land.** The 2012 Employment Buildable Lands Inventory describes Eugene’s employment land base. Subsection 4.4 describes land characteristics of businesses that considered locating in Oregon.

- **Pollution control requirements.** Eugene’s water quality policies demonstrate the City of Eugene’s commitment to meeting federal and state pollution regulations. Businesses in Eugene is regulated by the Lane Regional Air Protection Agency for compliance with federal and state air pollution regulations.

### 4.8 Eugene’s Economic Development Policies

In the context of considering the adoption of this EOA document, Eugene and Lane County will consider adoption of the Envision Eugene Comprehensive Plan. That Plan will include the City’s economic development policies and text. The policies will provide direction in the City’s economic development planning and programs and provide a framework to implement the Economic Opportunity pillar of Envision Eugene.

In addition to other policies that are derived from the extensive citizen involvement program utilized by the City of Eugene for this project, the comprehensive plan policies and text to be adopted by the City and County will:

- State the overall objectives for economic development in the planning area;

- Identify categories or particular types of industrial and other employment uses desired by the community, based on the analysis in this EOA;

- State that a competitive short term supply of land is a community objective for the industrial and other employment uses selected through the EOA;

- Commit to designating an adequate number of employment sites of suitable sizes, types and locations;
• Commit to providing necessary public facilities and transportation facilities for the planning area, through public facilities planning and transportation system planning;

• Include detailed strategies for preparing the total land supply for development and for replacing the short-term supply of land as it is developed, including dates, events or both, that trigger local review of the short-term supply of land.
5 Employment Growth and Target Industries in Eugene

Goal 9 and its implementing rules require cities to prepare an estimate of the amount of employment land that will be needed over a 20-year planning period in terms of both acreage and number of sites. The estimate of employment land need, addressed in section 5.1, based on an “employee-per-acre” (EPA) approach. Section 5.2 describes the types of employers that Eugene is likely to, and wishes to, attract during the 20-year planning period.

5.1 Employment Forecast

Demand for commercial and industrial land will be driven by the expansion and relocation of existing businesses and new businesses locating in Eugene. The level of this business expansion activity can be measured by employment growth in Eugene. This chapter presents a projection of future employment levels in Eugene for the purpose of estimating demand for commercial and industrial land.

The projection of employment has three major steps:

1. **Establish base employment for the projection.** We start with the estimate of covered employment in Eugene’s UGB presented in Table 10. Covered employment does not include all workers, so we adjust covered employment to reflect total employment in Eugene.

2. **Project total employment.** The projection of total employment over the 20-year planning period is based on the forecast published by the Oregon Employment Department. This basis for projecting job growth is endorsed as a “safe harbor” in State rules.

3. **Allocate employment.** This step involves allocating employment to different land-use types.

The employment projections in this Chapter build off of Eugene’s existing employment base, assuming future growth similar to the County’s past employment growth rates. The employment forecast does not take into account a major change in employment that could result from the location

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60 For purposes of this EOA, the term “target industries” refers to the types of employers identified as both likely to locate in Eugene (based on trends and considering the assessment of Eugene’s economic potential) and consistent with the City’s economic development objectives.
(or relocation) of one or more large employers in the community during the planning period. Major economic events, such as the successful recruitment of a very large employer, are very difficult to include in a study of this nature. Such a major change in the community’s employment would be addressed through the City’s growth monitoring program.

5.1.1 Employment Base for Projection

The forecast of employment growth in Eugene starts with a base of employment growth on which to build the forecast. Table 19 shows ECO’s estimate of total employment in the Eugene UGB in 2010. To develop the figures, ECO started with estimated covered employment in the Eugene UGB from confidential QCEW (Quarterly Census of Employment and Wages) data provided by the Oregon Employment Department. Based on this information, Eugene had about 80,400 covered employees in 2010.

Covered employment, however, does not include all workers in an economy. Most notably, covered employment does not include sole proprietors. Analysis of data shows that covered employment reported by the Oregon Employment Department for Lane County is only about 72% of total employment reported by the U.S. Department of Commerce. We made this comparison by sector for Lane County and used the resulting ratios to determine the number of non-covered employees. This allowed us to determine the total employment in Eugene. Table 21 shows Eugene had an estimated 111,772 total employees within its UGB in 2010.
### Table 21. Estimated total employment in the Eugene UGB by sector, 2010

<table>
<thead>
<tr>
<th>Sector</th>
<th>Covered Employment</th>
<th>Estimated Total Employment</th>
<th>% of Total Emp.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrial</strong></td>
<td>14,221</td>
<td>16,784</td>
<td><strong>15%</strong></td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing &amp; Hunting</td>
<td>197</td>
<td>265</td>
<td>0%</td>
</tr>
<tr>
<td>Construction</td>
<td>2,191</td>
<td>3,601</td>
<td>3%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>7,338</td>
<td>7,369</td>
<td>7%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>3,499</td>
<td>4,102</td>
<td>4%</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing &amp; Utilities</td>
<td>996</td>
<td>1,447</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Retail Trade</strong></td>
<td>11,445</td>
<td>14,233</td>
<td><strong>13%</strong></td>
</tr>
<tr>
<td><strong>Commercial (non-retail)</strong></td>
<td>40,107</td>
<td>63,210</td>
<td><strong>57%</strong></td>
</tr>
<tr>
<td>Information</td>
<td>1,633</td>
<td>2,060</td>
<td>2%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>2,610</td>
<td>4,678</td>
<td>4%</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>1,341</td>
<td>4,593</td>
<td>4%</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>4,419</td>
<td>9,001</td>
<td>8%</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>1,630</td>
<td>1,669</td>
<td>1%</td>
</tr>
<tr>
<td>Admin. &amp; Support &amp; Waste Mgt. &amp; Remediation Srv.</td>
<td>4,361</td>
<td>6,229</td>
<td>6%</td>
</tr>
<tr>
<td>Private Educational Services</td>
<td>1,191</td>
<td>2,817</td>
<td>3%</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>10,826</td>
<td>13,641</td>
<td><strong>12%</strong></td>
</tr>
<tr>
<td>Arts, Entertainment, &amp; Recreation</td>
<td>1,094</td>
<td>2,982</td>
<td>3%</td>
</tr>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>7,362</td>
<td>8,055</td>
<td>7%</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>3,640</td>
<td>7,485</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>14,665</td>
<td>17,545</td>
<td><strong>16%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>80,438</td>
<td>111,772</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: 2010 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department.

Note: Covered employment as a percent of total employment calculated by ECONorthwest using data for Lane County employment from the U.S. Department of Commerce, Bureau of Economic Analysis (total), and the Oregon Employment Department (covered).
Employment Projection

The employment forecast covers the 2012 to 2032 period, requiring an estimate of total employment for Eugene in 2012. The recovery from the recent recession was weak between 2010 and 2012. As a result, we assumed that employment in Eugene did not change between 2010 and 2012. Based on this assumption, the 2012 employment base is 111,772 employees located within the Eugene UGB.

There is no required method for employment forecasting. OAR 660-024-0040(9) sets out some optional “safe harbors” for determining employment land need. A “safe harbor” is a State-endorsed, or pre-authorized, method of calculation.

Eugene is relying on the safe harbor at OAR 660-024-0040(9)(a)(A), which provides a method for determining Eugene’s employment growth rate by assuming that the current number of jobs in the Eugene urban area will grow during the 20-year planning period at a rate equal to “the county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department.” Table 22 shows the OED’s employment forecast for Lane County for 2012 to 2032, which has an average annual growth rate of 1.43%.61

The City of Eugene is using the OED employment forecast growth rate (1.43% average annual growth) for Lane County for the 2012 to 2022 period as the basis for the forecast of future employment growth. This approach is consistent with OAR 660-024-0040(9)(a)(A).62

Table 22 shows employment growth in Eugene between 2012 and 2032, based on the assumption that Eugene will grow at an average annual growth rate of 1.43%. Eugene will have 148,460 employees within the UGB by 2032, an increase of 36,688 employees (33%) between 2012 and 2032.

61 The OED’s newest employment forecast for Lane County became available in March 2014. Even before this forecast was available, Eugene was planning for employment growth at an average annual rate of 1.4% per year, based (in part) on historical growth rates in Lane County, as well as the Regional Prosperity Plan and developing local economic development policies.

62 The OED forecast for Lane County is available from the following link:

http://www.qualityinfo.org/olmisj/PubReader?itemid=00003222
Table 22. Employment growth in Eugene’s UGB, 2012–2032

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>111,772</td>
</tr>
<tr>
<td>2032</td>
<td>148,460</td>
</tr>
</tbody>
</table>

Change 2012 to 2032

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>36,688</td>
</tr>
<tr>
<td>Percent</td>
<td>33%</td>
</tr>
<tr>
<td>AAGR</td>
<td>1.43%</td>
</tr>
</tbody>
</table>

Source: ECONorthwest

5.1.2 Allocate Employment to Different Land Use Types

The next step in forecasting employment growth is to allocate Eugene’s future employment among broad categories to provide better information for estimating the amount of land / sites that will be needed to accommodate Eugene’s future employees. We grouped employment into four broad categories based on North American Industrial Classification System (NAICS): industrial, commercial, retail, and government (as grouped in Table 19).

Table 23 shows the expected shares of employment in these four land use types in 2012 and the forecast of employment growth by these same land use types in 2032 in Eugene’s UGB.

The forecast shows growth in all categories of employment, with the most growth in industrial employment. This assumption is based on consideration of trends, the assessment of Eugene’s economic potential and on the City’s economic development policies that support the growth of traded-sector businesses. There is an expectation of continued growth in all employment categories but the City’s economic development policies target a higher rate of growth of industrial traded-sector businesses such as advanced manufacturing, food and beverage manufacturing, clean technology and renewable energy, as well as other types of manufacturing. To reflect the expectation that the City’s policy direction will lead to growth in the city’s share of such industrial jobs, the EOA assumes a modest increase in share of industrial employment. This modest increase is the only way in which Eugene’s target industries factor into the City’s estimate of land need.

Prior to the 2007-2009 recession, about 18% of Eugene’s employment was in industrial sectors. Growth of the share of industrial employment in Eugene will both replace industrial jobs that were lost in the recession and provide new industrial jobs. This type of employment growth is consistent with the
City’s broad economic development goal of increasing household prosperity because industrial jobs typically have higher-than-average wages.

Table 23. Forecast of employment growth by land use type, Eugene UGB, 2011–2031

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>2012 Employment</th>
<th>% of Total</th>
<th>2032 Employment</th>
<th>% of Total</th>
<th>Change 2012 to 2032</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>16,784</td>
<td>15%</td>
<td>28,207</td>
<td>19%</td>
<td>11,423</td>
</tr>
<tr>
<td>Commercial</td>
<td>63,210</td>
<td>57%</td>
<td>81,654</td>
<td>55%</td>
<td>18,444</td>
</tr>
<tr>
<td>Retail</td>
<td>14,233</td>
<td>13%</td>
<td>17,815</td>
<td>12%</td>
<td>3,582</td>
</tr>
<tr>
<td>Government</td>
<td>17,545</td>
<td>16%</td>
<td>20,784</td>
<td>14%</td>
<td>3,239</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>111,772</strong></td>
<td><strong>100%</strong></td>
<td><strong>148,460</strong></td>
<td><strong>100%</strong></td>
<td><strong>36,688</strong></td>
</tr>
</tbody>
</table>

Source: ECONorthwest

Note: Land needed for government employment is addressed in the Public and Semi-public Land analysis, which is in a separate document. The remainder of this document does not address land needed for government employment.
5.2 Target Industries

An analysis of growth industries in Eugene should address two main questions: (1) Which industries are most likely to be attracted to the Eugene-Springfield area? and (2) Which industries best meet Eugene’s economic objectives? As noted above, for Eugene, the term “target industries” refers to the types of employers that are both likely to locate in Eugene (based on trends and considering the assessment of Eugene’s economic potential) and consistent with the City’s economic development objectives. Through recent economic development work in Eugene and direction given by the Eugene City Council, the City has expressed that the types of industries that Eugene wants to attract at higher percentages than it has been able to attract in the past are those that offer: high-wage, stable jobs with benefits; jobs requiring skilled and unskilled labor; employers in a range of industries that will contribute to a diverse economy; and industries that are compatible with Eugene’s community values. The trend analysis and the assessment of Eugene’s economic potential show that Eugene is well-suited to attract certain industries with these attributes.

The characteristics of Eugene will affect the types of businesses most likely to locate in Eugene. Some of Eugene’s attributes that may attract firms are: the City’s proximity to I-5, air service at the Eugene Airport, high quality of life, presence of the University of Oregon and Lane Community College, access to an educated workforce, availability of skilled and semi-skilled labor, and proximity to indoor and outdoor recreational opportunities. In addition, public investments that foster innovation, such as the Regional Accelerator and Innovation Network (Oregon RAIN), may affect the types of businesses that grow and expand in Eugene.

The selection of target industries is also based on Eugene’s Economic Development Goals and Policies, economic conditions in Eugene and Lane County, and the City’s competitive advantages.

The following are Eugene’s target industries for accommodating new employees as found in the City’s comprehensive plan:

- Advanced manufacturing
- Food and beverage manufacturing
- Health and wellness
- Clean technology and renewable energy
- Software and educational technology
- Biomedical and biotechnology
These industries more accurately represent clusters of industries, most including both industrial and commercial aspects, activities and employers. The purpose of identified industries within this EOA is to ultimately identify site characteristics of those employers, so that potential land can be accurately evaluated for its ability to serve those employers. In addition to these target industries, the City has a number of existing industries that it intends to continue supporting, but which are well served by the existing land supply. These industries include:

- Warehouse and distribution
- Construction
- Tourism
- Corporate or regional headquarters
- Service centers
- Back office functions
- Services for seniors
- Services for residents

Because land use is generally divided into industrial and commercial uses, those categories of employers are evaluated below for why they are likely to locate in Eugene and how they meet the City’s economic development objectives.

- **Manufacturing.** Eugene’s attributes (e.g., lower cost of electricity, availability of labor, and transportation access) are likely to attract manufacturing firms. The type and size of manufacturing firm may depend on land availability and the community’s preferences for clean industries.

  Examples of manufacturing include specialty apparel, metal fabrication, heavy machinery, high-tech electronics, avionics equipment, or recreational equipment.

Eugene’s Economic Development Policies promote growth in the following types of manufacturing:

- **Advanced / High Tech Manufacturing.** Eugene’s access to highly educated labor, access to comparatively inexpensive electricity, and high quality of life may make Eugene attractive to advanced manufacturing firms. The types of firms that may be attracted to Eugene range from specialized instruments to electric vehicles to optical systems to specialized computer and networking hardware.
Food and Beverage Manufacturing/Processing. Eugene’s proximity to agricultural resources and community values may make the City attractive to specialty food processing firms. In addition, Eugene participates in the Willamette Valley Farm and Food Coalition, which promotes the purchase of locally grown and produced foods. The types of specialty food and beverage companies that might locate in Eugene include those that specialize in organic or natural foods, breweries and wineries, or other locally grown foods (e.g., berries or grains).

Clean Tech and Renewable Energy. The positive attitude about environmentally sustainable industries among residents of Eugene and the City government may make Eugene more attractive to firms involved in clean tech and renewable energy production. The types of businesses that may choose to locate or expand in Eugene include: firms engaged in clean tech and renewable energy product research and development, contractors involved in the installation of clean tech or renewable energy products, alternative energy production (e.g., manufacturing solar panels or bio-fuels), and other types of clean tech and renewable energy production.

Biomedical. The presence of the University of Oregon, the highly educated workforce, and high quality of life in Eugene make it attractive to biomedical research and production firms.

Wood product manufacturing. Eugene’s history of logging and access to raw lumber make it attractive to wood product manufacturers, such as firms that produce home and garden products, furniture, or paper.

Warehouse and distribution. Eugene’s location along I-5, between Seattle and San Francisco, make the City attractive to warehouse and distribution businesses. The types of warehouse and distribution firms that may locate in Eugene include those that are part of or are serving the manufactures in Eugene and Springfield, as well as distribution firms serving businesses along the I-5 corridor.

Construction. As the regional economic center of the Southern Willamette Valley, Eugene is likely to be the home of construction firms. Local attitudes and support for sustainable development may make Eugene more attractive to firms involved with sustainable construction, such as firms that use LEED-certified building practices, or that specialize in innovative, energy-efficient, or small housing products.
• **Professional and Technical Services.** Eugene’s attributes make it attractive to businesses that need access to educated workers and want a high quality of life. These types of businesses could include engineering, architecture and design, research, legal services, information technology services, and other professional services that are attracted to high-quality settings. Some specific examples are:

  o **Software Development.** Eugene’s access to highly educated labor, existing base of software firms, and high quality of life may make the City attractive to software development firms. Eugene may attract software publishers in a variety of industries, including gaming, industrial fabrication, education, medical software, inventory management, business productivity, web search and utilities, web and marketing, and other types of software development.

  o **Health and Wellness.** The growing population in and around Eugene, including the aging of the population, and the presence of hospitals in Eugene and in the broader region make Eugene attractive to health and wellness businesses. Eugene may attract health care professionals, alternative health care providers, care and assistance for seniors and disabled population, and businesses involved in active transportation and outdoor recreation.

  o **Corporate or Regional Headquarters.** Eugene’s quality of life, location along I-5, and availability of educated workers may make Eugene attractive as a place to locate corporate or regional headquarters.

  o **Service Centers.** The existing service center cluster may attract additional customer service centers to Eugene. The potential for growth in service centers in the Eugene-Springfield area will depend on the availability of skilled labor.

  o **Back-Office Functions.** Eugene’s high quality of life, availability of skilled labor, and relatively low wages may attract back-office functions, such as the Levi Strauss financial center. Back-office functions include administrative functions, such as accounting or information technology. The potential for growth in back-office functions may be limited by national competition for this type of employment. Eugene may be more successful at attracting back-office functions for firms that have a reason to locate in the region, such as firms with corporate headquarters on the West Coast or firms that do a substantial amount of business in the Willamette Valley.
- **Tourism.** Visitors may be attracted to Eugene to take advantage of recreational opportunities and other amenities. They may also be attracted as a result of regional events, such as the Olympic Track and Field trials, the Oregon Country Fair, or the University of Oregon Bach Festival. Industries that serve tourists, such as food services and accommodations, are likely to grow if tourism increases.

- **Services for seniors.** Eugene’s growing population of those near or in retirement may attract or create demand for health services that cater to the elderly, such as assisted living facilities, retirement centers, and medical services.

- **Services for Residents.** Population growth will drive development of retail, medical services, and government services, especially education, in Eugene.

The clusters of employers identified above and in Eugene’s economic development policies as “targeted industries” are those that both (1) are likely to be attracted to the Eugene-Springfield area and (2) best meet Eugene’s economic objectives.
6 LAND DEMAND AND SITE NEEDS

OAR 660-009-0015(2) requires the EOA to “identify the number of sites by type reasonably expected to be needed to accommodate the expected [20-year] employment growth based on the site characteristics typical of expected uses.” The Goal 9 rule does not specify how jurisdictions conduct and organize this analysis.

The rule does state that “[i]ndustrial or other employment uses with compatible site characteristics may be grouped together into common site categories.” OAR 660-009-0015(2). The rule suggests, but does not require, that the City “examine existing firms in the planning area to identify the types of sites that may be needed.” For example, site types can be described by: (1) plan designation (e.g., heavy or light industrial), (2) general size categories that are defined locally (e.g., small, medium, or large sites), or (3) industry or use (e.g., manufacturing sites or distribution sites). For purposes of the EOA, Eugene groups its future employment uses into categories based on their need for land of particular size within a broad plan designation (i.e., industrial or commercial).63

This chapter provides an estimate of employment land needs based on information about the amount of employment growth that will require new land, employment densities, and land need by site size. This chapter provides a demand-based approach to estimating employment land needs. It projects employment land need using the forecast of employment growth and recent employment densities (e.g., the number of employees per acre) to estimate future commercial and industrial land demand.64

This chapter is divided into two sections:

63 Some of Eugene’s targeted industries have more specific needs. These are discussed in more detail in sub-section 6.1.2. The analysis of particular land to determine its suitability to meet these more particular needs is carried out as a next step, in the City’s Goal 14 work, not in the EOA.

64 Eugene does not use Woodburn’s “target industry” approach to establish the number of acres and sites the City will need in its 2012-2032 Employment BLI. The methodology in this EOA (Section 6.1) is based on an “employees-per-acre [EPA] approach, under which a local government simply projects employment growth and divides that growth by a statistically accepted number of employees per acre of land in order to arrive at the number of acres needed to support employment growth.” 1000 Friends of Oregon v. LCDC, 260 Or App 444, 447-448 (2014). To arrive at a more accurate land need determination, the EPA calculation is performed separately for commercially-designated land and different size categories of industrially-designated land. In Section 6.2, this EOA identifies certain site characteristics needed to attract the City’s target industries. These characteristics will be a consideration in the City’s process of identifying which sites (not how many sites) to add to its 2012 employment land supply as identified in Part I of this Employment Land Supply Study.
• **Employment land demand.** Section 6.1 provides a forecast of commercial and industrial land demand based on the employment forecast in the prior chapter and the capacity of land with existing development to accommodate additional development based on recent employee-per-acre figures. This section shows that Eugene has a deficit of commercial land and of industrial land on sites larger than 10 acres.

• **Characteristics of sites needed to accommodate employment growth in Eugene.** Section 6.2 describes the most basic site characteristics needed by target industries based on the characteristics of existing employment sites in Eugene, businesses that relocated outside of Eugene, and businesses that considered locating in the Willamette Valley. These characteristics will be considered by the City in its process of identifying the sites to add to its employment land inventory to make up the deficit described above.
6.1 Employment Land Demand

This section presents an estimate of land needed for commercial and retail employment growth (i.e., employment generally locating on land designated for commercial uses) and for industrial employment growth (i.e., employment generally locating on land designated for industrial uses). It begins with a discussion of factors that may affect employment land demand in Eugene, such as employment densities. Based on these factors and the employment forecast, the section presents a forecast for commercial and industrial employment demand and land sufficiency.

6.1.1 Factors Affecting Employment Land Demand in Eugene

The following sub-section describes the characteristics of employment land in Eugene, as well as employment densities (number of employees per acre) at businesses in Eugene. Through the following sub-sections, the analysis of the characteristics of employment in Eugene refers both to employment data in 2013 (the most recently available data) and employment data from 2006, which was developed as part of ECLA.

We retain the analysis from 2006 for several reasons. Employment data from 2006 reflects changes in Eugene’s economy as a result of the 2007-2009 recession. For example, comparing employment by industry using 2006 data and more recent data give an indication of decreases in efficient use of built space. This information informs the analysis of potential capacity for existing buildings to accommodate new employment.

In addition, if employment densities (number of employees per acre) changed significantly between 2006 and 2012, they likely decreased. The analysis of 2006 data reflects future densities based on longer-term growth patterns, rather than the results of the recent recession.

6.1.1.1 Employment Not Requiring New Employment Land

Not all new employment in Eugene will require additional land in employment plan designations. Some employment growth will occur on land not designated for employment use (e.g., employment in residential designations), and some employment growth will not require new commercial or industrial built space or land (e.g., new employment accommodated in existing built space).

- Some employment growth will occur on land not designated for employment use. Some new employment will occur outside
commercial and industrial built space or land. For example, some construction contractors may work out of their homes, with no need for a shop or office space on non-residential land.

In 2006, 15% of employment was located in residential plan designations. The information is based on analysis of employment located in residential plan designations using Quarterly Census of Employment and Wages data from the Oregon Employment Department. Residential plan designations include: High Density Residential, Medium Density Residential, and Low Density Residential. About 10% of this employment was businesses located in non-employment plan designations (such as a corner store in a neighborhood) and about 5% was people working from home. This estimate excludes workers that are not covered by unemployment insurance, such as sole proprietors. Although these workers may be more likely than covered employees to locate on land with non-employment designation, we do not have information about where non-covered workers are located.

This analysis assumes that 15% of new employment will occur outside of commercial and industrial built space or land, consistent with the historical trend.

- **Some employment growth will not require new commercial or industrial built space or land.** As firms add employees, they may fit many of them into existing office spaces. That would occur if current vacancy rates were much higher than average (because future employment growth could then be partially accommodated in existing built space until the natural, frictional vacancy rate were reached). It could also occur in occupied buildings through filling vacant cubicles or offices or increasing the density of use in existing workspaces (e.g., by adding new cubicles). There is no study that quantifies how much employment is commonly accommodated in existing built space over a 20-year period in a city.

There is no data that documents the amount of employment located in existing built space. The loss of jobs in the recent recession resulted in capacity in existing commercial and industrial buildings, which will decrease the demand for new building in the immediate future. Clearly some employment is accommodated through this type of intensification of existing

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65 This information is based on analysis of employment located in residential plan designations using Quarterly Census of Employment and Wages data from the Oregon Employment Department.

Residential plan designations include: High Density Residential, Medium Density Residential, and Low Density Residential.

66 This information is based on analysis of employment located in residential plan designations using Quarterly Census of Employment and Wages data from the Oregon Employment Department.
built space but, equally clearly, not all employment can be accommodated this way.

The city lost more than 15,000 jobs during the recession, between 2006 and 2010. It is likely that some of the future job growth in Eugene could be accommodated in the existing built space that was vacated.

Table 24 shows the amount of jobs lost during 2006-2010 that could be accommodated through existing built space:

- **Commercial and retail.** We project that the vacant spaces resulting from commercial and retail jobs lost during the 2006 to 2010 period will be refilled with new employment growth.

- **Industrial.** Refill of built industrial space is not as efficient as refill of commercial space since industrial sites are often custom-built for special purposes. Due to re-purposing inefficiencies, we project that industrial built space will refill on sites smaller than 10 acres to only a portion of pre-recession capacity. Table 24 assumes that 3,454 new employees will locate in existing industrial built spaces, which is 55% of the industrial jobs that were lost during the 2006-2010 period.

### Table 24. Estimate of infill of jobs in existing built space

<table>
<thead>
<tr>
<th>Infill in existing business</th>
<th>Number of jobs lost 2006-2010</th>
<th>Percent of lost jobs that will locate in existing built space</th>
<th>Jobs locating in existing built space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>6,334</td>
<td>55%</td>
<td>3,454</td>
</tr>
<tr>
<td>Commercial</td>
<td>7,705</td>
<td>100%</td>
<td>7,705</td>
</tr>
<tr>
<td>Retail</td>
<td>1,187</td>
<td>100%</td>
<td>1,187</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15,226</strong></td>
<td></td>
<td><strong>12,346</strong></td>
</tr>
</tbody>
</table>

Source: Analysis of Quarterly Census of Employment and Wages for 2006 and 2010, from the Oregon Employment Department

### 6.1.1.2 Employment Densities

The primary factor that Eugene considered in determining employment land demand is employment density, which is the ratio of labor to land. There are several ways to measure employment density. The City of Eugene used the **Employees per acre** (EPA) measurement. EPA is the total number of employees divided by the size of the site.
Table 25 shows EPA estimates by plan designation for employment in Eugene in 2006, based on employment density in selected, representative sample areas. 22 areas within Eugene’s UGB were selected and analyzed to estimate employment by plan designation. The sample areas represented a range of employment types, from dense development in downtown to less dense industrial areas, and include a little more than half of the employment in Eugene. The sample areas used to estimate employment by plan designation are shown in Map 1.

Table 25 shows that Eugene’s average employment density was 24 EPA in commercial and industrial plan designations. Density in commercial designations ranged from 36 EPA in the Commercial designation to 54 EPA in the Major Retail Center designation. The average employment density across all commercially-designated land was 39 EPA, with nearly three-quarters of employment in the Commercial designation, which had an average density of 36 EPA. The average employment density across all industrially-designated land was 13 EPA, ranging from 8 EPA in the Heavy Industrial and Special Heavy Industrial designations to 21 EPA in the Campus Industrial designation.

### Table 25. Estimate of employees per acre (EPA) by plan designation in selected sample areas, Eugene, 2006

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Employees</th>
<th>Acres (net)</th>
<th>Employees per Net Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>46,369</td>
<td>1,181</td>
<td>39</td>
</tr>
<tr>
<td>Commercial</td>
<td>33,942</td>
<td>936</td>
<td>36</td>
</tr>
<tr>
<td>Major Retail Center</td>
<td>9,642</td>
<td>179</td>
<td>54</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>1,642</td>
<td>37</td>
<td>45</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>1,143</td>
<td>29</td>
<td>40</td>
</tr>
<tr>
<td>Industrial</td>
<td>21,904</td>
<td>1,716</td>
<td>13</td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>11,502</td>
<td>730</td>
<td>16</td>
</tr>
<tr>
<td>Heavy Industrial &amp; Special Heavy Industrial</td>
<td>6,524</td>
<td>799</td>
<td>8</td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>3,878</td>
<td>188</td>
<td>21</td>
</tr>
<tr>
<td><strong>EPA for Commercial and Industrial Plan Designations</strong></td>
<td><strong>68,273</strong></td>
<td><strong>2,897</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Source: ECONorthwest based on analysis of Quarterly Census of Employment and Wages for 2006, from the Oregon Employment Department

The summary of employment density in Table 25 does not tell the full story about employment density in Eugene. Employment density of employment land varies substantially throughout Eugene, depending on the location and type of use. Table 26 shows EPA for several commercial office, retail, and industrial sites in Eugene (shown on Map 1).

Employment density in retail sites varied from 14 EPA at the retail area along West 11th at Seneca Road (the Fred Meyer’s shopping center) to 22 EPA at Valley River Center and Santa Clara Square. Oakway Center’s employment density was higher than most other retail sites in Eugene, at 37
EPA. Sites with a mixture of retail and office uses typically have higher employment densities, around 30 to 35 EPA.

Office employment densities are generally higher than retail employment densities, ranging from 30 EPA to higher. Table 26 shows office employment densities for established sites in and near Eugene’s downtown and along Country Club Road, where densities ranged from about 53 to 93 EPA. Office buildings in these areas are typically four stories or higher. Areas with two story office buildings are more likely to have employment densities closer to 30 to 40 EPA.

Table 26. Estimate of employees per acre (EPA) for sample sites, Eugene, 2006

<table>
<thead>
<tr>
<th>Site Type</th>
<th>Site Description</th>
<th>Acres</th>
<th>Employees</th>
<th>Employees per Net Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Retail Center</td>
<td>Valley River Center</td>
<td>89</td>
<td>1,990</td>
<td>22</td>
</tr>
<tr>
<td>Community Retail Center</td>
<td>West 11th Retail</td>
<td>49</td>
<td>780</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>West 11th and Seneca St.</td>
<td>44</td>
<td>613</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Winco Shopping Center at Barger</td>
<td>12</td>
<td>251</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Santa Clara Square</td>
<td>32</td>
<td>682</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Delta</td>
<td>53</td>
<td>1,082</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Chad Drive</td>
<td>126</td>
<td>2,384</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Willamkenzie</td>
<td>21</td>
<td>740</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Oakway</td>
<td>53</td>
<td>1,976</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>South Willamette St.</td>
<td>33</td>
<td>1,160</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>18th &amp; Chambers</td>
<td>15</td>
<td>444</td>
<td>30</td>
</tr>
<tr>
<td>Other Commercial</td>
<td>Country Club Rd</td>
<td>37</td>
<td>2,854</td>
<td>77</td>
</tr>
<tr>
<td>Downtown</td>
<td>Downtown Core</td>
<td>93</td>
<td>8,689</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>South of Downtown</td>
<td>64</td>
<td>3,390</td>
<td>53</td>
</tr>
<tr>
<td>Industrial</td>
<td>Prairie Road</td>
<td>165</td>
<td>1,168</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>West Eugene Light Industrial</td>
<td>181</td>
<td>3,027</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Highway 99 Y Heavy Industrial</td>
<td>315</td>
<td>1,747</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>North Eugene Heavy Industrial</td>
<td>289</td>
<td>956</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Enid Drive</td>
<td>240</td>
<td>1,118</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Chad Drive</td>
<td>126</td>
<td>2,384</td>
<td>19</td>
</tr>
<tr>
<td>Specialty</td>
<td>University of Oregon and PeaceHealth*</td>
<td>139</td>
<td>8,581</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2,177</td>
<td>46,016</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: ECONorthwest based on analysis of Quarterly Census of Employment and Wages for 2006, from the Oregon Employment Department
*Note: The University of Oregon and Peace Health are combined to preserve confidentiality of employment data for Peace Health
Note: Table 24 does not include data about Hynix because of confidentiality of employment data
Map 1. Employment Density Sample Sites

Source: ECONorthwest based on analysis of Quarterly Census of Employment and Wages for 2006, from the Oregon Employment Department
6.1.2 Commercial Land Demand and Sufficiency

The forecast of commercial land demand is based on information from the employment forecast (Table 23), the analysis of commercial employment need for new land (Table 27), and the analysis of employment densities (Table 26).

The first step in determining land need is to estimate the number of commercial jobs that will not require new (vacant) employment land. This estimate is derived by first establishing the number of new commercial employees and the number of those employees that will locate in non-employment designated lands (sub-section 6.1.1.2) and in existing built space (Table 24), then subtracting the latter number from the former. Table 27 presents this estimate of commercial employment that will not require vacant employment land. Table 27 shows:

- **New employment.** Table 23 shows that Eugene will add 22,026 employees in commercial and retail sectors over the 20-year planning period.

- **Employment locating in non-employment designations.** The analysis in sub-section 6.1.1.2 indicates that 15% of Eugene’s new commercial employment (3,304 employees) will locate in non-employment plan designations, mostly on land designated for residential uses. Ten percent of these employees will locate in residential land designations zoned for neighborhood commercial uses and 5% will locate in residences as home occupations.\(^67\)

- **Employment in existing built space.** Table 24 shows that 7,705 commercial employees and 1,187 retail employees will be fit into existing office and retail spaces or vacant commercial spaces. This estimate is based on the number of commercial jobs lost between 2006 and 2010, during the recent recession. This analysis assumes that Eugene has enough underutilized or vacant commercial space to accommodate these employees.

\(^{67}\) These assumptions are based on analysis of the Oregon Employment Department’s Quarterly Census of Employment and Wages (QCEW) data presented in sub-section 6.1.1.2.
Table 27 shows that 55% of new commercial (including retail) employment will not require new employment land. Eugene will need to accommodate about 9,830 new commercial employees on new commercial land over the 20-year planning period.

Table 27. Estimate of commercial employment that will require new employment land, Eugene 2032

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>New Employment Growth</th>
<th>Non-employment designations</th>
<th>Existing Built Space</th>
<th>Total</th>
<th>% of New Employment</th>
<th>Employment Requires New Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>18,444</td>
<td>2,767</td>
<td>7,705</td>
<td>10,472</td>
<td>57%</td>
<td>7,972</td>
</tr>
<tr>
<td>Retail</td>
<td>3,582</td>
<td>537</td>
<td>1,187</td>
<td>1,724</td>
<td>48%</td>
<td>1,858</td>
</tr>
<tr>
<td>Total</td>
<td>22,026</td>
<td>3,304</td>
<td>8,892</td>
<td>12,196</td>
<td>55%</td>
<td>9,830</td>
</tr>
</tbody>
</table>

Source: ECONorthwest
The estimate of employment requiring new land is based on subtracting the total “employment not requiring new employment land” from “new employment growth.” (18,444 new employees minus 10,472 employees not requiring land equals 7,972 employees requiring new land)

The next step in determining employment land needs for the 20-year period is to estimate commercial land need based on the number of jobs that will need to be located on new employment land, and the expected employment density. Table 28 estimates employment land need by land use type using existing employment densities presented in the prior sub-section. It shows that Eugene will need about 248 acres of land for commercial (including retail) employment uses between 2012 and 2032. The analysis uses the following assumptions to convert employment into land need:

- **Eugene’s future employment densities will be similar to current employment densities.** Table 28 uses EPA assumptions based on 2006 employment data from Table 26. The EPA assumption for commercial is based on commercial centers, such as Downtown, the area south of Downtown, Country Club Road, or mixed retail and office sites. This results in an assumption that new commercial uses will have 68 EPA. The EPA assumption for retail is based on the observed EPA in retail centers, such as Valley River Center, Oakway Center, or West 11th and Seneca. This results in an assumption that new retail uses will have 23 EPA.

- **Employment sites will require additional land for right-of-way and other public uses.** The EPA assumptions are employees per net acre (e.g., acres that are in tax lots). As land gets divided and developed, some of the land goes for right-of-way and other public uses. The City of Eugene estimates the amount of land needed for employment including public right-of-way by converting from net to gross acres using estimates of the amount of land needed for
right-of-way. A net to gross conversion is expressed as a percentage of gross acres that are in public rights-of-way.

The amount of land used for rights-of-way varies based on use. An empirical analysis of commercial and retail sites in Eugene had a net to gross factor ranging from: about 17% in community retail centers, 31% in Downtown, and 34% in the area directly south of Downtown Eugene. Based on this information, a reasonable net to gross factor assumption is 20% for commercial and retail development.

**Table 28. Estimate of commercial land need Eugene, 2032**

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Employment Requiring New Land</th>
<th>Employees per Acre</th>
<th>Land Demand (Net Acres)</th>
<th>Land Demand (Gross Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>7,972</td>
<td>68</td>
<td>117</td>
<td>147</td>
</tr>
<tr>
<td>Retail</td>
<td>1,858</td>
<td>23</td>
<td>81</td>
<td>101</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,830</strong></td>
<td><strong>198</strong></td>
<td><strong>248</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECONorthwest

The estimate of land demand (net acres) is based on dividing the employees requiring new land by the EPA. (7,972 employees divided by 68 employees per acre equals 117 net acres)

The estimate of gross land demand is based on increasing net land demand by 20%.

Table 29 compares Eugene’s supply of commercial land (from the 2012 Employment Buildable Lands Inventory) to Eugene’s demand for commercial land (from Table 28). Table 29 presents the following estimate of the supply of commercial land from the 2012 Employment Buildable Lands Inventory (“BLI”):

- **Vacant commercial land.** The 2012 employment land supply identified 108 acres of land as vacant in commercial and mixed-use plan designations.

- **Partially vacant commercial land.** City staff and a technical advisory group engaged in a parcel-by-parcel review of all commercially-designated developed parcels to identify land with additional development capacity (i.e., partially vacant land). This

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68 The net-to-gross conversion ratio was developed based on analysis of existing development by plan designation in Eugene.

69 This includes land in the following Comprehensive Plan Designations: Commercial, Major Retail Center, Mixed Use and High Density Mixed Use.
review identified about 17 acres of partially vacant commercial land.\textsuperscript{70}

- **Redevelopable commercial land.** City staff and a technical advisory group developed a tool to estimate redevelopment potential on commercial lands in Eugene.\textsuperscript{71} This tool produced an estimate of redevelopment that is reasonably likely without interventions from the City, referred to as the baseline redevelopment estimate. The 2012 employment land supply provides details about the methodology for estimating redevelopable commercial land.

Commercial land sufficiency is calculated by subtracting the estimated demand (from Table 28) from the existing supply. Table 29 shows that Eugene has a deficit of 94 acres of land for commercial development over the 20-year planning period.

\begin{table}[h]
\centering
\begin{tabular}{lrr}
\hline
\textbf{Acres of Commercial Land} & \\
\textbf{Supply} & 154 \\
  Vacant & 108 \\
  Partially Vacant & 17 \\
  Redevelopable & 29 \\
\hline
\textbf{Demand} & 248 \\
\textbf{Sufficiency} & (94) \\
\hline
\end{tabular}
\caption{Commercial land sufficiency, Eugene 2012-2032}
\end{table}

Source: ECONorthwest  

The sufficiency of Eugene’s commercial land is calculated by subtracting the demand (248 acres) from the supply of commercial land (154 acres), which equals a deficit of 94 acres.

\textsuperscript{70} This analysis is documented in the Envision Eugene report Commercial Employment Supply Draft Technical Report: March 14, 2012.

6.1.3 Industrial Land Demand and Sufficiency

The forecast of industrial land demand starts on information from the employment forecast (Table 23). The forecast of industrial land then divides industrial employment growth into categories based on site size: smaller than 10 acres, 10 to 19.99 acres, 20 to 49.99 acres, 50 to 74.99 acres, and 75 to 100 acres before applying the employees-per-acre divisor.

This sub-section is divided into three steps:

- **Allocate industrial employment by site size**, divides forecasted industrial employment growth into site sizes ranging from less than 10 acres to sites of 75 to 100 acres;

- **Estimate the number of sites needed**, uses employment density (EPA) and site size assumptions to forecast the number of sites needed in each size range; and

- **Industrial land sufficiency**, compares the supply of industrial land to the demand for industrial land by site size.

6.1.3.1 Allocate Industrial Employment by Site Size

Based on our analysis of recent industrial development in Eugene and the Eugene area, on information provided by Business Oregon and the Lane Metro Partnership, and trends that inform the City’s expectations for future economic growth opportunities, we assume that the most significant percentage of new employees will continue to be located on small (less than 10 acre) sites. Both trends and City policies indicate significant growth in the types of industries that are likely to locate on industrial sites smaller than 10 acres, including (but not limited to): small-scale manufacturing (such as small food and beverage manufacturers, small biomedical firms, or small wood products manufacturers), construction companies, or small-scale warehouse and distribution firms.

This sub-section presents the forecast of industrial growth over the 20-year period by size of site, ranging from sites smaller than 10 acres to sites larger than 75 acres. Historical consumption patterns over the last 20 years and the fact that several large companies have left Eugene in search of larger sites suggests a strong likelihood that additional large lot industrial development would have occurred in Eugene in the last 20 years, had there been suitable sites. Since Eugene’s job growth on large sites has been constrained due to lack of available land, we must look to job growth and land inventory statistics in comparable cities that have not had such constraints. In Springfield, 33% of their industrial jobs are on sites larger
than 20 acres, most on sites larger than 50 acres. In Salem, over 40% of their vacant industrial lands are in sites larger than 20 acres. It is reasonable to assume that Eugene’s historic job growth would have distributed among varying lot sizes, much like Springfield’s, if Eugene had large lots in its inventory of employment land.

The analyses, information, trends and City policies also support a conclusion that 33% of Eugene’s new employment will be located on industrial sites that are 20 acres or larger. It is reasonable to assume that this 33% will be split almost evenly between lots of 20-50 acres (12%), lots of 50-75 acres (11%), and lots of more than 75 acres (10%). With the assumption that 55% of new employees will locate on sites smaller than 10 acres, the remaining 12% are assumed to locate on sites between 10 to 20 acres. The employers likely to locate on these larger industrial sites include (but are not limited to) industries such as: mid-sized and large-scale manufacturers (such as advanced manufacturing, large food and beverage manufacturers, clean tech and renewable energy, biomedical, or wood products manufacturing), large construction businesses, and large warehouse and distribution firms.

There is ample evidence of future demand for these larger industrial sites in Eugene (See Chapter 4):

- A comparison of buildable lands data between the 2012 employment land supply and a 1990 inventory of vacant industrial sites larger than 20 acres shows that three sites larger than 50 acres were developed over the past two decades.\(^\text{72}\)

- The limited supply of industrial sites larger than 10 acres, especially sites with easy access to utilities and transportation, has resulted in businesses relocating outside of Eugene. For example:
  - Rexius was headquartered in Eugene since the early 1930’s and was unable to find a suitable site for relocation, after several years of searching, and moved to Coburg.
  - Grain Millers has been located in downtown Eugene since the 1980’s. They were unable to find a larger site that would allow them more room for train cars and processing operations. Grain Millers identified an expansion site (of 100 acres, with 50 suitable acres) in Junction City, along Highway 99.
  - In 2002, Symantec moved from downtown Eugene to an approximately 14 acre site in Springfield.

\(^{72}\) Metro Industrial Lands Special Study Inventory Report, LCOG, 1991.
After searching for a suitable site in Eugene for a new major hospital, Peace Health ultimately selected a 180 acre site in Springfield for its new hospital.

According to Business Oregon and the Lane Metro Partnership, a number of businesses searched for industrial sites in Oregon between 1997 and 2010. Examples included solar manufacturers, data centers, food processors, biotech, other large manufacturers, and warehouse and distribution firms. These businesses needed sites of 25 acres or larger and some needed sites larger than 100 acres.

A comparison of the industrial land bases in Springfield and Salem provide a contrast to Eugene’s industrial land base. All three of these cities have economic development goals of growing industrial employment, including businesses that require sites larger than 10 acres. The characteristics of industrial land in Springfield and Salem are more supportive of this goal than Eugene’s industrial land base. These cities provide information about the characteristics of industrial land that Eugene will need to achieve its economic development goal of providing opportunities for growth of businesses that need large sites, as well as those that need small sites.

- **Springfield** is part of the Eugene-Springfield economic region. We have evidence that some businesses in Eugene relocated into Springfield, in large part, because of Eugene’s lack of large employment sites. (See Chapter 4).

About one-third of Springfield’s industrial employment is located on sites 50 acres or larger and about 50% of industrial employment is located on sites five acres or smaller. This information describes the important role that both large and small sites play in Springfield’s developed industrial land base.73

- **Salem** is Oregon’s third largest city, after Portland and Eugene, and is located along I-5 in the mid-Willamette Valley. Salem has a relatively large inventory of vacant industrial land, mostly concentrated in the Mill Creek area. Salem has the largest supply of vacant industrial land in Western Oregon, outside of the Portland

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73 Springfield’s Commercial and Industrial Buildable Lands Inventory and Economic Opportunities Analysis, ECONorthwest, 2009.
Metro area. About 42% of Salem’s vacant industrial land is in sites 20 acres and larger.\(^7^4\)

Based on this information, it is reasonable to assume that, if Eugene had a larger base of vacant, suitable industrial sites, Eugene would attract a share of the businesses considering locating or expanding in Western Oregon and the Southern Willamette Valley. The City’s economic development policies (see sub-section 4.7) will support development of these industries (including those that require sites larger than 10 acres) and development of the necessary land base.

Table 30 presents a forecast of the employment growth that is projected to occur on industrially-designated land, by site size, starting with the number of new employees forecasted to be located on industrial land in Table 23, which projects 11,423 new employees over the course of the planning period.

### Table 30. Industrial employment forecast by site size, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Percent of New Jobs</th>
<th>Number of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 acres</td>
<td>55%</td>
<td>6,283</td>
</tr>
<tr>
<td>10 to 20 acres</td>
<td>12%</td>
<td>1,371</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>12%</td>
<td>1,371</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>11%</td>
<td>1,257</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>10%</td>
<td>1,142</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>11,423</strong></td>
</tr>
</tbody>
</table>

Source: City of Eugene Technical Resource Group review and analysis; Calculations by ECONorthwest.

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\(^7^4\) Salem-Keizer Metropolitan Area Regional Economic Opportunities Analysis 2012-2032, ECONorthwest, 2011.
6.1.3.2 Estimate Amount of Land and Sites Needed

This sub-section estimates industrial land and sites needed for: (1) sites smaller than 10 acres, and (2) sites 10 acres or larger. These estimates build from the forecast in Table 30.

For sites smaller than ten acres, Table 31 estimates land needed for employment growth on industrial land. Table 29 makes the following assumptions:

- Employment in existing built space. Eugene lost about 6,334 industrial jobs between 2006 and 2010. Since the majority of Eugene’s industrial jobs are located on sites smaller than 10 acres, it is reasonable to assume that most of these jobs were previously located on sites in this size class. Industrial firms are less efficient at reusing existing built spaces than commercial firms, given the special needs of industrial business processes. As a result, we assume the capacity of existing built space is 55% of the employment lost over the four-year period (3,454 jobs).

- Employment density. The estimate of employment density for industrial jobs on sites smaller than 10 acres builds from the analysis of historical employment densities shown in Table 25 and Table 26. The average industrial employment density in industrial plan designations was 13 employees per acre (EPA). The range of densities in sample industrial areas was 3 to 5 EPA in the North Eugene Heavy Industrial area and Enid Drive to 17 to 19 EPA in the West Eugene Light Industrial area and Chad Drive.

Considering this data, it is reasonable to assume that new industrial employment will be between 6 and 14 EPA. For estimating employment land needs on sites smaller than 10 acres, we use an assumption of 10 EPA, the mid-point between 6 and 14 EPA.

Table 31 shows that Eugene will need land for 2,829 new industrial jobs, based on subtracting the jobs in existing built space (3,454) from all new jobs (6,283). Eugene will need 283 suitable gross acres of industrial land on sites smaller than 10 acres, based on the assumption of 10 employees per acre (2,829 employees divided by 10).
Table 31. Industrial employment land need on sites smaller than 10 acres, Eugene, 2012-2032

<table>
<thead>
<tr>
<th></th>
<th>Sites smaller than 10 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Jobs</td>
<td>6,283</td>
</tr>
<tr>
<td>Employment in existing built space</td>
<td>3,454</td>
</tr>
<tr>
<td>New jobs requiring vacant land</td>
<td>2,829</td>
</tr>
<tr>
<td>Employment density (EPA)</td>
<td>10</td>
</tr>
<tr>
<td><strong>Gross Acres Needed</strong></td>
<td><strong>283</strong></td>
</tr>
</tbody>
</table>

Source: ECONorthwest

New jobs requiring vacant land was calculated by subtracting employees locating in existing built space (3,454) from new jobs (6,283). Acres needed was calculated by dividing employees on new land by an EPA of 10 (2,829 employees divided by 10 employees per acre equals 283 acres).

For sites 10 acres or larger, Table 32 illustrates the reasonable range of land and sites needed to accommodate employment growth on industrial land in Eugene. Table 32 builds on the employment forecast in Table 30 and uses the following assumptions.

- **Range of land need.** The range of land need uses the projection that industrial employment will develop at densities between 6 and 14 EPA. For example, for employment on sites between 10 to 20 acres, Eugene will need between 98 acres (at 14 EPA) to 229 acres (at 6 EPA) to accommodate the forecast of 1,371 new jobs.

- **Sites needed.** The range of needed sites is based on projections about the size of the site at the high and low end of the size range. For example, Eugene would need between five sites (at a size of 20 acres per site for 98 acres of land) to 23 sites (at a size of 10 acres per site for 229 acres of land). The average number of sites is the average in the range (e.g., 14 is the average between 5 and 23 sites).

Table 32. Range of land and suitable sites needed to accommodate industrial employment, sites larger than 10 acres, Eugene, 2012-2032

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Number of Jobs</th>
<th>Range of land need</th>
<th>Sites needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Employees Per Acre</td>
<td>Gross Acres Needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>10 to 20 acres</td>
<td>1,371</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>1,371</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>1,257</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>1,142</td>
<td>6</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: ECONorthwest

The **gross acres needed** is based on the number of jobs and the EPA range. For example, for sites 10 to 20 acres, the low acreage need (98) is based on the high EPA (14) divided by the number of jobs (1,371 divided by 14). The high acreage need (229) is based on the low EPA (6) divided by the number of jobs (1,371 divided by 6).

The **gross site size** is based on the low and high of the site size. For example, for sites 10 to 20 acres, the low site size is 10 acres and the high is 20 acres.

The **range of needed sites** is based on dividing the gross site size by the EPA. For example, for sites 10 to 20 acres, the
The average sites needed is the arithmetic mean of the low and high, rounded to the nearest whole number. For example, for sites 10 to 20 acres, the average between 5 and 23 sites is 14 sites.

Table 33 shows Eugene’s industrial land and site needs for employment on sites larger than 10 acres. It shows that Eugene will need a total of 820 suitable gross acres of industrial land on sites larger than 10 acres over the 20-year planning period. Table 33 shows:

- **Needed Sites**, based on the average shown in Table 32 (e.g., 14 sites between 10 and 20 acres).

- **Average site size**, generally based on the average between the low and high site size in Table 33. For example, the average site size for sites between 10 to 20 acres is 15 acres.

- **Suitable Gross Acres needed**, the number of needed sites multiplied by the average site size.

### Table 33. Land and sites needed to accommodate industrial employment, sites larger than 10 acres, Eugene, 2012-2032

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Needed Sites</th>
<th>Average site size (suitable acres)</th>
<th>Average Suitable Gross Acres Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>14</td>
<td>15</td>
<td>210</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>7</td>
<td>35</td>
<td>245</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>3</td>
<td>63</td>
<td>189</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>2</td>
<td>88</td>
<td>176</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td></td>
<td><strong>820</strong></td>
</tr>
</tbody>
</table>

Source: ECONorthwest

The needed sites is from Table 32. The average site size is the arithmetic average of the site size category. For example, the average of 10 to 20 acre site sizes is 15 acres. The acres needed is based on multiplying the needed sites by average site size (14 sites times 15 acres equals 210 acres). The average site size is rounded to the nearest whole number.
6.1.3.3 Industrial Land Sufficiency

A comparison of the supply of industrial land, based on the 2012 employment land supply (Part I of the Employment Land Study), with the demand for industrial land in the previous sub-section results in a determination of whether Eugene has enough industrial land to accommodate growth over the 20-year period (i.e., whether Eugene has sufficient industrial land).

**Industrial Sites Smaller than 10 Acres**

Table 34 shows industrial land sufficiency for sites smaller than 10 acres. The 2012 employment land supply shows that Eugene has 435 vacant or redevelopable acres of industrial land. Eugene has 404 acres of vacant industrial land on sites smaller than 10 acres. Table 34 estimates that Eugene’s existing industrial land base has about 31 acres of redevelopment capacity. The 2012 employment land supply shows that Eugene has demand for 283 acres of industrial land on sites smaller than 10 acres.

The sufficiency of Eugene’s industrial land on sites smaller than 10 acres was calculated by subtracting the land need from the supply of land. Eugene has a surplus of 152 industrial acres located on smaller than 10 acres. In other words, Eugene has an adequate supply of sites smaller than 10 acres to meet its demand for the next 20 years. Eugene assumes that this extra capacity of small sites, along with measures taken to encourage economic development inside its current UGB, will accommodate its need for the small employment sites (less than 10 acres) sought by some of its target industries.

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75 This assumption is consistent with the finding of the redevelopment capacity of Eugene’s commercial land base, which showed that about 5% of new commercial employment can be accommodated through redevelopment. This analysis assumes that the industrial land base for sites smaller than 10 acres can accommodate about 5% of new employment (310 jobs) through redevelopment. At a density of 10 EPA, this results in 31 acres of industrial redevelopment.

76 The 152 acre surplus was derived by subtracting land demand from land supply (435 minus 283 equals 152).
Table 34. Industrial land sufficiency, sites smaller than 10 acres, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Acres in Sites smaller than 10 acres</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land supply (gross acres)</td>
<td>435</td>
</tr>
<tr>
<td>Vacant</td>
<td>404</td>
</tr>
<tr>
<td>Redevelopment</td>
<td>31</td>
</tr>
<tr>
<td>Land Needed (gross acres)</td>
<td>283</td>
</tr>
<tr>
<td>Land surplus (gross acres)</td>
<td>152</td>
</tr>
</tbody>
</table>

Source: ECONorthwest
The sufficiency of industrial land on sites smaller than 10 acres was calculated by subtracting the land need (283 acres) from the land supply (435 acres).

**Industrial Sites 10 Acres or Larger**

Table 35 shows the following information about the supply of industrial sites larger than 10 acres:

- **Vacant.** Eugene has four vacant sites between 10 and 20 acres and four vacant sites between 20 to 50 acres. The 2012 employment land supply documents Eugene’s industrial land inventory in detail.

- **Redevelopable.** Eugene has three redevelopable industrial sites in the 10 to 20 acres. These sites all have small amount of development (e.g., a single dwelling or a parking lot). Eugene also has one redevelopable site between 20 and 50 acres.77

- **Brownfield / Assembly.** The City’s policies are to actively pursue a strategy of creating new industrial sites through brownfield remediation, site assembly, or both. Based on these policies, the City assumes that there is capacity for three sites in the 10 to 20 acre range for development over the planning period. The land for these sites is assumed to come from the 152-acre surplus of industrial land on sites smaller than 10 acres.

Eugene is documenting its measures to increase employment development in a subsequent part (Part IV) of the Envision Eugene Employment Land Supply Study. The Envision Eugene Employment Land Supply Study is an appendix to the Envision Eugene Comprehensive Plan).

A comparison of the supply of sites with the need for sites (Table 35) shows that Eugene has a deficit of industrial sites in all categories of sites

77 This information is documented in Part I of the City’s Employment Land Supply Study.
10 acres or larger. As discussed elsewhere in this EOA, sites larger than 10 acres will be needed to meet the needs of target manufacturers, business parks/ flex space, and warehouse / distribution firms.

### Table 35. Industrial site sufficiency, sites larger than 10 acres, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Supply (Sites)</th>
<th>Redevelopable</th>
<th>Brownfield / Assembly</th>
<th>Sites Needed</th>
<th>Site Sufficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>14</td>
<td>4 (4)</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>2 (2)</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3 (3)</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>26</td>
<td>(11)</td>
</tr>
</tbody>
</table>

Source: ECONorthwest

The sufficiency of industrial land on sites larger than 10 acre was calculated by subtracting the supply of sites from the number of sites. For sites 10 to 20 acres, the supply is 10 total sites minus 14 sites needed, which equals a deficit of 4 sites.

Note: Brownfield and parcel assembly is a land-use efficiency measure, which is documented in the Land Use Efficiency Strategies report.

Table 36 shows the deficit of industrial land on sites 10 acres or larger in terms of acreage. Land sufficiency is derived by subtracting estimated demand for sites from the existing supply. Using the average site size assumption in Table 36, the site deficit calculation results in a deficit of approximately 495 suitable acres.

### Table 36. Industrial land sufficiency, sites larger than 10 acres, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Site sufficiency</th>
<th>Average site size (suitable acres)</th>
<th>Average Suitable Gross Acres Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>(4)</td>
<td>15</td>
<td>(60)</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>(2)</td>
<td>35</td>
<td>(70)</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>(3)</td>
<td>63</td>
<td>(189)</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>(2)</td>
<td>88</td>
<td>(176)</td>
</tr>
<tr>
<td>Total</td>
<td>(11)</td>
<td>(495)</td>
<td></td>
</tr>
</tbody>
</table>

Source: ECONorthwest

The land deficit was calculated by multiplying the site deficit by the average site size in Table 31. For sites 10 to 20 acres, there is a deficit of 4 sites at an average size of 15 acres (4 sites times 15 acre sites equals a 60 acre deficit).

In summary, Eugene has a deficit of 94 acres of commercial land for all types of commercial employment uses (including retail). This deficit will be addressed by the City of Eugene through efficiency measures.

Eugene has a surplus of 152 acres of industrial land on sites smaller than 10 acres and a deficit of 11 sites of industrial sites larger than 10 acres with
a total estimated average of 495 acres. The deficit of large industrial lots cannot be met through efficiency measures, and so will be addressed by an expansion of the urban growth boundary.

6.2 Site Needs for Target Industries

Eugene’s target industries, described in section 5.2.1, range from a variety of types of manufacturing, professional services, and services for residents and visitors to the Eugene-Springfield region. Eugene’s 2012 inventory of employment land (shown on the 2012 employment land supply) is well suited for some of these target industries, but not for others. This section describes the minimum site needs for the target industries that are not served by Eugene’s 2012 inventory of employment land or are intended to be served through efficiency measures. These un-served target industries are primarily manufacturing employers located independently or in business parks/flex space. The particular site needs of these types of employers are evaluated below.

This focus on the site characteristics of these unserved target industries is intended to assist the City in its process of identifying new land for its employment land inventory and to ensure that Eugene’s 2012-2032 land supply will include some land suitable for those target industries. The land need determination for Eugene is limited to the land expected to develop with employment uses over the 20 year planning period. It does not include additional land for purposes of “market choice.” As such, it is extremely important that the land added to Eugene’s 2012 employment land inventory has the characteristics sought by employers.

As this EOA has already established, Eugene has a deficit of industrial sites of 10 acres and larger (Table 35). These manufacturing businesses require sites larger than 10 acres. Other basic requirements of manufacturing employers are also discussed in this section.

The Goal 9 Administrative Rule (OAR 660-009) requires that jurisdictions include policies in their comprehensive plan that “identify categories or particular types of industrial and other employment uses desired by the community” and that they commit “to designate an adequate number of sites of suitable sizes, types and locations.” The Rule requires the City to identify the “site characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies.” (OAR 660-009-0020(1); -0025(1)). The Administrative Rule defines site characteristics as follows in OAR 660-009-0005(11):

(11) "Site Characteristics" means the attributes of a site necessary for a particular industrial or other employment use to operate. Site
characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.

Employers’ locational decisions are an indicator of whether Eugene’s land base meets the needs of employers that want to expand or locate within the Willamette Valley in general and in Eugene in particular. Many employers have grown, expanded, and located their businesses in Eugene over the past decade. Chapter 4 presents examples of businesses that considered expanding or locating in Eugene, but chose to locate elsewhere on sites with characteristics not available in Eugene.

### 6.2.1 Characteristics of Needed Sites

This sub-section identifies the characteristics of sites needed to address the identified deficits of industrial land in Table 35. Eugene has deficits of industrial land in all size categories larger than 10 acres. These sites are necessary to provide employment opportunities in target industries that are currently un-served.

We have already established that Eugene, as a community, has characteristics that make it attractive to major employers that Eugene would like to accommodate. When considering Eugene as a potential location, these target industries will begin their site78 consideration by seeking out developable sites (sites not prohibitively encumbered by development constraints) of sufficient size. If they find such sites, they will make their final site selection based largely on whether a site has the specific characteristics needed to enable the successful operation of the particular use. To meet the community needs, Eugene must ensure that its 2012-2032 Employment BLI includes sites with the characteristics needed by the target industries.

#### 6.2.1.1 Manufacturing

Eugene has identified the following types of manufacturing target industries: advanced manufacturing, food and beverage manufacturing /processing, clean tech and renewable energy, biomedical, wood products

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78 The definition of “site” becomes important in this analysis. A site is a cohesive property (or group of adjacent properties) that functions as a single unit.
manufacturing, specialty apparel, metal fabrication, heavy machinery, high-tech electronics, avionics equipment, and recreational equipment.

The following summarizes a range of the site characteristics Eugene should seek when identifying the sites that will address its employment land deficit, in terms of the Oregon Court of Appeals’ opinion in Friends of Yamhill County v. City of Newberg, 62 Or LUBA 5 (2010), aff’d 240 Or App 738 (2011). The conclusion will identify those key site characteristics that the City will focus on through the expansion analysis.

- **Site size / minimum acreage.** Sites for manufacturing firms range in size from 10 acres up to more than 100 acres for large-scale industrial firms. Some manufacturing firms prefer to locate in a manufacturing or flex business park, which range in size from about 25 acres to several hundred acres. Considering historic employment patterns and trends, along with Eugene’s efforts to attract mid- and large-sized manufacturing firms, it is likely that manufacturing firms will be seeking to locate in Eugene on sites of all sizes offered.

  Business Oregon, the State of Oregon’s economic development agency, has studied manufacturer’s site needs and determined that competitively sized general manufacturing firms select sites 10 acres in size. Competitive sites for heavy manufacturing, high-tech manufacturing, or campus industrial manufacturing require 25-acre sites. Regionally-scaled clean-tech manufacturers require 50-acre sites, and globally-scaled clean technology campuses require 100 acres. (Table 18).

  Some businesses seek a location in a manufacturing or flex business park. Business parks are typically at least 25 acres in size, to allow for development of multiple buildings and associated parking. In the Portland area, established parks generally range in size from about 25 acres to 50 acres, with a few examples of parks around 75, 100, or 300 acres. (Table 19).

  Industrial businesses that considered locating in Oregon (including businesses that relocated away from Eugene) needed sites ranging in size from 10 acres to 200 acres or larger. Major employment sites with general industrial uses in the Portland Metro area range in size from 25 to 160 acres and average about 50 acres in size. Businesses parks will need to be at least 25 to 50 acres and possibly as large as 75 to 100 acres.
For the operations of manufacturing firm to be successful, its site needs to be large enough to accommodate the needed built space, as well as to accommodate storage. In addition, the site needs to be large enough to accommodate not only the general industrial uses, but also parking, on-site circulation, connections to public transportation, rail connections, and other access to the transportation network. These factors are born out in the Chapter 4 data about sites actually selected in recent years by the types of manufacturers Eugene needs to attract.

There is ample evidence that businesses have relocated or expanded outside of Eugene because they were unable to find sites big enough to support the successful operation within Eugene. Examples of such firms include Rexius, Grain Millers, Symantec, and Peace Health’s new hospital. A number of these firms searched for expansion sites within Eugene and only moved or expanded to sites outside of Eugene after they were unable to find a suitable, big enough site within Eugene.

- **Land ownership.** Sites with two or fewer owners are necessary to reduce the cost and uncertainty of land assembly. Developing an industrial building on a site on two or more tax lots requires negotiating land assembly. Land assembly is difficult and often costly for a number of reasons. People own land for a variety of reasons, such as the desire to develop the land, keep the land undeveloped, or sell the land for a profit. Getting landowners to sell land can be difficult, especially if the ownership is legally disputed, as is the case with some inheritances. If a landowner is a willing seller, they may have an unrealistic expectation of their land’s value, in the context of comparable land values. In addition, one parcel of land may have multiple owners, compounding the issues described above.

Developers attempting land assembly often have difficulty assembling a site at a cost that makes development economically viable. When assembling land, developers often find that owners of key sites are not willing sellers, have unrealistic expectations of the value of their land, or cannot get agreement among multiple owners to sell the land. As a result, developers of industrial buildings typically choose to develop sites with one or two owners.

- **Proximity / access to a major automotive route.** Manufacturers seek sites that located on arterial or major collector streets with good access to an interstate highway (or equivalent).
Manufacturers reject sites that would force their industrial traffic to be routed through residential neighborhoods.

Business Oregon has determined that manufacturing and industrial firms need to be located relatively close to an interstate highway or principle arterial road, with varying minimum proximity requirements depending upon the specific type of manufacturer, not exceeding 20 miles. (Table 18). Local experts indicate that close proximity to a freight route is typical for local manufacturers. Effective industrial operations rely on close proximity to an arterial or collector street to avoid conflicts with the community / residential areas by minimizing the amount of traffic on local streets and freight traffic in residential neighborhoods. More direct access to freight routes also improves the industry’s mobility provides for efficient long distance travel.

- **Topography / no or little slope.** Eugene considers a slope exceeding 5% to be a development constraint for purposes of identifying possible land for industrial employment. Business Oregon has determined that most industrial sectors on Eugene’s list of targeted industries select sites with a slope of 5% or less, except high tech manufacturing and campus industrial, which accept a slope of 7% or less. (Table 18). Eugene has indicated that “no more than a 5% slope” would be an important site characteristic, if not treated as an actual development constraint, because the successful operation of industrial buildings requires level floorplates to reduce costs and offer maximum flexibility, as well as level areas to provide for freight access and pedestrian walkways that meet ADA standards. The real estate development literature describes the increases in development costs and other difficulties associated with industrial development on a sloped site.79

- **Floodplain.** Eugene considers land located in the Special Flood Hazard Areas (SFHA) as a development constraint for purposes of identifying possible land for industrial employment. OAR 660-009-0005(2) says: "Development Constraints" means factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, cultural

and archeological resources, infrastructure deficiencies, parcel fragmentation, or natural hazard areas. Goal 7 specifically defines "...floods (coastal and riverine)...") as one type of natural hazard.

Development within the SFHA is likely to become even more difficult for developers to obtain financing or obtain insurance during the 20-year planning period. There is increasing uncertainty about development within the SFHA as a result of the settlement agreement that Federal Emergency Management Agency (FEMA) reached with several environmental groups. Under the terms of the settlement agreement, FEMA will now require applicants for certain types of changes to the Oregon floodplain maps to demonstrate that the map change will not cause a loss of habitat. Second, the settlement agreement requires FEMA to initiate a "consultation" under the Endangered Species Act (ESA) with the National Marine Fisheries Service (NMFS) to determine the impacts of the National Flood Insurance Program (NFIP) on fifteen salmon and steelhead species that are listed as threatened or endangered under the ESA. The outcome of this process is still pending, and may result in stringent requirements for development regulations for development in or near the floodplains. Even under existing regulations, commercial developments are required to either elevate or flood-proof structures located in the floodplain, significantly increasing costs or impacting pedestrian and freight access to the site. Eugene has indicated that “location outside the SFHA” would be an important site characteristic, if not treated as an actual development constraint, because it is very risky for a manufacturer to invest in a development site in the SFHA under the current regulatory uncertainty.

- **Compatible surrounding land uses.** Manufactures reject sites located in areas where a manufacturing operation will be incompatible with surrounding uses (established or planned). OAR 660-009-0025(6) recognizes that compatibility is an important factor when locating new employment land. It strongly encourages cities to manage the encroachment and intrusion of incompatible uses with employment uses. Industrial buildings used for manufacturing are generally compatible with other industrial uses, commercial uses, and some public uses. Industrial uses may be

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compatible with agricultural uses, provided that the industrial use does not encroach on the agricultural uses. Industrial uses are able to operate efficiently where they are not in conflicts with adjacent land uses that could disrupt industrial business activity. Noise or odors from the manufacturing process and/or traffic from employees and/or shipping can cause conflicts with nearby residential uses. This could result in requiring a manufacturer to make changes that negatively impact its operations. For this reason, manufacturing firms require a location that does not present incompatibility concerns.
6.2.2 Summary of Site Needs for Target Industries

Based on the criteria of specific targeted industries above, the City of Eugene will seek land with the characteristics listed below.

- **Constraints.** Sites must not be:
  - Land that has a slope of 5 percent or greater
  - Land within a Special Flood Hazard Areas (SFHA)
  - Land subject to Statewide Planning Goal 5 protections
  - Tax lots committed to a use or development that is not reasonably likely to be discontinued during the planning period, making industrial redevelopment highly unlikely during planning period

- **Site Characteristics.** Sites must:
  - Be a contiguous area comprised of one or two tax lots that could accommodate one of the following:
    - An industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
    - An industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
    - An industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
    - An industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)
  - Have access via existing or planned roads within close proximity to a State Designated Freight Route. State Designated Freight Routes within one mile of the study area are:
    - Interstate 5
    - Interstate 105 west of I-5
    - Randy Papé Beltline
    - Highway 99 north of Randy Papé Beltline
    - Highway 126 west of Randy Papé Beltline
7 CONCLUSIONS

The key findings from the Economic Opportunities Analysis are as follows and as shown in Table 37:

- Eugene has a deficit of 94 acres of commercial land for all types of commercial employment uses (including retail).
- Eugene has a surplus of 152 acres of industrial land on sites smaller than 10 acres.
- Eugene has a deficit of 495 acres for industrial sites larger than 10 acres. That deficit is in the following size categories:
  - Sites 10 to 20 acre: 4 sites or approximately 60 acres
  - Sites 20 to 50 acres: 2 sites or approximately 70 acres
  - Sites 50 to 75 acres: 3 sites or approximately 189 acres
  - Sites 75 acres and larger: 2 sites or approximately 176 acres

Table 37. Summary of all land deficit or surplus, Economic Opportunities Analysis Conclusions, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Plan Designation / Use</th>
<th>Land sufficiency (deficit) (gross acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
</tr>
<tr>
<td>Employment Uses</td>
<td>(94)</td>
</tr>
<tr>
<td>Non-retail commercial</td>
<td>(57)</td>
</tr>
<tr>
<td>Retail</td>
<td>(37)</td>
</tr>
<tr>
<td>Public and Semi-Public Uses</td>
<td>TBD</td>
</tr>
<tr>
<td>Residential development in</td>
<td></td>
</tr>
<tr>
<td>Commercial Plan Designations</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Total Commercial</strong></td>
<td><strong>(94)</strong></td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
</tr>
<tr>
<td>Employment Uses</td>
<td></td>
</tr>
<tr>
<td>Sites smaller than 10 acres</td>
<td>152</td>
</tr>
<tr>
<td>Sites larger than 10 acres</td>
<td>(495)</td>
</tr>
<tr>
<td>Public and Semi-Public Uses</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Source: ECONorthwest

Eugene will address the commercial land deficit through new land use measures affecting the use of land within the current UGB. The industrial land deficit will be addressed through a UGB expansion. These actions are explained in a subsequent Parts of the Envision Eugene Employment Land Supply Study (an appendix to the Envision Eugene Comprehensive Plan).
Part III. Public and Semi-Public Uses on Employment Land (2012-2032)

Part III includes the following sections and tables:
1. Introduction
2. Historical Public and Semi-Public Land Uses
3. Public and Semi-Public Land Needs
4. Summary of Public Land Uses on Employment Land
5. Summary of 2012 Employment Land Supply After Public Need Deductions
6. 2012 Employment Land Supply Conclusions

Table 1. Where Public and Semi-public Demand Will be Met Inside the Current UGB on Employment Land, in gross acres, 2012-2032
Table 2. Estimate of Public Land Need on Employment Land, inside the current Eugene UGB, gross acres, 2012-2032
Table 3. Summary of Employment Land Supply After Public Need Capacity Deductions, in gross acres, 2012-2032

1. Introduction

This Part addresses the 20-year public and semi-public uses which are likely be located on employment land inside the urban growth boundary (UGB). These uses displace capacity for jobs that would otherwise occur on the employment land identified in Part I of this Study, and this loss must be incorporated into the capacity analysis of employment lands. Using the analysis below, the amount of employment capacity lost due to accommodating public uses on employment land can to be accounted for when determining the capacity of employment land (see summary section).1

2. Historical Public and Semi-Public Land Uses

Cities need to plan for public and semi-public facilities such as schools, governments, churches, parks, and other non-profit organizations that will expand as population increases. For the purpose of estimating land needed for these uses, land is classified into four categories:

- **Land needed for public operations and facilities.** This includes lands for City offices and maintenance facilities, county facilities, state facilities, federal facilities, and other related public facilities.
- **Land needed for parks and open space.** This includes all land for publicly-owned park and open space use within the Eugene UGB.

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1 All acreage estimates are rounded to the nearest whole number. For exact acreage estimates see the *Summary of Public Facilities and Operations Land Needs and Park-By-Park Methodology* documents in the Technical Support portion of the public record.
• **Land needed for schools.** This includes 4J and Bethel school districts’ plans for new schools by
general location within the City and potential plans for selling surplus school properties.
• **Land needed for semi-public uses.** This includes land for churches, non-profit organizations, and
related semi-public uses.

3. **Public and Semi-Public Land Needs**

This section summarizes the forecast of needed public and semi-public land on employment land in
Eugene for the planning period 2012-2032. Table 1 summarizes where the 57 acres of public and semi-
public demand will be met on employment designations inside the UGB:

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>City of Eugene</th>
<th>University of Oregon</th>
<th>City of Eugene Parks</th>
<th>School Districts</th>
<th>Total (rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>storm-water</td>
<td>waste-water</td>
<td>building facilities</td>
<td>fire</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>Industrial</td>
<td>27</td>
<td>0.5</td>
<td>3</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>0.5</td>
<td>3</td>
<td>0</td>
<td>57</td>
</tr>
</tbody>
</table>

The 57 acre public land need on employment land is based on the following assumptions:
• **Public operations and facilities** may be smaller in the future than the current level of service
(6.7 gross acres per 1,000 people\(^3\)) because Eugene already has most of the large public facilities
the City is likely to need over the 20-year planning period.
  
  o Recently built **public facilities** include: a new Federal building, a new Library, a new site
for EWEB (Eugene Water and Electric Board) facilities, new fire and emergency facilities
and a new police station. The City anticipates building a new city hall on publicly owned
property.
  
  o The community may need some new, smaller public facilities over the 20-year period
that will require City land acquisition or easements on land. Review of City of Eugene
master plans and capital improvement project lists identify several smaller
infrastructure facility projects that are planned to occur within the 20-year planning
period to address stormwater, wastewater and fire needs, totaling a need for just over
38 acres of employment land inside the UGB\(^3\). The majority of the 38 acres needed is for
stormwater facilities (35 acres), specifically for 7.6 acres on Commercial land and 27.4

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2 From Lane County Tax Assessor data regarding property within public and semi-public ownership. For more
information, see excerpt from the Eugene Comprehensive Lands Assessment, Table D-1 in the Technical Support
portion of the public record.

3 Smaller public facility needs were identified through review of the following: the City of Eugene stormwater basin
plans for stormwater, the 2013 Capital Improvement Projects list for buildings and transportation, the Wastewater
Master Plan and Public Facilities Plan for wastewater, the 2010-2015 Capital Improvement Projects list for fire
stations, and November 2011 correspondence with Brad Taylor, Water Planning Supervisor from the Eugene Water
and Electric Board for water.
on Industrial land, the balance being 3 acres for fire stations and a 0.5 acre site for wastewater facilities. Note that specific utility needs that might occur within the right-of-way of new development (e.g. roads, utility lines) are already accounted for in the density assumptions used to determine the capacity of the buildable lands inventory and are therefore not included in this estimate.⁴

- The University of Oregon anticipates no or an insignificant amount of student growth for the next 20 years.⁵ The University also has a goal of providing on-campus housing for 25% of its underclassmen. To that end, the University plans to add 1,250 additional beds during the planning period which can be accommodated on the existing campus.⁶

The University also forecasts a need for 45 acres of land adjacent to the main campus and the Autzen Stadium complex for non-residential uses. Some lands near these two locations that are suitable for university expansion are currently in the Commercial plan designation. Based on how much land around these areas is designated Commercial, the need is estimated to be 15 acres of Commercial land (the other 30 acres is from non-employment plan designations).⁷

- Lane County, EWEB, and the University of Oregon indicated that they do not have land that they classify as surplus land at this time.⁸

- Table 1 is a summary of the amount of employment land needed for new public operations and facilities inside the UGB. The acreage needed inside the UGB reduces the 2012 employment land supply’s capacity as reflected in the Conclusion section, below.

- Park land need determinations use the projects identified in the Parks, Recreation & Open Space (PROS) Project and Priority Plan as guidance for anticipated future park need. This plan was adopted as a fiscal plan related to system development charges in 2006 and identifies acquisition and development priorities for a population consistent with that identified in

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⁴ Specifically, the employment density assumptions used in the buildable lands analysis are adjusted to account for road and utility needs that would occur within the right-of-way of development; e.g. a net-to-gross conversion factor is applied to the density assumption.

⁵ This information was provided by JP Monroe, Director of Institutional Research at the University of Oregon in an interview on May 9, 2013.

⁶ This was provided by Chris Ramey, University Architect and Associate Vice President of Campus Planning and Real Estate at the University of Oregon in an interview on May 8, 2013, and the University of Oregon Residential Hall Modernization Study, 2011, pages 6 and 7. No distinction was made regarding whether the land needed is developed or vacant because in either scenario, the University use would be displacing either existing or future capacity that needs to be accounted for.

⁷ This information was provided by Chris Ramey, University Architect and Associate Vice President of Campus Planning and Real Estate at the University of Oregon in an interview on May 8, 2013.

⁸ City staff asked staff at public agencies in Eugene about surplus land. Chris Ramey, Associate Vice President at the University of Oregon, said that the University does not expect to have surplus land over the 20-year planning period. EWEB staff indicate that the agency does not currently have land that is designated as surplus. Staff at Lane County indicate that the County does not currently have plans to surplus County properties, including the Lane County Fairgrounds.
Envision Eugene. The City’s park land need is discussed in greater detail in its findings documents, specifically addressing the need for an expansion to accommodate the need for two new community parks. Approximately 95 acres inside the UGB will be required for park land that might otherwise be used for residential or employment uses. As the City’s need for park land relates to the 2012 Employment Buildable Land Inventory, based on the locations of the needed park land, only about 4 acres will be on Commercial land (the remainder of the 95 acres will be on residential land).

- **School** land needs are based on the estimate of land need provided by the school districts. The City’s school land need is discussed in greater detail in its findings documents, addressing the need for an expansion to accommodate the need for one new school site for the Bethel School District. Neither the 4J School District nor the Bethel School District anticipates a need for a new school facility inside the current UGB over the 2012 to 2032 period. The 4J School Board has identified three sites (47.9 acres) as surplus: Dunn / Opportunity Center (4.5 acres), Bailey Hill (5.6 acres), and Coburg Farm (28.0 acres). The District may sell, trade, or lease these properties at some time in the future. These sites were addressed in Part I of this Study. The Bethel School District does not have surplus property.

- The need for **Semi-public uses** is forecast to be similar to historical needs, at about 1.3 acres per 1,000 people or 44 gross acres over the 20-year period; 29 in Low Density Residential and 15 in Commercial plan designations. Current trends have resulted in many semi-public uses (e.g. religious organizations) accommodating their growth on their existing property rather than requiring additional land. The Envision Eugene Technical Resource Group reviewed several parcels with existing semi-public uses and found that many of these sites that have not yet expanded appear to have room for a building expansion. Therefore, the entire need is anticipated to be accommodated through redevelopment and infill and not require any additional land.

### 4. Summary of Public Land Uses On Employment Land

The following Table 2 summarizes the public land uses that will be accommodated on employment land inside the UGB.

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9 The **PROS Project and Priority Plan** was adopted as a fiscal plan and not as a land use plan nor as part of the local comprehensive plan. However, it provides the most detailed analysis for potential future park acquisition needs, so it is reasonable to estimate future acquisition needs using the **PROS Project and Priority Plan** list.

10 This information was provided by Barb Bellamy, Communications Director at 4J in an interview on August 21, 2012.

11 This information was provided by Pat McGillivray, Communications Relations for the Bethel School District in an interview on March 12, 2009.
**Table 2. Estimate of Public Land Need on Employment Land, inside the current Eugene UGB, gross acres, 2012-2032**

<table>
<thead>
<tr>
<th>Type of Use</th>
<th>Estimated need inside UGB on employment land 2012-2032</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facilities and Operations</td>
<td></td>
</tr>
<tr>
<td>Stormwater, wastewater and fire</td>
<td>38</td>
</tr>
<tr>
<td>University of Oregon</td>
<td>15</td>
</tr>
<tr>
<td>Parkland needed inside the current UGB</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>4</td>
</tr>
<tr>
<td>Semi-public uses</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
</tr>
</tbody>
</table>

Source: 4J and Bethel School Districts, The University of Oregon, PROS Project and Priority Plan, EWEB staff, City of Eugene public facilities plans and City Public Works staff.

5. **Summary of 2012 Employment Land Supply After Public Need Deductions**

The 57 acres needed to accommodate public uses on employment land equates to 57 acres of lost capacity for jobs on employment land to be deducted from the capacity of the 2012 employment land supply. The capacity of the 2012 employment land supply is discussed in the Employment Economic Opportunities Analysis (EOA) at Part II of this Study as follows:

- The EOA finds that Eugene has a deficit of 93 acres of Commercial land. Accounting for the 27 acres of Commercial land that is needed for public and semi-public land increases the deficit of Commercial land to 121 acres.
- The EOA finds that Eugene has a surplus of 152 acres of Industrial land on sites that are smaller than 10 acres in size.\(^\text{12}\)
- The EOA finds that Eugene has deficit of 11 sites, or about 495 acres Industrial land that are 10 acres or larger in size.

6. **2012 Employment Land Supply Conclusions**

The next step is to combine the analysis from Parts I, II, and III of this Study to identify whether the City’s baseline, 2012 employment land supply can accommodate the projected demands on employment land for the next 20 years if Eugene continues to develop according to recent trends and existing codes and

\(^{12}\) The EOA finds that Eugene has deficit of 11 sites, or about 495 acres Industrial land that are 10 acres or larger in size. This deficit accounts for 3 sites to be provided through remediation efforts of three brownfield sites. Those sites are also discussed under Part IV Measures to Increase Employment Development, but are accounted for here.
If the City has a deficit in employment land, the City is required by State law to take actions to accommodate the entire 20 year employment demand.

Based on the analysis in the preceding three Parts of the Employment Land Study, as shown in Table 3 the City has:

- A deficit of about 121 acres of Commercial land
- A surplus of about 152 acres of Industrial sites smaller than 10 acres
- A deficit of 11 sites, or about 495 acres of Industrial sites larger than 10 acres, as follows:
  - Sites 10 to 20 acres: 4 sites or approximately 60 acres
  - Sites 20 to 50 acres: 2 sites or approximately 70 acres
  - Sites 50 to 75 acres: 3 sites or approximately 189 acres
  - Sites 75 acres and larger: 2 sites or approximately 176 acres

Given that the City’s analysis shows that Eugene does not have enough land under current conditions to accommodate all of the demands for Commercial land or Industrial sites larger than 10 acres in size, the City has to make policy choices to accommodate these remaining demands. These actions are discussed in the subsequent Parts of the Employment Land Supply Study, Part IV Measures to Increase Employment Development and Part V UGB Expansion Areas to Address Industrial Land Deficit.
Table 3. Summary of Employment Land Supply After Public Need Capacity Deductions, in gross acres, 2012-2032

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Gross Acres (deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commercial</strong></td>
<td></td>
</tr>
<tr>
<td>2012 Land Supply</td>
<td>154</td>
</tr>
<tr>
<td>Vacant</td>
<td>108</td>
</tr>
<tr>
<td>Partially Vacant</td>
<td>17</td>
</tr>
<tr>
<td>Redevelopment</td>
<td>29</td>
</tr>
<tr>
<td>2032 Land Need</td>
<td>248</td>
</tr>
<tr>
<td>2012 Land Sufficiency</td>
<td>(94)</td>
</tr>
<tr>
<td>2032 Public and Semi-public Demand</td>
<td>27</td>
</tr>
<tr>
<td>Preliminary Land Sufficiency Conclusion</td>
<td>(121)</td>
</tr>
</tbody>
</table>

| **Industrial (less than 10 acres in size)** |                       |
| 2012 Land Supply | 435                   |
| Vacant           | 404                   |
| Redevelopment    | 31                    |
| 2032 Land Need   | 283                   |
| 2012 Land Sufficiency | 152         |
| 2032 Public and Semi-public Demand | 31 |
| Preliminary Land Sufficiency Conclusion | 121 |

| **Industrial (greater than 10 acres in size)** | Sites (deficit) |
| 2012 Land supply | 15                   |
| Vacant           | 8                    |
| Redevelopment    | 4                    |
| Brownfield/ Parcel Assembly | 3    |
| 2032 Land Need   | 26                   |
| 2012 Land Sufficiency | (11)         |
| 2032 Public and Semi-public Demand | - |
| Preliminary Land Sufficiency Conclusion | (11) |
Part IV. Measures to Increase Employment Development (2012-2032)

Part IV includes the following sections and tables:
1. Information and Assumptions
2. List of Measures and Analysis
3. Conclusion

Table 1. Acres re-zoned to C-2 Community Commercial or E-2 Mixed Use Employment
Table 2. Acres re-zoned to E-1 Campus Employment Zone
Table 3. Capacity of Measures to Increase Commercial Employment on Industrial Land
Table 4. Employment Land Supply After Measures to Increase Development, in gross acres, 2012-2032
Table 5. Industrial Sites Larger than 10 acres After Measures to Increase Development
Table 6. Land Deficiency for Industrial Sites Larger than 10 acres

1. Information and Assumptions

The next step in establishing a 2012-2032 Employment Buildable Lands Inventory is to identify any new capacity that can be created through City actions. This part of the Employment Land Supply Study provides more information about the measures the City has taken to add employment capacity within the 2012 urban growth boundary (UGB). These measures increase the number of jobs that can fit inside our current UGB by using regulatory changes (e.g. zone changes), programs or development incentives to achieve more jobs than Eugene would otherwise see under current development trends.

After reviewing numerous potential measures, those strategies pursued by Eugene (outlined below) were selected based on several key factors. First, the City already has several codes and programs in place that facilitate compact development. In 2001 the City adopted extensive changes to Eugene Code Chapter 9, Land Use. These amendments included several provisions that allow land to be used more efficiently. The City also has existing programs that help facilitate denser urban development, such as tax increment financing downtown.1 The employment measures attempt to balance the efficiency of compact urban growth with concerns about livability and compatibility by focusing incentives primarily on redevelopment of the city core for multi-family and commercial jobs, and making underutilized industrial lands more viable. These strategies reflect the guiding pillars and strategies of the Envision Eugene Recommendation (2012) and subsequent City Council direction.

The following includes a list of quantifiable measures Eugene has taken to increase the supply of employment land or increase the employment capacity of that land since the 2012 Employment Land Supply (Part I of this Study) and EOA (Part II of this Study) were prepared. The assumptions and methods used to determine their effect on the land need are detailed below for each of the actions taken. Efficiencies gained is shown for each and shown all together in the Conclusion and Table 4.

1 These existing measures and programs are documented in Existing Land Use Efficiency Measures in the Technical Support portion of the public record.
2. List of Measures and Analysis

1. Creation and Application of New E-1 and E-2 Employment Zones

   a) **E-2 Mixed Use Employment Zone / W. Eugene Industrial Flexibility**

**Applicability:** Certain areas designated Industrial and zoned industrial or commercial.

**Assumptions:** Creating a new E-2 Mixed Use Employment zone to allow more office type uses than in the I-2 Light Medium Industrial and C-4 Commercial Industrial zones will create more capacity for retail and office jobs and reduce the need to expand the UGB for Commercial jobs.

**Analysis:** The West Eugene Study Area will have a more flexible commercial-industrial zone and consistent development standards through the rezone of some land to the new E-2 Mixed Use Employment zone and some land to the existing C-2 Community Commercial zone. This will occur due to the following new E-2 provisions and existing C-2 provisions:

   *Allow a mixture of commercial and industrial uses.* The C-4 Commercial-Industrial zone was intended to accommodate a range of uses found in west Eugene, recognizing the auto-oriented character of the area. The E-2 Mixed-Use Employment zone replaces C-4 and allows a mix of uses throughout the zone with an emphasis on employment zone flexibility and the retail character of the transit corridor.

   *Do no harm to existing businesses.* The West 11th Avenue corridor is a jumble of the commercial and industrial zones. The zone changes will unify most of the area under the E-2 and C-2 zones. The goal of the amendments is to avoid non-conformities in E-2 by combining the currently allowed list of permitted uses in I-2 and C-4.

   *Clarity and consistency in standards.* The height, setback, landscape requirements, and other basic development standards in the E-2 zone build upon the C-2 zone standards to: (1) provide clarity and familiarity to those working with the code; and (2) create a consistent development pattern and attractive streetscape to the greatest degree possible. Transition standards are added where E-2 abuts residential zones.

   *Pedestrian friendly and transit supportive development standards.* The E-2 development standards promote the compact development and efficient transportation options pillar of Envision Eugene. The standards attempt to strike a balance among the needs of pedestrians, transit users, and automobile drivers, as well as among businesses, customers, and travelers. The front setback and development standards for buildings and drive-through aisles are important pieces of creating a transit supportive and pedestrian friendly corridor.
Table 1. Acres re-zoned to C-2 Community Commercial or E-2 Mixed Use Employment

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Acres</th>
<th>Rezoned from*</th>
<th>Rezoned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Eugene</td>
<td>0.4</td>
<td>C-1</td>
<td>C-2</td>
</tr>
<tr>
<td></td>
<td>30.5</td>
<td>C-4</td>
<td>C-2</td>
</tr>
<tr>
<td></td>
<td>35.3</td>
<td>I-2</td>
<td>C-2</td>
</tr>
<tr>
<td></td>
<td>1.8</td>
<td>S-C</td>
<td>C-2</td>
</tr>
<tr>
<td><strong>Total to C-2</strong></td>
<td><strong>68</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1</td>
<td>C-2</td>
<td>E-2</td>
</tr>
<tr>
<td></td>
<td>12.8</td>
<td>C-4</td>
<td>E-2</td>
</tr>
<tr>
<td></td>
<td>245.2</td>
<td>I-2</td>
<td>E-2</td>
</tr>
<tr>
<td></td>
<td>12.2</td>
<td>I-3</td>
<td>E-2</td>
</tr>
<tr>
<td><strong>Total to E-2</strong></td>
<td><strong>271</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Zoning districts: C-1 Neighborhood Commercial, C-2 Community Commercial, C-4 Commercial Industrial, S-C Chambers Special Area, I-2 Light-Medium Industrial, I-3 Heavy Industrial, R-1 Low Density Residential

W. 11th Avenue Adopted Zone Changes Map (68 acres to C-2, 271 acres to E-2)

Of the 271 acres that are rezoned to E-2, about 42 acres are vacant and less than 10 acres in size. It is assumed that all of those 42 small-lot surplus acres will be suitable for commercial uses therefore decreasing the surplus of such sites. Additionally, with 271 acres of I-2 land being rezoned, it is reasonable to assume that some portion of the developed land in this area would
be suitable for new commercial uses as well. Additionally, Table 1 shows that about 35 acres of I-2 was rezoned to C-2 which also allows more office and retail uses.

After accounting for the capacity gained from re-designation to Commercial in the Crow Road Area (Measure 2), E-1 zone changes (Measure 1b), and the 42 acres of vacant rezoned to E-2 (portion of Measure 1a), the remaining commercial need is for about 15.5 acres of land. Given the large amount of land rezoned to E-2 and the demand for a mixture of commercial and industrial in this area, it is reasonable to assume that this 15.5 acre need will be accommodated on developed land throughout the E-2 and C-2 rezone area. This still leaves about 93% percent of the E-2 land in this area available for smaller industrial needs through redevelopment.

In summary, as shown in Table 3, the E-2 rezone results in capacity for 1,670 commercial jobs, or 54.5 acres of commercial capacity on Industrial land.

**Timing:** The City Council adopted the new E-2 Mixed Use Employment Zone on May 14, 2014. The City’s action was acknowledged by the Oregon Department of Land Conservation and Development pursuant to ORS 197.625(1)(a).

b) **E-1 Employment Zone / Campus Industrial Flexibility**

**Applicability:** Certain areas designated Campus Industrial and zoned I-1 Campus Industrial.

**Assumptions:** Amending the I-1 zone to be the E-1 Campus Industrial zone and allowing more office type uses will create more capacity for office jobs and reduce the need to expand the UGB for Commercial office jobs.

**Analysis:** The City’s three areas designated as Campus Industrial (Chad Drive, Willow Creek, and Greenhill Technology Park) were re-zoned to the new E-1 Campus Employment zone to create more business and job development opportunities. This will occur due to the following new provisions:

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2 Of the 271 I-2 acres rezoned to E-2, 42 acres are vacant and assumed to be suitable for commercial uses, which leaves 229 developed I-2 acres in this area. With 15.5 of these acres assumed suitable for commercial uses, that leaves 213.5 E-2 acres (79% of the E-2 zoned land in this area, or 93% of the developed E-2 zoned area) available for Industrial uses through redevelopment.

3 The conversion of jobs to acres uses the same assumption used to calculate capacity on employment land; 68 EPA for (non-retail) commercial jobs and 23 EPA for retail jobs. The portion that is commercial office versus commercial retail jobs is based on the split of commercial jobs forecasted in the 2011 Oregon Employment Department forecast; the commercial demand is projected to be 59.09% office jobs and 40.72% retail jobs. For 1,670 jobs, 59.09% of these jobs are assumed to be office which is 14.86 jobs divided by 68 EPA is 14.86 acres and 40.72% of the jobs are assumed to be retail which is 659 retail jobs divided by 23 EPA is 28.65 acres. This 43.6 acres divided by .8 acre for the net-to-gross conversion is 54.5 ac of new commercial capacity on industrial land.

4 Some sites in these areas were rezoned from one zoning to the new E-1 Campus Employment zone. The sites in these areas where the property was already zoned I-1 Campus Industrial did not have to be rezoned because the City renamed the I-1 Campus Industrial zone to E-1 Campus Employment so those properties would automatically be subject to the new Campus Employment Zone standards.
Rename zone to reflect purpose and intent of the zone to better reflects the intent of the revised use list. This relates to a changing economy where businesses often blur the lines between commercial and industrial, or combine several employment uses on a property.

Add to the use list to increase employment opportunities. The Code amendments are intended to respond to new market realities in the Campus Employment areas by allowing a wider range of employment and support uses. For example, rather than limiting the types of office-based employment uses, the amendments allow all office development. The uses also allow a wider range of medical uses, such as doctor’s offices, dentists, and clinics. In addition, some uses were deleted to better preserve the lands for the intended employment uses; these include churches and schools, although existing permit holders are allowed to remain and expand on their existing property.

Adjust regulations that pose unnecessary barriers to employment opportunities. Several Special Use Limitations have proven difficult to use for both developers and for City staff. By revising or deleting these limitations, the code should make the Campus Employment areas more appealing to future development, resulting in increased employment density. The changes include:

- deleting limitation 1; (which requires complicated and restrictive accounting of square footage for different uses),
- deleting references to “business park” approval (which is difficult to administer across multiple ownerships and is replaced by explicit standards), and;
- allowing more flexibility for accessory uses and support uses in the zone.

Maintain the campus character while allowing additional flexibility. The code retains green space percentage requirements, adds large facility development standards, and allows outdoor storage with siting and screening standards.

Improve residential compatibility/ transitions such as height limits, special height limits adjacent to residential areas, and landscape buffers to improve neighborhood livability in those residential areas adjacent to the Employment and Industrial zones.

The following acres were rezoned or are now subject to the new E-1 standards. These estimates represent the number of acres that are impacted by the rezone, regardless of their disposition (e.g. vacant or developed). While these estimates are not meant to imply or expect that all of the acres will convert or develop with office use, the amount rezoned is significantly more than the deficit of 4,250 commercial jobs (Table 3) would require, therefore it is reasonable to assume that the office deficit will be accommodated by this E-1 and the E-2 zone changes discussed above.

Table 2. Acres re-zoned to E-1 Campus Employment Zone

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Acres</th>
<th>Previous Zoning*</th>
<th>New Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhill Technology Park</td>
<td>161</td>
<td>I-1</td>
<td>E-1</td>
</tr>
<tr>
<td>Willow Creek</td>
<td>224</td>
<td>I-1</td>
<td>E-1</td>
</tr>
<tr>
<td>Chad Drive</td>
<td>152</td>
<td>I-1</td>
<td>E-1</td>
</tr>
<tr>
<td></td>
<td>6.4</td>
<td>R-1</td>
<td>E-1</td>
</tr>
<tr>
<td><strong>Total to E-1</strong></td>
<td><strong>543</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*Zoning districts: I-1 Campus Industrial, R-1 Low Density Residential, E-1 Campus Employment

Greenhill Technology Park Zone Change Map (about 161 acres to E-1)

Willow Creek Zone Change Map (about 224 acres to E-1)
Of the 543 acres that were rezoned to E-1, about 139 of these acres are vacant with about 87 of those vacant acres being smaller than 10 acres in size.\(^5\) The remaining commercial job need after the E-2 re-zone/code amendments (Measure 1a) is about 47.5 acre or 2,584 commercial jobs.\(^6\) It is assumed that at minimum 47.5 of the smaller E-1 vacant acres may be suitable for these commercial-type uses, thereby accommodating the remaining commercial job need. As a result of Measures 1a and 1b, the 121 acre surplus of Industrial sites less than 10 acres in size identified in Part III of this Study is further reduced, as reflected in Table 4 below.

**Timing:** The City Council adopted the new E-1 Employment Zone on May 14, 2014. The City’s action was acknowledged by the Oregon Department of Land Conservation and Development pursuant to ORS 197.625(1)(a).

The resulting capacity of these two measures is for 4,254 commercial jobs on Industrial land:

---

\(^5\) Based on review of the inventory of vacant Industrial sites 10 acres or greater, about 52 of the 139 vacant acres in the three E-1 study areas are 10 acres or greater.

\(^6\) The conversion of jobs to acres uses the same assumption used to calculate capacity on employment land; 68 EPA for (non-retail) commercial jobs and 23 EPA for retail jobs. For these 2,584 campus industrial jobs, all are assumed to be office jobs (not retail), divided by 68 EPA is 38 acres. This 38 acres divided by .8 acre for the net-to-gross conversion is 47.5 ac of additional commercial jobs capacity on Industrial land.
### Table 3. Capacity of Measures to Increase Commercial Employment on Industrial Land

<table>
<thead>
<tr>
<th>Measure</th>
<th>Gross ac</th>
<th>Net ac</th>
<th>% of net acres</th>
<th>Office jobs/ac</th>
<th>% of net acres</th>
<th>Retail jobs/ac</th>
<th>Total jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>80%</td>
<td>59.09%</td>
<td>68</td>
<td>40.72%</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Campus Industrial Flexibility (E-1 zone)</td>
<td>47.5</td>
<td>38</td>
<td>38</td>
<td>2,584</td>
<td>0</td>
<td>-</td>
<td>2,584</td>
</tr>
<tr>
<td>W. Eugene Industrial Flexibility (E-2 zone)</td>
<td>54.5</td>
<td>43.6</td>
<td>14.9</td>
<td>1,011</td>
<td>28.7</td>
<td>659</td>
<td>1,670</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>102</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>4,254</strong></td>
</tr>
</tbody>
</table>

ac = acres

➤ **Efficiency Gained:** Together, measures 1a and 1b equate to 4,254 commercial jobs, or 102 acres of commercial jobs capacity on Industrial land. The reduction to the 152 acre surplus of Industrial sites less than 10 acres in size is also reflected in Table 4.

Additional notes:

The E-1 and E-2 code amendment package also included amendments to the I-2 Light-Medium Industrial Zone that increase allowances for on-site sales of goods manufactured on-site. The I-2 zone accommodates many small-scale manufactures that need to have a retail component. The pre-2014 code (before these measures were adopted) allowed retail trade in I-2 when it is “secondary, directly related to, and limited to products manufactured, repaired, or assembled on the development site.” This clause has no clear and objective standard for simple permitting, and as such, it has been difficult to implement consistently. The 2014 adopted I-2 code amendments create clear, measurable standards for accessory uses directly related to the primary use, and small-scale independent retail uses to serve employees in the zone. While the impact of these amendments are not quantified, they may add additional retail capacity in the I-2 zone due to increased flexibility.

2. **Re-designation of Land to Commercial Designation**

As a result of a comprehensive look at how the Crow Road area might develop in the future, some portions of this area were re-designated to Commercial.

**Applicability:** Portions of three sites in the Crow Road Study Area, south of W. 11th Avenue and east of Greenhill Road. These sites were designated Medium Density Residential. Two of the sites were identified as partially vacant sites on the City’s 2012 Employment Land Supply in Part I of this Study.

**Assumptions:** Re-designation of partially vacant land from Medium Density Residential to Commercial will add capacity for commercial jobs.

**Analysis:** A total of 10.3 acres on three sites were re-designated from Medium Density Residential to Commercial. One of the sites had 0.7 acres of Commercial designation but is developed and therefore was not assumed to add capacity at this time. The two other sites have a total of 1.2 acres
of development on the Commercial designation portion of the sites. The result is about 8.4 acres of additional commercial capacity.

**Timing:** The City Council adopted the re-designation of the 10.3 acres of MDR to Commercial on July 9, 2014, and it became effective 30 days later. The City’s action was acknowledged by the Oregon Department of Land Conservation and Development pursuant to ORS 197.625(1)(a).

- **Efficiency Gained:** 8.4 acres of Commercial land.

3. Downtown & Mixed Use Code Amendments

The City has taken actions to boost redevelopment downtown. Measures 4 and 5 are included in these actions.

**Applicability:** C-2 Community Commercial Zone, C-3 Major Commercial Zone (downtown), /ND Nodal Development Overlay Zone, and /TD Transit Oriented Development Overlay Zone.

**Assumptions:** The goal of these amendments is to facilitate compact urban development in downtown, on key transit corridors, and in core commercial areas, consistent with Envision Eugene. The amendments address this as follows:

  - **Surface Parking Limitation.** The goal of this amendment is to provide flexibility for redevelopment sites within downtown by allowing up to 20 additional surface parking spaces for sites where all vehicle access is via an alley, and removing the prohibition on stand-alone surface parking lots.

  - **Large Commercial Facilities Standards.** The goal of this amendment is to ensure that development standards applicable to downtown developments are appropriate for a high quality urban setting by exempting downtown developments from certain large commercial facility standards.

  - **Commercial Landscaping Standards.** The goal of this amendment is to make the commercial landscaping standards align with desired urban development and a pedestrian-oriented streetscape design by reducing the minimum landscape area requirement downtown and removing the required width for front yard landscape beds.

  - **Nodal Development Overlay Zone.** The goal of this amendment is to provide flexibility while adding clarity, in application of these standards by allowing for all properties to seek adjustments to the development standards, by adding relevant adjustment review criteria, and by clarifying applicability of the standards.

  - **Traffic Impact Analysis/Level of Service in Downtown.** The goal of this amendment is to provide clarity in the expected outcome for property owners and affected community members by remove the TIA requirement and reduce the allowed level of service for projects within the Downtown Plan area, with the exception of the properties subject to the EWEB master plan.
General Commercial Standards. The goal of these amendments is to simplify the structure of one section of the land use code. Section headings and subheadings are simplified and clarified.

Analysis: These code amendments clearly make it easier to do development downtown. They are part of the City’s overall program to help facilitate more jobs and housing downtown.

Timing: The City Council adopted the package of code/plan amendments on July 22, 2013, and they become effective August 24, 2013. The City’s action was acknowledged by the Oregon Department of Land Conservation and Development pursuant to ORS 197.625(1)(a).

➢ Efficiency Gained: See “Efficiency Gained” under Measure 5, below.

4. Downtown Riverfront Special Area Zone

Applicability: The new Downtown Riverfront Special Area Zone, intended to; support the creation of an active, vibrant, people place, along Eugene’s downtown riverfront; to achieve an appropriate balance between redevelopment certainty and flexibility; to further economic development, incorporate educational aspects, support appropriate enhancement of riverfront habitat; and to promote a mix of uses that complement and support existing downtown riverfront uses.

Assumptions: This new special area zone applies to about 27 acres of land on the east side of downtown, along the riverfront (also known as the Eugene Water and Electric Board – EWEB-riverfront site). Consistent with Envision Eugene’s goal of compact urban development and accommodating more multi-family homes and jobs inside the current UGB, City staff provided support to the Eugene Water and Electric Board’s (EWEB) design staff and a nine-member Community Advisory Team for development of the EWEB Riverfront Master Plan. The new special area zone for the site is intended to implement the plan.

Analysis: The EWEB riverfront site has been and will continue to be the focus of several City resources and tools in order to help facilitate redevelopment of the site. These include the site currently sitting within both the newly adopted Multiple Unit Tax Exemption (MUPTE) boundary and the urban renewal district, adoption of the Riverfront Special Area Zone for the EWEB site, project coordination assistance, permit facilitation, and commitments to park and infrastructure improvements. The EWEB redevelopment scenarios for the site include eight acres of new development space focused on commercial and restaurants. Depending on how it is developed, job capacity for these eight acres could range from 320 jobs (similar to Oakway Center shopping center) to 720 jobs (similar to downtown).7

Timing: The City Council adopted the Downtown Riverfront Special Area Zone on July 8, 2013. The City’s action was acknowledged by the Oregon Department of Land Conservation and Development pursuant to ORS 197.625(1)(a).

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7 Based on ECONorthwest analysis of approximate densities of commercial centers around Eugene, which found a range of about 40 employees per acre at Oakway Center to about 90 employees per acres in downtown.
➢ **Efficiency Gained:** Together, Measures 4 and 5, along with market incentives and pressures, should gain 331 retail jobs or about 18 acres.8

5. **Brownfield / Parcel Assembly**

**Applicability:** This measure affects any type of Industrial land that is a brownfield site or perceived brownfield site in Eugene or other smaller Industrial land sites.

**Assumptions:** One to three 10 acre or greater in size Industrial sites will become available for development through brownfield remediation efforts or by assembling smaller Industrial parcels into 10 acre or larger parcels, therefore reducing the need for a UGB expansion for industrial uses.

**Analysis:** Two efforts will address this. In 2013, the Eugene/Springfield/Lane County Brownfields Coalition received over half a million dollars in funding from the federal government to inventory and assess potential brownfield sites. This funding positions the metro area to establish a brownfields program and begin to see cleanup and re-development of key properties. In Eugene, work is focused on the downtown, west Eugene, and the Highway 99 industrial areas. Vacant or underused properties can be redeveloped into residential, commercial, or industrial uses, helping to re-use land inside the existing UGB and reduce the amount of UGB expansion. In the past two years, the Brownfields Coalition has completed an inventory of 400 sites, identified priority areas of focus, and conducted site assessments on 13 properties.

Additionally, Eugene’s 2012 Employment Land Supply identified 404 acres of Industrial land sites that are less than 10 acres in size. Based on the 2012 Employment Land Supply at Part I of this Study and on capacity and demand assumptions in the EOA at Part II, the City has a surplus of about 121 acres on industrial sites that are less than 10 acres in size, some of which could be consolidated into larger sites.

The 121 acre Industrial small site surplus is reduced by approximately 102 acres to create additional capacity for commercial uses (see measure 1, Table 3 above). As documented in the EOA, ECONorthwest found that it is reasonable to assume that three sites 10-20 acres would be made available through these measures (brownfield redevelopment and parcel assembly). As an example, in conservative estimate,9 45 acres of the 121 acre surplus could create the three sites of 10-20 acres based on the three sites having an average site size of 15 acres.

---

8 The conversion of jobs to acres uses the same employees per acre assumption used to calculate capacity on employment land; 68 EPA for (non-retail) commercial jobs and 23 EPA for retail jobs. All of these jobs are assumed to be retail (not office) jobs. 331 jobs divided by 23 EPA is 14.39 acres. This 14.39 acres divided by 0.8 acre for the net-to-gross conversion results in the total estimate of 17.99 acres of additional Industrial capacity.

9 This estimate assumes that the site assembly will occur among the surplus of sites that are less than 10 acres in size. However, it is also possible that all three sites will be derived from sites 10 acres or larger in size that are developed brownfield clean-up sites that are not included in the 2012 Employment Land Supply and thus would not deduct from the surplus of sites less than 10 acres in size.
Timing: Phase I environmental site assessments for the brownfield work has been conducted on eligible sites to assess the potential for hazardous substances and petroleum contamination. Phase II environmental site assessments have been conducted on a smaller number of sites to determine if there is any contamination on these sites, the exact nature and extent of contamination, and options for remediation or even clean-up—if necessary. Parcel assembly will be coordinated with willing property owners as available. This “willing seller” information will be provided to the Chamber of Commerce and other entities that help the City to facilitate the location of new employment opportunities and job growth in Eugene.

➤ Efficiency Gained: The gain of three 10-20 acre sized industrial sites was already accounted for in the EOA as shown in Table 5. The reduction to the 152 acre surplus of Industrial sites less than 10 acres in size is also reflected in Table 4.

3. Conclusion

Based on the measures above, the City has created additional capacity for employment land within its 2012 UGB. The capacity identified in the 2012 Employment Land Supply in Part I of this Study and the Economic Opportunities Analysis (EOA) in Part II of the Study, together with the capacity identified through these measures, determines whether the City has enough employment land for the next 20 years or whether it needs to expand its UGB to meet all of the employment demand.

As shown in the following tables, the capacity identified on the 2012 Employment Land Supply (Part I of this Study) and in the EOA (Part II of this Study), together with the above measures results in:

- The demand for the non-industrial employment land need (commercial office, retail) is met. The measures create a small surplus of about 7 acres of Commercial land.
- There is a deficit of about 26 acres of Industrial land less than 10 acres in size.
- There is still a need for 11 sites of Industrial land 10 acres or greater.
Table 4. Employment Land Supply After Measures to Increase Development, in gross acres, 2012-2032

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Gross Acres (deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commercial</strong></td>
<td></td>
</tr>
<tr>
<td>2012 Land Supply</td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td>154</td>
</tr>
<tr>
<td>Partially Vacant</td>
<td>108</td>
</tr>
<tr>
<td>Redevelopment</td>
<td>17</td>
</tr>
<tr>
<td>2032 Land Need</td>
<td>248</td>
</tr>
<tr>
<td>2012 Land Sufficiency</td>
<td>(94)</td>
</tr>
<tr>
<td>2032 Public and Semi-public Demand</td>
<td>27</td>
</tr>
<tr>
<td>Preliminary Land Sufficiency Conclusion</td>
<td>(121)</td>
</tr>
<tr>
<td>Land Supply Gained from Measures to Increase Commercial Employment</td>
<td>128</td>
</tr>
<tr>
<td>E-1 Employment Zone</td>
<td>47.5</td>
</tr>
<tr>
<td>E-2 Employment Zone</td>
<td>54.5</td>
</tr>
<tr>
<td>Re-designation to Commercial (Crow Road Area)</td>
<td>8.4</td>
</tr>
<tr>
<td>Downtown and Mixed Use Amendments / S-DR Zone</td>
<td>18</td>
</tr>
<tr>
<td>Final Land Supply Sufficiency -- Surplus</td>
<td>7</td>
</tr>
<tr>
<td><strong>Industrial (less than 10 acres in size)</strong></td>
<td></td>
</tr>
<tr>
<td>2012 Land Supply</td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td>435</td>
</tr>
<tr>
<td>Redevelopment</td>
<td>404</td>
</tr>
<tr>
<td>2032 Land Need</td>
<td>283</td>
</tr>
<tr>
<td>2012 Land Sufficiency</td>
<td>152</td>
</tr>
<tr>
<td>2032 Public and Semi-public Demand</td>
<td>31</td>
</tr>
<tr>
<td>Preliminary Land Sufficiency Conclusion</td>
<td>121</td>
</tr>
<tr>
<td>Land Supply Lost from Measures to Increase Commercial Employment</td>
<td>147</td>
</tr>
<tr>
<td>(for Commercial jobs)</td>
<td></td>
</tr>
<tr>
<td>E-1 Employment Zone</td>
<td>48</td>
</tr>
<tr>
<td>E-2 Employment Zone</td>
<td>54</td>
</tr>
<tr>
<td>(for Industrial sites 10 acres or greater)</td>
<td></td>
</tr>
<tr>
<td>Parcel assembly to create 3 15-acre sites</td>
<td>45</td>
</tr>
<tr>
<td>Final Land Supply Sufficiency -- Deficit</td>
<td>(26)</td>
</tr>
<tr>
<td><strong>Industrial (greater than 10 acres in size)</strong></td>
<td></td>
</tr>
<tr>
<td>2012 Land supply</td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td>15</td>
</tr>
<tr>
<td>Redevelopment</td>
<td></td>
</tr>
<tr>
<td>Brownfield/ Parcel Assembly</td>
<td>4</td>
</tr>
<tr>
<td>2032 Land Need</td>
<td>26</td>
</tr>
<tr>
<td>2012 Land Sufficiency</td>
<td>(11)</td>
</tr>
<tr>
<td>Final Land Supply Sufficiency -- Deficit</td>
<td>(11)</td>
</tr>
</tbody>
</table>
Table 5. Industrial Sites Larger than 10 acres After Measures to Increase Development

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Supply (Sites)</th>
<th>Parcel Assembly /Brownfield Remediation</th>
<th>Sites Needed</th>
<th>Site Sufficiency (deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>(2)</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>(3)</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>(2)</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>26</td>
</tr>
</tbody>
</table>

Table 6. Land Deficiency for Industrial Sites Larger than 10 acres

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Site sufficiency (deficit)</th>
<th>Average Site Size (Suitable Acres)</th>
<th>Average Land (Deficit) (Suitable Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>(4)</td>
<td>15</td>
<td>(60)</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>(2)</td>
<td>35</td>
<td>(70)</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>(3)</td>
<td>63</td>
<td>(189)</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>(2)</td>
<td>88</td>
<td>(176)</td>
</tr>
<tr>
<td>Total</td>
<td>(11)</td>
<td>(495)</td>
<td></td>
</tr>
</tbody>
</table>

Based on the City actions, Eugene’s 2012 UGB includes a 20 year supply of land for Commercial employment. Because there is still a remaining need for 11 sites of Industrial land 10 acres or larger in size, the City is required to expand the UGB to address this need. In the subsequent Parts of this Employment Land Study, the City will address the remaining deficit to fulfill the 20 year land demand. The full 20 year employment land supply for both Commercial and Industrial land is identified in Part VI Employment Buildable Lands Inventory (2012-2032).
Part V. UGB Expansion Areas to Address Industrial Land Deficit

Part V includes the following sections and tables:
1. Introduction
2. Conclusion

Table 1. Employment Land Supply Including Policy Decisions, in gross acres, 2012-2032
Table 2. Land Deficiency for Industrial Sites Larger than 10 acres

1. Introduction

The next step is to identify a UGB expansion area that will accommodate the remaining need for large Industrial sites. The City conducted a detailed study of the land surrounding Eugene’s 2012 UGB to identify the appropriate area for a UGB expansion to accommodate the remaining industrial land need. Combining the analysis from the previous Parts of this Study with the expansion area analysis shows how the City will accommodate the entire employment land needs through 2032.

The City’s expansion study, the City of Eugene Urban Growth Boundary Expansion Analysis for Employment Land, details how the proposed UGB expansion for Industrial land accommodates the remaining need for 11 Industrial sites at least 10 acres or greater in size.¹ The Study resulted in the expansion area and large lot portfolio that is part of the City’s 20-year supply and is shown in Figure 3 of Part VI of this Study: Employment Buildable Lands Inventory (2012-2032).

2. Conclusion

As shown in the following Tables 1 and 2, based on the analysis in the preceding Parts of this Employment Land Study and including the UGB expansion illustrated on Figure 1, above, the entire 20 year (2012-2032) employment land demand will be met.

¹ The Urban Growth Boundary Industrial Expansion Study is included in the “findings” attached to the City’s 2017 Ordinance adopting the UGB expansion.
Table 1. Employment Land Supply Including Policy Decisions, in gross acres, 2012-2032

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<thead>
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<td>Vacant</td>
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</tr>
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<td>Redevelopment</td>
<td>31</td>
</tr>
<tr>
<td>2032 Land Need</td>
<td>283</td>
</tr>
<tr>
<td>2012 Land Sufficiency</td>
<td>152(^2)</td>
</tr>
<tr>
<td>2032 Public and Semi-public Demand</td>
<td>31</td>
</tr>
<tr>
<td>Preliminary Land Sufficiency Conclusion</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Parcel assembly to create 3 15-acre sites</td>
<td>45</td>
</tr>
<tr>
<td>Final Land Supply Sufficiency -- met(^3)</td>
<td>(26)</td>
</tr>
</tbody>
</table>

\(^2\) As the Table shows, this 152-acre surplus of smaller Industrial sites inside the UGB is depleted by the public uses need on Industrial land of (31 acres -- See Part III of this Study) and the efficiency measures that create new employment zones that allow for greater employment flexibility (147 acres -- See Part IV of this Study).

\(^3\) As demonstrated in Figure 2 and 3 of Part VI of this Study, the City addresses this deficit of 26 small industrial acres through the inherent need to include some smaller industrial sites in the UGB expansion area.
Industrial (greater than 10 acres in size)  

<table>
<thead>
<tr>
<th>Site supply</th>
<th>Sites (deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant</td>
<td>8</td>
</tr>
<tr>
<td>Redevelopment</td>
<td>4</td>
</tr>
<tr>
<td>Brownfield/ Parcel Assembly</td>
<td>3</td>
</tr>
<tr>
<td>2032 Land Need</td>
<td>26</td>
</tr>
<tr>
<td>2012 Land Sufficiency</td>
<td>(11)</td>
</tr>
<tr>
<td>Land Supply gained from UGB expansion</td>
<td>11</td>
</tr>
<tr>
<td>Final Land Supply Sufficiency -- met</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2. Land Sufficiency for Industrial Sites Larger than 10 acres

<table>
<thead>
<tr>
<th>Site size</th>
<th>Site sufficiency (suitable acres)</th>
<th>Site sufficiency (deficit)</th>
<th>Average Site Size (suitable acres)</th>
<th>Average Land (Deficit) (suitable acres)</th>
<th>UGB Expansion Sites</th>
<th>Land Sufficiency (deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>(4)</td>
<td>15</td>
<td>(60)</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>(2)</td>
<td>35</td>
<td>(70)</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>(3)</td>
<td>63</td>
<td>(189)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>(2)</td>
<td>88</td>
<td>(176)</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>(11)</td>
<td>(495)</td>
<td></td>
<td></td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

The entire 20 year employment land supply and maps are provided in Part VI Employment Buildable Lands Inventory (2012-2032).
Part VI. Employment Buildable Lands Inventory (2012-2032)

Part VI includes the following table and figures:

Table 1. Vacant Employment Land, Eugene 2012-2032
Table 2. Employment Land, Partially Vacant & Baseline Redevelopment, Eugene 2012-2032
Table 3. Additional Employment Land Supply from Measures to Increase Development, in gross acres, Eugene 2012-2032
Table 4. Industrial Sites Larger than 10 acres Sufficiency After Measures to Increase Development and UGB Expansion, Eugene 2012-2032
Table 5. Employees per Acre for Vacant and Partially Vacant Land, Eugene 2012-2032

Figure 1. Employment Lands Supply (2012-2032) and UGB Expansion
Figure 2. Employment Lands Supply (2012-2032) (tiles 1 through 10)
Figure 3. Clear Lake Area UGB Expansion Industrial Large Lot Portfolio (2012-2032)

1. Final 2012-2032 Buildable Lands Inventory

This final Part of the Employment Land Supply Study provides the 20-year Employment Buildable Lands Inventory (BLI) for Eugene. The BLI incorporates the changes made to the 2012 land supply by the Part IV Measures to Increase Employment Development and the Part V UGB Expansion Areas.

As previously shown in Table 1 of Part V, the addition of capacity from actions the City took to increase employment inside the UGB, in addition to expanding the UGB for Industrial sites 10 acres or greater in size, results in the following:

- There is a minor surplus of 7 acres of Commercial land
- The entire need for Industrial land in less than 10 acre sites is accommodated
- The entire need for Industrial sites 10 acres or greater is accommodated

The final BLI maps and acreage in Tables 1-2 and 4-5 in this Part VI reflect the changes in plan designation described in Part IV of this Study (e.g. 10 acres of medium density residential in the Crow Road area were changed to Commercial land) and the UGB expansion in the Clear Lake Road area described in Part V of this Study.
Table 1. Vacant Employment Land, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Vacant Land Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>96.9</td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>3.8</td>
</tr>
<tr>
<td>Campus Industrial</td>
<td>175.7</td>
</tr>
<tr>
<td>Government &amp; Education</td>
<td>0.2</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>102.5</td>
</tr>
<tr>
<td>Light Medium Industrial</td>
<td>319.7</td>
</tr>
<tr>
<td>Major Retail Center</td>
<td>3.9</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>3.1</td>
</tr>
<tr>
<td>Parks and Open Space</td>
<td>63.0</td>
</tr>
<tr>
<td>Parks/OpenSpace Mixed Use</td>
<td>0.0</td>
</tr>
<tr>
<td>Special Heavy Industrial</td>
<td>5.7</td>
</tr>
<tr>
<td>University Research</td>
<td>2.6</td>
</tr>
</tbody>
</table>

As documented in Part I and Part II of this Study, the City identified some additional development capacity to accommodate some jobs on employment land that has existing development:

Table 2. Employment Land, Partially Vacant & Baseline\(^1\) Redevelopment, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Partially Vacant Acres</th>
<th>Redevelopment/ Infill Acres or Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>25</td>
<td>29 acres (not mapped)</td>
</tr>
<tr>
<td>Commercial</td>
<td>23.8</td>
<td></td>
</tr>
<tr>
<td>Commercial Mixed Use</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>0</td>
<td>See below</td>
</tr>
<tr>
<td>Sites smaller than 10 acres</td>
<td>0</td>
<td>31 acres (not mapped)</td>
</tr>
<tr>
<td>Sites larger than 10 acres</td>
<td>0</td>
<td>4 sites (mapped)</td>
</tr>
</tbody>
</table>

As documented in Part IV of this Study, additional capacity was identified as a result of actions the City has taken to accommodate more jobs inside the UGB:

---

\(^1\) Baseline redevelopment is the natural amount of redevelopment expected to occur without additional actions taken by the City to encourage it, as opposed to redevelopment that is stimulated by City actions (e.g. because of enacting measures that increase residential development). Table 4 shows the amount of baseline employment potential on employment land. See also Table 3 for additional capacity created through measures to increase development.
Table 3. Additional Employment Land Supply from Measures* to Increase Development, in gross acres, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Gross Acres</th>
<th>Land Supply</th>
<th>Gross Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 acres</td>
<td>Commercial</td>
<td>Policy changes for uses on Campus Industrial 48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy changes in West Eugene Industrial Areas 54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boosting Redevelopment 18</td>
</tr>
<tr>
<td>3 Sites</td>
<td>Industrial (greater than 10 acres in size)</td>
<td>Land Supply gained from Measures to Increase Employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parcel assembly to create 3 15-acre sites 10 acres or greater 3</td>
</tr>
</tbody>
</table>

*Excludes land supply gained from re-designations. These gains are represented in Tables 1 and 2.

Table 4 shows the full portfolio of the 26 large Industrial sites and the average amount of suitable acres provided in the UGB expansion area².

Table 4. Industrial Sites Larger than 10 acres After Measures to Increase Development and UGB Expansion, Eugene 2012-2032

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Supply Sites</th>
<th>UGB Expansion Average Suitable Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites Needed</td>
<td>Vacant</td>
<td>Redevelop</td>
</tr>
<tr>
<td>10 to 20 acres</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>8</td>
</tr>
</tbody>
</table>

As documented in Part II of this Study (the Economic Opportunities Analysis), the following employees per acre, shown in Table 5, are used to estimate capacity on employment lands:

² The average amount of suitable acres needed in the UGB expansion area is based on the average size of sites in each site size category; see Part II, EOA at Table 36.
In summary, taken together, the vacant, partially vacant and large site supply included in Figures 1 through 3 and Tables 1 through 3 with the employees per acre assumptions provided in Table 4, and the redevelopment estimates provided in Table 2, constitute Eugene’s 2012-2032 Employment Land Buildable Land Inventory.

<table>
<thead>
<tr>
<th>Plan Designation</th>
<th>Employees per Acre³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>68</td>
</tr>
<tr>
<td>Retail</td>
<td>23</td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
</tr>
<tr>
<td>Sites smaller than 10 acres</td>
<td>10</td>
</tr>
<tr>
<td>Sites larger than 10 acres</td>
<td>6-14</td>
</tr>
</tbody>
</table>

³ This is employees per net acre. A net-to-gross conversion ratio of 20% is established in Part II of this Study, the Economic Opportunities Analysis at Table 28.
Figure 1. Employment Land Supply (2012-2032) and UGB Expansion

Plan Designation - Vacant Employment Lands

- Commercial
- Heavy Industrial
- Special Heavy Industrial
- Commercial Mixed Use
- Light Medium Industrial
- Government & Education
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant (PV) / Redevelopment
- Commercial (COM) Partially Vacant (PV)

Urban Growth Boundary (2012)
Water Bodies
Roads

Caution: This map is not suitable for legal, engineering, or surveying purposes.
The location of the UGB line on these maps is imprecise; for the precise location see the Figure 2 2032 Employment Land Supply maps.
Figure 2. Employment Land Supply (2012-2032)

Map tile 1 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Plan Designations - Vacant Employments Lands

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Employment (E) Zone
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Figure 2. Employment Land Supply (2012-2032)

Map tile 2 of 18

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Mixed Use
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
- Industrial (IND) vacant >= 10 acres
- Employment (E) Zone
- 2012 BLI Taxlots
- Major Streets
- UGB Expansion Boundary
- Rail Road
- Urban Growth Boundary
- Water Bodies

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 3 of 18

- Santa Clara UGB Expansion, Land for Parks

Urban Growth Boundary
UGB Expansion Boundary
2012 BLI Taxlots
Major Streets
Rail Road
Water Bodies

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 4 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Land for Parks

Water Quality Management Area

Figure 2. Employment Land Supply (2012-2032)

Map tile 5 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 6 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)
Map tile 7 of 18

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 8 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Plan Designations - Vacant Employments Lands

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- Heavy Industrial
- University Research
- Mixed Use
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Employment (E) Zone
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Figure 2. Employment Land Supply (2012-2032)

Map Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Plan Designations - Vacant Employments Lands

- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Employment (E) Zone
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)

Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 10 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Plan Designations - Vacant Employments Lands

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

### Plan Designations - Vacant Employments Lands

- **Commercial**
- **Major Retail Center**
- **Commercial Mixed Use**
- **Heavy Industrial**
- **Special Heavy Industrial**
- **Light Medium Industrial**
- **Campus Industrial**
- **University Research**
- **Government & Education**
- **Parks and Open Space**
- **Parks/Open Space Mixed Use**
- **Mixed Use**

### Partially Vacant (PV) or Redevelopment Employment Lands

- **Industrial (IND) Partially Vacant / Redevelopment**
- **Commercial (COM) Partially Vacant**
- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Mixed Use
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Map tile 13 of 18
Figure 2. Employment Land Supply (2012-2032)

Map tile 14 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Plan Designations - Vacant Employments Lands

- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Parks and Open Space
- Parks/Open Space Mixed Use
- Government & Education
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands

- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Caution: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.

The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.

For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 16 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Plan Designations - Vacant Employments Lands
- Commercial
- Major Retail Center
- Commercial Mixed Use
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Campus Industrial
- University Research
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.
Figure 2. Employment Land Supply (2012-2032)

Map tile 18 of 18

- Caution: This map is not suitable for legal, engineering, or surveying purposes.
- Data Sources: City of Eugene, RLID.
- The land supply was conducted at a sub-tax lot level analysis; tax lot boundaries are shown for reference only and may change over time.
- For assumed capacity of land shown on the land supply, see Table 5 of Part VI.

Plan Designations - Vacant Employments Lands
- Commercial
- Special Heavy Industrial
- Government & Education
- Parks and Open Space
- Parks/Open Space Mixed Use
- Mixed Use

Partially Vacant (PV) or Redevelopment Employment Lands
- Industrial (IND) Partially Vacant / Redevelopment
- Commercial (COM) Partially Vacant

- Final
- 2012 BLI Taxlots
- Major Streets
- UGB Expansion Boundary
- Water Bodies
- Rail Road

- Miles

- Industrial (IND) vacant >= 10 acres
- Employment (E) Zone
- Developed Commercial & Industrial Lands
- Committed or Protected Lands (in UGB)
Figure 3. Clear Lake Area UGB Expansion Industrial Large Lot Portfolio (2012-2032)

Legend:
- **UGB Expansion Boundary**
- **Urban Growth Boundary (2012)**
- **Taxlots**
- **Light-Medium Industrial (LMI) designation**
- **Campus Industrial designation**

<table>
<thead>
<tr>
<th>Large Lot Category</th>
<th>Lot Size Range (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Less than 10 acres</td>
</tr>
<tr>
<td>A</td>
<td>10 to 19 acres</td>
</tr>
<tr>
<td>B</td>
<td>20 to 49 acres</td>
</tr>
<tr>
<td>C</td>
<td>50 to 74 acres</td>
</tr>
<tr>
<td>D</td>
<td>75 acres or greater</td>
</tr>
<tr>
<td>*</td>
<td>This area is not part of the large lot portfolio due to local geographic uncertainties (e.g. water courses, future transport corridors).</td>
</tr>
</tbody>
</table>

Credits: This map is not suitable for legal, engineering, or surveying purposes.

Data Sources: City of Eugene, RLID.
Table 1 of the Eugene Metropolitan Area Public Facilities and Services Plan is amended as follows:

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Name/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>107</td>
<td>Green Hill/Airport mainline</td>
</tr>
<tr>
<td>108</td>
<td>EWEB/Seneca 42-inch transmission line</td>
</tr>
<tr>
<td>109</td>
<td>City View reservoir (800)</td>
</tr>
<tr>
<td>110</td>
<td>Hayden Bridge Expansion and 10mg Reservoir and pump gallery</td>
</tr>
<tr>
<td>111</td>
<td>Hawkins Hill reservoir seismic upgrades</td>
</tr>
<tr>
<td>112</td>
<td>Willamette reservoir (800) replacement</td>
</tr>
<tr>
<td>113</td>
<td>Shasta constant run pump station (1150)</td>
</tr>
<tr>
<td>114</td>
<td>Willamette pump station (975)</td>
</tr>
<tr>
<td>115</td>
<td>Crenshaw pump station (800)</td>
</tr>
<tr>
<td>116</td>
<td>Hawkins View pump station (1150)</td>
</tr>
<tr>
<td>117</td>
<td>Crest pump station (1150) replacement</td>
</tr>
<tr>
<td>218</td>
<td>Back-up well field development area</td>
</tr>
<tr>
<td>219</td>
<td>Hayden Bridge-former fish hatchery intake modifications</td>
</tr>
<tr>
<td>220</td>
<td>Laurel Hill reservoir (950)</td>
</tr>
<tr>
<td>221</td>
<td>Laurel Hill reservoir and pump station (975)</td>
</tr>
<tr>
<td>222</td>
<td>Laurel Hill pump station (1150)</td>
</tr>
<tr>
<td>223</td>
<td>Shasta reservoir (1150)</td>
</tr>
<tr>
<td>224</td>
<td>Dillard reservoir (975) and pump station (1150)</td>
</tr>
<tr>
<td>225</td>
<td>Dillard reservoir (1150)</td>
</tr>
<tr>
<td>226</td>
<td>Elliot reservoir (607)</td>
</tr>
<tr>
<td>227</td>
<td>Willamette reservoir (1325)</td>
</tr>
<tr>
<td>228</td>
<td>Willamette pump station (1500)</td>
</tr>
<tr>
<td>229</td>
<td>Timberline reservoir (1100)</td>
</tr>
<tr>
<td>230</td>
<td>Timberline pump station (1325)</td>
</tr>
<tr>
<td>231</td>
<td>Gimple Hill reservoir (975) and pump station</td>
</tr>
<tr>
<td>232</td>
<td>Green Hill reservoir (800)</td>
</tr>
<tr>
<td>233</td>
<td>Green Hill reservoir (975)</td>
</tr>
<tr>
<td>234</td>
<td>Green Hill pump station (975)</td>
</tr>
<tr>
<td>235</td>
<td>Westside/Cantrell Hill reservoir (607)</td>
</tr>
<tr>
<td>236</td>
<td>Westside Transmission Main</td>
</tr>
<tr>
<td>237</td>
<td>Glenwood/LCC Basin intertie</td>
</tr>
<tr>
<td>238</td>
<td>Santa Clara pump station and 5 MG reservoir at the existing Santa Clara pump station and reservoir site.</td>
</tr>
<tr>
<td>239</td>
<td>College Hill 5 MG reservoir and decommission existing College Hill 15 MG reservoir</td>
</tr>
<tr>
<td>240</td>
<td>Construct 10,000 feet of 36-inch pipeline in 23rd Avenue and Alder Street</td>
</tr>
</tbody>
</table>
• Table 3 of the Eugene Metropolitan Area Public Facilities and Services Plan is amended as follows:

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Name/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-Term</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>West Eugene Bypass (48-inch)</td>
</tr>
<tr>
<td>101</td>
<td>North River Road pump station</td>
</tr>
<tr>
<td>102</td>
<td>North Willakenzie gravity sewers</td>
</tr>
<tr>
<td>103</td>
<td>North Enid pump station</td>
</tr>
<tr>
<td>100</td>
<td>Bailey Hill/Gimpl Hill pump station</td>
</tr>
<tr>
<td>101</td>
<td>North Willakenzie County Farm Road pump station</td>
</tr>
<tr>
<td>Long-Term</td>
<td></td>
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<tr>
<td>200</td>
<td>North Enid pump station</td>
</tr>
<tr>
<td>200</td>
<td>North Willakenzie pump station</td>
</tr>
<tr>
<td>201</td>
<td>Awbrey Lane pump station</td>
</tr>
<tr>
<td>202</td>
<td>Enid Road pump station and gravity line</td>
</tr>
<tr>
<td>203</td>
<td>North Delta Highway pump station</td>
</tr>
<tr>
<td>204</td>
<td>North Coburg Road pump station</td>
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• Table 5 of the Eugene Metropolitan Area Public Facilities and Services Plan is amended as follows:

<table>
<thead>
<tr>
<th>Project Number</th>
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<tbody>
<tr>
<td>Willakenzie Basin Short-Term</td>
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</tr>
<tr>
<td>1</td>
<td>River Point Pond Outlet Channel</td>
</tr>
<tr>
<td>2</td>
<td>Federal Priority Project- Delta Ponds Enhancement</td>
</tr>
<tr>
<td>Willakenzie Basin Long-Term</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Gilham Road System Water Quality Facility</td>
</tr>
<tr>
<td>4</td>
<td>Gilham Road System Culvert Replacement</td>
</tr>
<tr>
<td>5</td>
<td>Ayers Pond Outfall Retrofit</td>
</tr>
<tr>
<td>6</td>
<td>Wetland Adjacent Coburg &amp; County Farm Roads</td>
</tr>
<tr>
<td>7</td>
<td>Modify Ascot Park Open Waterway</td>
</tr>
<tr>
<td>Laurel Hill Basin Short-Term</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Riverview/Augusta Bypass and System Improvements</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Minor System Between Riverview and Augusta</td>
</tr>
<tr>
<td>10</td>
<td>I-5 and Augusta Water Quality Facility</td>
</tr>
<tr>
<td>11</td>
<td>Riverview/Augusta Minor Storm Drainage System Plan</td>
</tr>
<tr>
<td>12</td>
<td>Bethel Danebo Basin Short-Term</td>
</tr>
<tr>
<td>13</td>
<td>Culvert Replacement in Roosevelt Channel</td>
</tr>
<tr>
<td>14</td>
<td>Green Hill Tributary Stream Enhancements</td>
</tr>
<tr>
<td>15</td>
<td>West Irwin Storm</td>
</tr>
<tr>
<td>16</td>
<td>Bethel Danebo Basin Long-Term</td>
</tr>
<tr>
<td>17</td>
<td>Royal Node Infrastructure</td>
</tr>
<tr>
<td>18</td>
<td>Retrofit Empire Park Pond</td>
</tr>
<tr>
<td>19</td>
<td>Increase Pipe Sizes Along Bell Avenue</td>
</tr>
<tr>
<td>20</td>
<td>Green Hill Tributary Water Quality Facility</td>
</tr>
<tr>
<td>21</td>
<td>Wallis Street Culvert (Bertelsen Slough)</td>
</tr>
<tr>
<td>22</td>
<td>Increase Pipe Sizes Along Garfield Street</td>
</tr>
<tr>
<td>23</td>
<td>Amazon Creek Basin Short-Term</td>
</tr>
<tr>
<td>24</td>
<td>Kinney Park Neighborhood Facility</td>
</tr>
<tr>
<td>25</td>
<td>Federal Priority Project - Upper Amazon Creek Restoration</td>
</tr>
<tr>
<td>26</td>
<td>Martin Drive Pipe Improvements</td>
</tr>
<tr>
<td>27</td>
<td>Hilyard Street Pipe Improvements</td>
</tr>
<tr>
<td>28</td>
<td>Amazon Creek Basin Long-Term</td>
</tr>
<tr>
<td>29</td>
<td>Jackson Street Pipe Improvements</td>
</tr>
<tr>
<td>30</td>
<td>North Laurelwood Water Quality Facility</td>
</tr>
<tr>
<td>31</td>
<td>South Laurelwood Water Quality Facility</td>
</tr>
<tr>
<td>32</td>
<td>Pine View Neighborhood Facility</td>
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<tr>
<td>33</td>
<td>43rd Avenue Pipe Improvements</td>
</tr>
<tr>
<td>34</td>
<td>Morse Ranch Park Pipe Improvements</td>
</tr>
<tr>
<td>35</td>
<td>Option B - Laurelwood Flood Control Facilities and Pipe Improvements</td>
</tr>
<tr>
<td>36</td>
<td>Option B - Mt. Cavalry Pipe Improvements</td>
</tr>
<tr>
<td>37</td>
<td>Option A - Cleveland Street Flow Diversion</td>
</tr>
<tr>
<td>38</td>
<td>Mt. Cavalry Water Quality Facility</td>
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<tr>
<td>39</td>
<td>Option B - Brittany Street Pipe Improvements</td>
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<tr>
<td>40</td>
<td>Option B - Windsor Circle Pipe Improvements</td>
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<tr>
<td>41</td>
<td>Water Quality Facility West of Hawkins Lane</td>
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<td>42</td>
<td>Water Quality Facility at Sam [R.] Reynolds Street</td>
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<tr>
<td>43</td>
<td>Realign/Restore Main Stem Willow Creek</td>
</tr>
<tr>
<td>44</td>
<td>Water Quality Facility at Interior Street</td>
</tr>
<tr>
<td>45</td>
<td>Willow Creek Basin Short-Term</td>
</tr>
<tr>
<td>46</td>
<td>Willow Creek - West Branch Culvert/Channel Retrofits</td>
</tr>
<tr>
<td>47</td>
<td>Willow Creek Basin Long-Term</td>
</tr>
<tr>
<td>48</td>
<td>Realign/Restore Main Stem Willow Creek</td>
</tr>
<tr>
<td>49</td>
<td>Willow Creek - East Branch Culvert/Channel Retrofits</td>
</tr>
<tr>
<td>50</td>
<td>Willamette River Short-Term</td>
</tr>
<tr>
<td>51</td>
<td>Federal Priority Project - Willamette River Bank Restoration</td>
</tr>
<tr>
<td>52</td>
<td>Polk Street Water Quality Facilities</td>
</tr>
<tr>
<td>53</td>
<td>Willamette River Long-Term</td>
</tr>
<tr>
<td>54</td>
<td>Federal Priority Project - Eugene Millrace Enhancements</td>
</tr>
<tr>
<td>55</td>
<td>City-wide Projects Short-Term (not mapped)</td>
</tr>
<tr>
<td>56</td>
<td>Channel Easement Acquisition</td>
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<tr>
<td>57</td>
<td>Stormwater Rehabilitation</td>
</tr>
<tr>
<td>Water Quality Facilities for High Source Areas</td>
<td></td>
</tr>
<tr>
<td>City-wide Projects Long-Term (not mapped)</td>
<td></td>
</tr>
<tr>
<td>[Channel Easement Acquisition]</td>
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</tr>
<tr>
<td>Stormwater Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Water Quality Facilities for High Source Areas</td>
<td></td>
</tr>
<tr>
<td>[River Road-Santa Clara Basin Short-Term]</td>
<td></td>
</tr>
<tr>
<td>[42 Willamette Overflow Channel Upgrade]</td>
<td></td>
</tr>
<tr>
<td>[48 Irvington Road Drainage Improvements]</td>
<td></td>
</tr>
<tr>
<td>[49 River Road Drainage Improvements]</td>
<td></td>
</tr>
<tr>
<td>River Road-Santa Clara Basin Long-Term</td>
<td></td>
</tr>
<tr>
<td>50 Water Quality Project</td>
<td></td>
</tr>
<tr>
<td>51 Flat Creek Low Flow Channel Upgrade</td>
<td></td>
</tr>
<tr>
<td>52 Upgrade Existing Pipe</td>
<td></td>
</tr>
<tr>
<td>53 A-1 Channel Upgrade</td>
<td></td>
</tr>
<tr>
<td>54 Water Quality Facility</td>
<td></td>
</tr>
<tr>
<td>55 Flat Creek Water Quality Facility</td>
<td></td>
</tr>
<tr>
<td>56 Spring Creek Water Quality Project</td>
<td></td>
</tr>
<tr>
<td>57 Spring Creek Culvert Replacement</td>
<td></td>
</tr>
<tr>
<td>58 A-1 Channel, West Tributary Improvements</td>
<td></td>
</tr>
<tr>
<td>Clear Lake UGB Expansion Area Long-Term</td>
<td></td>
</tr>
<tr>
<td>59 Awbrey Lane at Highway 99 Culvert Upgrade/Channel Capacity Enhancements</td>
<td></td>
</tr>
<tr>
<td>60 Green Hill Road/ North of Old Airport Road Channel/Culvert Improvements</td>
<td></td>
</tr>
<tr>
<td>61 Green Hill Road to Awbrey Lane Channel/Culvert Improvements</td>
<td></td>
</tr>
<tr>
<td>62 Clear Lake Road Channel/Culvert Improvements</td>
<td></td>
</tr>
<tr>
<td>63 New Open Channel West of Terry Street (includes estimated acquisition cost)</td>
<td></td>
</tr>
</tbody>
</table>

- Map 1 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Planned Water Facilities” is hereby amended as to remove the following projects:
  107 Green Hill/Airport mainline
  108 EWEB/Seneca 42-inch transmission line
  109 City View reservoir (800)
  110 Hayden Bridge Expansion and 10mg Reservoir and pump gallery
  219 Hayden Bridge-former fish hatchery intake modifications
  220 Laurel Hill reservoir (850)
  223 Shasta reservoir (1150)
  226 Elliot reservoir (607)
  227 Willamette reservoir (1325)
  229 Timberline reservoir (1100)
  230 Timberline pump station (1325)
  235 Westside/Cantrell Hill reservoir (607)
  236 Westside Transmission Main
  237 Glenwood/LCC Basin intertie
• Map 1 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Planned Water Facilities” is hereby further amended to add the projects shown on the map attached to this Ordinance as Exhibit C-2, entitled “Amendment to Eugene-Springfield Public Facilities and Services Plan Map 1: Planned Water Facilities.”

• Map 2 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Planned MWMC Wastewater Project Sites” is hereby amended as to remove the following projects:
  100  West Eugene Bypass (48-inch)
  101  North River Road pump station
  102  North Willakenzie gravity sewers
  103  North Enid pump station
  200  North Willakenzie pump station

• Map 2 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Planned MWMC Wastewater Project Sites” is hereby further amended to add the projects shown on the map attached to this Ordinance as Exhibit C-2, entitled “Amendment to Eugene-Springfield Public Facilities and Services Plan Map 2: Planned MWMC Wastewater Project Sites.”

• Map 3 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Planned Stormwater Facilities” is hereby amended as to remove the following projects:
  1   River Point Pond Outlet Channel
  2   Federal Priority Project- Delta Ponds Enhancement
  5   Ayers Pond Outfall Retrofit
  8   Riverview/Augusta Bypass and System Improvements
  9   Minor System Between Riverview and Augusta
 12   Green Hill Tributary Stream Enhancements
 23   West Irwin Storm
 20   Kinney Park Neighborhood Facility
 22   Martin Drive Pipe Improvements
 24   Hilyard Street Pipe Improvements
 30   43rd Avenue Pipe Improvements
 45   Polk Street Water Quality Facilities
 47   Willamette Overflow Channel Upgrade
 48   Irvington Road Drainage Improvements
 49   River Road Drainage Improvements

• Map 3 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Planned Stormwater Facilities” is hereby further amended to add the projects shown on the map attached to this Ordinance as Exhibit C-2, entitled “Amendment to Eugene-Springfield Public Facilities and Services Plan Map 3: Planned Stormwater Facilities.”
Map 8 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Public Service Availability in the Eugene-Springfield Metropolitan Area” is hereby amended as to remove the following projects:

**Eugene Water & Electric Board Water System Improvement Projects:**

107  Green Hill/Airport mainline
108  EWEB/Seneca 42-inch transmission line
109  City View reservoir (800)
110  Hayden Bridge Expansion and 10mg Reservoir and pump gallery
219  Hayden Bridge-former fish hatchery intake modifications
220  Laurel Hill reservoir (850)
223  Shasta reservoir (1150)
226  Elliot reservoir (607)
227  Willamette reservoir (1325)
229  Timberline reservoir (1100)
230  Timberline pump station (1325)
235  Westside/Cantrell Hill reservoir (607)
236  Westside Transmission Main
237  Glenwood/LCC Basin intertie

**City of Eugene Wastewater System Improvement Projects**

100  West Eugene Bypass (48-inch)
101  North River Road pump station
102  North Willakenzie gravity sewers
103  North Enid pump station
200  North Willakenzie pump station

**City of Eugene Stormwater System Improvement Projects**

1  River Point Pond Outlet Channel
2  Federal Priority Project- Delta Ponds Enhancement
5  Ayers Pond Outfall Retrofit
8  Riverview/Augusta Bypass and System Improvements
9  Minor System Between Riverview and Augusta
12  Green Hill Tributary Stream Enhancements
23  West Irwin Storm
20  Kinney Park Neighborhood Facility
22  Martin Drive Pipe Improvements
24  Hilyard Street Pipe Improvements
30  43rd Avenue Pipe Improvements
45  Polk Street Water Quality Facilities
47  Willamette Overflow Channel Upgrade
48  Irvington Road Drainage Improvements
49  River Road Drainage Improvements
• Map 8 of the Eugene Metropolitan Area Public Facilities and Services Plan entitled “Public Service Availability in the Eugene-Springfield Metropolitan Area” is hereby further amended to add the projects shown on the map attached to this Ordinance as Exhibit C-2, entitled “Amendment to Eugene-Springfield Public Facilities and Services Plan Map 8: Public Service Availability in the Eugene-Springfield Metropolitan Area.”

• Table 13 of the Eugene Metropolitan Area Public Facilities and Services Plan is amended as follows:

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Name/Description</th>
<th>Cost ($000)</th>
<th>Estimated Completion Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>Green Hill/Airport mainline</td>
<td>400</td>
<td>1999</td>
</tr>
<tr>
<td>108</td>
<td>EWEB/Seneca 42-inch transmission line</td>
<td>6,600</td>
<td>2001</td>
</tr>
<tr>
<td>109</td>
<td>City View reservoir (800)</td>
<td>800</td>
<td>2001</td>
</tr>
<tr>
<td>110</td>
<td>Hayden Bridge Expansion and 10mg Reservoir and pump gallery</td>
<td>21,100</td>
<td>2002</td>
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<tr>
<td>111</td>
<td>Hawkins Hill reservoir seismic upgrades</td>
<td>1,927</td>
<td>2016</td>
</tr>
<tr>
<td>112</td>
<td>Willamette reservoir (800) replacement</td>
<td>1,500</td>
<td>2016</td>
</tr>
<tr>
<td>113</td>
<td>Shasta constant run pump station (1150)</td>
<td>500</td>
<td>2016</td>
</tr>
<tr>
<td>114</td>
<td>Willamette pump station (975)</td>
<td>857</td>
<td>2017</td>
</tr>
<tr>
<td>115</td>
<td>Crenshaw pump station (800)</td>
<td>925</td>
<td>2018</td>
</tr>
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<td>116</td>
<td>Hawkins View pump station (1150)</td>
<td>953</td>
<td>2019</td>
</tr>
<tr>
<td>117</td>
<td>Crest pump station (1150) replacement</td>
<td>982</td>
<td>2020</td>
</tr>
<tr>
<td>Long-Term</td>
<td></td>
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</tr>
<tr>
<td>218</td>
<td>Back-up well field development area</td>
<td>10,100</td>
<td>2002-2035*</td>
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<tr>
<td>219</td>
<td>Hayden Bridge former fish hatchery intake modifications</td>
<td>1,000</td>
<td>2010*</td>
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<tr>
<td>220</td>
<td>Laurel Hill reservoir (850)</td>
<td>830</td>
<td>2005*</td>
</tr>
<tr>
<td>221</td>
<td>Laurel Hill reservoir and pump station (975)</td>
<td>1,000</td>
<td>[2007] 2022-2032*</td>
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<tr>
<td>222</td>
<td>Laurel Hill pump station (1150)</td>
<td>150</td>
<td>[2007] 2022-2032*</td>
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<tr>
<td>223</td>
<td>Shasta reservoir (1150)</td>
<td>500</td>
<td>2006*</td>
</tr>
<tr>
<td>224</td>
<td>Dillard reservoir (975) and pump station (1150)</td>
<td>750</td>
<td>[2010*] 2022-2032*</td>
</tr>
<tr>
<td>225</td>
<td>Dillard reservoir (1150)</td>
<td>500</td>
<td>[2010*] 2022-2032*</td>
</tr>
<tr>
<td>226</td>
<td>Elliot reservoir (607)</td>
<td>5,000</td>
<td>2010*</td>
</tr>
<tr>
<td>227</td>
<td>Willamette reservoir (1325)</td>
<td>500</td>
<td>2010*</td>
</tr>
<tr>
<td>228</td>
<td>Willamette pump station (1500)</td>
<td>150</td>
<td>2005-08 2022-2032*</td>
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<td>229</td>
<td>Timberline reservoir (1100)</td>
<td>500</td>
<td>2008*</td>
</tr>
<tr>
<td>230</td>
<td>Timberline pump station (1325)</td>
<td>150</td>
<td>2008*</td>
</tr>
<tr>
<td>231</td>
<td>Gimple Hill reservoir (975) and pump station</td>
<td>750</td>
<td>[2010*] 2022-2032*</td>
</tr>
<tr>
<td>Project Number</td>
<td>Project Name/Description</td>
<td>Cost ($000)</td>
<td>Estimated Completion Year</td>
</tr>
<tr>
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<td>-------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>232</td>
<td>Green Hill reservoir (800)</td>
<td>500</td>
<td>[2010+] 2022-2032*</td>
</tr>
<tr>
<td>233</td>
<td>Green Hill reservoir (975)</td>
<td>500</td>
<td>[2010+] 2022-2032*</td>
</tr>
<tr>
<td>234</td>
<td>Green Hill pump station (975)</td>
<td>250</td>
<td>[2010+] 2022-2032*</td>
</tr>
<tr>
<td>[235]</td>
<td>Westside/Cantrell Hill reservoir (807)</td>
<td>10,000</td>
<td>2010+</td>
</tr>
<tr>
<td>[236]</td>
<td>Westside Transmission Main</td>
<td>1,000</td>
<td>2010+</td>
</tr>
<tr>
<td>[237]</td>
<td>Glenwood/LCC Basin intertie</td>
<td>500</td>
<td>2010</td>
</tr>
<tr>
<td>238</td>
<td>Santa Clara pump station and 5 MG reservoir at the existing Santa Clara pump station and reservoir site.</td>
<td>12,442</td>
<td>2024</td>
</tr>
<tr>
<td>239</td>
<td>College Hill 5 MG reservoir and decommission existing College Hill 15 MG reservoir</td>
<td>9,370</td>
<td>2028</td>
</tr>
<tr>
<td>240</td>
<td>Construct 10,000 feet of 36-inch pipeline in 23rd Avenue and Alder Street</td>
<td>8,971</td>
<td>2030</td>
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<tr>
<td>241</td>
<td>Elliott 5 MG reservoir</td>
<td>9,370</td>
<td>2031</td>
</tr>
<tr>
<td>242</td>
<td>5 MG Reservoir at either the Santa Clara site, Elliott site, or Oak Hill/Cantrell Rd site</td>
<td>9,370</td>
<td>2032</td>
</tr>
</tbody>
</table>

*Timing is dependent upon development pressure

- Table 15 of the Eugene Metropolitan Area Public Facilities and Services Plan is amended as follows:

**Table 15**

**City of Eugene**

**Wastewater System Improvements, Estimated Costs, and Timing**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Name/Description</th>
<th>Cost ($000)</th>
<th>Estimated Completion Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-Term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[100]</td>
<td>West Eugene Bypass (48-inch)</td>
<td>3,350</td>
<td>2002</td>
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<tr>
<td>[101]</td>
<td>North River Road pump station</td>
<td>315</td>
<td>2002</td>
</tr>
<tr>
<td>[102]</td>
<td>North Willakenzie gravity sewers</td>
<td>666</td>
<td>2004</td>
</tr>
<tr>
<td>[103]</td>
<td>North Enid pump station</td>
<td>274</td>
<td>2005</td>
</tr>
<tr>
<td>100</td>
<td>Bailey Hill/Gimpl Hill pump station</td>
<td>800</td>
<td>2016-2021</td>
</tr>
<tr>
<td>[200][101]</td>
<td>[North Willakenzie] County Farm Road pump station</td>
<td>645</td>
<td>[2008] 2016-2021</td>
</tr>
<tr>
<td><strong>Long-Term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[103][200]</td>
<td>North Enid pump station</td>
<td>774</td>
<td>[2005] 2022-2032</td>
</tr>
<tr>
<td>[200]</td>
<td>North Willakenzie pump station</td>
<td>645</td>
<td>2008</td>
</tr>
<tr>
<td>201</td>
<td>Awbrey Lane pump station</td>
<td>300</td>
<td>[2008] 2022-2032</td>
</tr>
<tr>
<td>202</td>
<td>Enid Road pump station and gravity line</td>
<td>4,000</td>
<td>2022-2032</td>
</tr>
<tr>
<td>203</td>
<td>North Delta Highway pump station</td>
<td>600</td>
<td>2022-2032</td>
</tr>
<tr>
<td>204</td>
<td>North Coburg Road pump station</td>
<td>600</td>
<td>2022-2032</td>
</tr>
</tbody>
</table>

- Table 17 of the Eugene Metropolitan Area Public Facilities and Services Plan is amended as follows:
<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Name/Description</th>
<th>Cost ($000)</th>
<th>Estimated Completion Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Willakenzie Basin Short-Term]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willakenzie Basin Long-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laurel Hill Basin Short-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bethel Danebo Basin Short-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bethel Danebo Basin Long-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[17]</td>
<td>Increase Pipe Sizes Along Bell Avenue</td>
<td>795</td>
<td>2012-2035 2022-2032</td>
</tr>
<tr>
<td>[20]</td>
<td>Increase Pipe Sizes Along Garfield Street</td>
<td>1,620</td>
<td>2012-2035 2022-2032</td>
</tr>
<tr>
<td>Amazon Creek Basin Short-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon Creek Basin Long-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[27]</td>
<td>North Laurelwood Water Quality Facility</td>
<td>446</td>
<td>2007-2011 2022-2032</td>
</tr>
<tr>
<td>[30]</td>
<td>43rd Avenue Pipe Improvements</td>
<td>2,156</td>
<td>2012-2035</td>
</tr>
<tr>
<td>[31]</td>
<td>Morse Ranch Park Pipe Improvements</td>
<td>1,004</td>
<td>2012-2035 2022-2032</td>
</tr>
<tr>
<td>[32]</td>
<td>Option B - Laurelwood Flood Control Facilities and Pipe Improvements</td>
<td>2,008</td>
<td>2012-2035 2022-2032</td>
</tr>
<tr>
<td>[33]</td>
<td>Option B - Mt. Cavalry Pipe Improvements</td>
<td>944</td>
<td>2012-2035 2022-2032</td>
</tr>
<tr>
<td>[34]</td>
<td>Mt. Cavalry Water Quality Facility</td>
<td>470</td>
<td>2012-2035 2022-2032</td>
</tr>
<tr>
<td></td>
<td>Project Description</td>
<td>Cost</td>
<td>Date Range</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>---------------------</td>
</tr>
<tr>
<td>35</td>
<td>Option A - Cleveland Street Flow Diversion</td>
<td>422</td>
<td>[2012-2035] 2022-2032</td>
</tr>
<tr>
<td>36</td>
<td>Option B - Brittany Street Pipe Improvements</td>
<td>308</td>
<td>[2012-2035] 2022-2032</td>
</tr>
<tr>
<td>37</td>
<td>Option B - Windsor Circle Pipe Improvements</td>
<td>968</td>
<td>[2012-2035] 2022-2032</td>
</tr>
<tr>
<td>38</td>
<td>Water Quality Facility West of Hawkins Lane</td>
<td>625</td>
<td>[2012-2035] 2022-2032</td>
</tr>
<tr>
<td>40</td>
<td>Water Quality Facility at Interior Street</td>
<td>328</td>
<td>[2012-2035] 2022-2032</td>
</tr>
</tbody>
</table>

**Willow Creek Basin Short-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Willow Creek - West Branch Culvert/Channel Retrofits</td>
<td>36</td>
<td>[2000-2006] 2016-2021</td>
</tr>
</tbody>
</table>

**Willow Creek Basin Long-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Realign/Restore Main Stem Willow Creek</td>
<td>2,689</td>
<td>[2012-2035] 2022-2032</td>
</tr>
<tr>
<td>43</td>
<td>Willow Creek - East Branch Culvert/Channel Retrofits</td>
<td>980</td>
<td>[2012-2035] 2022-2032</td>
</tr>
</tbody>
</table>

**Willamette River Short-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Federal Priority Project - Willamette River Bank Restoration</td>
<td>1,000</td>
<td>[2000-2006] 2016-2021</td>
</tr>
</tbody>
</table>

**Willamette River Long-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
</table>

**City-wide Projects Short-Term (not mapped)**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Channel Easement Acquisition]</td>
<td>Stormwater Rehabilitation</td>
<td>950</td>
<td>2000-2006</td>
</tr>
<tr>
<td></td>
<td>Water Quality Facilities for High Source Areas</td>
<td>2,200</td>
<td>2016-2021</td>
</tr>
</tbody>
</table>

**City-wide Projects Long-Term (not mapped)**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Channel Easement Acquisition]</td>
<td>Stormwater Rehabilitation</td>
<td>1,500</td>
<td>2007-2035</td>
</tr>
<tr>
<td></td>
<td>Water Quality Facilities for High Source Areas</td>
<td>4,000</td>
<td>2022-2032</td>
</tr>
</tbody>
</table>

**River Road - Santa Clara Basin Short-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>[48]</td>
<td>Irvington Road Drainage Improvements</td>
<td>145</td>
<td>2000—2006</td>
</tr>
</tbody>
</table>

**River Road - Santa Clara Basin Long-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Flat Creek Low Flow Channel Upgrade</td>
<td>100</td>
<td>[2007—2011] 2022-2032</td>
</tr>
<tr>
<td>52</td>
<td>Upgrade Existing Pipe</td>
<td>97</td>
<td>[2007—2011] 2022-2032</td>
</tr>
<tr>
<td>55</td>
<td>Flat Creek Water Quality Facility</td>
<td>TBD</td>
<td>[2007—2011] 2022-2032</td>
</tr>
<tr>
<td>56</td>
<td>Spring Creek Water Quality Project</td>
<td>TBD</td>
<td>[2007—2011] 2022-2032</td>
</tr>
<tr>
<td>57</td>
<td>Spring Creek Culvert Replacement</td>
<td>TBD</td>
<td>[2007—2011] 2022-2032</td>
</tr>
</tbody>
</table>

**Clear Lake UGB Expansion Area Long-Term**

<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Cost</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>Awbrey Lane at Highway 99 Culvert Upgrade/Channel Capacity Enhancements</td>
<td>390</td>
<td>2022-2032</td>
</tr>
<tr>
<td>60</td>
<td>Green Hill Road/ North of Old Airport Road Channel/ Culvert Improvements</td>
<td>1,625</td>
<td>2022-2032</td>
</tr>
<tr>
<td>61</td>
<td>Green Hill Road to Awbrey Lane Channel/ Culvert Improvements</td>
<td>880</td>
<td>2022-2032</td>
</tr>
<tr>
<td>62</td>
<td>Clear Lake Road Channel/Culvert Improvements</td>
<td>640</td>
<td>2022-2032</td>
</tr>
<tr>
<td></td>
<td>New Open Channel West of Terry Street (includes estimated acquisition cost)</td>
<td>400</td>
<td>2022-2032</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----------</td>
</tr>
</tbody>
</table>

*Total project costs do not include acquisition costs (unless otherwise noted).*
Amendments to Eugene-Springfield Public Facilities and Services Plan
Map 1: Planned Water Facilities

Water Projects
- Pump Station
- Reservoir
- Transmission Line

Eugene Urban Growth Boundary
Major Streets
Water Bodies

Caution: This map is based on imprecise source data, subject to change, and for general reference only.
Amendments to Eugene-Springfield Public Facilities and Services Plan
Map 2: Planned MWMC Wastewater Project Sites

Wastewater Projects

- Local Pump Station
- Wastewater Lines

Eugene Urban Growth Boundary

Major Streets

Water Bodies

Caution: This map is based on imprecise source data, subject to change, and for general reference only.
Amendments to Eugene-Springfield Public Facilities and Services Plan
Map 3: Planned Stormwater Facilities

Stormwater Projects

- Drainage/Channel Improvements
- Eugene Urban Growth Boundary
- Major Streets
- Water Bodies

Caution: This map is based on imprecise source data, subject to change, and for general reference only.
Amendments to Eugene-Springfield Public Facilities and Services Plan
Map 8: Public Service Availability

This map is based on imprecise source data, subject to change, and for general reference only.
## Transportation System Plan 2035
### Project List Amendments for UGB Expansion

**Complete Street Upgrades of existing streets:**

<table>
<thead>
<tr>
<th>MM-17</th>
<th>Upgrade Clear Lake Road consistent with City of Eugene design standards, including provision of two travel lanes, center turn lane, sidewalks on both sides of the road, and planting strips</th>
<th>Terry Street to Highway 99</th>
<th>1.0</th>
<th>$5.1M</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM-18</td>
<td>Extend Terry Street to Clear Lake Road consistent with major collector standards</td>
<td>Existing Terry Street to Clear Lake Road</td>
<td>.5</td>
<td>$4.3M</td>
</tr>
</tbody>
</table>

**Projects to be Completed upon Development:**

| UD-16   | Extend Terry Street consistent with major collector standards                                                                   | Clear Lake Road to Airport Road | 0.8   | $8.7M |

**Projects to be Completed Beyond 20 years:**

| B-1     | Upgrade Airport Road from Highway 99 to the UGB, consistent with minor arterial standards including provision of two travel lanes, bike lanes, center median or a center turn lane, sidewalks and planting strips on both sides of the road |
Goal 5 Water Resources Conservation Plan Amendments
(Employment, Park and School Land)

A. Delete the following text immediately following the table titled “Locally Significant Wetlands Sites within the Eugene Urban Growth Boundary” in Section III:

“Total acres in Locally Significant Wetland sites: 618.6”

B. Add the following text and table immediately following the table titled “Locally Significant Wetlands Sites within the Eugene Urban Growth Boundary” in Section III:

As part of Eugene’s urban growth boundary adoption in 2017, the following wetlands were identified as Locally Significant Wetlands.

<table>
<thead>
<tr>
<th>#</th>
<th>Site No.</th>
<th>Site Name</th>
<th>Type*</th>
<th>Significant**</th>
<th>Site Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>79</td>
<td>CL-W-3</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>26.71</td>
</tr>
<tr>
<td>80</td>
<td>CL-W-5</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>58.87</td>
</tr>
<tr>
<td>81</td>
<td>CL-W-8</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>1.70</td>
</tr>
<tr>
<td>82</td>
<td>CL-W-14</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>27.11</td>
</tr>
<tr>
<td>83</td>
<td>CL-W-15</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>11.87</td>
</tr>
<tr>
<td>84</td>
<td>CL-W-16</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>1.71</td>
</tr>
<tr>
<td>85</td>
<td>CL-W-17</td>
<td>Clear Lake wetlands</td>
<td>LSW</td>
<td>Yes</td>
<td>2.58</td>
</tr>
</tbody>
</table>

Total acres in Locally Significant Wetland sites: 749.14

*LSW = Locally Significant Wetland

** Significance based on criteria at ORS 197.279(3)(b).

C. Replace “950.7” (which is provided as the “Total acres in riparian corridor sites”) in text immediately following the table titled “Goal 5 Riparian and Upland Wildlife Habitat Sites within the Eugene Urban Growth Boundary” in Section III with “990.86.”
D. In the “Total Acres” column for site no. E56 (River Loop No.1) on the table titled “Goal 5 Riparian and Upland Wildlife Habitat Sites within the Eugene Urban Growth Boundary” in Section III, replace the “2.3” with “4.09.”

E. Add the following text and table immediately following the table titled “Goal 5 Riparian and Upland Wildlife Habitat Sites within the Eugene Urban Growth Boundary” in Section III:

As part of Eugene’s urban growth boundary adoption in 2017, the following riparian corridor was identified as a significant Goal 5 Riparian Corridor.

<table>
<thead>
<tr>
<th>#</th>
<th>Site No.</th>
<th>Site Name</th>
<th>Type</th>
<th>Significant**</th>
<th>Total acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>CL-R</td>
<td>A-3 Channel</td>
<td>R</td>
<td>Yes</td>
<td>38.37</td>
</tr>
</tbody>
</table>

R=Riparian Corridor

** Significance based on OAR 660-023-0030(4)(a).

F. Revise the table entitled “ESEE Conclusions Summary Table – Riparian Corridor Sites” in Section IV of the Goal 5 Water Resources Conservation Plan as follows:

<table>
<thead>
<tr>
<th>SITENAME</th>
<th>SITE LABEL</th>
<th>SUB-SITE LABEL</th>
<th>TYPE</th>
<th>ACRES</th>
<th>ESSEE CONCLUSION</th>
<th>PROPOSED PROTECTION LEVEL</th>
<th>PROPOSED SETBACK (Feet from TOB)</th>
<th>ESEE CONCLUSIONS MAP NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>River Loop No. 1</td>
<td>E56</td>
<td>E56 A-2</td>
<td>R</td>
<td>0.84</td>
<td>1.99 Limit Conflicting Uses</td>
<td>Stream Category D</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>River Loop No. 1</td>
<td>E56</td>
<td>E56 B</td>
<td>R</td>
<td>0.92</td>
<td>1.61 Limit Conflicting Uses</td>
<td>Stream Category D</td>
<td>20</td>
<td>16</td>
</tr>
</tbody>
</table>

G. Add the following three rows (for the A-3 Channel) to the table entitled “ESEE Conclusions Summary Table – Riparian Corridor Sites” in Section IV of the Goal 5 Water Resources Conservation Plan:
H. Add the following seven rows (for the Clear Lake wetlands) to the table entitled “ESEE Conclusions Summary Table – Wetland Sites” in Section IV of the Goal 5 Water Resources Conservation Plan:

<table>
<thead>
<tr>
<th>SITENAME</th>
<th>SITE LABEL</th>
<th>SUB-SITE LABEL</th>
<th>TYPE</th>
<th>ACRES</th>
<th>ESSEE CONCLUSION</th>
<th>PROPOSED PROTECTION LEVEL</th>
<th>PROPOSED SETBACK (Feet from TOB)</th>
<th>ESEE CONCLUSIONS MAP NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Lake wetlands</td>
<td>CL-W-3</td>
<td>CL-W-3</td>
<td>W</td>
<td>26.71</td>
<td>Fully Allow Conflicting Uses</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Clear Lake wetlands</td>
<td>CL-W-5</td>
<td>CL-W-5</td>
<td>W</td>
<td>58.87</td>
<td>Fully Allow Conflicting Uses</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Clear Lake wetlands</td>
<td>CL-W-8</td>
<td>CL-W-8</td>
<td>W</td>
<td>1.70</td>
<td>Fully Allow Conflicting Uses</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Clear Lake wetlands</td>
<td>CL-W-14</td>
<td>CL-W-14</td>
<td>W</td>
<td>27.11</td>
<td>Fully Allow Conflicting Uses</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
H. Amend the Map entitled “Goal 5 Water Resources Conservation Plan, Section III / Significant Goal 5 Riparian Corridors and Wildlife Habitat Sites within the Eugene Urban Growth Boundary / Tile 1 Northwest Eugene” as shown on the maps at Attachments 1 and 2 to this Exhibit.

I. Amend the Map entitled “Goal 5 Water Resources Conservation Plan, Section III / Significant Goal 5 Riparian Corridors and Wildlife Habitat Sites within the Eugene Urban Growth Boundary / Tile 4 Northeast Eugene” as shown on the map at Attachment 1 to this Exhibit.

J. Amend the Map entitled “Goal 5 Water Resources Conservation Plan, Section III / Locally Significant Wetland Sites within the Eugene Urban Growth Boundary / Tile 1 Northwest Eugene” as shown on the map at Attachment 3 to this Exhibit.

K. Amend the Map entitled “Goal 5 Water Resources Conservation Plan, Section IV, Map 16 / Eugene Goal 5 ESEE Conclusions” as shown on the map at Attachment 4 to this Exhibit.
Amendment to:
Goal 5 Water Resources Conservation Plan, Section III
Significant Goal 5 Riparian Corridors and Wildlife Habitat Sites within the Eugene Urban Growth Boundary

Tile 1 - Northwest Eugene
Tile 4 - Northeast Eugene
Amendment to:
Goal 5 Water Resources Conservation Plan, Section III
Significant Goal 5 Riparian Corridors and Wildlife Habitat Sites within the Eugene Urban Growth Boundary

Tile 1 - Northwest Eugene
Amendment to:
Goal 5 Water Resources Conservation Plan, Section III
Locally Significant Goal 5 Wetland Sites
within the Eugene Urban Growth Boundary
Tile 1 - Northwest Eugene
Amendment to:
Goal 5 Water Resources Conservation Plan, Section IV, Map 16
Eugene Goal 5 ESEE Conclusions

Protected Goal 5 Resources

- Eugene Urban Growth Boundary
- Riparian Corridors Designated for Protection
- Eugene City Limits
- Taxlots

Final
Plan Map 1803 (Existing)

Township 18 South, Range 03 West

RCP Plan Designations
- F: Forest
- A: Agricultural
- NL: Natural
- CC: Commercial
- I: Industrial
- R: Residential
- NR: Non-Resource
- NRCA: Natural Resource Conservation Area
- NR-W: Natural Resource - Water
- NR-O: Natural Resource - Other
- R: Rural
- SW: Special Use
- SW-D: Special Use District (Residential)
- FP: Public Facility

LSU
- 2: Sections
- 3: Townships
- 4: Parcels
- 6: Roads

City Limits
- Roads
- Metro Plan Boundary
- Surface Water

Original Adoption ordinance number: ORD-PA-1246

Revision:
- Date Effective: July 11, 2006
- Revision 1:
- Description: Map Adopted

Revision: 2
- Date Effective: June 4, 2013
- Revision 2:
- Description: Changes to 101-002

Revision: 3
- Date Effective: March 30, 2016
- Revision 3:
- Description: Town Planning

Revision: 4
- Date Effective:
- Description:

Revision: 5
- Date Effective:
- Description:

Revision: 6
- Date Effective:
- Description:

Revision: 7
- Date Effective:
- Description:

Revision: 8
- Date Effective:
- Description:

Revision: 9
- Date Effective:
- Description:

Revision: 10
- Date Effective:
- Description:

Official Lane County Plan Map

Plan Map 1803 (Existing)
Zoning Map 1704 (Existing)
Findings for Ordinance Establishing Sufficiency of Eugene UGB for Purposes of Employment, Park and School Land

The findings, below, present State criteria first, then local government criteria. The State criteria are presented in order of the Statewide Planning Goals. State statutes and administrative rules are addressed under the Statewide Planning Goal to which they relate.

Statewide Planning Goal 1 – Citizen Involvement

*Statewide Planning Goal 1* -- “To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.”

The action taken by this ordinance do not amend or affect either jurisdiction’s state acknowledged citizen involvement program. Therefore, Statewide Planning Goal 1 does not directly apply to the City and County actions.

The City’s and County’s citizen involvement programs were adopted into the Eugene Code, and into the County’s Code for the Eugene urban transition area. They include a formal land use review procedure with public notification, meetings and hearings. The public engagement actions for the Envision Eugene work were completed consistently with the acknowledged citizen involvement programs and went far beyond the requirements of those programs to ensure that citizens had opportunities to be involved in the process. The “Envision Eugene Public Engagement” document, included in the record, summarizes the Envision Eugene public engagement efforts used to educate the public and obtain feedback on the 20-year growth planning efforts, from the visioning process to the now proposed urban growth boundary (UGB) adoption package.

Statewide Planning Goal 2 – Land Use Planning

*Statewide Planning Goal 2* -- “To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.”

The Eugene and Lane County land use codes specify the procedures and criteria that were used in considering these amendments. The findings documents show that the record includes an adequate factual base for the amendments. The record shows the City studied its residents’ 20-year needs for employment, parks and schools, compiled an inventory of lands and other factual information related to Goals 9 and 14, evaluated alternative courses of actions and made ultimate policy choices based on the criteria addressed in more detail throughout these findings.
Consistent with the Goal 2 coordination requirement, there was a significant exchange, or invitation for such an exchange, between the City and affected governmental units. The information obtained in these exchanges was used to balance the needs of the citizens. The City and County coordinated and jointly adopted the UGB amendments. For the ordinance adopting the urban growth boundary for jobs, parks and schools, intergovernmental coordination included the following:

- **The Department of Land Conservation and Development (DLCD)** was engaged through notice of the proposed action, regular contact with the City of Eugene’s regional representative, and periodic presentations at DLCD where staff was invited to comment on the proposed action.
- **Lane County**, which will jointly adopt the UGB amendments, was engaged through notice of the proposed action and opportunity to comment, as well as meetings with staff and coordination with elected officials at key points throughout the process of developing the proposal. The County was invited to (and did) send a County Commissioner to participate in the Community Resource Group during the early visioning phase of the Envision Eugene project. City staff collaborated with County staff to provide informational updates and presentations to the County Planning Commission and Board of Commissioners at key points in the Envision Eugene process. The County also participated in the adoption process for measures that increased the capacity of land inside the UGB to accommodate employment needs.
- **City of Springfield** was engaged through notice of the proposed action and opportunity to comment.
- **City of Junction City** was engaged through direct communication with Planning staff, including discussion of the proposed action and opportunity to comment.
- **City of Creswell** was engaged through direct communication with Planning staff, including discussion of the proposed action and opportunity to comment.
- **Junction City Water Control District** was engaged through direct involvement in the identification of concerns and strategies regarding the UGB expansion near its jurisdictional boundaries.
- **Bethel School District** was engaged through coordination on identifying its 20-year land need and strategies to meet it.
- **Eugene School District 4J** was engaged through coordination on identifying its 20-year land need and the determination that its needs can be met without a UGB expansion.
- **Junction City School District** was engaged through coordination on identifying its 20-year land need and the determination that its needs can be met without a UGB expansion.
- **University of Oregon** was engaged through meetings early in the process and at key points along the way to identify future needs and concerns.
- **Lane Transit District (LTD)** was engaged through meetings early in the process and at key points along the way to identify needs and concerns.
- **Eugene Water and Electric Board (EWEB)** was engaged through direct coordination regarding the delivery of services both within the current UGB and proposed expansions, and through planning of their downtown riverfront site which added capacity to increase employment inside the current urban growth boundary.
Statewide Planning Goal 3 – Agricultural Lands

*Statewide Planning Goal 3* -- “To preserve and maintain agricultural lands.”

OAR 660-024-0020(1)(b) provides that Statewide Planning Goal 3 is not applicable when amending a UGB. Therefore, Goal 3 is not applicable. Consideration of Agricultural land is addressed under Goals 9 and 14.

Statewide Planning Goal 4 – Forest Lands

*Statewide Planning Goal 4* -- “To conserve forest lands. . .”

OAR 660-024-0020(1)(b) provides that Statewide Planning Goal 4 is not applicable when amending a UGB. Therefore, Goal 4 is not applicable. Consideration of Forest land is addressed under Goals 9 and 14.

Statewide Planning Goal 5 – Natural Resources, Scenic and Historic Areas, and Open Spaces

OAR Chapter 660, Division 23

*Statewide Planning Goal 5* -- “To protect natural resources and conserve scenic and historic areas and open spaces.”

Both the City of Eugene and Lane County have adopted / acknowledged programs for protecting and conserving the types of resources, areas and spaces referenced in Statewide Planning Goal 5 for land within the current UGB. The actions taken by this ordinance do not include any which would change the Goal 5 program inside the current UGB.

The Goal 14 UGB rule specifies the circumstances under which Goal 5 applies to a UGB amendment. It states that, when establishing or amending a UGB:

OAR 660-024-0020(1)(c) - Goal 5 and related rules under OAR chapter 660, division 23, apply only in areas added to the UGB, except as required under OAR 660-023-0070 and 660-023-0250.

These findings apply to the areas added to the UGB (Clear Lake and Santa Clara). The following findings address whether Goal 5 also applies in other areas.

OAR 660-023-0070 - Buildable Lands Affected by Goal 5 Measures

(1) If measures to protect significant resource sites inside urban growth boundaries affect the inventory of buildable lands in acknowledged plans required by Goals 9, 10 and 14, a local government outside of the Metro UGB, and Metro inside the Metro UGB, prior to or at the next
periodic review, shall: (a) Amend its urban growth boundary to provide additional buildable lands sufficient to compensate for the loss of buildable lands caused by the application of Goal 5; (b) Redesignate other land to replace identified land needs under Goals 9, 10, and 14 provided such action does not take the plan out of compliance with other statewide goals; or (c) Adopt a combination of the actions described in subsections (a) and (b) of this section.

The actions taken do not include the adoption of measures to protect significant Goal 5 resource sites inside the UGB that existed at the time of the actions. (If it had done so, this rule would require the City and County to, prior to or at the next periodic review, expand the UGB to compensate for the loss of buildable lands caused by the application of Goal 5, redesignate other land to replace identified land needs or both.)

the City is taking measures (application of the /WR Water Resources overlay zone) to protect significant resource sites in the proposed Santa Clara UGB expansion area, but those Goal 5 measures do not affect any land on the acknowledged (pre-expansion) BLI, or a proposed BLI, as they are located on land that needed to provide a community park.

Based on this, OAR 660-023-0070 does not constitute an exception to the rule at 660-024-0020(1)(c) which provides that Goal 5 and related rules under OAR chapter 660, division 23, apply only in areas added to the UGB.

OAR 660-023-0250(3) - Applicability

Local governments are not required to apply Goal 5 in consideration of a PAPA unless the PAPA affects a Goal 5 resource. For purposes of this section, a PAPA would affect a Goal 5 resource only if:

(a) The PAPA creates or amends a resource list or a portion of an acknowledged plan or land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5;
(b) The PAPA allows new uses that could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list; or
(c) The PAPA amends an acknowledged UGB and factual information is submitted demonstrating that a resource site, or the impact areas of such a site, is included in the amended UGB area.

The actions taken do not change existing Goal 5 lists or site protections, as described in OAR 660-023-0250(3)(a) and (b).

OAR 660-023-0250(3)(c) requires the City to apply Goal 5 only within the UGB expansion area and only to respond to factual information submitted into the local record demonstrating that the expansion area includes a Goal 5 resource sit. Although not required to do so, the City and County chose to be

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1 Testimony submitted by Bill Kloos, on behalf of the Eugene Sand and Gravel Co., argues that the City and County are required to expand the UGB to include, for urban industrial development, mining land that is currently on the County’s inventory of Goal 5 aggregate resources, and that is currently subject to Goal 5 protections (protective comprehensive plan designation and County zoning). The City and County have found that the Goal 5 listing and protection measures that apply to the vast majority of the mining site impose development constraints on that portion of the site that make it unavailable for industrial development. Based on the mining company’s claims that
proactive in determining whether there are any significant riparian corridor sites, wetland sites, wildlife habitat sites or impact areas within the UGB expansion areas. The City wishes to be as certain as possible that the expansion area can be developed to serve the industrial employment needs of the City’s population for 20 years. Significant resource protections can impact whether land is truly developable. Therefore, although the City could have simply waited to respond to any evidence presenting information about a potential Goal 5 resource in the UGB expansion area, the City hired a professional natural resources consultant, Pacific Habitat Services, Inc. (PHS), to conduct a study of the Clear Lake and Santa Clara UGB expansion areas. That study revealed the location of riparian corridor, wetland, and wildlife habitat resources in the expansion areas. In response, consistent with the Goal 5 rules at OAR 660-023 addressed below, the City has applied Goal 5 within the UGB expansion areas.

OAR 660-023-0250 does not constitute an exception to the rule at 660-024-0020(1)(c), which provides that Goal 5 and related rules under OAR chapter 660, division 23, apply only in areas added to the UGB.

**OAR 660-023-0060 - Notice and Land Owner Involvement.** Local governments shall provide timely notice to landowners and opportunities for citizen involvement during the inventory and ESEE process. Notification and involvement of landowners, citizens, and public agencies should occur at the earliest possible opportunity whenever a Goal 5 task is undertaken in the periodic review or plan amendment process. A local government shall comply with its acknowledged citizen involvement program, with statewide goal requirements for citizen involvement and coordination, and with other applicable procedures in statutes, rules, or local ordinances.

See findings under Statewide Planning Goal 1.

Prior to beginning the inventory field work, selected landowners in the proposed UGB expansion areas (i.e. those suspected of having wetlands or stream on their property) were mailed notices by the City describing the project and asking permission to enter their property. Right of access was granted to PHS by landowner permission only. The properties of those not responding were not accessed. Information regarding right of access was collected by the City and provided to PHS for incorporation into project field maps.

Following the field work and preparation of the draft reports, the City held public meetings on May 23, 2012 and June 25, 2014 for property owners in the Clear Lake expansion area to discuss details of the Goal 5 inventory and to provide comments. Staff from the Division of State Lands attended the second meeting. Additional community meetings with expansion area property owners, nearby property owners, and other interested parties of the Clear Lake expansion area were held June 24, 2015 and September 15, 2016. The purpose of these latter two meetings was to provide an update on the expansion proposal, including the formal adoption process, wetlands, zoning, and land use code proposals. Letters were also sent to property owners in the expansion area on October 10, 2014 and December 1, 2015 to provide updates on the expansion proposal. City staff were also on hand to discuss wetlands and related topics at other more general project meetings throughout 2015 and 2016. The City

it no longer has a significant resource to protect, the City has urged the mining company to apply to the County for a formal review and possible removal from the County’s Goal 5 program. To date, Eugene Sand and Gravel has not submitted such an application and the land remains as a protected Goal 5 resource. This is addressed in the UGB expansion Analysis for Employment land at Appendix B to these Findings.
has also maintained a website (www.envisioneugene.org) for the duration of the project where copies of the draft inventories and the ESEE have been available for review.

As the Santa Clara expansion area is solely owned by the City, Planning staff have worked closely with City Parks and Open Space staff regarding the inventory and ESEE process for the expansion area. Numerous meetings, phone calls and emails were exchanged to discuss the details of the inventory process and results.

The ordinance has been processed by the City and County consistently with their citizen involvement programs. This includes notice and hearings before both jurisdictions’ planning commissions and elected officials.

**Wetlands (Standard Process)**

For wetland resources, the standard Goal 5 process (not the “safe harbor” process) was used. The standard process for wetlands includes the following steps, addressed in the findings below:

1. **Conduct an Inventory Process to compile a list of significant resources in the UGB expansion areas.**
   
   (A) Conduct a Local Wetlands Inventory (LWI) and adopt the LWI as part of the comprehensive plan or as a land use regulation.
   
   (B) Determine which wetlands on the LWI are “significant wetlands” by using criteria adopted by DSL.
   
   (C) Adopt the list of significant wetlands as part of the comprehensive plan or as a land use regulation.

2. **Through the following 4 steps, use the ESEE Decision Process to analyze the consequences of completely protecting the significant resource sites identified in 1(c), above, or, instead, allowing some or all uses that could conflict with the resources, then determine whether the significant resource sites should get full protection, partial protection or no protection.**

   (A) Identify Conflicting Uses
   
   (B) Determine the Impact Area
   
   (C) Analyze the ESEE Consequences
   
   (D) Develop a Program to Achieve Goal 5

3. **Adopt Protection Measures for those significant resource sites identified for protection under 2. above.**

As discussed above, the City chose to be proactive in identifying Goal 5 resources present in the UGB expansion areas. As soon as the proposed expansion areas were identified through the Goal 14 / Goal 9 process, the City hired Pacific Habitat Services, Inc. (“PHS”) to gather information on potential wetlands in both the Clear Lake and Santa Clara expansion areas. This information was submitted to the City in two documents. For the Clear Lake area, PHS’s wetland information is set out in a report dated May
2014 entitled “City of Eugene Local Wetland Inventory – Clear Lake Area UGB Expansion.” For the Santa Clara area, PHS’s wetland information is set out in a memo to the City dated October 21, 2014.²

The City hired a second consultant, Winterbrook, to conduct the second part of the Goal 5 process (ESEE Decision Process). Winterbrook’s work is set out in a report dated December 8, 2016 titled “Goal 5 ESEE Analysis for Significant Wetlands and Riparian Corridors."

1. Conduct an Inventory Process to compile a list of significant resources in the UGB expansion areas.
   (A) OAR 660-023-0100(3)(a) - Conduct a LWI using the standards and procedures of OAR 141-086-0110 through 141-086-0240 and adopt the LWI as part of the comprehensive plan or as a land use regulation.

For the Santa Clara UGB expansion area, PHS conducted a study that is described and documented in its October 21, 2014 memo. PHS found that, in the Santa Clara expansion area, there were no wetland areas greater than .5 acre. Under the Division of State Lands (“DSL”) rules in OAR 141-086, these wet areas “must be represented as points on the appropriate parcel(s) and should be labeled as “P[otential] W[etlands]” on the maps. No further characterization or assessment is required for probable wetlands in the LWI.” As required, these areas were mapped as “Potential Wetlands” on an LWI (Figure 2 in Attachment A to PHS’s memo). That “Local Wetlands Inventory – Figure 2” is included in these findings at Appendix F.³

For the Clear Lake area, PHS prepared a LWI using the standards and procedures of OAR 141 (DSL rules) as noted on page 4 of PHS’ report. That LWI (an index and three maps) is also included in these findings at Appendix F. PHS identified 17 wetlands in the Clear Lake Area. The Clear Lake Area Local Wetland Inventory was submitted to Division of State Lands in 2014, who conducted an initial review and generally concurred with the analysis, inventory and findings of significance.⁴

(B) OAR 660-023-0100(3)(b) - Determine which wetlands on the LWI are “significant wetlands” by using the criteria adopted by DSL pursuant to ORS 197.279(3)(b)

For purposes of the Goal 5 inventory, local governments are required to apply specific criteria adopted by DSL to those wetland sites included on the LWI. Those that meet the criteria are “significant wetlands” and must be included on the area’s Goal 5 inventory of wetlands (but are not necessarily protected wetlands, as addressed, below).

PHS found that, based on their size and status as “Potential Wetlands” under DSL’s rules, none of the five wet areas in the Santa Clara expansion area are significant wetlands. See October, 21, 2014 memo

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² The subject line on PHS’ October 21, 2014 memo mistakenly states: “City of Eugene Local Wetland Inventory - Clear Lake Area UGB Expansion.” To reflect its content, the subject line should state: “City of Eugene Local Wetland Inventory and Riparian Corridors - Santa Clara Area UGB Expansion.”

³ In an email from Ed Moore (DLCD) to Carolyn Burke (City of Eugene) dated January 30, 2013, DLCD confirmed that the City does not need to have Division of State Lands approval of the local wetlands inventory prior to or concurrent with the adoption of the amendment to expand the urban growth boundary because DSL will not formally approve the LWIs until after the new UGB has been established. The adoption of the LWI will occur under a separate process following UGB adoption.

⁴ See previous footnote.
and its attached Wetland Determination Data Forms. Therefore, the remainder of these wetland findings pertain only to the Clear Lake expansion area.

For the significance determinations in the Clear Lake expansion area, PHS complied with this rule as demonstrated in substantial detail in sections 8.1 and 8.2 of its May 2014 report. Based on its analysis, PHS identified seven significant wetlands in the Clear Lake expansion area (and found that ten wetlands were not significant). As noted above, the Clear Lake Area Local Wetland Inventory was submitted to Division of State Lands in 2014, who conducted an initial review and generally concurred with the analysis, inventory and findings of significance.

(C) OAR 660-023-0100(3)(b) - Adopt the list of significant wetlands as part of the comprehensive plan or as a land use regulation.

The list of significant wetlands (all within the Clear Lake area) is added to the adopted list of significant wetlands in the City / County Goal 5 Water Resources Conservation Plan as part of this action. See section 9 of City’s Ordinance.

2. Through the following 4 steps, use the ESEE Decision Process to analyze the impacts of protecting the significant resource sites or, instead, allowing some or all uses that could conflict with the resources; determine whether the significant resource sites should get full protection, partial protection or no protection. (OAR 660-023-0040)

(A) Identify Conflicting Uses

660-23-0040(2) - Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site.

660-023-0010(1) - "Conflicting use" is a land use, or other activity reasonably and customarily subject to land use regulations, that could adversely affect a significant Goal 5 resource . . . Local governments are not required to regard agricultural practices as conflicting uses.

This requirement is addressed in detail on pages 16 – 21 of the December 8, 2016 ESEE analysis prepared by Winterbrook, which is included at Appendix F to these findings.

660-23-0040(2) - The following shall also apply in the identification of conflicting uses:

(a) If no uses conflict with a significant resource site, acknowledged policies and land use regulations may be considered sufficient to protect the resource site. The determination that there are no conflicting uses must be based on the applicable zoning rather than ownership of the site. (Therefore, public ownership of a site does not by itself support a conclusion that there are no conflicting uses.)

(b) A local government may determine that one or more significant Goal 5 resource sites are conflicting uses with another significant resource site. The local government shall
determine the level of protection for each significant site using the ESEE process and/or the requirements in OAR 660-023-0090 through 660-023-0230 (see OAR 660-023-0020(1)).

Conflicting uses have been identified, so subsection (a) is inapplicable. The consultant did not determine that any significant Goal 5 resource sites are conflicting uses with another significant resource site, so subsection (b) is inapplicable.

(B) Determine the Impact Area

660-23-0040(3) - Local governments shall determine an impact area for each significant resource site. The impact area shall be drawn to include only the area in which allowed uses could adversely affect the identified resource. The impact area defines the geographic limits within which to conduct an ESEE analysis for the identified significant resource site.

660-023-010(3) - "Impact area" is a geographic area within which conflicting uses could adversely affect a significant Goal 5 resource.

For the reasons stated at pages 15-16 of its December 8, 2016 ESEE analysis, Winterbrook determined that the entire Clear Lake expansion area is the impact area.

(C) Analyze the ESEE Consequences

660-23-0040(4) - Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more resource sites that are within the same area or that are similarly situated and subject to the same zoning. The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular resource sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource. The ESEE analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5. The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation.

Winterbrook’s analysis conducted an ESEE analysis for the seven significant wetland sites in the Clear Lake expansion area. That detailed analysis is set out at pages 21 – 67 of its December 8, 2016 report, which is included at Appendix F to these findings.

(D) Develop a Program to Achieve Goal 5

660-023-0040(5) - Develop a program to achieve Goal 5. Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determinations shall be reached with regard to conflicting uses for a significant resource site:
(a) A local government may decide that a significant resource site is of such importance compared to the conflicting uses, and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource, that the conflicting uses should be prohibited. (b) A local government may decide that both the resource site and the conflicting uses are important compared to each other, and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource site to a desired extent. (c) A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. The ESEE analysis must demonstrate that the conflicting use is of sufficient importance relative to the resource site, and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.

This requirement is addressed in detail on pages 66 – 67 of the December 8, 2016 ESEE analysis prepared by Winterbrook, which is included at Appendix F to these findings. The City is proposing to not protect the wetlands locally, consistent with (c) above. As described in the ESEE, this “No Local Protection Program” means the wetland areas can be developed, consistent with other regulations that will apply (e.g. zoning, wetland banking, inter-agency coordination, stormwater management planning, the application of the Goal 6 /WQ Water Quality overlay zone to two major stormwater conveyance channels, and a city-approved area-wide stormwater master plan that incorporates green infrastructure). Furthermore, the wetlands will continue to be regulated by the Oregon Department of State Lands and the US Army Corps of Engineers.

Riparian Areas (Standard Process)

For riparian resources, the standard Goal 5 process (not the “safe harbor” process) was used. The standard Goal 5 process for Riparian Areas includes the following steps, addressed in the findings below:

1. Conduct an Inventory Process to compile a list of significant resources in the UGB expansion areas by taking the following 4 steps:
   (A) Collect Information about Goal 5 Resource Sites
   (B) Determine the Adequacy of the Information
   (C) Determine the Significance of the Resource Sites
   (D) Adopt a List of Significant Resource Sites

2. Through the following 4 steps, use the ESEE Decision Process to analyze the consequences of completely protecting the significant resource sites or, instead, allowing some or all uses that could conflict with the resources, then determine whether the significant resource sites should get full protection, partial protection or no protection.
   (A) Identify Conflicting Uses
   (B) Determine the Impact Area
   (C) Analyze the ESEE Consequences
   (D) Develop a Program to Achieve Goal 5

3. Adopt Protection Measures for those significant resource sites identified for protection under 2. above.
As discussed above, the City chose to be proactive in identifying Goal 5 resources present in the UGB expansion areas. The City hired PHS to address the first part of the Goal 5 process (Inventory Process) in both the Clear Lake and Santa Clara areas. PHS provided the City with this information in two documents. For the Clear Lake area, PHS’s riparian area information is included in a report dated May 2014 entitled “City of Eugene Local Wetland Inventory - Clear Lake Area UGB Expansion.” For the Santa Clara area, PHS’s riparian area information is included in a memo to the City dated October 21, 2014. In addition, the City consulted the acknowledged Goal 5 work pertaining to riparian corridors, to identify any riparian corridors protected within the City’s current UGB that extend into one of the expansion areas.

The City hired a second consultant, Winterbrook, to conduct the second part of the Goal 5 process (ESEE Decision Process). Winterbrook’s work is set out in a report dated December 8, 2016 titled “Goal 5 ESEE Analysis for Significant Wetlands and Riparian Corridors” which is included at Appendix F to these findings.

1. **Conduct an Inventory Process to compile a list of significant resources in the UGB expansion areas by taking the following 4 steps (OAR 660-023-0030):**

   (A) **Collect Information about Goal 5 Resource Sites**

   660-23-0030(2) - The inventory process begins with the collection of existing and available information, including inventories, surveys, and other applicable data about potential Goal 5 resource sites. If a PAPA or periodic review work task pertains to certain specified sites, the local government is not required to collect information regarding other resource sites in the jurisdiction. When collecting information about potential Goal 5 sites, local governments shall, at a minimum:

   (a) Notify state and federal resource management agencies and request current resource information; and

   (b) Consider other information submitted in the local process.

For riparian corridors, 660-023-0090(4) sets out a more specific requirement with regard to the consultation of federal and state agencies. That rule is addressed below. To the extent any information about potential riparian areas was submitted during the local process, that information is referenced and addressed in these findings.

660-023-0090(4) - When following the standard inventory process in OAR 660-023-0030, local governments shall collect information regarding all water areas, fish habitat, riparian areas, and wetlands within riparian corridors. Local governments may postpone determination of the precise location of the riparian area on lands designated for farm or forest use until receipt of applications for local permits for uses that would conflict with these resources. Local governments are encouraged, but not required, to conduct field investigations to verify the location, quality, and quantity of resources within the riparian corridor. At a minimum, local governments shall consult the following sources, where available, in order to inventory riparian corridors along rivers, lakes, and streams within the jurisdiction:

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5 The subject line on PHS’ October 21, 2014 memo mistakenly states: “City of Eugene Local Wetland Inventory - Clear Lake Area UGB Expansion.”
(a) Oregon Department of Forestry stream classification maps;
(b) United States Geological Service (USGS) 7.5-minute quadrangle maps;
(c) National Wetlands Inventory maps;
(d) Oregon Department of Fish and Wildlife (ODFW) maps indicating fish habitat;
(e) Federal Emergency Management Agency (FEMA) flood maps; and
(f) Aerial photographs.

As noted previously, the standard inventory process in OAR 600-023-0030 was followed in the inventory of riparian corridors for the Clear Lake and Santa Clara UGB expansion areas. In an email dated December 6, 2016, Pacific Habitat Services, Inc. confirmed that the sources listed in (a) through (f) above, or an equivalent, were consulted in the inventory of riparian corridors for Clear Lake and Santa Clara UGB expansion areas.

(B) Determine the Adequacy of the Information
660-023-0030(3) - In order to conduct the Goal 5 process, information about each potential site must be adequate. A local government may determine that the information about a site is inadequate to complete the Goal 5 process based on the criteria in this section. This determination shall be clearly indicated in the record of proceedings. . . . When local governments determine that information about a site is inadequate, they shall not proceed with the Goal 5 process for such sites unless adequate information is obtained, and they shall not regulate land uses in order to protect such sites. The information about a particular Goal 5 resource site shall be deemed adequate if it provides the location, quality and quantity of the resource, as follows:

(a) Information about location shall include a description or map of the resource area for each site. The information must be sufficient to determine whether a resource exists on a particular site. However, a precise location of the resource for a particular site, such as would be required for building permits, is not necessary at this stage in the process.

(b) Information on quality shall indicate a resource site’s value relative to other known examples of the same resource. While a regional comparison is recommended, a comparison with resource sites within the jurisdiction itself is sufficient unless there are no other local examples of the resource. Local governments shall consider any determinations about resource quality provided in available state or federal inventories.

(c) Information on quantity shall include an estimate of the relative abundance or scarcity of the resource.

For the Santa Clara UGB expansion area, in its October 21, 2014 memo, PHS found that there were no riparian areas. However, information taken from the acknowledged Goal 5 work that pertains to adjacent land within the City’s current UGB shows that there is a riparian corridor with Goal 5 protections that continues from within the UGB into the Santa Clara UGB expansion area (Riparian Corridor identified as E56 in the City / County 2005 Goal 5 work). In a memo from Alissa Hansen dated November 28, 2016, she explains that Eugene staff have recommended that that riparian corridor E56 be assigned the same protections within the expansion area that it currently has in the areas already
within the UGB. The City’s previous determination of adequate information carries forward for this corridor, including mapping, site visits, and information on quality and quantity.

For the Clear Lake UGB expansion area, in its May 2014 report PHS identified four reaches of the A-2 Channel as riparian areas. In addition to being previously mapped in the City’s GIS system, and by PHS as part of their Goal 5 inventory work, on-site inspections of each identified riparian area were conducted by PHS and by City staff to verify location and quality. The methodology used by PHS to assess the condition of the riparian corridors (the Urban Riparian Inventory and Assessment Guide (URIAG) (DSL 1998)) is described in detail on pages 17-19 of their May 2014 report. PHS confirmed via an email on December 6, 2016 that as part of their inventory and assessment, they utilized information from aerial photographs, the National Wetlands Inventory, United States Geological Service maps, Oregon Department of Forestry, Oregon Department of Fish and Wildlife and federal flood hazard maps.

Based on the available information, the City has determined that information about each potential site is adequate, consistent with the above OAR.

(C) Determine the Significance of the Resource Sites

660-023-0030(4) - For sites where information is adequate, local governments shall determine whether the site is significant. This determination shall be adequate if based on the criteria in subsections (a) through (c) of this section, unless challenged by the department, objectors, or the commission based upon contradictory information. The determination of significance shall be based on:

(a) The quality, quantity, and location information;
(b) Supplemental or superseding significance criteria set out in OAR 660-023-0090 through 660-023-0230; and
(c) Any additional criteria adopted by the local government, provided these criteria do not conflict with the requirements of OAR 660-023-0090 through 660-023-0230.

For riparian areas, there are no supplemental or superseding significance criteria set out in OAR 660-023-0090 through 660-023-0230 as referenced in -0030(4)(b). Further, the City did not adopt any additional criteria for this Goal 5 process as referenced in -0030(4)(c). Therefore, the determination of significance was based on the quantity, quality and location information as referenced in -0030(4)(a).

For the Santa Clara UGB expansion area, in its October 21, 2014 memo, PHS found that there were no riparian areas. However, as noted above, information taken from the acknowledged Goal 5 work that pertains to adjacent land within the City’s current UGB shows that there is a significant riparian corridor with Goal 5 protections that continues from within the UGB into the Santa Clara UGB expansion area (Riparian Corridor identified as E56 in the City / County 2005 Goal 5 work). In a memo from Alissa Hansen dated November 28, 2016, she explains that Eugene staff have recommended that that riparian corridor E56 be assigned the same protections within the expansion area that it currently has in the areas already within the UGB. In this case, they are of the same quality, quantity, and location.

For the Clear Lake UGB expansion area, in their May 2014 report, PHS assessed the four identified reaches of the A-2 Channel using the URIAG methodology. All four of the inventoried riparian areas rate “high” for water quality functioning, due to the low slopes within the riparian area, the presence of
complete vegetative cover, and the near lack of impervious areas. In the flood management category, all four rate “medium.” Flood management is determined by the presence of flood prone areas, the dominance or absence of woody vegetation in flood prone areas, and whether the water resource is constricted by man-made features. All reaches rated low for thermal regulation, the result of few trees in the riparian area and no vegetation shading the water resources. As a result of these same conditions, and the open mowed and agricultural uses, these areas rated low to medium for wildlife habitat. However, in a subsequent phone conversation with the Oregon Department of Fish and Wildlife (ODFW) staff, it was confirmed that the reaches are fish-bearing.\(^6\) While the quantity (over 38 intact acres of riparian area in an agricultural setting) and location (a major tributary of the Amazon Creek system that eventually flows into the Fern Ridge Reservoir), are notable, based on available information related to quality, including the high water quality function, and identification as a fish-bearing stream by ODFW, the riparian areas are determined to be significant.

**(D) Adopt a List of Significant Resource Sites**

660-023-0030(5) - When a local government determines that a particular resource site is significant, the local government shall include the site on a list of significant Goal 5 resources adopted as a part of the comprehensive plan or as a land use regulation.

As discussed previously, riparian resource sites in both the Santa Clara and Clear Lake UGB expansion areas have been determined to be significant. As such, an amendment to the adopted list of significant riparian resources is included as part of the UGB adoption. See section 9 of the City’s Ordinance.

2. **Through the following 4 steps, use the ESEE Decision Process to analyze the impacts of protecting the significant resource sites or, instead, allowing some or all uses that could conflict with the resources; determine whether the significant resource sites should get full protection, partial protection or no protection. (OAR 660-023-0040)**

(A) **Identify Conflicting Uses**

660-23-0040(2) - Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site.

For riparian areas, the rule at -0090(7) provides more specific direction for the identification of conflicting uses. It sets out the specific activities that, if allowed outright or conditionally within the applicable zones, must be considered as conflicting uses with riparian resources.

660-023-0090(7) - When following the standard ESEE process in OAR 660-023-0040 and 660-023-0050, a local government shall comply with Goal 5 if it identifies at least the following activities as conflicting uses in riparian corridors:

(a) **The permanent alteration of the riparian corridor by placement of structures or impervious surfaces, except for:**

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\(^6\) Phone conversation between Alissa Hansen, City of Eugene and Karen Hans, Assistant District Fish Biologist, Oregon Department of Fish and Wildlife, on January 15, 2016.
(A) Water-dependent or water-related uses; and
(B) Replacement of existing structures with structures in the same location that
do not disturb additional riparian surface area; and
(b) Removal of vegetation in the riparian area, except:
(A) As necessary for restoration activities, such as replacement of vegetation with
native riparian species;
(B) As necessary for the development of water-related or water-dependent uses;
and
(C) On lands designated for agricultural or forest use outside UGBs.

For the Santa Clara UGB expansion area, as described in a memo from Alissa Hansen dated November 28, 2016, the conflicting uses are described in the City’s 2005 “Conflicting Uses and ESEE Analysis”
document.

For the Clear Lake UGB expansion area, conflicting uses are addressed in detail on pages 16 – 21 of the
December 8, 2016 ESEE analysis prepared by Winterbrook, which is included at Appendix F to these
findings.

660-23-0040(2) - The following shall also apply in the identification of conflicting uses:
(a) If no uses conflict with a significant resource site, acknowledged policies and land
use regulations may be considered sufficient to protect the resource site. The
determination that there are no conflicting uses must be based on the applicable
zoning rather than ownership of the site. (Therefore, public ownership of a site
does not by itself support a conclusion that there are no conflicting uses.)
(b) A local government may determine that one or more significant Goal 5 resource
sites are conflicting uses with another significant resource site. The local
government shall determine the level of protection for each significant site using
the ESEE process and/or the requirements in OAR 660-023-0090 through 660-023-
0230 (see OAR 660-023-0020(1)).

Conflicting uses have been identified, so subsection (a) is inapplicable. The consultant did not determine
that any significant Goal 5 resource sites are conflicting uses with another significant resource site, so
subsection (b) is inapplicable.

(B) Determine the Impact Area
660-23-0040(3) - Local governments shall determine an impact area for each significant
resource site. The impact area shall be drawn to include only the area in which allowed
uses could adversely affect the identified resource. The impact area defines the
geographic limits within which to conduct an ESEE analysis for the identified significant
resource site.

For the Santa Clara UGB expansion area, the impact area is described in a memo from Alissa Hansen
dated November 28, 2016. For the reasons stated at pages 15- 16 of its December 8, 2016 (in Appendix
F to these findings) Winterbrook determined that the entire Clear Lake UGB expansion area is the
impact area.
(C) Analyze the ESEE Consequences
660-23-0040(4) Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more resource sites that are within the same area or that are similarly situated and subject to the same zoning. The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular resource sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource. The ESEE analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5. The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation.

For the Santa Clara UGB expansion area, the ESEE analysis is described in a memo from Alissa Hansen dated November 28, 2016,

Winterbrook’s analysis conducted an ESEE analysis for the significant riparian corridor site in the Clear Lake UGB expansion area. That detailed analysis is set out at pages 21 - 67 of its December 8, 2016 report, which is included at Appendix F to these findings.

(D) Develop a Program to Achieve Goal 5
660-023-0040(5) Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determinations shall be reached with regard to conflicting uses for a significant resource site:

(a) A local government may decide that a significant resource site is of such importance compared to the conflicting uses, and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource, that the conflicting uses should be prohibited.

(b) A local government may decide that both the resource site and the conflicting uses are important compared to each other, and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource site to a desired extent.

(c) A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. The ESEE analysis must demonstrate that the conflicting use is of sufficient importance relative to the resource site, and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.

For the Santa Clara UGB expansion area, as described in a memo from Alissa Hansen dated November 28, 2016, the City determined that a limited protection program (application of the /WR Water
Resources Conservation overlay zone) was appropriate, thereby allowing the conflicting uses in a limited way that protects the significant riparian corridors. This is documented through an amendment to section IV of the Water Resources Conservation Plan and the application of the /WR Overlay Zone to the appropriate land, both actions taken as part of this ordinance.

For the Clear Lake UGB expansion area, this requirement is addressed in detail on pages 66 – 67 of the December 8, 2016 ESEE analysis prepared by Winterbrook, which is included at Appendix F to these findings. The City is proposing to fully allow conflicting uses within the riparian corridors, consistent with (c) above. This is documented through an amendment to section IV of the Water Resources Conservation Plan. As described in the ESEE, this “No Local Protection Program” means the wetland areas can be developed, consistent with other regulations that will apply (e.g. zoning, wetland banking, inter-agency coordination, stormwater management planning, the application of the Goal 6 /WQ Water Quality overlay zone to two major stormwater conveyance channels and a city-approved area-wide stormwater master plan that incorporates green infrastructure). Furthermore, any wetlands within the riparian corridors will continue to be regulated by the Oregon Department of State Lands and the US Army Corps of Engineers.

3. Adopt Protection Measures for those Significant Resource Sites Identified for Protection under 2. above. (660-023-0050)

660-023-0050(1) For each resource site, local governments shall adopt comprehensive plan provisions and land use regulations to implement the decisions made pursuant to OAR 660-023-0040(5). The plan shall describe the degree of protection intended for each significant resource site. The plan and implementing ordinances shall clearly identify those conflicting uses that are allowed and the specific standards or limitations that apply to the allowed uses. A program to achieve Goal 5 may include zoning measures that partially or fully allow conflicting uses (see OAR 660-023-0040(5)(b) and (c)).

For significant sites identified for protection in the Santa Clara UGB expansion area, as described in a memo from Alissa Hansen dated November 28, 2016, the City is applying an already-acknowledged acknowledged Goal 5 protection measure – the /WR Water Resources Conservation overlay zone – as part of this ordinance.

**Wildlife Habitat Areas (Safe Harbor Process)**

For wildlife habitat resources, the safe harbor Goal 5 process was used. When new wildlife habitat areas are identified, the safe harbor process includes specific steps to determine whether to protect the site and, if so, how to do so. As explained below, no new habitat sites were identified in either expansion area.

As discussed above, the City chose to be proactive in identifying Goal 5 resources present in the UGB expansion area. The City hired PHS to conduct an inventory of wildlife habitat sites in both the Clear
Lake and Santa Clara areas. PHS provided the City with this information in a memo to the City dated June 22, 2015.\textsuperscript{7}

1. Conduct an Inventory Process to compile a list of significant resources in the UGB expansion areas by applying the safe harbor criteria in OAR 660-023-0110(4).
   (A) Under the safe harbor, local governments may determine that "wildlife" does not include fish, and that significant wildlife habitat is only those sites where one or more of the following conditions exist:
   (1) OAR 660-023-0110(4)(a) - The habitat has been documented to perform a life support function for a wildlife species listed by the federal government as a threatened or endangered species or by the state of Oregon as a threatened, endangered, or sensitive species;
   (2) OAR 660-023-0110(4)(b) - The habitat has documented occurrences of more than incidental use by a species described in subsection (a) of this section;
   (3) OAR 660-023-0110(4)(c) - The habitat has been documented as a sensitive bird nesting, roosting, or watering resource site for osprey or great blue herons pursuant to ORS 527.710 (Oregon Forest Practices Act) and OAR 629-024-0700 (Forest Practices Rules);
   (4) OAR 660-023-0110(4)(d) - The habitat has been documented to be essential to achieving policies or population objectives specified in a wildlife species management plan adopted by the Oregon Fish and Wildlife Commission pursuant to ORS Chapter 496; or
   (5) OAR 660-023-0110(4)(e) - The area is identified and mapped by ODFW as habitat for a wildlife species of concern and/or as a habitat of concern (e.g., big game winter range and migration corridors, golden eagle and prairie falcon nest sites, or pigeon springs).

These criteria are directly addressed in PHS’ June 22, 2015 memorandum, incorporated herein by this reference. In the Santa Clara expansion area, PHS found no significant wildlife habitat. In the Clear Lake area, PHS found one area of significant wildlife habitat.

(B) Adopt a List of Significant Resource Sites
660-023-0030(5) Adopt a list of significant resource sites: When a local government determines that a particular resource site is significant, the local government shall include the site on a list of significant Goal 5 resources adopted as a part of the comprehensive plan or as a land use regulation.
660-023-0110(5) For certain threatened or endangered species sites, publication of location information may increase the threat of habitat or species loss. Pursuant to ORS 192.501(13), local governments may limit publication, display, and availability of location information for such sites. Local governments may adopt inventory maps of these areas, with procedures to allow limited availability to property owners or other specified parties.

\textsuperscript{7} The subject line on PHS’ October 21, 2014 memo mistakenly states: “City of Eugene Local Wetland Inventory - Clear Lake Area UGB Expansion.” To reflect its content, the subject line should state: “City of Eugene Local Wetland Inventory and Riparian Corridors - Santa Clara Area UGB Expansion.”
PHS’ June 22, 2015 memorandum concludes that there are no significant wildlife habitat areas in the Santa Clara UGB expansion area. There is one area of significant wildlife habitat located in the Clear Lake UGB expansion area. A Goal 5 Significant Wildlife Habitat map of the resource area in the Clear Lake area has been provided to the City of Eugene but due to restrictions on data distribution from the Oregon Biodiversity Information Center (ORBIC), and to protect the species and its habitat, neither the habitat nor the species have been named herein. This area of habitat is already identified on Lane County’s acknowledged inventory of significant wildlife habitat for lands inside the Metro Plan and outside the current urban growth boundary (see policy C.16 from Chapter III, section C of the Metro Plan). Pursuant to 660-023-0110(5), Lane County has limited publication, display and availability of location information. To the extent that state agencies require review of the County’s adopted Goal 5 map and protection measures for this site, the County will make the information available.


With the expansion of the UGB into the area, the County will continue to apply the already-acknowledged protection measures for this wildlife habitat site. This action simply transfers the site from the County’s rural Goal 5 inventory to the Goal 5 Water Resources Conservation Plan which applies within the Eugene UGB. New land use designations and zoning will not conflict with those acknowledged protection measures: this significant wildlife habitat site will continue to be located on publically owned land and the County will to rely on the acknowledged level of protection for the site, which is to rely on state and/or federal protections and to send notice of any development permit or land use application to the Oregon Department of Fish and Wildlife.

Statewide Planning Goal 6 – Air, Water and Land Resources Quality

Statewide Planning Goal 6 -- “To maintain and improve the quality of the air, water and land resources of the state.”

The State has not yet adopted specific requirements for complying with Statewide Planning Goal 6. The City and County are in compliance with environmental standards and statutes, including the federal Clean Water Act and Clean Air Act. The actions taken are consistent with the jurisdictions’ future compliance with those laws. New development will be required to comply with the City’s stormwater standards and, in some areas, the /WQ Water Quality overlay zone adopted by the City as a tool to implement Statewide Planning Goal 6. The areas are subject to the regulations of the Lane Regional Air Protection Agency and, upon annexation, the Eugene Toxics Right to Know board.
Statewide Planning Goal 7 – Areas Subject to Natural Hazards

*Statewide Planning Goal 7* -- “To protect people and property from natural hazards.”

The State has not yet adopted specific requirements for complying with Statewide Planning Goal 7. In determining which areas are appropriate for future development and, therefore, included on the City’s BLI, the City considered the existence of natural hazards in terms of slope and flood hazards, eliminating areas with such hazards from the inventory. Existing regulations intended to address hazard areas in the context of proposed developments will continue to apply.

Statewide Planning Goal 8 – Recreation Needs

*Statewide Planning Goal 8* -- “To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.”

Goal 8 focuses on the provision of destination resorts. However, it does impose a general obligation on the City to plan for meeting its residents’ recreational needs: “(1) in coordination with private enterprise; (2) in appropriate proportions; and (3) in such quantity, quality and locations as is consistent with the availability of the resources to meet such requirements.”

Goal 8 provides that “Recreation Needs -- refers to existing and future demand by citizens and visitors for recreations areas, facilities and opportunities.” Goal 8 also provides that “Recreation Areas, Facilities and Opportunities -- provide for human development and enrichment, and include but are not limited to: open space and scenic landscapes; recreational lands; history, archaeology and natural science resources; scenic roads and travelers; sports and cultural events; camping, picnicking and recreational lodging; tourist facilities and accommodations; trails; waterway use facilities; hunting; angling; winter sports; mineral resources; active and passive games and activities.”

Eugene has a robust and diverse system of parks, recreation areas and open spaces, including parks with active and passive recreation opportunities, such playgrounds, ball fields, tennis courts, pedestrian and bicycle paths, basketball courts, hiking trails, skate parks, dog parks, BMX track, boat launch, swimming pools, golf course, picnic areas, viewpoints, disc golf, community gardens, and recreation centers.

Planning for parks and recreation is guided by two documents; the Parks, Recreation and Open Space (PROS) Comprehensive Plan; and the Parks, Recreation and Open Space Project and Priority Plan. The former was developed as an aspirational guiding document for the City’s park and open space system, and the latter, adopted by city council, represents the list of projects intended to implement the Parks, Recreation and Open Space Comprehensive Plan.
Although most areas in Eugene are well served, the Parks, Recreation and Open Space Project and Priority Plan identifies several specific areas within the community that are deficient in parks and recreation opportunities, and includes strategies to acquire and develop additional needed facilities. The Santa Clara area is underserved by parks, and does not have any community parks. The Bethel area is also identified as an underserved area for parks.

The Parks, Recreation and Open Space Project and Priority Plan includes strategies to acquire and develop a community park sites to serve the Santa Clara and Bethel areas. Community parks are intended to be developed for active and passive recreation, and typically include children’s play areas, basketball courts, open play areas, reservable picnic areas, gathering spaces, restrooms, ball fields, pathways/trails, natural areas, off-street parking, transit access and bicycle parking. These parks need to be within the urban growth boundary so they can served by city facilities, including wastewater, water and stormwater.

Parks are also addressed under Statewide Planning Goal 14, governing the establishment and change of urban growth boundaries based on, in part, the need for parks or open space. See “UGB Expansion Analysis for Park Land” at Appendix C to these findings for additional details regarding the City’s need for additional park land.

State statutes (e.g. ORS 195.120, 195.125) impose no park planning requirements on the City. The City’s actions do not implement a master plan for a particular park and, therefore, state administrative rules at OAR 660-0034 also impose no requirements.

Statewide Planning Goal 9 – Economic Development

OAR Chapter 660, Division 9

Statewide Planning Goal 9 – “To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.”

Goal 9 requires the City to provide, through its comprehensive plan, at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses. It provides:

- Comprehensive plans shall be based on inventories of areas suitable for increased economic growth and activity after taking into consideration the health of the current economic base; materials and energy availability and cost; labor market factors; educational and technical training programs; availability of key public facilities; necessary
support facilities; current market forces; location relative to markets; availability of renewable and non-renewable resources; availability of land; and pollution control requirements.

With this action, the City is documenting and adding to its inventory of land suitable for economic growth and activity. See the Envision Eugene Employment Land Supply Study at Appendix B to the Envision Eugene Comprehensive Plan. In determining which land is suitable for Eugene’s increased economic growth, the City conducted an assessment of the community’s economic potential as required by Goal 9 and OAR 660-009-015(4). That assessment is set out at section 4 of the Envision Eugene Economic Opportunities Analysis document (“EOA”). The EOA is in section II of the Employment Land Supply Study. Section 4.7 of the EOA addresses Eugene’s economic advantages and disadvantages as described above and at OAR 660-009-0015(4).

- Comprehensive plans for urban areas shall:
  1. Include an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends;

This action includes the adoption of the EOA as section II of the Employment Land Supply Study, an appendix to the Envision Eugene Comprehensive Plan. The analysis required by this part of Goal 9 is located in the EOA at Chapter 3.

  2. Contain policies concerning the economic development opportunities in the community;

This Goal 9 requirement is implemented by OAR 660-009-0020, requiring specific economic development policies. See findings under OAR 660-009-0020, below. This action includes the adoption of the Envision Eugene Comprehensive Plan, which sets out those required policies and other policies concerning the economic development opportunities in the community as part of the “Economic Development” Chapter.

  3. Provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies;

This Goal 9 requirement is implemented through more specific requirements set out in OAR 660, Division 9, addressed below. As explained below, the EOA contains analysis and a determination of the City’s commercial and industrial site needs through 2032. See EOA at Chapter 6. The 2012 Land Supply Study located in Part I of the Envision Eugene Employment Land Supply Study, identified land to meet most of the employment needs on land already located within the UGB at the commencement of the planning period in 2012. While all commercial needs can be met on land already in the City’s UGB, the analysis in Appendix B to these findings (“UGB Expansion Analysis for Employment Land”) identifies a modest expansion of the UGB to address the industrial site needs that cannot be met on land already inside the UGB.

Analysis and Actions taken to increase the 2012 supply, as described in Parts II-V of the Employment Land Supply Study (including a UGB expansion in the Clear Lake Area), demonstrate that the final Employment Land Buildable Lands Inventory for 2012-2032 (set out at Park VI of the Employment Land
Supply Study) provides for an adequate supply of sites as required by this Goal 9 provision. All of the City's needed commercial and industrial sites are identified in the BLI. As those findings show, the UGB expansion adds only the industrial sites needed to meet the City's needs through 2032.

4. **Limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with proposed uses.**

This Goal 9 requirement is implemented through designations in the Eugene-Springfield Metropolitan Area General Plan (Metro Plan) and specific policies in the EECP. Section II.G of the Metro Plan identified appropriate uses in industrial and commercial designated areas of a variety of intensities. The location of areas with these designations is identified in the Metro Plan Diagram (Metro Plan section II.G). These designations are further implemented through the City of Eugene Code: Chapter 9 – Land Use, sections 9.2100, 9.2400, and 9.3000. The EECP includes the following policies in Chapter 3, which limit uses in specific industrial and commercial zones: 3.17, 3.19, 3.22, and 3.23. These combined policies and codes limit uses in industrial and commercial areas to those which are compatible with proposed uses.

**OAR Chapter 660, Division 9**

OAR Chapter 660, Division 9 implements Statewide Planning Goal 9. OAR 660-009-0010 states that LCDC will determine the effort necessary to comply with OAR 660-009-0015 through 660-009-0030 “depending upon the size of the jurisdiction, the detail of previous economic development planning efforts, and the extent of new information on national, state, regional, county, and local economic trends. A jurisdiction's planning effort is adequate if it uses the best available or readily collectable information to respond to the requirements of this division.”

**660-009-0015 -- Economic Opportunities Analysis.**

Cities and counties must review and, as necessary, amend their comprehensive plans to provide economic opportunities analyses containing the information described in sections (1) to (4) of this rule. This analysis will compare the demand for land for industrial and other employment uses to the existing supply of such land.

As explained throughout these findings, the City has conducted a detailed EOA, adopted as Part II of the Envision Eugene Employment Land Supply Study (an appendix to the Envision Eugene Comprehensive Plan). As described below, the EOA contains the information described in (1) to (4) of 660-009-0015.

As required by Statewide Planning Goal 14 and its implementing rules, the City has identified the supply of employment land that existed within the UGB in 2012, at the commencement of the 20-year planning period. This supply is summarized in Part I of the Employment Land Supply Study. (See findings under Goal 14, below). Chapter 6 of the EOA sets out the analysis comparing that 2012 employment land supply with the demand for employment land that will arise through 2032. For most employment sites needed, the EOA concludes that the 2012 supply is sufficient. However, the 2012 supply of land is insufficient to meet the 2032 need for: 4 sites of between 10–20 acres, 2 sites of between 20-50 acres, 3
sites of between 50-65 acres, and 2 sites of at least 75 acres. Therefore, the City and County actions include an expansion of the UGB to provide for those 11 needed industrial sites.  

(1) Review of National, State, Regional, County and Local Trends. The economic opportunities analysis must identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county or local trends.

Chapter 3 of the EOA includes an analysis of national, state, regional, county and local trends that help determine the kinds of economic opportunities that are reasonably likely in Eugene over the 20 year planning period. This trend analysis (along with the assessment of community potential) is used by the City to ensure that its “target industries” include only industries that are reasonably likely to locate in Eugene.

(2) Identification of Required Site Types. The economic opportunities analysis must identify the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses.

As required by this rule, the City uses an employment growth estimate in determining its need for employment sites. OAR 660-024-0040 (addressed under Goal 14) specifies that job growth estimates are not necessarily proportional to population growth, but must be reasonably justified. LCDC has adopted optional safe harbors for determining job growth rate and made them available to Eugene. Use of a safe harbor provides the “reasonable justification” required by LCDC’s rules. Eugene’s employment growth estimate relies on the safe harbor at OAR 660-024-0040(9)(A), allowing cities to “estimate that the number of jobs in the urban area will grow during the 20-year planning period at a rate equal to . . . [t]he county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department.” Section 5.1.2 of the EOA provides the analysis and application of this safe harbor. The City’s use of the safe harbor (1.43%) job growth rate is consistent with other analysis conducted and heavily vetted through numerous citizen involvement initiatives.

Sections 5.1.3 – 5.2.2 of the EOA considers the City’s need to accommodate a 1.43% job growth rate (33,688 new jobs) through new jobs in industries that are reasonably expected to locate in Eugene. As explained by the DLDC Director in the Scappoose Order, OAR 660-009-0015(2) “grants latitude to the city to create site categories to suit its needs. Site characteristics may then be attached to the site categories provided that are typical and reasonably related to the use.” DLCD Order 1816, 8. The Court of Appeals, agreeing with LUBA, has explained that “site characteristics” need not be ‘indispensable’ to a particular use in order be necessary for a particular industrial or other employment use to operate.” Friends of Yamhill County v. Newberg, 240 Or App 738, 747 (2011). The Court endorsed “more pragmatic approach toward accommodating economic growth: That ‘necessary’ site characteristics are

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8 As an efficiency measure, to meet a deficit of commercial land, the City adopted new, more flexible employment zones that allow a mix of commercial and residential uses. These zone were applied to some small industrial lots inside the UGB. Consideration of public uses that take place on industrial land and the impact of these rezoning actions resulted in a minor deficit - 26 acres - of industrial land located on small lots (lots of less than 10-acres). This deficit is documented in the Employment Land Supply Study at Part IV. This deficit is also addressed in the UGB expansion.
those attributes that are reasonably necessary to the successful operation of particular industrial or employment uses, in the sense that they bear some important relationship to that operation.” Id.

Based on such information, the City identified site characteristics in the EOA. The EOA, Part II of the Employment Land Supply Study, addresses “Site Needs for Target Industries” in its section 6.2. For purposes of its evaluation of land, the City of Eugene chose to include only the most essential site characteristics identified through data and studies cited by ECONorthwest in the City’s EOA: those focused on minimum acreage needs and proximity to a freight route. The EOA contains detailed information justifying these site characteristics for the different types of employment-generating development that Eugene is expecting to attract based on its economic development strategy. In addition to relying on the expertise of the City’s EOA consultant (ECONorthwest), the City worked with the Eugene Chamber of Commerce to identify the reasons that employers needed by Eugene have rejected Eugene’s employment land in the past, in terms of site suitability. The City also received information from current employers, with first-hand knowledge of site needs. Specifically, the expansion sites needed in Eugene must:

- Be a contiguous area comprised of one or two tax lots that could accommodate one of the following:9
  - an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
  - an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
  - an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
  - an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)
- Have access via existing or planned roads, within 1 mile of the site, to a State Designated Freight Route (see State Highway Freight System map inset below).10 State Designated Freight Routes within one mile of the study area are:
  - Interstate 5
  - Interstate 105 west of I-5
  - Randy Papé Beltline
  - Highway 99 north of Randy Papé Beltline
  - Highway 126 west of Randy Papé Beltline

9 An unconstrained higher priority site that is too small to meet any of the size characteristics above, but is within a mile of access to a State Designated Freight Route is not dismissed from further consideration if it could possibly be combined with an adjacent lower priority site to meet the size criterion. For such sites, the analysis below specifies that the site will be considered further along with adjacent lower priority sites, to determine whether the inclusion of it in combination with a lower-priority site can reduce the need to expand onto lower priority land.

10 Access is measured from along existing or planned roads to access points for the routes, such as an intersection, entrance or exit.
(3) Inventory of Industrial and Other Employment Lands. Comprehensive plans for all areas within urban growth boundaries must include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use.

This action includes the adoption of a 2012-2032 Employment Buildable Lands Inventory at Part VI of the Employment Land Supply Study. It identifies the location of all vacant and developed lands designated for industrial or other employment use within the Eugene UGB.

This action also includes the adoption of a land supply analysis of the employment land within the UGB, prior to the expansion that takes place as part of this action. That analysis is Part I of the “Employment Land Supply Study” appendix to the Envision Eugene Comprehensive Plan. It identifies the location of all vacant and partially vacant lands designated for industrial or other employment use within the Eugene UGB and estimates for redevelopment.

(a) For sites inventoried under this section, plans must provide the following information:

(A) The description, including site characteristics, of vacant or developed sites within each plan or zoning district;

This action includes the adoption of the 2012-2032 Employment Buildable Lands Inventory at Part VI of the Employment Land Supply Study, which describes vacant and developed sites within each plan district (plan designation). As explained, site characteristics, including specific development constraints and existing land uses, were used in the City’s land supply model to identify the sites to be included on the Inventory.

(B) A description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory; and

The 2012 Land Supply Study at Part I of the Employment Land Supply Study appendix to the Envision Eugene Comprehensive Plan describes development constraints or infrastructure needs that affect the buildable area of sites that ultimately appear on the 2012-2032 Employment Buildable Lands Inventory.

(C) For cities and counties within a Metropolitan Planning Organization, the inventory must also include the approximate total acreage and percentage of sites within each plan or zoning district that comprise the short-term supply of land.

Eugene and Lane County are within a Metropolitan Planning Organization (the Central Lane Metropolitan Planning Organization). “Short-term supply” is “suitable land that is ready for construction within one year of an application for a building permit or request for service extension.” OAR 660-009-0005(10). The rule specifies that “[e]ngineering feasibility is sufficient to qualify land for the short-term supply of land. Funding availability is not required.” In the 2012 Employment Land Study at Part I of the Employment Land Supply Study (see subsection 5, titled “Short Term Supply of Employment Land”), the City provides the approximate total acreage and percentage of sites within each plan district (plan designation) that comprise the short-term supply of land. All of the City’s short term supply is located within the pre-expansion area of the Eugene UGB.

(4) Assessment of Community Economic Development Potential. The economic opportunities analysis must estimate the types and amounts of industrial and other employment uses likely to
occur in the planning area. The estimate must be based on information generated in response to sections (1) to (3) of this rule and must consider the planning area's economic advantages and disadvantages. Relevant economic advantages and disadvantages to be considered may include but are not limited to:

(a) Location, size and buying power of markets;
(b) Availability of transportation facilities for access and freight mobility;
(c) Public facilities and public services;
(d) Labor market factors;
(e) Access to suppliers and utilities;
(f) Necessary support services;
(g) Limits on development due to federal and state environmental protection laws; and
(h) Educational and technical training programs.

Chapter 4 of the EOA (located at Part II of the Employment Land Supply Study) includes an assessment of economic potential, as described in Statewide Planning Goal 9 and this rule. Chapter 6 of the EOA provides an estimate of the types and amounts of industrial and other employment uses likely to occur in the planning area based on that assessment and OAR 660-009-0015(1) – (3).

• 660-009-0020 -- Industrial and Other Employment Development Policies

(1) Comprehensive plans subject to this division must include policies stating the economic development objectives for the planning area. These policies must be based on the community economic opportunities analysis prepared pursuant to OAR 660-009-0015 and must provide the following:

(a) Community Economic Development Objectives. The plan must state the overall objectives for economic development in the planning area and identify categories or particular types of industrial and other employment uses desired by the community.

The Economic Development Chapter of the Envision Eugene Comprehensive Plan, at Policies 3.1 through 3.8, sets out policies that state the city’s overall objectives for economic development. The categories or particular types of industrial and other employment uses desired by the community are identified under the “Targeted Industries” heading at Policies 3.9-3.14.

(b) Commitment to Provide a Competitive Short-Term Supply. Cities and counties within a Metropolitan Planning Organization must adopt a policy stating that a competitive short-term supply of land as a community economic development objective for the industrial and other employment uses selected through the economic opportunities analysis pursuant to OAR 660-009-0015.

Eugene and Lane County are within a Metropolitan Planning Organization (the Central Lane Metropolitan Planning Organization). Envision Eugene Comprehensive Plan Chapter 3 (Economic Development), Policy 3.25 is the policy required by -0020(1)(b).

(c) Commitment to Provide Adequate Sites and Facilities. The plan must include policies committing the city or county to designate an adequate number of sites of suitable sizes,
types and locations. The plan must also include policies, through public facilities planning and transportation system planning, to provide necessary public facilities and transportation facilities for the planning area.

As part of this action, the City and County are designating an adequate number of sites of suitable sizes, types and locations. Several policies in Envision Eugene Comprehensive Plan Chapter 2 (Economic Development) address the City’s commitment to continue to provide adequate sites and facilities as described in (c). These include Policies 3.15 through 3.25. The Plan includes policies to provide necessary public facilities and transportation facilities for the planning area at Policies 3.26, 3.28 and 3.29. As part of this action, the City is also adopting updates to its public facilities plan and its local transportation system plan to provide all facilities needed to serve the areas planned for future economic growth.

(2) Plans for cities and counties within a Metropolitan Planning Organization or that adopt policies relating to the short-term supply of land, must include detailed strategies for preparing the total land supply for development and for replacing the short-term supply of land as it is developed. These policies must describe dates, events or both, that trigger local review of the short-term supply of land.

Eugene and Lane County are within a Metropolitan Planning Organization (the Central Lane Metropolitan Planning Organization). Envision Eugene Comprehensive Plan Chapter 3 (Economic Development), Policies 3.25 through 3.27 are the policies required by -0020(2). As part of this action, the City is also adopting updates to its public facilities plan and its local transportation system plan to provide all facilities needed to serve the areas planned for future economic growth (See Transportation System Plan project list amendments, and Public Facilities and Services Plan project list amendments and corresponding map amendments).

660-009-0025 -- Designation of Lands for Industrial and Other Employment Uses
Cities and counties must adopt measures adequate to implement policies adopted pursuant to OAR 660-009-0020. Appropriate implementing measures include amendments to plan and zone map designations, land use regulations, public facility plans, and transportation system plans.

This action includes the adoption of adequate measures to implement the policies adopted pursuant to OAR 660-009-0020, and other local policies to ensure an adequate supply of land for economic development. The implementing measures include: the creation, adoption and application of an overlay zone (the Clear Lake Overlay Zone), amendments to the zoning map, amendments to the Metro Plan designation map (the Plan Diagram), the adoption of a new Envision Eugene Comprehensive Plan and amendments to the Public Facilities and Services Plan and transportation plan. In advance of this action, other steps were taken by the City to ensure that the UGB would include sufficient suitable land to accommodate the City’s 20-year need for employment land. Those actions, described in Part IV of the Employment Land Supply Study (“Measures to Increase Employment Development (2012-2032), were:

1. Creation and Application of New E-1 and E-2 Employment Zones
2. Re-designation of Land to Commercial Designation
3. Downtown & Mixed Use Code Amendments
4. Downtown Riverfront Special Area Zone
5. Brownfield / Parcel Assembly
(1) Identification of Needed Sites. The plan must identify the approximate number, acreage and site characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies. Plans do not need to provide a different type of site for each industrial or other employment use. Compatible uses with similar site characteristics may be combined into broad site categories. Several broad site categories will provide for industrial and other employment uses likely to occur in most planning areas. Cities and counties may also designate mixed-use zones to meet multiple needs in a given location.

Section 6.1 of the EOA (Part II of the Employment Land Supply Study) identifies the employment land demand in great detail. Section 6.1.3.1 establishes industrial site size ranges by acreage. Section 6.1.3.2 then identifies total needed sites in each size category, which is then modified per efficiency measures to reach the number of sites that need to be accommodated through expansion in section 6.1.3.3. section 6.2 specifies the site characteristics of needed employment sites. The UGB Expansion Analysis for Employment Land then evaluates candidate land surrounding the current UGB for the most suitable land for expansion.

(2) Total Land Supply. Plans must designate serviceable land suitable to meet the site needs identified in section (1) of this rule. Except as provided for in section (5) of this rule, the total acreage of land designated must at least equal the total projected land needs for each industrial or other employment use category identified in the plan during the 20-year planning period.

The 2012-2032 Employment Buildable Lands Inventory at Part VI of the Employment Land Supply Study shows that the City has the “serviceable” and “suitable” land needed to meet the site needs discussed under (1), above.

(3) Short-Term Supply of Land. Plans for cities and counties within a Metropolitan Planning Organization . . . must designate suitable land to respond to economic development opportunities as they arise. Cities and counties may maintain the short-term supply of land according to the strategies adopted pursuant to OAR 660-009-0020(2).

Eugene and Lane County are within a Metropolitan Planning Organization. The Metro Plan diagram amendments included with this action apply land use designations to additional land to ensure that the City’s 20-year need for employment land can be met on suitable land within the UGB that is designated for employment uses. The suitability of the land for employment use is discussed in Chapter 6 of the EOA and in the UGB Expansion Analysis for Industrial Land Need at Appendix B to these findings. See findings under (a), below, regarding the land that is within the “short-term supply.”

(a) Except as provided for in subsections (b) and (c), cities and counties subject to this section must provide at least 25 percent of the total land supply within the urban growth boundary designated for industrial and other employment uses as short-term supply.

The City’s short-term supply of land is identified in Part I of the Employment Land Supply Study. (See section 5 entitled “Short Term Supply of Employment Land.”) The information there demonstrates that about 71% of the land in the UGB – before the expansion – was “short term supply.”

(5) Institutional Uses. Cities and counties are not required to designate institutional uses on privately owned land when implementing section (2) of this rule. Cities and counties may designate
land in an industrial or other employment land category to compensate for any institutional land demand that is not designated under this Section.

Section III of the Employment Land Supply Study addresses, and determines the needed compensation for, the non-employment use of some employment land.

(6) Compatibility. Cities and counties are strongly encouraged to manage encroachment and intrusion of uses incompatible with industrial and other employment uses. Strategies for managing encroachment and intrusion of incompatible uses include, but are not limited to, transition areas around uses having negative impacts on surrounding areas, design criteria, district designation, and limiting non-essential uses within districts.

The City of Eugene addressed compatibility issues with the expansion area through a series of transitions from residential areas within the current UGB, to public uses (school and park land), into Campus Industrial land, and then Light Medium Industrial land. Further, the Clear Lake Overlay Zone addresses additional compatibility issues through restricted uses.

(8) Uses with Special Siting Characteristics. Cities and counties that adopt objectives or policies providing for uses with special site needs must adopt policies and land use regulations providing for those special site needs. Special site needs include, but are not limited to large acreage sites, special site configurations, direct access to transportation facilities, prime industrial lands, sensitivity to adjacent land uses, or coastal shoreland sites designated as suited for water-dependent use under Goal 17. Policies and land use regulations for these uses must:

(a) Identify sites suitable for the proposed use;
(b) Protect sites suitable for the proposed use by limiting land divisions and permissible uses and activities that interfere with development of the site for the intended use; and
(c) Where necessary, protect a site for the intended use by including measures that either prevent or appropriately restrict incompatible uses on adjacent and nearby lands.

This action includes adoption of objectives or policies providing for uses with special site needs. Envision Eugene Comprehensive Plan policies 3.16 and 3.17 address this subsection of OAR 660-009-0025. Chapter 6 of the EOA addresses special characteristics / suitability. The City and County also take action to provide, within the Eugene UGB, sites that have those special characteristics identified in the EOA. See UGB Expansion Analysis for Employment Land at Appendix B to these findings. The /CL Overlay zone being applied to the sites that are suitable for the targeted industries protects those sites by limiting land divisions and permissible uses and activities that interfere with development of the site for the intended use. See EC 9.4150 through 9.4170 of proposed code provisions at Exhibit E to the City’s ordinance; See also “Addendum to UGB Expansion Analysis for Employment Land” at Appendix D to these findings.
Statewide Planning Goal 10– Housing

*Statewide Planning Goal 10* -- “To provide for the housing needs of citizens of the state.”

Goal 10 pertains to the planning for residential use. The City and County have addressed Statewide Planning Goal 10 and its related statutes and rules in a separate, concurrent action. The actions taken by this ordinance do not impact the city’s supply/demand for residential land. Therefore, OAR 660, Division 11 does not apply.

Statewide Planning Goal 11 – Public Facilities and Services

OAR Chapter 660, Division 11

*Statewide Planning Goal 11* -- “To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.”

As part of the City’s UGB expansion analysis, the City determined that it is feasible to provide the necessary public services to the areas added to the UGB, and that those services are “likely to be provided.” Although not required to do so at the same time as the UGB expansion action, the City’s action does take the next steps to actually plan for the needed public facilities and services.

Goal 11 requires that urban development be supported by urban facilities and services, including schools and recreation facilities. The Bethel School District has determined that there is an inadequate supply of suitable land inside the existing UGB to meet that District’s needs for its 10 year planning period. ORS 195.110(6) requires the City and County to cooperate with Bethel School District in identifying land for its needed school facilities and to take necessary actions (e.g. adding a site designated for school facilities to the UGB). The actions taken to add a site to the UGB for Bethel School District’s use respond to this requirement, addressed more thoroughly under Statewide Planning Goal 14 findings and the “UGB Expansion Analysis for School Land” (Appendix A to these findings). The need for additional park land in underserved areas of the Eugene community is also thoroughly addressed under Statewide Planning Goal 14 Findings. Also see findings under Statewide Planning Goal 8.

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11 The requirements of Goal 14 and OAR 660-024 are addressed in the finding’s evaluation and comparison of the relative costs, advantages and disadvantages of alternative UGB expansion areas with respect to the provision of public facilities and services needed to urbanize alternative expansion areas.
To address the need for sewer (wastewater and stormwater) and water the City’s action amends its public facilities plan to address the needs of the areas newly included in the UGB. Therefore, the City makes the following findings addressing Goal 11 and the rules that implement Goal 11.

Goal 11 and ORS 197.712 require Eugene to have a public facilities plan for water, sewer and transportation services within the UGB. LCDC has acknowledged the Eugene-Springfield Metropolitan Area Public Facilities and Services Plan (PFSP) as Eugene’s public facilities plan for water and sewer (wastewater and stormwater). Transportation planning is addressed under Goal 12, below. The City’s action includes amendments to the PFSP intended to assure a timely, orderly and efficient arrangement of public facilities and services, and to serve as a framework for serving the anticipated future development within the UGB, as expanded.

Based on analysis from the City regarding wastewater and storm water (sewer) and from the Eugene Water and Electric Board (EWEB) regarding water, the projects identified on the tables below, are necessary to serve the two UGB expansion areas and they will serve only those developments located within the City’s UGB. Although additional infrastructure improvements may be necessary to provide services to these areas, these additional improvements do not rise to the level of being required to be included within the PFSP as per OAR 660-011-0005(7)(a)-(c). Such improvements will be addressed through the City’s or EWEB’s master plans and capital improvement programs (CIP), or be the responsibility of private developers.

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12 The TPR purpose statement, OAR 660-12-000, explains the TPR serves the following purposes, among others: “[t]o establish that transportation system plans adopted under the TPR fulfill the requirements for public facilities planning required under ORS 197.712(2)(e), Goal 11 and OAR Chapter 660, Division 11, as they relate to transportation facilities.”

### PFSP Projects Necessary to Serve UGB Expansion Areas

<table>
<thead>
<tr>
<th></th>
<th>PFSP Projects for Clear Lake Expansion Area (Employment, Park and School Site)</th>
<th>PFSP Projects for Santa Clara Expansion Area (Park Site)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td>Per OAR 660-011-0005(7)(a),</td>
<td></td>
<td></td>
</tr>
<tr>
<td>public water facility systems</td>
<td></td>
<td></td>
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<tr>
<td>are limited to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Sources of water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Treatment system</td>
<td></td>
<td></td>
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<tr>
<td>- Storage system</td>
<td></td>
<td></td>
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<tr>
<td>- Pumping system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Primary distribution system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PFSP includes proposed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transmission lines 24” or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>larger, reservoirs, pump</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stations and sources of water.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wastewater</strong></td>
<td>Enid Road</td>
<td>None.</td>
</tr>
<tr>
<td>Per OAR 660-011-0005(7)(b),</td>
<td></td>
<td></td>
</tr>
<tr>
<td>public wastewater facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>systems are limited to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Treatment facility system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Primary collection system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: PFSP includes proposed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lines that 24” or larger, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>local or regional pump stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enid Road</td>
<td>6.1 MGD Pump Station ($2.8 M)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24” Gravity Line ($1.2 M)</td>
<td></td>
</tr>
<tr>
<td>Pump station to be located in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enid Road area, on yet to be</td>
<td></td>
<td></td>
</tr>
<tr>
<td>identified property (approximately 22,000 square feet). Does not include property acquisition. Includes removal of the existing Enid Road pump station.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In addition to the above projects needed to serve the UGB expansion areas, the City and EWEB have identified several additional projects needed to ensure that certain areas within the current UGB can also be provided with sewer and water to accommodate growth expected inside the UGB.

**PFSP Projects Necessary to Serve Areas within Current UGB**

<table>
<thead>
<tr>
<th>Stormwater</th>
<th>PFSP Projects for Areas inside Current UGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per OAR 660-011-0005(7)(c), public stormwater facility systems are limited to:</td>
<td>Hawkins Hill Reservoir Seismic Upgrades – Reservoir will be divided in half and seismic upgrades to bring the Reservoir up to current code ($1,927,000)</td>
</tr>
<tr>
<td>- Major drainageways</td>
<td>Replace the existing 1.25 MG Willamette 800 Reservoir ($1,500,000)</td>
</tr>
<tr>
<td>- Outfall locations</td>
<td>Construct a new Shasta 1150 Constant Run Pump Station in lieu of a new reservoir ($500,000)</td>
</tr>
<tr>
<td>Note: PFSP includes proposed drainage/channel improvements and/or piping systems 36” or larger, detention ponds, outfalls and water quality projects</td>
<td>Construct a new Willamette 975 Pump Station ($857,000)</td>
</tr>
<tr>
<td>Green Hill Road/ North of Old Airport Road</td>
<td>Construct a new Crenshaw 800 Pump Station – Adds fire flow and domestic service for the Gillespie Butte Area ($925,000)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage system</td>
<td>- Construct new Hawkins View 1150 Pump Station ($953,000)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Pumping system</td>
<td>- Replace the existing Crest 1150 Pump Station ($982,000)</td>
</tr>
<tr>
<td>Primary distribution system</td>
<td>- Construct new Santa Clara Pump Station and 5 MG Reservoir at the existing Santa Clara Pump Station and Reservoir site ($12,442,000)</td>
</tr>
<tr>
<td></td>
<td>- Construct new 5 MG College Hill Reservoir and decommission existing 15 MG College Hill Reservoir. ($9,370,000)</td>
</tr>
<tr>
<td></td>
<td>- Construct 10,000 feet of 36-inch pipeline in 23rd Avenue and Alder Street ($8,971,000)</td>
</tr>
<tr>
<td></td>
<td>- Construct 5 MG Elliott Reservoir ($9,370,000)</td>
</tr>
<tr>
<td></td>
<td>- Construct 5 MG Reservoir at either the Santa Clara site, Elliott site, or Oakhill Reservoir Site (off Cantrall Rd) ($9,370,000)</td>
</tr>
</tbody>
</table>

**Wastewater**

Per OAR 660-011-0005(7)(b), public wastewater facility systems are limited to:

- Treatment facility system
- Primary collection system

**Note:** PFSP includes proposed transmission lines 24” or larger, reservoirs, pump stations and sources of water.

**Bailey Hill/Gimpl Hill**

- 0.8 MGD Pump Station ($800,000)
  To be located in vicinity of intersection of Gimpl Hill Road/Gimpl Way on yet to be identified property (approximately 600 square feet).

**North Delta Highway (River Ridge)**

- 0.3 MGD Pump Station ($600,000)
  To be located around the northwest corner of the River Ridge golf course on yet to be identified property (approximately 600 square feet).

**North Coburg Road**

- 0.3 MGD Pump Station ($600,000)
  To be located north of Coburg Road, on yet to be identified property (approximately 600 square feet).

**Stormwater**

Per OAR 660-011-0005(7)(c), public stormwater facility systems are limited to:

- Major drainageways
- Outfall locations

- None.\(^\text{14}\)

\(^{14}\) Following the update of the city’s stormwater basin plans, additional projects called for in those plans will be added to the PFSP.
Note: PFSP includes proposed drainage/channel improvements and/or piping systems 36” or larger, detention ponds, outfalls and water quality projects.

To comply with the applicable provisions of state, the above identified projects, rough cost estimates and timing necessary to serve the UGB expansion areas and other areas in the City’s current UGB must be adopted into the PFSP. To that end, the following tables and maps from the PFSP are amended as part of this action:

- Table 1 EWEB Water System Improvements Projects (projects 111-117, 223, 226, 238-242)
- Table 3 City of Eugene Wastewater System Improvement Projects (projects 100, 202-204)
- Table 5 City of Eugene Stormwater System Improvement Projects (projects 59-63)
- Table 13 EWEB Water System Improvements, Estimated Costs, and Timing (projects 111-117, 223, 226, 238-242)
- Table 15 City of Eugene Wastewater System Improvements, Estimated Costs, and Timing (projects 100, 202, 204)
- Table 17 City of Eugene Stormwater System Improvements, Estimated Costs, and Timing (projects 59-63)
- Map 1 Planned Water Facilities
- Map 2 Planned Wastewater Facilities
- Map 3 Planned Stormwater Facilities
- Map 8 Public Service Availability in Eugene-Springfield Metropolitan Area

The amendments to these tables and maps from the PFSP are provided as Exhibits C-1 and C-2 to the City’s adoption ordinance. Regarding these amendments, the relevant Oregon Administrative Rules and findings addressing each are provided below.

**OAR 660-011-0010 – The Public Facility Plan**

1. The public facility plan shall contain the following items:
   a. An inventory and general assessment of the condition of all the significant public facility systems which support the land uses designated in the acknowledged comprehensive plan;
   b. A list of the significant public facility projects which are to support the land uses designated in the acknowledged comprehensive plan. Public facility project descriptions or specifications of these projects as necessary;
   c. Rough cost estimates of each public facility project;
   d. A map or written description of each public facility project's general location or service area;
   e. Policy statement(s) or urban growth management agreement identifying the provider of each public facility system. If there is more than one provider with the authority to provide the
system within the area covered by the public facility plan, then the provider of each project shall be designated;

(f) An estimate of when each facility project will be needed; and

(g) A discussion of the provider's existing funding mechanisms and the ability of these and possible new mechanisms to fund the development of each public facility project or system.

This OAR provides a summary of the required components of a public facility plan. As addressed previously, the Eugene-Springfield Metropolitan Area Public Facilities and Services Plan (PFSP) has been acknowledged by the state as Eugene’s public facilities plan for water and sewer. The adopted PFSP contains all of the items required by (1)(a) through (g) above. The parts of the PFSP required by subsections (b), (c), (d) and (f) are being amended to reflect the projects necessary to serve the UGB expansion areas and other areas in the City’s current UGB; the remaining portions of the PFSP do not need to be amended for this action.

Each required component has a corresponding OAR that provides more detailed requirements:

- Subsection (b) is addressed below under OAR 660-011-0020.
- Subsection (c) is addressed below under OAR 660-011-0035.
- Subsection (d) is addressed below under OAR 660-011-0030.
- Subsection (f) is addressed below under OAR 660-011-0025.

The findings under each of these OAR (below) are incorporated here as demonstration that the amendments comply with OAR 660-011-0010.

**OAR 660-011-0020 -- Public Facility Inventory and Determination of Future Facility Projects**

(2) The public facility plan shall identify significant public facility projects which are to support the land uses designated in the acknowledged comprehensive plan. The public facility plan shall list the title of the project and describe each public facility project in terms of the type of facility, service area, and facility capacity.

Tables 3, 5 and 7 of the PFSP are being amended to identify significant public facility projects necessary to serve the UGB expansion areas and other areas in the City’s UGB, including the project title and description, consistent with this OAR.

**OAR 660-011-0025 -- Timing of Required Public Facilities**

(1) The public facilities plan shall include a general estimate of the timing for the planned public facility projects. This timing component of the public facilities plan can be met in several ways depending on whether the project is anticipated in the short term or long term. The timing of projects may be related directly to population growth, e.g., the expansion or new construction of water treatment facilities. Other facility projects can be related to a measure of the facility’s service level being met or exceeded, e.g., a major arterial or intersection reaching a maximum vehicle-per-day standard. Development of other projects may be more long term and tied neither

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15 Anticipated timing provisions for public facilities are not considered land use decisions as specified in ORS 197.712(2)(e), and, therefore, cannot be the basis of appeal under ORS 197.610(1) and (2) or 197.835(4). OAR 660-011-0025(3).
to specific population levels nor measures of service levels, e.g., sewer projects to correct infiltration and inflow problems. These projects can take place over a long period of time and may be tied to the availability of long-term funding. The timing of projects may also be tied to specific years.

(2) Given the different methods used to estimate the timing of public facilities, the public facility plan shall identify projects as occurring in either the short term or long term, based on those factors which are related to project development. For those projects designated for development in the short term, the public facility plan shall identify an approximate year for development. For those projects designated for development over the long term, the public facility plan shall provide a general estimate as to when the need for project development would exist, e.g., population level, service level standards, etc. Timing provisions for public facility projects shall be consistent with the acknowledged comprehensive plan’s projected growth estimates. The public facility plan shall consider the relationships between facilities in providing for development.

Tables 13, 15, 17 and Map 8 of the PFSP are being amended to provide a general estimate of the timing for the public facility projects necessary to serve the UGB expansion areas and other areas in the City’s UGB, including whether the project is anticipated in the short term or long term and an estimated completion year, consistent with this OAR.

OAR 660-011-0030 -- Location of Public Facility Projects

(1) The public facility plan shall identify the general location of the public facility project in specificity appropriate for the facility. Locations of projects anticipated to be carried out in the short term can be specified more precisely than the locations of projects anticipated for development in the long term.

Maps 1, 2 and 3 of the PFSP are being amended to show the general location of the newly added public facility projects for water and sewer consistent with this OAR.


(1) The public facility plan shall include rough cost estimates for those sewer, water, and transportation public facility projects identified in the facility plan.

Tables 13, 15 and 17 of the PFSP are being amended to include rough cost estimates for the newly added projects for water and sewer, consistent with this OAR.

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¹⁶ Anticipated financing provisions are not considered land use decisions as specified in ORS 197.712(2)(e) and, therefore, cannot be the basis of appeal under ORS 197.610(1) and (2) or 197.835(4). OAR 660-011-0035(2).
Statewide Planning Goal 12 – Transportation

OAR Chapter 660, Division 12

Statewide Planning Goal 12 -- “To provide and encourage a safe, convenient and economic transportation system.”

OAR 660-024-0020 -- Adoption or Amendment of a UGB

(1) All statewide goals and related administrative rules are applicable when establishing or amending a UGB, except as follows:

(d) The transportation planning rule requirements under OAR 660-012-0060 need not be applied to a UGB amendment if the land added to the UGB is zoned as urbanizable land, either by retaining the zoning that was assigned prior to inclusion in the boundary or by assigning interim zoning that does not allow development that would generate more vehicle trips than development allowed by the zoning assigned prior to inclusion in the boundary;

The actions taken by the City and County preserve the land added to the UGB for its current use unless / until a development is proposed for the land that will meet the specific industrial development needs that gave rise to the UGB expansion. At that time, there must be a change in the zoning of these lands, to a zone that will allow the planned industrial use. That later rezoning action will require analysis under Goal 12 and its implementing rules at OAR 660-012-0060.

Pursuant to OAR 660-024-0020(1)(d), no analysis under that section is needed at this time. The actions taken do not allow the land added to the UGB to develop in a way that would generate more vehicle trips than development allowed by the zoning that was assigned prior to inclusion in the UGB. Before being added to the UGB, the land was zoned either: E-40 (Exclusive Farm Use Zone with a 40-acre minimum lot size; See Lane Code at 16.212), E-30 (Exclusive Farm Use Zone with a 30-acre minimum lot size; See Lane Code at 16.212) or RR-5 (Rural Residential with a 5-acre minimum lot size; See Lane Code at 16.290). All land added to the UGB will be included in the Agricultural base zone (See Lane County Code for the Eugene Urban Transition Area (“UTA Code”) at 9.2000 – 9.2010), with the /UL (Urbanizable Land) overlay zone (See UTA Code at 9.4600 – 9.4650). Most lots will also be in the new /CL Clear Lake overlay zone that is adopted with these actions. In addition, some lots also have the /CAS Commercial Airport Safety overlay zone (UTA Code at 9.4100 – 9.4130) or the /WR Water Resources Conservation overlay zone (UTA Code at 9.4900 – 9.4980). The following Table is illustrative. See also, Exhibit A-3 to the Ordinance.

<table>
<thead>
<tr>
<th>Current Zoning</th>
<th>New / Interim Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-40</td>
<td>AG/UL/CAS</td>
</tr>
<tr>
<td></td>
<td>- or -</td>
</tr>
<tr>
<td></td>
<td>AG/UL/CAS/CL</td>
</tr>
<tr>
<td>E-30</td>
<td>AG/UL/WR</td>
</tr>
<tr>
<td>RR5</td>
<td>AG/UL</td>
</tr>
</tbody>
</table>
Future changes in the zoning of this land to a zone that would allow a more intense use, will require analysis under Goal 12 and its implementing rules at OAR 660-012-0060. Pursuant to OAR 660-024-0020(1)(d), no analysis under that section is needed at this time.

In conjunction with the Envision Eugene UGB Project, the City of Eugene has developed a new local transportation system plan, the Eugene 2035 Transportation System Plan. As of May, 2017, that Plan has not yet been adopted, but is scheduled for adoption prior to the adoption of the UGB. The 2035 Transportation System Plan addresses all of the requirements of Goal 12 and its implementing rules at OAR 660-012. The findings prepared for the 2035 TPR adoption ordinance are included in the record for this action and, to the extent applicable, are incorporated herein.

Four transportation projects needed for the 2035 population (the population addressed in the 2035 Transportation System Plan) have been identified on land located in the UGB expansion areas. These are added to the 2035 Transportation System Plan by section 5 and Exhibit D of the City’s Employment, Park and School Ordinance. Additional amendments to the 2035 Transportation System Plan will be proposed in the future to update language in the 2015 Transportation System Plan to add references to the Envision Eugene Comprehensive Plan and to revise text related to the five additional projects added with this Ordinance (e.g. update references to the number of projects, financial information regarding the collective cost of projects, and maps showing the location of the UGB).

Statewide Planning Goal 13 – Energy Conservation

*Statewide Planning Goal 13 -- “To conserve energy.”*

The State has not adopted specific rules for complying with Statewide Planning Goal 13. Consistent with Goal 13, the City of Eugene’s plans for accommodating growth are based on a philosophy of compact urban development, with land use regulations to preserve livability. The adoption package does not adopt or amend a local energy policy or implementing provisions.
Statewide Planning Goal 14 – Urbanization\textsuperscript{17}

\textbf{OAR Chapter 660, Division 24}

\textit{Statewide Planning Goal 14} -- “To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.”

\textbf{Urban Growth Boundaries}

Urban growth boundaries shall be established and maintained by cities, counties and regional governments to provide land for urban development needs and to identify and separate urban and urbanizable land from rural land. Establishment and change of urban growth boundaries shall be a cooperative process among cities, counties and, where applicable, regional governments.

Prior to 2011, the Cities of Eugene and Springfield shared a single, regional UGB. Actions taken by the City of Springfield and Lane County in 2011 established a new UGB line along I-5 that resulted in two UGBs. Since that time, both cities have worked to ensure that their separate UGBs include enough land to accommodate their independent populations for 20 years.

With this action of the City of Eugene and Lane County, Eugene is adopting a precise location for its UGB line, and expanding its UGB to provide land for its urban development needs for employment, parks and schools until 2032.

An urban growth boundary and amendments to the boundary shall be adopted by all cities within the boundary and by the county or counties within which the boundary is located, consistent with intergovernmental agreements, except for the Metro regional urban growth boundary established pursuant to ORS chapter 268, which shall be adopted or amended by the Metropolitan Service District.

Eugene is the only City within the Eugene UGB, located entirely within Lane County. The amendments to the City of Eugene’s UGB are being adopted by the City of Eugene and Lane County.

\textsuperscript{17} Amendments to Statewide Planning Goal 14 and its administrative rules at OAR 660-024 took effect on January 1, 2016. The City of Eugene is not required to address the amendments for purposes of its UGB work, pursuant to HB 4126 (2016) and OAR 660-024-0000(4), which provides: “The rules in this division adopted on December 4, 2015, are effective January 1, 2016, except that a local government may choose to not apply the amendments to rules in this division adopted December 4, 2015 to a plan amendment concerning the amendment of a UGB, regardless of the date of that amendment, if the local government initiated the amendment of the UGB prior to January 1, 2016.”
Land Need

Establishment and change of urban growth boundaries shall be based on the following:

(1) Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and

To determine the employment land needs of its long range population, Eugene has studied the 20-year period between 2012 and 2032. Where a population figure is needed, consistent with Oregon Laws 2013 c.574 §3, Eugene has relied on the coordinated population forecast for Eugene prepared by PSU and adopted by Lane County in June 2009. That forecast is located in the Eugene-Springfield Metropolitan Area Plan. However, State laws and rules do not refer to the population forecast to determine employment land need. OAR 660-024-0040(9) sets out some optional “safe harbors” for determining employment land need. Eugene is relying on the safe harbor at OAR 660-024-0090(9)(a)(A), which provides a method for determining Eugene’s employment growth rate by assuming that the current number of jobs in the Eugene urban area will grow during the 20-year planning period at a rate equal to “the county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department.” See Chapter 5 of the Eugene Economic Opportunities Analysis located at section II of the Envision Eugene Employment Land Supply Study.

The City relied on information obtained from the three school districts and Eugene Parks and Recreation documents within the Eugene UGB to determine their facility needs over the 20-year planning period. These are described in more detail in the UGB Expansion Analysis for School Land and UGB Expansion Analysis for Park Land located at Appendices A and C to these Findings.

(2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection (2). In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need.

The UGB established by this ordinance is based on a demonstrated need for employment opportunities, schools, parks and the facilities needed to serve those uses. (Residential land supply and demand are addressed through a separate ordinance with separate findings.) In determining the need for such employment, park and school land, the local governments have specified characteristics necessary for land to be suitable for an identified need.

For employment, those characteristics are described in Chapter 6 of the Eugene Economic Opportunities Analysis located at section II of the Envision Eugene Employment Land Supply Study. They are considered in the evaluation of land for inclusion in the UGB. See the UGB Expansion Analysis for Employment Land at Appendix B to these findings.

Suitability characteristics for the needed school site for Bethel School District are discussed in section III of the UGB Expansion Analysis for School Land attached at Appendix A to these Findings. Suitability characteristics for the needed community parks are discussed in section III of the UGB Expansion Analysis for Park Land attached at Appendix C to these Findings.
Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.

The City made all reasonable efforts to accommodate its land needs without expanding its UGB. With respect to employment land, the City is able to meet all of its 20-year populations’ need for commercial and retail employment within the pre-expansion UGB. Part IV of the Employment Land Supply Study (“Measures to Increase Employment Development”) documents the measures the City took to increase the capacity of the land inside its UGB to accommodate employment needs.

The need to expand the UGB to locate the Bethel School District facility is discussed in section II of the UGB Expansion Analysis for School Land attached at Appendix A to these Findings. The need to expand the UGB to locate a community park for the Bethel/Danebo area and for the River Road/Santa Clara area is discussed in section II of the UGB Expansion Analysis for Park Land attached at Appendix C to these Findings.

The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298, and with consideration of the following factors:

(1) Efficient accommodation of identified land needs;

As directed by the Oregon Court of Appeals, the City considers this factor at sections III.g.(2) and (3) of the UGB Expansion Analysis for Employment Land at Appendix B to these findings.

(2) Orderly and economic provision of public facilities and services;

As directed by the Oregon Court of Appeals, the City considers this factor at sections III.g.(2) and (3) of the UGB Expansion Analysis for Employment Land at Appendix B to these findings.

(3) Comparative environmental, energy, economic and social consequences; and

As directed by the Oregon Court of Appeals, the City considers this factor at sections III.f.(6)(d), (7)(d) and (8)(d) and also at sections III.g.(2) and (3) of the UGB Expansion Analysis for Employment Land at Appendix B to these findings.

(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

As directed by the Oregon Court of Appeals, the City considers this factor at sections III.f.(6)(c), (7)(c) and (8)(c) and also at sections III.g.(2) and (3) of the UGB Expansion Analysis for Employment Land at Appendix B to these findings.

Land within urban growth boundaries shall be considered available for urban development consistent with plans for the provision of urban facilities and services.

This action includes amendments to the public facilities plan and the transportation plan to ensure that the land identified to meet the City’s 20-year needs can be served with urban facilities and services. See Ordinance Exhibits C-1, C-2 and D.
Comprehensive plans and implementing measures shall manage the use and division of urbanizable land to maintain its potential for planned urban development until appropriate public facilities and services are available or planned.

This action includes adoption of a /CL Clear Lake overlay zone that is being applied to the employment land being added to the UGB for planned large site industrial development. The /CL overlay zone protects those sites by limiting land divisions and permissible uses and activities that interfere with development of the sites for their intended uses. See EC 9.4150 through 9.4170 of proposed code provisions at Exhibit E to the City’s ordinance. See also “Addendum to UGB Expansion Analysis for Employment Land” at Appendix D to these findings. Lane County is also adopting those provisions into the Urban Transition Code that will be applied in the UGB expansion areas.

**ORS 197.298 -- Priority of land to be included within urban growth boundary.**

(1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary except under the following priorities:

(a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.

Lane County and the City of Eugene have not designated any urban reserve land.

(b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.

The City of Eugene conducted a substantial analysis of second priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the school site needed. The land included in Eugene’s study area for the school site is described in section V.a of the UGB Expansion Analysis for School Land at Appendix A to these findings. The identification, analysis and substantive findings addressing the second priority land are located in section V.d of that Analysis.

The City of Eugene conducted a substantial analysis of the second priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the amount of employment land needed. The land included in Eugene’s study area for employment is described in section III.a of the UGB Expansion Analysis for Employment Land at Appendix B to these findings. The identification, analysis and substantive findings addressing the second priority land are located in section III.d of that Analysis.

The City of Eugene conducted a substantial analysis of the second priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the amount of park land needed. The land included in Eugene’s study area for the two community parks is described in the UGB Expansion Analysis for Park Land at Appendix C to these findings in section V.a under both “Bethel/Danebo Community Park” and “River Road/Santa Clara Community Park.” The identification, analysis and substantive findings
addressing the second priority land are located in section V.d under both “Bethel/Danebo Community Park” and “River Road/Santa Clara Community Park.”

(c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition).

There is no third priority land in the study area for the Bethel School facility.

The City of Eugene conducted a substantial analysis of the third priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the amount of employment land needed. The land included in Eugene’s study area for employment is described in section III.a of the UGB Expansion Analysis for Employment Land at Appendix B to these findings. The identification, analysis and substantive findings addressing the third priority land are located in section III.e of that Analysis.

There is no third priority land in the study areas for the community parks.

(d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.

The City of Eugene conducted a substantial analysis of fourth priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the amount of employment land needed. The land included in Eugene’s study area for the school site is described in section V.a of the UGB Expansion Analysis for School Land at Appendix A to these findings. The identification, analysis and substantive findings addressing the fourth priority land are located in section V.f of that Analysis.

The City of Eugene conducted a substantial analysis of the fourth priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the amount of employment land needed. The land included in Eugene’s study area for employment is described in section III.a of the UGB Expansion Analysis for Employment Land at Appendix B to these findings. The identification, analysis and substantive findings addressing the fourth priority land are located in section III.f of that Analysis.

The City of Eugene conducted a substantial analysis of the fourth priority land in its study area (all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency) to determine its adequacy to accommodate the amount of park land needed. The land included in Eugene’s study area for the two community parks is described in the UGB Expansion Analysis for Park Land at Appendix C to these findings in section V.a under both “Bethel/Danebo Community Park” and “River Road/Santa Clara Community Park.” The identification, analysis and substantive findings addressing the fourth priority land are located in section V.f under both “Bethel/Danebo Community Park” and “River Road/Santa Clara Community Park.”
(2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

With respect to the UGB Expansion Analysis for School Land and the UGB Analysis for Park Land, the potential sites were narrowed to one potential site based on considerations required before this provision is applied. Therefore this provision was inapplicable in both of those Expansion Analyses.

In its UGB Expansion Analysis for Employment Land, Appendix B to these findings, the City gave higher priority to agricultural land of lower capability as measured by the capability classification system. The analysis and substantive findings demonstrating this prioritization of agricultural land are located in section III.f of the UGB Expansion Analysis for Employment Land at Appendix B to these findings. Detailed information about this prioritization is included in the “Soil Evaluation of Suitable Candidate Sites” document attached to the UGB Expansion Analysis for Employment Land.

(3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:

(a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;

The UGB Expansion Analysis for School Land, Appendix A to these findings, includes consideration of the location-based and other site needs for the required school facility. See section III of that Analysis. This resulted in the dismissal of second-priority land that could not reasonably accommodate the needed school. See UGB Expansion Analysis for School Land at section V.d.(1).

The City’s EOA at Part II of the Employment Land Supply Study identifies two site characteristics (site size and proximity to a freight route) that must be present to reasonably accommodate the types of employment expected to locate in Eugene during the planning period. In the evaluation of each subarea in section III of the UGB Expansion Analysis for Employment Land (Appendix B to these findings), after dismissing land with development constraints, the City identifies and dismisses land that cannot reasonably accommodate the City’s employment land needs due to insufficient size or too great a distance from a freight route. This provision of state law is discussed in detail in section II.c.(2) of the UGB Expansion Analysis for Employment Land. Also see related findings under OAR 660-024-0060.

The UGB Expansion Analysis for Park Land, Appendix C to these findings, includes consideration of the location-based and other site needs for the required community parks. See section III of that Analysis. This resulted in the dismissal of second-priority land that could not reasonably accommodate the needed parks. See UGB Expansion Analysis for Park Land at section V.d.(1).

(b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or

The City of Eugene does not rely on ORS 197.298(3)(b) in its analysis of land in its study area. The City does not find that service to any higher priority land “could not reasonably be provided due to topographical or other physical constraints.”
(c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

The City of Eugene does not rely on ORS 197.298(3)(c) in its analysis of land in its study area. The City does not find that any lower priority lands are needed in the UGB “in order to include or to provide services to higher priority lands.”

OAR 660 / Division 24 / Urban Growth Boundaries

660-024-0020 Adoption or Amendment of a UGB

(1) All statewide goals and related administrative rules are applicable when establishing or amending a UGB, except as follows:

(a) The exceptions process in Goal 2 and OAR chapter 660, division 4, is not applicable unless a local government chooses to take an exception to a particular goal requirement, for example, as provided in OAR 660-004-0010(1);

(b) Goals 3 and 4 are not applicable;

(c) Goal 5 and related rules under OAR chapter 660, division 23, apply only in areas added to the UGB, except as required under OAR 660-023-0070 and 660-023-0250;

(d) The transportation planning rule requirements under OAR 660-012-0060 need not be applied to a UGB amendment if the land added to the UGB is zoned as urbanizable land, either by retaining the zoning that was assigned prior to inclusion in the boundary or by assigning interim zoning that does not allow development that would generate more vehicle trips than development allowed by the zoning assigned prior to inclusion in the boundary;

(e) Goal 15 is not applicable to land added to the UGB unless the land is within the Willamette River Greenway Boundary;

(f) Goals 16 to 18 are not applicable to land added to the UGB unless the land is within a coastal shorelands boundary;

(g) Goal 19 is not applicable to a UGB amendment.

See findings addressing Goals 2, 3, 4, 5, 12, 15, 16, 17, 18, and 19.

(2) The UGB and amendments to the UGB must be shown on the city and county plan and zone maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. Where a UGB does not follow lot or parcel lines, the map must provide sufficient information to determine the precise UGB location.

Actions taken by this ordinance result in a precisely-defined Eugene UGB that will allow interested parties to determine, with certainty, whether a tax lot or part of a tax lot is included within the UGB. To make the UGB’s location most useful, the City and County are adopting it in an electronic format (a shapefile) as Appendix A to the Envision Eugene Comprehensive Plan. See Policy 11.1 of the EECP and Exhibit B-2 to the ordinance. The adopted UGB file will be saved, unchanged unless/until the UGB is formally amended in the future. In the meantime, the UGB file can be made available to anyone wishing to use it as a GIS layer. This is intended to eliminate the difficulties that Eugene has encountered with the limitations of a paper map.
Before this action, the mapping of the Eugene UGB was difficult to apply in some areas. The Eugene UGB is almost entirely lot-specific, meaning it bisects very few tax lots. For the 29 areas around the UGB where the July 31, 2015 tax-lot lines could not be used to easily define the UGB, the City applied a published methodology to define the UGB’s location and produced a precise written description of the Boundary in that area. With the electronic mapping of the UGB, referral to this written description should be unnecessary. However, it is included in ordinance materials as findings to demonstrate the basis for the location in those area. See Appendix D to these findings, titled “Summary of Methodology to Refine the Eugene Urban Growth Boundary Location.” This exercise was done with specific outreach and (when requested) correspondence with owners in these areas.

**OAR Chapter 660, Division 024**

**660-024-0040 / Land Need**

1. The UGB must be based on the appropriate 20-year population forecast for the urban area as determined under Rules in OAR 660, div 32, and must provide for needed housing, employment and other urban uses such as public facilities, streets and roads, schools, parks and open space over the 20-year planning period consistent with the land need requirements of Goal 14 and this rule. The 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision.

The 20-year planning period for the actions taken is 2012-2032. Where a population figure is needed for the actions taken, the City and County rely upon the 2012-2032 population forecast prepared by PSU, adopted by Lane County and Eugene in 2009 consistent with the requirements of ORS 195.034 and 195.036, and subsequently acknowledged by DLCD. The legislative review of the Eugene UGB / residential land supply was initiated in 2012, before the date Oregon’s Population Research Center issued a new population forecast for the Eugene UGB. Oregon Laws 2013 c.574 §3 and the OAR are clear that that, in these circumstances, the City could continue its review using that 2009 population forecast. State laws and rules do not refer to the population forecast to determine employment land need. OAR 660-024-0040(9) sets out some optional “safe harbors” for determining employment land need. Eugene is relying on the safe harbor at OAR 660-024-0090(9)(a)(A).

The UGB established by this ordinance is based on a demonstrated need for employment opportunities, schools, parks and the facilities needed to serve those uses. (Residential land supply and demand are addressed through a separate ordinance with separate findings.) In determining the need for such employment, park and school land, the local governments have specified characteristics necessary for land to be suitable for an identified need.

2. If the UGB analysis or amendment is conducted as part of a periodic review work program, the 20-year planning period must commence on the date initially scheduled for completion of the appropriate work task. If the UGB analysis or amendment is conducted as a post-acknowledgement plan amendment under ORS 197.610 to 197.625, the 20-year planning period must commence either:

   a. On the date initially scheduled for final adoption of the amendment specified by the local government in the initial notice of the amendment required by OAR 660-018-0020; or
(b) If more recent than the date determined in subsection (a), at the beginning of the 20-year period specified in the appropriate coordinated population forecast for the urban area as determined under Rules in OAR 660, div 32, unless ORS 197.296 requires a different date for local governments subject to that statute.

The UGB analysis was conducted as a post-acknowledgement plan amendment under ORS 197.610 to 197.625. Therefore, the planning period commenced, consistent with (2)(a), on the date initially scheduled for final adoption of the amendment, specified by the City in the initial notice of the amendment. The Notice to DLCD was sent in October, 2012. That notice specifically stated that the City initially scheduled final adoption for 2012. DLCD staff confirmed, at that time, that the notice had “locked in” 2012 as the commencement date.

(3) A local government may review and amend the UGB in consideration of one category of land need (for example, housing need) without a simultaneous review and amendment in consideration of other categories of land need (for example, employment need).

Consistent with this rule, the actions taken by this ordinance are the outcome of the City’s review of its UGB in consideration of employment, park and school land needs, not housing need. Through a separate, concurrent action, the City is taking actions in consideration of the need for housing.

(4) The determination of 20-year residential land needs for an urban area must be consistent with the appropriate 20-year coordinated population forecast for the urban area determined under Rules in OAR 660, div 32, and with the requirements for determining housing needs in Goals 10 and 14, OAR chapter 660, division 7 or 8, and applicable provisions of ORS 197.295 to 197.314 and 197.475 to 197.490.

See findings, above, under: OAR 660-024-0040(1).

(5) Except for a metropolitan service district described in ORS 197.015(13), the determination of 20-year employment land need for an urban area must comply with applicable requirements of Goal 9 and OAR chapter 660, division 9, and must include a determination of the need for a short-term supply of land for employment uses consistent with 660-009-0025. Employment land need may be based on an estimate of job growth over the planning period; local government must provide a reasonable justification for the job growth estimate but Goal 14 does not require that job growth estimates necessarily be proportional to population growth.

OAR 660-024-0040(9) sets out some optional “safe harbors” for determining employment land need. Eugene is relying on the safe harbor at OAR 660-024-0090(9)(a)(A).

See findings under Goal 9 and OAR 660-009, above. Regarding short term supply, see findings under 660-009-0025(3), above.
(7) The determination of 20-year land needs for transportation and public facilities for an urban area must comply with applicable requirements of Goals 11 and 12, rules in OAR chapter 660, divisions 11 and 12, and public facilities requirements in ORS 197.712 and 197.768. The determination of school facility needs must also comply with 195.110 and 197.296 for local governments specified in those statutes.

See findings under Goals 11 and 12, above. With respect to planning for the need of school districts, Policy 10.3 of the Envision Eugene Comprehensive Plan addresses this requirement. As noted above, as part of this legislative review of the Eugene UGB, the City consulted with the school districts whose boundaries include land within the Eugene UGB and an expansion to meet the 20-year need for schools is included.

(9) The following safe harbors may be applied by a local government to determine its employment needs for purposes of a UGB amendment under this rule, Goal 9, OAR chapter 660, division 9, Goal 14 and, if applicable, ORS 197.296.
   (a) A local government may estimate that the current number of jobs in the urban area will grow during the 20-year planning period at a rate equal to either:
      (A) The county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department; or
      (B) The population growth rate for the urban area in the appropriate 20-year coordinated population forecast determined under Rules in OAR 660, div 32.
   (b) A local government with a population of 10,000 or less may assume that retail and service commercial land needs will grow in direct proportion to the forecasted urban area population growth over the 20-year planning period. This safe harbor may not be used to determine employment land needs for sectors other than retail and service commercial.

The City relies on the safe harbor provided at (9)(a)(A). See EOA (Part II of the Employment Land Supply Study) at section 5.1.1, under “Employment Projection.”

660-024-0050 - Land Inventory and Response to Deficiency

(1) When evaluating or amending a UGB, a local government must inventory land inside the UGB to determine whether there is adequate development capacity to accommodate 20-year needs determined in OAR 660-024-0040. ** For employment land, the inventory must include suitable vacant and developed land designated for industrial or other employment use, and must be conducted in accordance with OAR 660-009-0015.

The City’s Envision Eugene Employment Land Study summarizes the analysis of the land inside the UGB to determine whether there is adequate development capacity to accommodate the City’s employment land needs from 2012-2032. This includes a detailed analysis of suitable vacant and developed (partially vacant and redevelopable) land that was inside the UGB before its expansion. See Employment Land Supply Study Part I, section 4 (under headings: “Vacant Land,” “Developed Land,” “Partially Vacant Land,” and “Redevelopment Potential of Developed Employment Land”). The City also took actions to increase that baseline supply, as described in Part IV of the Employment Land Supply Study.
Chapter 6 of the EOA sets out the analysis comparing that 2012 employment land supply with the demand for employment land that will arise through 2032. For most employment sites needed, the EOA concludes that the 2012 supply is sufficient. However, the 2012 supply of land is insufficient to meet the 2032 need for: 4 sites of between 10 – 20 acres, 2 sites of between 20-50 acres, 3 sites of between 50-65 acres, and 2 sites of at least 75 acres. Therefore, the City and County actions include an expansion of the UGB to provide for those 11 needed industrial sites.

See, also, findings under OAR 660-009-0015.

(4) If the inventory demonstrates that the development capacity of land inside the UGB is inadequate to accommodate the estimated 20-year needs determined under OAR 660-024-0040, the local government must amend the plan to satisfy the need deficiency, either by increasing the development capacity of land already inside the city or by expanding the UGB, or both. . . . Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB. If the local government determines there is a need to expand the UGB, changes to the UGB must be determined by evaluating alternative boundary locations consistent with Goal 14 and OAR 660-024-0060.

Chapter 6 of the EOA (See Part II of the Employment Land Supply Study) sets out the analysis leading to the conclusion that the development capacity of land inside the 2012 UGB is inadequate to accommodate the estimated 20-year needs determined under OAR 660-024-0040. In response the City took all reasonable actions to increase the capacity of the land inside the UGB to satisfy the need deficiency. Those actions are described and quantified in Part IV of the Employment Land Supply Study (“Measures to Increase Employment Development (2012-2032)”). Even after those measures, a deficit of land for large-lot industrial needs was identified, as discussed under the previous findings.

As explained below, the City’s expansion of the UGB was conducted by evaluating alternative boundary locations consistent with Goal 14 and OAR 660-024-0060.

(6) When land is added to the UGB, the local government must assign appropriate urban plan designations to the added land, consistent with the need determination. The local government must also apply appropriate zoning to the added land consistent with the plan designation or may maintain the land as urbanizable land until the land is rezoned for the planned urban uses, either by retaining the zoning that was assigned prior to inclusion in the boundary or by applying other interim zoning that maintains the land’s potential for planned urban development. . . .

As part of the actions taken, the land in the UGB expansion areas are being assigned new Metro Plan designations. The new land use designations make the future intended use of the land clear. However, to allow the land to continue in its current use, the base zoning of the land zoning will remain consistent with its pre-action zoning. Overlay zones are assigned to apply “urbanizable land” regulations, and other relevant regulations (airport safety areas, natural resource protections). When land in the industrial expansion area is proposed for industrial development, it will be annexed to the City and rezoned to the intended industrial zone. This process is set out through the “Metro Plan Designation Changes and Zone Changes” table at Exhibit A-3 to the ordinance and through changes to the Eugene Code and Urban Transition Code at 9.7820(3)(c) and its related Figure.
660-024-0060 - Boundary Location Alternatives Analysis

(1) When considering a UGB amendment, a local government must determine which land to add by evaluating alternative boundary locations. This determination must be consistent with the priority of land specified in ORS 197.298 and the boundary location factors of Goal 14, as follows:

(a) Beginning with the highest priority of land available, a local government must determine which land in that priority is suitable to accommodate the need deficiency determined under OAR 660-024-0050.

(b) If the amount of suitable land in the first priority category exceeds the amount necessary to satisfy the need deficiency, a local government must apply the location factors of Goal 14 to choose which land in that priority to include in the UGB.

(c) If the amount of suitable land in the first priority category is not adequate to satisfy the identified need deficiency, a local government must determine which land in the next priority is suitable to accommodate the remaining need, and proceed using the same method specified in subsections (a) and (b) of this section until the land need is accommodated.

(d) Notwithstanding subsection (a) to (c) of this section, a local government may consider land of lower priority as specified in ORS 197.298(3).

See findings under ORS 197.298 and the findings addressing the location factors of Goal 14, above.

(e) For purposes of this rule, the determination of suitable land to accommodate land needs must include consideration of any suitability characteristics specified under section (5) of this rule, as well as other provisions of law applicable in determining whether land is buildable or suitable.

The UGB Expansion Analysis for School Land, Appendix A to these findings, includes consideration of attributes that make land unbuildable for the identified use, and of the location-based and other site needs for the required school facility. See section III of that Analysis. This resulted in the dismissal of second and fourth priority land that could not reasonably accommodate the needed school. See UGB Expansion Analysis for School Land at sections V.d.(1) and V.f.(1) and (2).

The City’s EOA at Part II of the Employment Land Supply Study identifies two site characteristics (site size and proximity to a freight route) that must be present to reasonably accommodate the types of employment expected to locate in Eugene during the planning period. In the evaluation of each subarea in section III of the UGB Expansion Analysis for Employment Land (Appendix B to these findings), the City dismisses land with development constraints and land that cannot reasonably accommodate the City’s employment land needs due to insufficient size or too great a distance from a freight route. These provisions of state law are discussed in detail in section II.c.(1) and (2) of the UGB Expansion Analysis for Employment Land. Also see related findings under OAR 660-024-0060.

The UGB Expansion Analysis for Park Land, Appendix C to these findings, includes consideration of attributes that make land unbuildable for the identified use, and of the location-based and other site needs for the required community parks. See section III of that Analysis. This resulted in the dismissal of second-priority land that could not reasonably accommodate the needed parks. See UGB Expansion Analysis for Park Land at section V.d.(1) and V.f.(1) and (2).
The boundary location factors of Goal 14 are not independent criteria. When the factors are applied to compare alternative boundary locations and to determine the UGB location, a local government must show that all the factors were considered and balanced.

See findings under location factors of Goal 14, above.

In determining alternative land for evaluation under ORS 197.298, "land adjacent to the UGB" is not limited to those lots or parcels that abut the UGB, but also includes land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency.

The study area used in each expansion analysis included all land adjacent to the UGB and all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified deficiency.

The land included in Eugene’s study area for school land is described in section V.a of the UGB Expansion Analysis for School Land (Appendix A to these findings).

The land included in Eugene’s study area for employment land is described in section III.a. of the UGB Expansion Analysis for Employment Land (Appendix B to these findings).

The land included in Eugene’s study area for park land is described in section V.a of the UGB Expansion Analysis for Park Land (Appendix C to these findings).

If a local government has specified characteristics such as parcel size, topography, or proximity that are necessary for land to be suitable for an identified need, the local government may limit its consideration to land that has the specified characteristics when it conducts the boundary location alternatives analysis and applies ORS 197.298.

See findings under ORS 197.298(3) and OAR 660-024-0060(1)(e), above.

The adopted findings for UGB adoption or amendment must describe or map all of the alternative areas evaluated in the boundary location alternatives analysis. If the analysis involves more than one parcel or area within a particular priority category in ORS 197.298 for which circumstances are the same, these parcels or areas may be considered and evaluated as a single group.

Eugene has documented its alternatives analysis in three extremely detailed documents: “UGB Expansion Analysis for School Land,” “UGB Expansion Analysis for Employment Land,” and “UGB Expansion Analysis for Park Land.” These are included in these findings as Appendices A, B, and C. Each of these analysis documents includes text and maps addressing every portion of the study area and every alternative for possible expansion. As the Analyses show, very little “grouping” is used; every potential site was mapped, discussed and considered independently of others.

The following is a very high-level description of the analysis in these studies, in terms of employment land: section III of the “UGB Expansion Analysis for Employment Land” (Appendix B to these findings) identifies 11 subareas of second priority land, one subarea of third priority land and 10 subareas of fourth priority land. Within the Analysis document, a mini-study is conducted to examine the candidacy of every possible site in each of these subareas, addressing issues of buildability (development constraints), site characteristics, serviceability, ESEE consequences, and compatibility with surrounding agricultural and/or forest uses. The sites with potential to meet the City’s need are evaluated based on
consideration of the Goal 14 boundary location factors. The analysis painstakingly follows the process identified by the Court of Appeals in the McMinnville case.

(8) The Goal 14 boundary location determination requires evaluation and comparison of the relative costs, advantages and disadvantages of alternative UGB expansion areas with respect to the provision of public facilities and services needed to urbanize alternative boundary locations. This evaluation and comparison must be conducted in coordination with service providers, including the Oregon Department of Transportation with regard to impacts on the state transportation system. "Coordination" includes timely notice to service providers and the consideration of evaluation methodologies recommended by service providers. The evaluation and comparison must include:

(a) The impacts to existing water, sanitary sewer, storm water and transportation facilities that serve nearby areas already inside the UGB;
(b) The capacity of existing public facilities and services to serve areas already inside the UGB as well as areas proposed for addition to the UGB; and
(c) The need for new transportation facilities, such as highways and other roadways, interchanges, arterials and collectors, additional travel lanes, other major improvements on existing roadways and, for urban areas of 25,000 or more, the provision of public transit service.

The City worked with all entities that provide public facilities and services within the Eugene UGB. The City of Eugene and its urban transition area is sufficiently developed at this point to make the extension of facilities and services to any adjacent or nearby area possible within the 20-year planning period, without substantial impact on areas already inside the UGB. For that reason, no land was summarily dismissed from consideration on the basis set out in this rule. Service costs were a consideration when ultimately choosing between alternative boundary locations for the industrial land expansion. See UGB Expansion Analysis for Employment Land (Appendix B to these findings) at section III(g)(2).

Statewide Planning Goal 15 – Willamette Greenway

Statewide Planning Goal 15 -- “To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.”

OAR 660-024-0020(1)(e) provides that Statewide Planning Goal 15 is not applicable when amending a UGB unless the land is within the Willamette River Greenway Boundary. The UGB amendments made with this action do not include land within the Greenway Boundary. Therefore, Goal 15 does not apply.
Statewide Planning Goal 16 – Estuarine Resources
Statewide Planning Goal 17 - Coastal Shorelands
Statewide Planning Goal 18 - Beaches and Dunes
Statewide Planning Goal 19 - Ocean Resources

OAR 660-024-0020(1)(f) provides that Statewide Planning Goals 16 through 18 are not applicable when amending a UGB unless the land is within a coastal shorelands boundary. The UGB amendments made with this action do not include land within a coastal shorelands boundary. Therefore, Goals 16, 17 and 18 do not apply.

OAR 660-024-0020(1)(g) provides that Statewide Planning Goal 19 is not applicable when amending a UGB.

Local Government Criteria

City of Eugene Criteria

EC 9.7735 Metro Plan Amendments – Criteria for Approval. The following criteria shall be applied by the city council in approving or denying a Metro Plan amendment application:

(1) The proposed amendment is consistent with the relevant Statewide Planning Goals; and

This action includes three types of amendments to the Metro Plan. Most of the Metro Plan amendments made by this ordinance add text to the Metro Plan to refer to the “Eugene UGB” and eliminate or revise text in the Metro Plan that related to the regional UGB, which no longer exists. (The Eugene UGB is adopted as part of the Envision Eugene Comprehensive Plan.) One amendment excludes Eugene from the Metro Plan’s 50-acre minimum for lots in the Campus Industrial Land Use designation. This is necessary to allow the creation of the industrial land sites needed in Eugene over the 2012-2032 planning period. Another amendment (the third type) makes the Metro Plan’s Economic Element inapplicable to Eugene, because the new Envision Eugene Comprehensive Plan will now set out the Economic development policies that apply within the Eugene UGB.

These changes are consistent with the Statewide Planning Goals. To the extent any of these actions implicate a requirement of a Statewide Planning Goal, they are addressed under the Goals, above.

(2) The proposed amendment does not make the Metro Plan internally inconsistent.

The Metro Plan amendments made by this ordinance (described under EC 9.7735(1), above), do not cause any internal inconsistencies in the Metro Plan. The more substantive actions taken by this ordinance relate to the adoption of the Envision Eugene Comprehensive Plan, including the detailed

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18 The Ordinance includes code amendments that preserve undeveloped industrial sites in the Clear Lake expansion area for future development consistent with the “large lot portfolio” needed.
description of the Eugene UGB and its expansion for employment, park and school uses. The Metro Plan policies that relate to any of the actions taken by this ordinance are addressed here:

**GM 9.** A full range of key urban facilities and services shall be provided to urban areas according to demonstrated need and budgetary priorities.

This UGB adoption package amends the Public Facilities and Services Plan to include new projects to ensure a full range of key urban facilities and services, including stormwater and wastewater conveyance and drinking water will be provided to urban areas both inside the current urban growth boundary and within planned expansion areas.

**GM 31.** If expansion of the UGB is contemplated, all other options should be considered and eliminated before consideration of expanding the UGB in the area west of Highway 99 and north of Royal Avenue.

The City of Eugene Industrial Expansion Study provides a detailed account of the analysis of every possible expansion area, showing that the City’s needs could not be met outside of the area west of Highway 99 and north of Royal Avenue. Furthermore, with regard to the legislative intent of this policy, it was originally adopted under the transportation section of the Metro Plan as a protective measure to prevent incompatible use that would impede the function of the Eugene Airport. In accordance with that intent, this expansion area, which does not include residential uses, does not impact the functioning of the airport.

**C.1** Where agricultural land is being considered for inclusion in future amendments to the UGB, least productive agricultural land shall be considered first. Factors other than agricultural soil ratings shall be considered when determining the productivity of agricultural land. Relevant factors include suitability for grazing, climatic conditions, existing and future availability of water for farm irrigation, ownership patterns, land use patterns, proximity to agricultural soils or current farm uses, other adjacent land uses, agricultural history, technological and energy inputs required, accepted farming practices, and farm market conditions.

The City of Eugene Industrial Expansion Study section 2.g.1 addresses the evaluation of soil consistent with this policy.

**C.9** Each city shall complete a separate study to meet its requirements under the Goal 5 Rule for wetlands, riparian corridors, and wildlife habitat within the UGB. Lane County and the respective city jointly will adopt the inventory and protection measures for the area outside the city limits and inside the UGB.

This action includes an update to the City and County Goal 5 study for the areas to be added to the Eugene UGB through this action. See findings under Statewide Planning Goal 5, above.

**C.13** Wetland, riparian corridor, or wildlife habitat sites inside the UGB identified after adoption of the applicable Goal 5 inventory of significant sites, that have not been previously considered for inclusion in the inventory, shall be addressed in the following manner:
a. The jurisdiction within which the natural resource is located shall study the site according to the requirements in the Goal 5 administrative rule.
b. Upon the completion of the study, the affected jurisdiction shall determine whether the identified natural resource is significant according to the adopted significance criteria of the affected jurisdiction.
c. If the newly identified site is determined significant, the affected jurisdiction shall complete the Goal 5 requirements for the site, which includes adoption of protection measures for sites identified for protection.
d. The affected jurisdiction will notify affected property owners and interested parties throughout the process.

See findings under Statewide Planning Goal 5, above.

G.1 Extend the minimum level and full range of key urban facilities and services in an orderly and efficient manner consistent with the growth management policies in Chapter II-C, relevant policies in this chapter, and other Metro Plan policies.

The actions taken by this ordinance amend the Public Facilities and Services Plan to include new projects to ensure a full range of key urban facilities and services, including stormwater and wastewater conveyance and drinking water will be provided to urban areas both inside the current urban growth boundary and within planned expansion areas. See Exhibit C to the Ordinance. Additional findings are provided under Goal 11, above.

G.2 Use the planned facilities maps of the Public Facilities and Services Plan to guide the general location of water, wastewater, stormwater, and electrical projects in the metropolitan area. Use local facility master plans, refinement plans, capital improvement plans and ordinances as the guide for detailed planning and project implementation.

As stated above, the actions taken include amendments to the Public Facilities and Services Plan to include new projects to ensure a full range of key urban facilities and services, including stormwater and wastewater conveyance and drinking water will be provided to urban areas both inside the current urban growth boundary and within planned expansion areas. See Exhibit C to the ordinance. Additional findings are provided under Goal 11, above.

G.3 Modifications and additions to or deletions from the project lists in the Public Facilities and Services Plan for water, wastewater, and stormwater public facility projects or significant changes to project location, from that described in the Public Facilities and Services Plan planned facilities Maps 1, 2, 2a and 3, requires amending the Public Facilities and Services Plan and the Metro Plan, except for the following:

a. Modifications to a public facility project which are minor in nature and do not significantly impact the project’s general description, location, sizing, capacity, or other general characteristic of the project; or
b. Technical and environmental modifications to a public facility which are made pursuant to final engineering on a project; or
c. Modifications to a public facility project which are made pursuant to findings of an Environmental Assessment or Environmental Impact Statement conducted under regulations implementing the procedural provisions of the national Environmental Policy Act of 1969 or any federal or State of Oregon agency project development regulations consistent with that act and its regulations; or
d. Public facility projects included in the PFSP to serve land designated Urban Reserve prior to the removal of the Urban Reserve designation, which projects shall be removed from the PFSP at the time of the next Periodic Review of the Metro Plan.

As stated above, the actions taken by this ordinance include amendments to the Public Facilities and Services Plan to include new projects to ensure a full range of key urban facilities and services, including stormwater and wastewater conveyance and drinking water will be provided to urban areas both inside the current urban growth boundary and within planned expansion areas. See Exhibit C to the ordinance. Additional findings are provided under Goal 11, above.

G.4 The cities and Lane County shall coordinate with EWEB, SUB, and special service districts operating in the metropolitan area, to provide the opportunity to review and comment on proposed public facilities, plans, programs, and public improvement projects or changes thereto that may affect one another’s area of responsibility.

Water facilities projects added to the PFSP are shown in ordinance exhibits at Table 1 of Exhibit C-1 and on Map 1 of Exhibit C-2. Also see findings under Goal 11, above.

G.9 Wastewater conveyance and treatment shall be provided to meet the needs of projected growth inside the UGB that are capable of complying with regulatory requirements governing beneficial reuse or discharge of effluent and beneficial reuse or disposal of residuals.

Wastewater projects added to the PFSP are shown in Table 3 of Exhibit C-1 and on Map 2 in Exhibit C-2. Also See findings under Statewide Planning Goal 11, above.

G.17 Manage or enhance waterways and open stormwater systems to reduce water quality impacts from runoff and to improve stormwater conveyance.

In developing the code changes for the UGB expansion area included in this action, the City consulted with the Junction City Water Control District to specifically address adequate stormwater conveyance. Stormwater projects added to the PFSP are shown in Table 5 of Exhibit C-1, and on Map 3 of Exhibit C-2. The City’s Goal 6 /WQ Water Quality overlay zone is proposed to be applied to resources in the proposed expansion areas that have been identified as contributing water quality benefits to the city’s stormwater system.

G.18 Include measures in local land development regulations that minimize the amount of impervious surface in new development in a manner that reduces stormwater pollution, reduces the negative affects from increases in runoff, and is compatible with Metro Plan policies.
The City has adopted regulations addressing stormwater management and quality starting at EC 9.6790. These standards will apply to the land proposed to be added to Eugene’s UGB. In addition, portions of the expansion areas will be subject to the /WQ Water Quality overlay zone, which provides additional protections to resources identified as contributing water quality benefits.

**G.22** The cities shall initiate a process with school districts within the UGB for coordinating land use and school planning activities. The cities and school districts shall examine the following in their coordination efforts:

a. The need for new public school facilities and sufficient land to site them;
b. How open enrollment policies affect school location;
c. The impact of school building height and site size on the buildable land supply;
d. The use of school facilities for non-school activities and appropriate reimbursement for this use;
e. The impact of building and land use codes on the development and redevelopment of school facilities;
f. Systems development charge adjustments related to neighborhood schools; and,
g. The possibility of adjusting boundaries, when practical and when total enrollment will not be affected, where a single, otherwise internally cohesive area is divided into more than one school district.

The City coordinated with Eugene 4J, Bethel and Junction City School Districts to determine their needs for new school facilities as part of this action. See “School Expansion Study” at Appendix A to these findings. Only Bethel School District reported a need for land for a new school facility, which is further analyzed in the School Expansion Study.

**G.33** New schools within the Plan Boundary shall be built inside the UGB.

The Bethel School District required new land for a school in the Clear Lake area. The addition of land to Eugene’s UGB for this purpose is consistent with policy G.33.

**(3)** When the city-specific local comprehensive plan also applies, the proposed amendment is consistent with the city-specific local comprehensive plan.

The actions taken by this ordinance include the initial adoption of Eugene’s first city-specific local comprehensive plan: the Envision Eugene Comprehensive Plan. Future Metro Plan amendments must be consistent with this new plan, under this code section (EC 9.7735(3)).

**EC 9.8065** Code Amendment Approval Criteria. If the city council elects to act, it may, by ordinance, adopt an amendment to this land use code that:

**(1)** Is consistent with applicable statewide planning goals as adopted by the Land Conservation and Development Commission.

See findings under Statewide Planning Goals, above.
(2) Is consistent with applicable provisions of the Metro Plan and applicable adopted refinement plans.

See findings addressing applicable provisions of the Metro Plan under EC 9.7735(2), above.

(3) In the case of establishment of a special area zone, is consistent with EC 9.3020 Criteria for Establishment of an S Special Area Zone.

The actions taken to not include the creation of a special area zone.

[Although not clearly applicable to the Public Facilities and Services Plan amendments made by section 4, Exhibits C-1 and Exhibit C-2 of the Employment, Park and School Ordinance, findings addressing EC 9.8424 are provided here.]

EC 9.8424 Refinement Plan Amendment Approval Criteria. Approval, or approval with modifications shall be based on compliance with the following criteria:

(1) The refinement plan amendment is consistent with all of the following:
   (a) Statewide planning goals.

   See Statewide Planning Goal findings, above.

   (b) Applicable provisions of the Metro Plan.

   See findings under EC 9.7735(2), above.

   (c) Remaining portions of the refinement plan.

   The amendments made to the Public Facilities and Services Plan add new projects for consistency with that Plan’s purpose – to provide for a full range of key urban facilities and services, including stormwater and wastewater conveyance and drinking water. See findings under Goal 11 and findings addressing Metro Plan Policies, above.

   (2) The refinement plan amendment addresses one or more of the following:
      (a) An error in the publication of the refinement plan.
      (b) New inventory material which relates to a statewide planning goal.
      (c) New or amended community policies.
      (d) New or amended provisions in a federal law or regulation, state statute, state regulation, statewide planning goal, or state agency land use plan.
      (e) A change of circumstances in a substantial manner that was not anticipated at the time the refinement plan was adopted.

The amendments to the Public Facilities and Services Plan address new inventory material which relates to Statewide Planning Goals 9, 11 and 14.
EC 9.8865  Zone Change Approval Criteria. Approval of a zone change application, including the designation of an overlay zone, shall not be approved unless it meets all of the following criteria:

(1) The proposed change is consistent with applicable provisions of the Metro Plan. The written text of the Metro Plan shall take precedence over the Metro Plan diagram where apparent conflicts or inconsistencies exist.

The actions taken by this ordinance include Metro Plan designation changes for each tax lot is being rezoned. The AG zone and specific overlay zone(s) being applied to each lot in a UGB expansion areas is consistent with the new Metro Plan designation being applied. The purpose of the AG zone as set out in EC 9.200 is “to allow agricultural uses within the urban growth boundary until land is converted to urban development.” See Exhibit A-3 of the Ordinance for a list of each tax lot with its new Metro Plan designation and zone, for demonstration of consistency. Consistency with the Metro Plan text is addressed under EC 9.7735(2), above.

(2) The proposed zone change is consistent with applicable adopted refinement plans. In the event of inconsistencies between these plans and the Metro Plan, the Metro Plan controls.

The rezoning actions taken in this ordinance apply only to land that, before this action, was located outside the Eugene UGB. There are no existing refinement plans that apply to that land.

(3) The uses and density that will be allowed by the proposed zoning in the location of the proposed change can be served through the orderly extension of key urban facilities and services.

Consistency with this criterion is addressed through updates to the Public Facilities Plan. See findings under Statewide Planning Goal 11, above.

(4) The proposed zone change is consistent with the applicable siting requirements set out for the specific zone in:

(s) EC 9.4776 /WQ Water Quality Overlay Zone Siting Requirements:

(1) The subject lot includes:
   (a) A waterway identified pursuant to section 303(d) of the federal Clean Water Act, a waterway that is a tributary to a 303(d) waterway, or that is a headwater stream; or
   (b) A portion of the /WQ Management Area, as described in EC 9.4778(1), for a waterway described in (a); and

(2) The subject segment of waterway (it may be natural or constructed):
   (a) Is not already protected by the NR zone or the /WR, /WP or /WB overlay zones;
   (b) Has a discernable streambed and side banks;
   (c) Carries water at least part of the year;
   (d) Provides a drainage function for surface runoff from land areas beyond a roadway; and
   (e) If a ponded area, has an inlet and outlet drainage function.

Clear Lake Expansion Area
The /WQ overlay is applied to two waterways, one in the northern portion of the area that drains into the A2 Channel and the A2 Channel in the southern part of the area, and to the ponds that the southern portion of the A2 Channel drains into and out of. The waterways drain to a 303(d) listed waterway (Amazon Creek) and the portions of the A2 Channel that are adjacent to this expansions area and inside the current urban growth boundary are already identified and protected on the City’s previously adopted Goal 6 inventory as a /WQ waterway with /WQ overlay zone.

Consistent with (4)(s)(1), (a) these two waterways are tributaries to a 303(d) listed waterway, and (b) the water quality management areas are as shown on the proposed amendment to the adopted Water Quality Waterway Map.

Consistent with (4)(s)(2), (a) these two waterways and ponds are not already protected by the zones or overlay zones listed, and (b)-(d) these two waterways and ponds include these features and (e) the ponds include an inlet and outlet drainage function for the A2 Channel.19

**Santa Clara Expansion Area**

The /WQ overlay zone is applied to one waterway, along the eastern portion of the site, which drains into the Willamette River. Consistent with (4)(s)(1), (a) this waterway is a tributary to a 303(d) listed waterway, the Willamette River, and (b) the water quality management areas are as shown on the proposed amendment to the adopted Water Quality Waterway Map.

Consistent with (4)(s)(2), (a) the waterway is not already protected by the zones or overlay zones listed, and (b)-(d) the waterway includes these features and (e) is not applicable because there is not a ponded area.

- **EC 9.4915 /WR Water Resources Conservation Overlay Zone Siting Requirements.**
  - (1) Is not already designated for protection or restoration by the West Eugene Wetlands Plan;
  - (2) Meets the other approval criteria of EC 9.8865; and
  - (3) Includes a Goal 5 Water Resource Site identified for conservation in the Goal 5 Water Resources Conservation Plan or includes land within the /WR Water Resources Conservation Area as described in EC 9.4920.

**Santa Clara Expansion Area**20

The /WR overlay is applied to one waterway, along the western portion of the site. The portion of this waterway that is adjacent the expansion area and inside the current urban growth boundary, is already identified and protected on the City’s previously adopted Goal 5 inventory work as a significant Goal 5 riparian resource with the /WR overlay zone (identified as riparian site E56).

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19 For more information, see the Clear Lake UGB Expansion Area Stormwater Capacity Assessment, dated May 2015, in the Evidentiary/Technical support portion of the public record.

20 The /WR overlay is not proposed for any of the Clear Lake Expansion area as detailed in the associated ESEE analysis.
Consistent with (4)(t): (1) the resource is not already designated for protection or restoration by the West Eugene Wetlands Plan and (2) is consistent with EC 9.8865 as there are no other criteria directly applicable to adding the /WR overlay zone. Regarding (3), because the portions of the riparian resources located inside the current urban growth boundary are identified as significant and protected accordingly, it follows that the portions of these resources that fall within the expansion area should receive the same identification of significance and the same level of protection. Pacific Habitat Services, Inc. has indicated that based on the rationale used in the previous Goal 5 inventory work, extension of the same level of protection to these resources would be appropriate. This is portion of the protected Goal 5 Water Resource Site E56 that is outside of the current urban growth boundary will be included on the City’s Goal 5 inventory with the proposed amendments to the Goal 5 Water Resources Conservation Plan, section III Significant Goal 5 Riparian Corridors and Wildlife Habitat Sites within the Eugene Urban Growth Boundary (Tiles 1 and 4) and to the Goal 5 Water Resources Conservation Plan, section IV, Map 16 Eugene Goal 5 ESEE Conclusions.

**Lane County Criteria**

**LC 12.225 Metro Plan Amendment Criteria.**

The following criteria will be applied by the Board of Commissioners and other applicable governing body or bodies in approving or denying a Metro Plan amendment application:

1. The proposed amendment is consistent with the relevant Statewide Planning Goals; and
2. The proposed amendment does not make the Metro Plan internally inconsistent.

See above findings for EC 9.7735.

**Appendices to Legal Findings**

A. UGB Expansion Analysis for School Land Needs
B. UGB Expansion Analysis for Industrial Land Needs
C. UGB Expansion Analysis for Park Land Needs
D. Addendum to UGB Expansion Analysis for Industrial Land Needs
E. Summary of Methodology Used to Refine the Location of the Eugene Urban Growth Boundary
F. Materials Supporting Goal 5 Findings

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21 For more information, see the memo from Alissa Hansen, Riparian Corridors in the Santa Clara UGB Expansion Area, dated November 28, 2016 with attachments, in the Evidentiary/Technical support portion of the public record.
UGB Expansion Analysis for School Land

I. Introduction

This study sets out the standards and process by which the City of Eugene determined a need for additional school land within its urban growth boundary and the characteristics of that land, then follows that process to conclude by identifying the most suitable land to meet the City’s school land need.

Oregon’s Statewide Planning Goals include schools in their definition of “key facilities” and “urban facilities and services.” Cities are required by Goals 11 and 14, and related statutes and administrative rules to plan for schools in their comprehensive plans and to ensure that UGBs are located based, in part, on the need for schools. Cities and school districts are required by ORS 195.110 to plan for school siting needs with at least a ten-year planning horizon.

The population within Eugene’s UGB is served by three different school districts: Eugene School District 4J, Bethel School District and Junction City School District. The “School Districts” map shows these three districts, as well as Springfield School District (which intersects a small portion of the Eugene UGB) and Creswell School District (which is near but does not intersect the UGB) for reference.

Both Eugene and Bethel School Districts are “large school districts” as defined in ORS 195.110 and both districts have school facilities plans that determine their long term facility needs. The school districts’ plans, as required by law, include “an analysis of the land required for the 10-year period covered by the plan that is suitable, as permitted or conditional use, for school facilities inside the urban growth boundary.” The schools must identify their “school facility needs based on population
growth projections and land use designations contained in the city or county comprehensive plan.”

Statutes require that, “[i]f a large school district determines that there is an inadequate supply of suitable land for school facilities for the 10-year period covered by the school facility plan, the city or county or both, and the large school district shall cooperate in identifying land for school facilities and take necessary actions, including, but not limited to . . . adding one or more sites designated for school facilities to an urban growth boundary.” ORS 195.110(6).

II. DETERMINATION OF NEED FOR NEW SCHOOL SITE

Eugene School District 4J, through the Eugene School District 4J Facilities Long-Range Plan (2013-2014), has determined that there is an adequate supply of suitable land for its school facilities within the current Eugene UGB. As documented in 4J’s plan, which is a 10-year plan approved in 2013 to comply with ORS 195.110, enrollment in 4J has been declining for more than three decades and enrollment projections show that enrollment will continue to decline. In addition to declining enrollment, 4J currently owns multiple school properties that are identified as surplus or reserve, meaning that 4J owns more land than it currently needs. The plan focuses on replacing, renovating and remodeling existing aging school buildings within 4J to serve current and future student populations.

Bethel School District has identified the need for one new school facility to serve the fast-growing population in Eugene’s Bethel neighborhood, in northwest Eugene. Bethel School District’s needs are explained and discussed in the Bethel School District 2013 Long Range Facilities Plan (a 20-year plan created in accordance with ORS 195.110). The Bethel School District boundary covers northwest Eugene (Bethel and parts of River Road/Santa Clara) and extends beyond the current UGB towards Fern Ridge Reservoir (see map above). Bethel’s plan documents historic enrollment trends, enrollment forecasts, capacity of existing school facilities and an assessment of existing conditions of schools.

In terms of historical enrollment trends, Bethel’s student enrollment increased from 4,464 to 5,544 students between the 1995/96 and the 2010/11 school years. The average annual growth rate over this period was 1.4 percent or about 70 students per year. Enrollment forecasts show that the Bethel School District will add about 700 additional students by 2032. Of these additional students, approximately 525 are forecasted for elementary and middle school students.

The District’s analysis of the existing schools shows a capacity deficit, which means there is not adequate room within the existing schools to accommodate the projected increase in students. The plan states that when a school approaches 90% capacity, the School District begins to evaluate options either for increasing capacity at the school or shifting enrollment or programs (if possible) to a school with more capacity. As of 2012, the plan estimates that only two of the five elementary schools were operating at under 80% capacity, while one elementary school and both of the K-8 schools were operating at or above 90% capacity. The additional students forecasted would push all of those schools beyond the 90% capacity threshold during the planning period.

Aware of this need for some time, Bethel School District has purchased parcels in the area of need as acquisition opportunities have arisen. The District now owns approximately 80 undeveloped acres near the Eugene UGB. As demonstrated in the analysis, below, the City does not assume that the land owned by the District is the correct expansion area. The following analysis determines which land is appropriate for a UGB expansion for the needed school site based on Statewide Planning Goal 14.
III. CHARACTERISTICS OF NEEDED SCHOOL SITE

Statewide Planning Goal 14 requires that the “[e]stablishment and change of the [urban growth] boundaries shall be based on the following: (1) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and (2) Demonstrated need for . . . schools. In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need.” See also OAR 660-024-0040(1), (7). The site characteristics below, identified in coordination with the City of Eugene and Bethel School District, are necessary for land to be suitable for the needed school facility.

A new school site would need to have a number of characteristics to meet the needs of the District. In order to be developed by the District, the site must be located within the district boundaries. Within those boundaries, there are more specific location-based, and other, characteristics needed in the new school site.

Within the first category of “location-based site characteristics,” this analysis will consider both issues of feasible development of a new school, and district-specific issues of distribution to serve their student population. Bethel School District serves students both inside and outside of the Eugene UGB. Because it serves urban populations, state statute mandates that all Bethel school facilities must be located within the urban growth boundary. Therefore, the new school site must be either within the current UGB or near enough to be brought into the UGB.

The school district is also responsible for planning the distribution of its schools to best serve its current and projected population. The majority of the forecasted growth is in the western portion of the district, near the current edge of the UGB, putting a particular strain on those schools. To appropriately serve this area of forecasted growth, the new school site should be located west of Terry Street.

The District has also established a pattern of maximizing efficient use of their resources while providing equitable distribution by collocating schools of different types while separating schools of the same type by a minimum of half a mile when possible. Because the identified need is for an elementary, middle or K-8 school, the new school site should be at least half a mile from an existing elementary, middle or K-8 school facility.

In addition to simple distance between school facilities, the District must consider equitable distribution of school facilities within the district boundaries as a whole. At this time, all but one of the Districts’ schools (Irving Elementary) are located south of Barger Drive. Irving Elementary is located near the eastern boundary of the district (see map – “Bethel School District Facilities”). In order to provide more equitable distribution of schools, the area north of Barger Drive has been identified as a desired location for a new school site.

Compatibility with adjacent uses is another important consideration. For health, safety and equity considerations, the new school site should be adjacent to an urban residential neighborhood. This maximizes the number of students who are able to live in close proximity to the school, which in turn enhances the safety and accessibility of the school by active modes of transportation such as walking or bicycling. Conversely, dangerous or hazardous areas, such as land adjacent to the airport (which is
located in the center of Bethel School District) or heavy industrial (which is prominent in the northern portion of Bethel School District), should be avoided when selecting a new school site.

Beyond identifying general areas that are appropriate for a new school site (“location-based site characteristics”), individual properties also need certain characteristics to meet the need for a new school site (“other site characteristics”). These characteristics include the needed size and buildability of sites, access via appropriate roads, and legal ability of the District to develop the site.

Given the anticipated shortfall, the District expects to need additional capacity for Kindergarten through 8th grade. The forecasted need is for a minimum of 25 acres of buildable land for an elementary, middle or K-8 school, depending on enrollment. The plan also states an intention to collocate schools where possible, indicating a preference for a larger site that could accommodate multiple facilities. Of the existing schools, both high schools and both middle schools are collocated on sites with other schools, as shown on the map above. For the current need, however, 25 buildable acres is the size criteria for a new school site.

For this analysis, three factors are considered with regard to what constitutes “buildable acres.” Based on the current Bethel School District facilities, a site or portion of a site must be 330 feet wide to be considered buildable1. Other constraints that make a site or portion of a site unbuildable are Goal 5 environmental protections and the Special Flood Hazard Area.

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1 The narrowest built portion of a school site for the current Bethel School District facilities is 330 feet (southwestern corner of Willamette High School site). In this case, there is less than 50 feet of clearance on either side of the building along the narrow width.
Because school facilities create significant foot and vehicular traffic, it is important that the new school site be located adjacent to a street designated as an existing or planned arterial or collector. These streets are designed for pedestrian connectivity and higher volumes of traffic.

In order to develop and operate the school facility, thereby meeting the identified need, the School District must have the rights to do so. Therefore, in addition to the location and type of site, availability for School District ownership must be considered in this evaluation. In summary, the site characteristics below are necessary for land to be suitable for the needed school facility.

**Summary**

**Location-based Site Characteristics:**

- **Distribution.** These characteristics provide for equitable distribution of schools within the school district, considering forecasted population and current facilities:
  - North of Barger Drive and west of Terry Street
  - Greater than one-half mile from an existing elementary, middle or K-8 school
- **Compatibility with surrounding uses.** This characteristic prevents the school from being sited in a dangerous or hazardous area, either through mechanical or environmental hazards.
  - Not adjacent to areas designated for incompatible uses (such as airport or heavy industrial)
- **Adjacency to urban residential neighborhoods.** This characteristic provides a site that is safely accessible to active modes of transportation, including walking and bicycling, for students and staff, as well as maximizing the number of students who are able to live in close proximity to the school.
  - Adjacent to an existing or planned urban residential neighborhood

**Other Site Characteristics:**

- **Size.** This characteristic ensures that the future school site is of an appropriate size and configuration for the intended use:
  - Minimum buildable size (at least 330’ wide) of 25 acres
- **Reasonably unconstrained/available for school use.** These characteristics ensure that the site will not be constrained from development for its intended use by environmental constraints or hazardous conditions such as the Special Flood Hazard Area.
  - Not committed to conflicting uses or environmental protections
  - Not severely encumbered with development constraints (such as the Special Flood Hazard Area)
- **Accessibility.** This characteristic ensures that the future school is fronting a street that carries or is intended to carry higher volumes of traffic, has or will have a high degree of connectivity, and provides or is intended to provide for pedestrian, bicycle and transit travel:
  - Located on existing or planned collector or arterial street
- **Availability for school ownership.** This characteristic ensures that the future school can be developed by the School District, as evidenced by existing District ownership or a willing seller.
  - Owned or available to be owned by the School District for purposes of school development
IV. DETERMINATION OF NEED FOR EXPANSION (Screening of Sites Within Current UGB)

Before evaluating land outside of the urban growth boundary, the City is required to determine whether the school need can be met with land already within the UGB. As described by the first “Distribution” characteristic above the needed site must be west of Terry Street and north of Barger Drive. Due to the configuration of the current UGB, there are two separate areas of land inside the current UGB that are west of Terry Street and north of Barger Drive (north of Clear Lake Road and South of Clear Lake Road). The northern area (north of Clear Lake Road and west of where Terry Street would be if it extended north) includes some vacant land (there is no partially vacant land in this area), which is shown in the map “Vacant and Partially Vacant Land – North of Clear Lake Road”). This area is entirely composed of industrial land that is distant from urban neighborhoods and is therefore clearly unsuitable for school siting based on the needed characteristics described above.
The southern area, near the intersection of Terry Street and Barger Drive, is designated Residential. The City’s Buildable Lands Inventory shows only eight vacant (and no partially vacant) sites in this area (see “Vacant and Partially Vacant Land – South of Clear Lake Road” map). None of these sites are larger than 0.3 acres, and most of these sites are isolated from each other. These factors of size and location require the City to conclude that there is insufficient available land within the urban growth boundary with the characteristics needed for a new school site. Because of the lack of available land, an expansion of the urban growth boundary is necessary to accommodate a school facility for Bethel.
V. ANALYSIS OF LAND FOR UGB EXPANSION

ORS 197.298(1) and OAR 660-024-0060(1) set out a “priority” system among four land categories. The categories are described below. The order of priority is the order in which the categories are listed, highest (a) to lowest (d). This priority system begins with the general rule that cities will expand onto land in the highest-priority land category, expanding onto lower priority land only if the higher-priority land is “inadequate to accommodate the amount of land needed.” ORS 197.298(b), (c) and (d). A number of regulations, together, direct the way in which the City must apply the priority system. In the case of land for a school, they include: ORS 197.298, the locational factors of Statewide Planning Goal 14 and OAR 660-024-0060(1), (5) and (6).

ORS 197.298 provides:
(1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary except under the following priorities:
   (a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan. [Note: Eugene has no land in this category.]
   (b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.
   (c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition). [Note: the study area has no land in this category.]
   (d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.

(2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

(3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:
   (a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;
   (b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or
   (c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

Statewide Planning Goal 14 provides:
The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:
(1) Efficient accommodation of identified land needs;
(2) Orderly and economic provision of public facilities and services;
(3) Comparative environmental, energy, economic and social consequences; and
(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

OAR 660-024-0060 provides:
(1) When considering a UGB amendment, a local government must determine which land to add by evaluating alternative boundary locations. This determination must be consistent with the priority of land specified in ORS 197.298 and the boundary location factors of Goal 14, as follows:
   (a) Beginning with the highest priority of land available, a local government must determine which land in that priority is suitable to accommodate the need deficiency determined under OAR 660-024-0050.
   (b) If the amount of suitable land in the first priority category exceeds the amount necessary to satisfy the need deficiency, a local government must apply the location factors of Goal 14 to choose which land in that priority to include in the UGB.
   (c) If the amount of suitable land in the first priority category is not adequate to satisfy the identified need deficiency, a local government must determine which land in the next priority is suitable to accommodate the remaining need, and proceed using the same method specified in subsections (a) and (b) of this section until the land need is accommodated.
   (d) Notwithstanding subsection (a) to (c) of this section, a local government may consider land of lower priority as specified in ORS 197.298(3).
   (e) For purposes of this rule, the determination of suitable land to accommodate land needs must include consideration of any suitability characteristics specified under section (5) of this rule, as well as other provisions of law applicable in determining whether land is buildable or suitable.

   * * *

(5) If a local government has specified characteristics such as parcel size, topography, or proximity that are necessary for land to be suitable for an identified need, the local government may limit its consideration to land that has the specified characteristics when it conducts the boundary location alternatives analysis and applies ORS 197.298.
(6) The adopted findings for UGB adoption or amendment must describe or map all of the alternative areas evaluated in the boundary location alternatives analysis. If the analysis involves more than one parcel or area within a particular priority category in ORS 197.298 for which circumstances are the same, these parcels or areas may be considered and evaluated as a single group.

**a. Establish the Study Area / Candidate Land for Evaluation**

To identify the right location for its urban growth boundary expansion, the City of Eugene established a very expansive study area that includes all land west of Interstate 5² and south of the McKenzie River within ½ mile of Eugene’s current UGB or within the Eugene-Springfield Metropolitan Area General Plan boundary (which extends beyond ½ mile in some areas). The study area includes some additional land to

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² The acknowledged regional comprehensive plan (the Metro Plan) provides that “[t]he division of responsibility for metropolitan planning between the two cities is the Interstate 5 Highway.” ORS 197.304 requires Eugene and Springfield to establish separate UGBs “consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan.”
allow for analysis of exception areas or non-resource areas that abut the current UGB and extend beyond the study area described above.

For purposes of determining how the City of Eugene would meet its need for an additional school site for the Bethel School District area, the study area was narrowed to include only the land within the school district boundaries.

Eugene’s study area for a school site includes all land that is:
(1) Within Bethel School District’s Boundaries; and
(2) Within one or more of these categories:
   (a) within one-half mile from the current UGB;
   (b) beyond one-half mile from the current UGB, but within the Eugene-Springfield Metropolitan Area General Plan (Metro Plan) boundary; or
   (c) beyond one-half mile from the current UGB, but part of an exception area or nonresource area (see ORS 197.298(1)(b)) that abuts the current UGB.

The location of the study area is shown in the “Study Area” map. It includes about 5,338 acres, or 21,400% of the 25 acre land need.
b. **Categorize Candidate Land into the Four Priority Categories of ORS 197.298(1)/(ORS 197.298(1)(b)**

ORS 197.298(1) requires the City to identify the land in its study area as follows:

- **First Priority Land:** land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan

- **Second Priority Land:** land identified in the Lane County Rural Comprehensive Plan or the Metro Plan as an exception area or non-resource land, including resource land that is completely surrounded by exception areas unless such resource land is high-value farmland

- **Third Priority Land:** land designated as marginal land in the Lane County Rural Comprehensive Plan

- **Fourth Priority Land:** land designated in the Lane County Rural Comprehensive Plan or the Metro Plan for agriculture or forestry, or both.

As required by state law, these priority categories are based on comprehensive plan land use designations. Therefore, the first map below, “Land Use Designations,” shows the designations of both the Metro Plan and the Lane County Rural Comprehensive Plan as they apply inside the study area. Some land use designations in the Metro Plan are substantially the same as those used in the Lane County Rural Comprehensive Plan (e.g. the Agriculture designation in Metro Plan and the Agricultural designation in the Lane County Rural Comprehensive Plan). For these designations, the “Land Use Designations” map and this study use a generic designation (e.g. Agriculture). The base designations shown on this map are aggregated into priority categories, which are shown on the second map, “Priority Categories of Candidate Land.”

In Eugene’s school expansion study area, there are no lands designated as urban reserves (See ORS 197.298(1)(a), above) or as marginal land ((c), above); therefore there are no first priority or third priority lands included on the map or in the analysis that follows. Land within the study area that does not fall into any of the four priority categories is identified on the Priority Categories of Candidate Land map as “Other Lands.”

In addition to forming the basis for the priority category of candidate land, land use designations are referenced in the subsequent analysis to identify proximity of candidate land to incompatible uses (such as heavy industrial or airport), or desired uses (such as urban residential neighborhoods). These land use designations include those within the study area and those adjacent to the study area. For ease of reference, these designations are shown on the third map below, “Contextual Land Use Designations.”

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3 These lands include those designated for Sand and Gravel, Airport Reserve, and Parks and Open Space, as well as a small portion of a tax lot designated Government and Education for which no exception was required.
Appendix A to Findings

City of Eugene Urban Growth Boundary Study
School Land Evaluation
Land Use Designations

Eugene Airport

Comprehensive Plan Designations
-Land Inside UGB
-Major Streets
-Water Bodies

Government & Education
-Parks and Open Space
-Agriculture

Rural Residential
-Rural Commercial
-Airport Reserve
-Rural Industrial

Note: This map is based on imprecise source data, subject to change, and for general reference only.
Land Inside UGB

**Land Types**
- Major Streets
- Water Bodies
- Priority 2
- Priority 3 (None)
- Priority 4
- Other Lands - land that does not fall within any priority category

Note: This map is based on imprecise source data, subject to change, and for general reference only.

Eugene Airport

City of Eugene Urban Growth Boundary Study
School Land Evaluation
Priority Categories of Candidate Land
Eugene Airport

School Study Area Boundary

Comprehensive Plan Designations
- Low Density Urban Residential
- Medium Density Urban Residential
- High Density Urban Residential
- Commercial
- Heavy Industrial
- Special Heavy Industrial
- Light Medium Industrial
- Government & Education
- Parks and Open Space
- Agriculture
- Rural Residential
- Rural Commercial
- Rural Industrial
- Airport Reserve
- Natural Resource

Note: This map is based on imprecise source data, subject to change, and for general reference only.
c. **First Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

There is no land designated for urban reserves around Eugene. Therefore, there is no first priority land to consider for the proposed UGB expansion.

d. **Second Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

The school expansion study area includes 1,518 acres of second priority land, shown on the Second Priority Land within Study Area map below. There are five distinct areas of second priority land. As shown on the map above entitled “Land Use Designations,” the largest area of second priority land in the study area is the Eugene Airport, designated “Government and Education” (Metro Plan), and “Airport” (Lane County Rural Comp Plan). The other second priority areas are designated “Rural Residential” (Metro Plan), “Rural Commercial” (Metro Plan), “Residential” (Lane County), and a single tax lot of “Industrial” (Lane County).

The determination of the City’s need for an additional school site to serve the Bethel School District is discussed above under Section II, while Section III addresses the characteristics required to make a site suitable for a school expansion. These site characteristics fall into two categories: location-based and other site characteristics. Analysis of location-based site characteristics (below) is the first step in evaluating whether any of the second priority land in the study area has the characteristics necessary to make it suitable to accommodate the needed school facility.
(1) Dismiss Candidate Land without Needed “Location-based” Site Characteristics

Location-based Site Characteristics:

- Distribution.
  - North of Barger Drive and west of Terry Street
  - Greater than one-half mile from an existing elementary, middle or K-8 school
- Compatibility with surrounding uses.
  - Not adjacent to areas designated for incompatible uses (such as airport or heavy industrial)
- Adjacency to urban residential neighborhoods.
  - Adjacent to an existing or planned urban residential neighborhood—See “Contextual Land Use Designations” map for reference.

The map below, Second Priority Land: Location-based Site Characteristics, is a visual representation of this analysis.4

Distribution

- Dismissal of Land South of Barger Drive or East of Terry Street

Three areas of second priority land are located south of Barger Drive or east of Terry Street. The southern-most area of second priority land (72.6 acres) and the two eastern-most areas of second priority land (54.2 acres and 53.5 acres) are therefore outside of the established needed location. Therefore, these areas are dismissed from further consideration.

- Dismissal of Land within Half a Mile of an Existing Elementary or K-8 School

None of second priority land is within half a mile of an existing Elementary or K-8 school.

Compatibility with surrounding uses

- Dismissal of Land that is Adjacent to Areas Designated for Incompatible Uses (Such as Airport or Heavy Industrial)

The largest area of second priority land is 1,324.4 acres designated Government and Education, which is owned and used by the Eugene Airport, an important Goal 12 transportation facility. A small area of land designated Rural Residential is adjacent to the western edge of the Airport. Even if a portion of this land were available for school siting, it would be incompatible as it would be adjacent to airport operations. For these reasons, this area is dismissed from further consideration.

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4 All maps in this analysis represent site characteristics in the order they are listed. For example, land that is dismissed because it is south of Barger Drive or East of Terry Street may also be dismissed because it is not adjacent to urban residential neighborhoods. However, it would only show on the map as being dismissed for the first noted site characteristic.
**Adjacency to urban residential neighborhoods**

- *Dismissal of Land that is not Adjacent to an Existing or Planned Urban Residential Neighborhood*

The remaining area of second priority land is approximately 11 acres designated Rural Commercial on Bodenhamer Road, surrounded by land designated Agriculture. This area is significantly separated from the current urban growth boundary, and therefore remote from existing or planned urban residential neighborhoods, making it unsuitable for school siting. For this reason, the area is dismissed from further consideration.
(2) Conclusion for Second Priority Land within School Expansion Study Area

The location-based site characteristics needed for the new Bethel school facility are not present on any second priority land within the study area. Based on the analysis above, the City has determined that there are no potential sites of second priority land within the study area.

e. Third Priority Land – Apply State’s Factors for Dismissal of Candidate Land

There is no land designated as marginal land within the study area. Therefore, there is no third priority land to consider for the proposed school expansion.

f. Fourth Priority Land – Apply State’s Factors for Dismissal of Candidate Land

The school expansion study area includes 3,477 acres of fourth priority land, shown on the Fourth Priority Land within Study Area map below. All of the fourth priority land in the study area is designated Agriculture.

The determination of the City’s need for an additional school site to serve the Bethel School District is discussed above under Section II, while Section III addresses the characteristics required to make a site suitable for a school expansion. These site characteristics fall into two categories: location-based and other site characteristics. Analysis of location-based site characteristics (below) is the first step in evaluating whether any of the fourth priority land in the study area has the characteristics necessary to make it suitable to accommodate the needed school facility.
(1) **Dismiss Candidate Land without Needed “Location-based” Site Characteristics**

*Location-based Site Characteristics:*

- **Distribution.**
  - North of Barger Drive and west of Terry Street
  - Greater than one-half mile from an existing elementary, middle or K-8 school
- **Compatibility with surrounding uses.**
  - Not adjacent to areas designated for incompatible uses (such as airport or heavy industrial)
- **Adjacency to urban residential neighborhoods.**
  - Adjacent to an existing or planned urban residential neighborhood– See “Contextual Land Use Designations” map for reference.

The map below, “Fourth Priority Land: Location-based Site Characteristics,” is a visual representation of this analysis.

**Distribution**

- **Dismissal of Land South of Barger Drive or East of Terry Street**

  562.1 acres of fourth priority candidate land are located south of Barger Drive, and 1,046.0 acres are located east of Terry Street. These 1,608.1 acres are therefore outside of the established needed location and are dismissed from further considerations.

- **Dismissal of Land within Half a Mile of an Existing Elementary or K-8 School**

  265.3 acres of fourth priority candidate land are located within half a mile of an existing Elementary or K-8 school. That land is dismissed from further consideration. 6.1 acres of this are also east of Terry Street, while 79.2 acres are also south of Barger Drive and are therefore dismissed under both criteria.

**Compatibility with surrounding uses**

- **Dismissal of Land that is Adjacent to Areas Designated for Incompatible Uses (Such as Airport or Heavy Industrial)**

  550.0 acres of fourth priority candidate land are on tax lots adjacent to land designated either for the airport, airport reserves, or heavy industrial. All of the land dismissed for adjacency to incompatible uses would also be dismissed as removed from urban residential neighborhoods.

**Adjacency to urban residential neighborhoods**

- **Dismissal of Land that is not Adjacent to an Existing or Planned Urban Residential Neighborhood**

  879.0 acres of fourth priority candidate land are dismissed from further consideration because they are located on tax lots that are not adjacent to existing or planned urban residential neighborhoods. An additional 48.1 acres are on tax lots adjacent to urban residential...
neighborhoods where the adjacent portion of the tax lot is within half a mile of an existing elementary or K-8 school, causing the entire tax lot to be unsuitable for school siting.

Summary

After dismissing candidate land without appropriate location-based site characteristics, 222.7 acres (891% of the needed 25 acres) of fourth priority land remains for further evaluation. Based on tax lot ownership, the remaining ten tax lots form five potential school sites (labeled P4.1, P4.2, P4.3, P4.4 and P4.5).
Fourth Priority Land: Other Site Characteristics

- Land Inside UGB
- Major Streets
- Taxlots
- Water Bodies
- School Expansion Study Area
- Remaining Fourth Priority Land
- Sites of Fewer than 25 Buildable Acres
- Special Flood Hazard Area
- Land with Goal 5 Protections
- Sites of Insufficient Size after Constraints
- Sites without Collector or Arterial Access
- Sites Unavailable for School Ownership

Note: This map is based on imprecise source data, subject to change, and for general reference only.
(2) Dismiss Candidate Land without Other Needed Site Characteristics

The next step is to evaluate the remaining fourth priority land in terms of the other needed site characteristics.

Other Site Characteristics:
- Size.
  - Minimum buildable size (at least 330’ wide) of 25 acres
- Reasonably unconstrained/available for school use.
  - Not committed to conflicting uses or environmental protections
  - Not severely encumbered with development constraints (such as the Special Flood Hazard Area)
- Accessibility.
  - Located on existing or planned collector or arterial street (“Major Streets” on all study maps)
- Availability for school ownership.
  - Owned or available to be owned by the School District for purposes of school development

The map above, Fourth Priority Land: Other Site Characteristics, is a visual representation of this analysis.

Size
- Dismissal of Sites with Fewer than 25 Buildable Acres

The narrow strip of land (“P4.4”) that connects Clear Lake Road to a tax lot primarily inside the current urban growth boundary is approximately one acre total, far less than the needed 25 acres. Due to insufficient size, site P4.4 is dismissed from further consideration.

The site composed of two tax lots immediately to the west of site P4.4 (P4.3) is only 294 feet wide (less than the 330 feet needed to be considered buildable), for a considerable length of the site. The portion of the site with sufficient width is 30.3 acres.

Reasonably unconstrained/available for school use
- Dismissal of Land with Goal 5 Protections or within FEMA Flood Zones (Special Flood Hazard Area)

All four remaining sites of sufficient size (labeled P4.1, P4.2, P4.3 and P4.5 on the map above) are constrained by the Special Flood Hazard Area to some extent. Sites P4.2 and P4.3 are also constrained by Goal 5 protections. For sites P4.1, P4.2 and P4.5, these constraints do not reduce the buildable acreage of any site below 25 acres. For site P4.3, given the insufficiently wide portion of this site, the buildable acreage of the site after constraints is 15.8 acres, and therefore unsuitable for school siting. Due to insufficient unconstrained land, site P4.3 is dismissed from further consideration.
Accessibility

- Dismissal of Land that is not Accessible by an Existing or Planned Arterial or Collector Street

The two streets that qualify as an “existing or planned arterial or collector street” adjacent to the remaining candidate land are Terry Street and Clear Lake Road, which are both existing major collectors. Site P4.1 is a 40.1-acre tax lot that is not accessible by either of these streets. The other remaining sites are all accessible by one or (in the case of site P4.5) both of these streets. Due to insufficient accessibility, site P4.1 is dismissed from further consideration.

Availability for school ownership

- Dismissal of Land that is not Available for School Ownership

Site P4.2 is owned by the Eugene Water and Electric Board for future development of utility facilities, and is unavailable for school purchase. Therefore, site P4.2 is dismissed from further consideration.

In anticipation of the need for additional school facilities, Bethel School District has made efforts to purchase land in the appropriate area for over a decade. The District was able to purchase site P4.5 for future school siting with the intent of co-locating two schools on the site, in keeping with best practices for the District.

Summary

After dismissing candidate land without appropriate site characteristics, 73.9 acres of site P4.5 remains as the only site that meets all of the required site characteristics for the school expansion. This site has excellent accessibility via two collector streets, one of which runs directly through an urban residential neighborhood to which the site is adjacent. While 14.0 acres of this site is constrained or isolated by the Special Flood Hazard Area, the remaining 59.9 acres are buildable and available for school siting. Pursuant to its own long-range planning needs, Bethel School District purchased this suitable land when it had the opportunity to do so. All of the remaining land is already owned by Bethel School District.

(3) Conclusion for Fourth Priority Land within School Expansion Study Area

The 73.9 acres of site P4.5 that meet the site requirements for school siting are more than is required for the current needed expansion. The site is composed of five tax lots, as shown on the “Fourth Priority Land: Other Site Characteristics” map, above. In order to accommodate the School District’s needs while keeping the expansion to the minimum necessary, the tax lots are evaluated below for their ability to meet the site characteristics.

The largest tax lot is the only one of the five adjacent to the urban residential neighborhood and the current urban growth boundary. As such, it is essential to meeting the site requirements. This tax lot is 34.1 total acres, of which 13.7 are constrained or isolated by the Special Flood Hazard Area, and therefore unbuildable. The unconstrained portion of this tax lot consists of two distinct areas of 9.5 acres to the south and 10.9 acres to the north. The 10.9-acre area is unbuildable as a stand-alone area due to a width of only 321 feet. Neither of these areas is sufficient for the school siting, therefore
additional land must be considered for expansion. In order to maximize buildable area and proximity to the residential neighborhood, the other tax lots are evaluated from south to north.

The southernmost of the small tax lots is 10.0 total acres, of which 0.3 is constrained by the Special Flood Hazard Area. The 9.7 buildable acres of this site connects the two portions of the largest tax lot to create a contiguous buildable area of 30.1 acres. As a total amount, this meets the requirement for 25 acres. However, the configuration of this area narrows to a smallest width of only 230 feet just north of the Special Flood Hazard Area, and continues north in an extended area of 321 feet wide from that point 1,463 feet north to Clear Lake Road, narrowing even further to 150 feet in width for the last 300 feet. This area of narrow width reduces the buildable area to 20.5 acres, which is insufficient for school siting.

The next southernmost tax lot is 10.0 unconstrained acres, which if added to the two lots evaluated above, would result in a 54.1 acre expansion, of which 40.1 is unconstrained. The addition of this 10 acre tax lot would reduce the length of the narrow portion of the site to approximately 1,028 feet. With the narrow portion removed from consideration as buildable, the remaining area is 33.2 acres of buildable land (see map “Fourth Priority Land: Other Site Characteristics”), enough to meet the School District’s needs.

Given that these three tax lots of site P4.5 are sufficient to meet all of the site characteristics needed for the proposed school expansion, the two additional tax lots in the northwestern corner of the land owned by Bethel School District are in excess of the District’s needs. Therefore, that portion of the site P4.5 will not be considered for expansion at this time.
VI. Conclusion – Land to be Added to Eugene’s UGB for School Use

Based on the above findings and analysis, the City finds that the area identified below in the “Site Selected for School Expansion” map is the UGB expansion site for a new school to meet the needs of the Bethel School District.
UGB Expansion Analysis for Employment Land

I. Introduction

This UGB Expansion Analysis for Employment Land sets out the standards and process by which the City of Eugene has identified the land to be added to Eugene’s urban growth boundary (“UGB”) for future industrial use. The additional urbanizable industrial land will complete the City’s buildable land inventory (“BLI”) to provide employment opportunities for Eugene’s growing population through 2032.

The City’s Employment Land Supply Study, adopted as an appendix to the Envision Eugene Comprehensive Plan, establishes the need to expand the UGB to add more industrial land. Part I of the Employment Land Supply Study identifies the supply of employment land within the UGB in 2012. Part II of that Study is the City’s Economic Opportunities Analysis (“EOA”), which concludes the City will need additional commercial and industrial employment land to meet the needs of the growing population through 2032. The EOA identifies the number of additional sites that are needed, and the characteristics those sites will need. Considering the additional land need that results from public and semi-public uses that occur on employment land (addressed in Part III of the Employment Land Supply Study), and the measures the City has taken since 2012 to increase the supply of employment land within the UGB (addressed in Part V of the Employment Land Supply Study), the City is still deficient in employment land as follows:

- 2 industrial sites of 75 acres or larger;
- 3 industrial sites of between 50 and 75 acres;
- 2 industrial sites of between 20 and 50 acres; and
- 4 industrial sites of between 10 and 20 acres.

This deficit must be addressed through an expansion of the City’s UGB.

II. Overview of Legal Standards and Process for Selecting Land to Address an Industrial Land Deficit

State statutes, rules and court decisions set up a highly prescriptive set of standards that must be applied to the City’s selection of land to address its industrial land deficit.¹ The standards described in this Section II are set out in order of their application. In Section III, below, the City explains how the City applied the standards to determine which land to include in its UGB to address the deficit in industrial employment land.

The primary regulation that governs the procedure for evaluating land for any UGB expansion is set out at ORS 197.298. ORS 197.298 is implemented more specifically through Statewide Planning Goal 14, the Goal 14 administrative rules at OAR 660-024. For a UGB expansion to address a deficit of industrial land,

¹ Amendments to Statewide Planning Goal 14 and its administrative rules at OAR 660-024 took effect on January 1, 2016. The amended versions do not apply to the City of Eugene for purposes of this UGB work, pursuant to HB 4126 (2016) and OAR 660-024-00004(4) (“The rules in this division adopted on December 4, 2015, are effective January 1, 2016, except that a local government may choose to not apply the amendments to rules in this division adopted December 4, 2015 to a plan amendment concerning the amendment of a UGB, regardless of the date of that amendment, if the local government initiated the amendment of the UGB prior to January 1, 2016.”)
Goal 9 rules at OAR 660-009 also apply. Terms of the statute and rules are referenced throughout this overview of the legal standards and procedure.

The primary directives for UGB expansions are set out in ORS 197.298:

(1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary except under the following priorities:

   (a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.

   (b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or non-resource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.

   (c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition).

   (d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.

(2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

(3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:

   (a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;

   (b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or

   (c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

**a. Establish the Industrial Land Study Area / Candidate Land for Evaluation (ORS 197.298(1)(b) / OAR 660-024-0060(4))**

The initial step in determining where a City will expand its UGB is to establish an extraterritorial study area. The only legal standards for doing so are derived from ORS 197.298(1)(b), which refers to the City’s consideration of “land adjacent to the UGB,” and OAR 660-024-0060(4), which states:
In determining alternative land for evaluation under ORS 197.298, “land adjacent to the UGB” is not limited to those lots or parcels that abut the UGB, but also includes land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency.

The study area for the industrial land expansion, including all land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency, is addressed under Section III.a., below.

b. Categorize Candidate Land into the Four Priority Categories of ORS 197.298(1)

ORS 197.298(1) sets out the initial requirement for analyzing land in the study area by requiring the City to sort the study area land into four basic categories:

a. Land that is designated urban reserve land;
b. Land identified in Lane County’s rural comprehensive plan or the Metro Plan\(^2\) as an exception area or non-resource land, including resource land that is completely surrounded by exception areas unless such resource land is high-value farmland;
c. Land designated as marginal land; and
d. Land designated in Lane County’s rural comprehensive plan or the Metro Plan for agriculture or forestry, or both.

This is addressed under Section III.b. of this study, below. ORS 197.298(1) and OAR 660-024-0060(1) below set out a “priority” system among the four land categories described above. The order of priority corresponds with the order in which the categories are listed above, highest (a) to lowest (d). This priority system begins with the general rule that cities will expand onto land in the highest-priority land category, expanding onto lower priority land only if the higher-priority land is “inadequate to accommodate the amount of land needed.”

c. Starting with Land in the Highest Priority Category, Apply State’s Factors for Dismissal of Candidate Land

Under III.c.f., below, the land in each priority category is analyzed. For every subarea, the analysis applies the following factors, in order, as required by ORS 197.298, Statewide Planning Goals 14 and 9, OAR 660-024, OAR 660-009 and the Oregon Court of Appeals. The Court of Appeals’ decision in \textit{1000 Friends of Oregon v. LCDC}, 244 Or App 239, 262 (2011) (often referred to as “the McMinnville decision”) is particularly noteworthy, as it provides the most specific direction regarding these steps and the application of ORS 197.298, Goal 14 and OAR 660-024, which apply to all UGB expansions.

\begin{itemize}
\item[(1)] \textbf{Dismiss Candidate Land with “Development Constraints” -- Factors that Temporarily or Permanently Limit or Prevent the Use of Land to Address the Identified Industrial Land Deficit (244 Or App 239 (2011))}
\end{itemize}

\footnote{For some areas, the land use designations of the Metro Plan are not parcel-specific as of the development of this document. As a result, portions of tax lots may fall into one priority while the majority of the tax lot is in a different priority.}
This threshold factor, explained by the Court of Appeals in the McMinnville decision, is required to make sure that the supply of land included in a UGB expansion can actually be developed. The Court of Appeals stated that “any necessary UGB amendment process for purposes of land development begins with the identification of buildable land that is contiguous to the existing [urban growth] boundary.” 1000 Friends of Oregon v. LCDC, 244 Or App 239, 262 (2011). In that case, the Court of Appeals explained that the determination as to whether candidate land is “inadequate,” as that term is defined in ORS 197.298(1) and (3), cannot be made until unbuildable land has been dismissed from consideration.3

For purposes of a UGB amendment to add employment land, the City must dismiss land that is encumbered with “development constraints,” as that term is defined for potential industrial land at OAR 660-009-0005. OAR 660-009-005(2) provides that “development constraints” means:

“factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, cultural and archeological resources, infrastructure deficiencies, parcel fragmentation, or natural hazard areas.”

The City’s EOA, located at Part II of its Employment Land Supply Study, identifies four development constraints that would limit or prevent the siting of a new industrial use of the type the City can reasonably expect to attract during the 20-year planning period.4 Therefore, those constraints are the ones applied by Eugene. They are:

- Land that has a slope of 5 percent or greater based on the United States Geological Survey’s 10-meter digital elevation model6
- Land within the Special Flood Hazard Areas (SFHA) identified on the applicable Flood Insurance Rate Map (FIRM)6
- Land subject to Statewide Planning Goal 5 protections that are designated in an acknowledged comprehensive plan7

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3 The Court explained that this initial basis for dismissal of land, which is explicitly stated in the statutes that govern UGB expansions for residential land, is clearly required for employment land as well. 1000 Friends of Oregon v. LCDC, 244 Or App 239, 262 (2011). See also, OAR 660-024-0060(1)(e), stating that the determination of suitable land to accommodate land needs must include consideration of any provisions of law applicable in determining whether land is buildable.

4 While “parcel fragmentation” is listed in OAR 660-009-005(2) as a constraint, it is addressed in this analysis under (2), below, through the requirement that expansion “sites” must meet minimum size characteristics with a maximum number of tax lots.

5 http://nationalmap.gov/elevation.html

6 https://www.eugene-or.gov/1945/Flood-Zones-and-Terms

7 Lane County’s Goal 5 program protects mineral and aggregate resources by designating land in the Metro Plan as “Sand and Gravel.” With that designation, the parcels do not fall into any of the ORS 197.298(1) priority categories. Even if Goal 5 Sand and Gravel land did fall into a priority category, it would be summarily removed from further consideration at this stage because the Goal 5 protections that apply to the entire site prevent its redevelopment for industrial uses. Only after such a site has been removed from the County’s Goal 5 inventory could it be considered for other uses.
• Tax lots committed to a use or development that is not reasonably likely to be discontinued during the planning period, making industrial redevelopment highly unlikely during planning period based on specific circumstances described on a lot by lot basis.

To provide some preliminary context, four high level “context” maps (one for each of the development constraints) are provided at the end of Section III.b., below. In Section III.c.-f., below, as each subarea is specifically analyzed in order of its ORS 197.298 priority, land with these constraints is identified and dismissed from further consideration. In some cases, this results in dismissal of a small area on a tax lot. In other cases, the constraint applies to an entire tax lot.

(2) Dismiss Candidate Land that Cannot Reasonably Accommodate the Specific Types of land Needs / Cannot be Expected to Provide the Appropriate Site Characteristic for the Proposed Use (ORS 197.298(3)(a) / OAR 660-024-0060(1)(e), (5))

ORS 197.298(3)(a) states:

3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:
   a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;

OAR 660-024-0060, implementing ORS 197.298, provides (with emphasis added):

1) When considering a UGB amendment, a local government must determine which land to add by evaluating alternative boundary locations. This determination must be consistent with the priority of land specified in ORS 197.298 and the boundary location factors of Goal 14, as follows:
   a) Beginning with the highest priority of land available, a local government must determine which land in that priority is suitable to accommodate the need deficiency determined under OAR 660-024-0050.
   b) If the amount of suitable land in the first priority category exceeds the amount necessary to satisfy the need deficiency, a local government must apply the location factors of Goal 14 to choose which land in that priority to include in the UGB.
   c) If the amount of suitable land in the first priority category is not adequate to satisfy the identified need deficiency, a local government must determine which land in the next priority is suitable to accommodate the remaining need, and proceed using the same method specified in subsections (a) and (b) of this section until the land need is accommodated.
   d) Notwithstanding subsection (a) to (c) of this section, a local government may consider land of lower priority as specified in ORS 197.298(3).

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5 One attribute of an area designated as an “urban reserve,” is that its further development is legally restricted until it is brought into the UGB. This is because such development, if allowed to occur before a UGB expansion, can impede efficient urbanization of the area. Eugene and Lane County have not adopted urban reserves and are an illustration of the problem described above. Lane County has allowed fairly extensive development in the areas surrounding Eugene’s UGB. In some areas, that development is so extensive or urban in nature that it makes the land unavailable for the uses needed by Eugene's growing population.
e) For purposes of this rule, the determination of suitable land to accommodate land needs must include consideration of any suitability characteristics specified under section (5) of this rule, as well as other provisions of law applicable in determining whether land is buildable or suitable.

* * *

5) If a local government has specified characteristics such as parcel size, topography, or proximity that are necessary for land to be suitable for an identified need, the local government may limit its consideration to land that has the specified characteristics when it conducts the boundary location alternatives analysis and applies ORS 197.298.

In determining whether land is suitable for industrial use, the Goal 9 rule’s definition of “suitable” at OAR 660-009-0005(12) applies. That rule states that “‘Suitable’ means serviceable land designated for industrial or other employment use that provides, or can be expected to provide the appropriate site characteristics for the proposed use.”

OAR 660-009-0005(11) defines “Site Characteristics” as “the attributes of a site necessary for a particular industrial or other employment use to operate. Site characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.”

Taken together, these statutes and rules allow the City to dismiss from further consideration land in its study area that lacks the site characteristics needed to accommodate the expected industries. The City’s Employment Land Supply Study, adopted as an appendix to the Envision Eugene Comprehensive Plan, discusses numerous site characteristics that make land suitable for the new or expanding industries that are desired by, and likely to be attracted to, Eugene during the 20-year planning period. The EOA, Part II of the Employment Land Supply Study, addresses “Site Needs for Target Industries” in its section 6.2. For purposes of its evaluation of land, the City of Eugene chose to include only the most essential site characteristics identified through data and studies cited by ECONorthwest in the City’s EOA; those focused on minimum acreage needs and proximity to a freight route. The EOA contains detailed information justifying these site characteristics for the different types of employment-generating development that Eugene is expecting to attract based on its economic development strategy. Specifically, the expansion sites needed in Eugene must:

- Be a contiguous area comprised of one or two tax lots that could accommodate one of the following:
  - an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)

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9 The Goal 14 rule at OAR 660-024-0010(8) states that “‘Suitable vacant and developed land’ describes land for employment opportunities, and has the same meaning as provided in OAR 660-009-0005 section (12) for ‘suitable’.”

10 In the City’s analysis of each subarea of land, under III.c.-f. below, it does not dismiss an unconstrained higher priority site that is too small to meet any of the size requirements above if it is located within a mile of access to a State Designated Freight Route and could possibly be combined with an adjacent lower priority site to meet a size requirement. For such sites, the analysis below specifies that the site will be considered further along with adjacent lower priority sites, to determine whether the inclusion of it in combination with a lower-priority site can reduce the need to expand onto lower priority land.
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

- Have access via existing or planned roads, within 1 mile of the site, to a State Designated Freight Route (see State Highway Freight System map inset below).\(^{11}\) State Designated Freight Routes within one mile of the study area are:
  - Interstate 5
  - Interstate 105 west of I-5
  - Randy Papé Beltline
  - Highway 99 north of Randy Papé Beltline
  - Highway 126 west of Randy Papé Beltline

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ORS 197.298(3)(b) states:

3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:

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\(^{11}\) Access is measured from along existing or planned roads to access points for the routes, such as an intersection, entrance or exit.
b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints;

At this stage of the land evaluation – the dismissal of land that is not adequate to address the identified needs -- the Court of Appeals has instructed that cities may dismiss land based on the specific standard at OAR 197.298(3)(b). However, the City of Eugene’s analysis does not identify any higher priority land that could not be served in the planning period due to “topographical or other physical constraints” and, therefore, does not dismiss any land on this basis.

(4) **Dismiss Candidate Land if its Inclusion in the UGB would be Untenable Considering the Comparative Environmental, Energy, Economic and Social Consequences that would Result from its Inclusion in the UGB (Goal 14 Locational Factor 3)**

(5) **Dismiss Candidate Land if its Inclusion in the UGB to Address the Identified Industrial Land Deficit would be Incompatible with Nearby Agricultural and Forest Activities Occurring on Farm and Forest Land Outside the UGB (Goal 14 Locational Factor 4)**

The Oregon Court of Appeals has instructed that, at this stage of a city’s analysis, when the city applies ORS 197.298(3), it must also apply (only) two of the four “location factors” from Goal 14 (factors three and four).

(6) **Identify Lower Priority Land that is Needed in Order to Include or to Provide Services to the Remaining Land in this Priority (ORS 197.298(3)(c))**

The City of Eugene’s analysis does not identify any lower priority land that must be included in the UGB in order to include or serve higher priority land and, therefore, does not dismiss any land on this basis.

(7) **Add Remaining Candidate Land to the UGB and/ or Evaluate Land in the Next Highest Priority Category as follows:**

(a) If there is no candidate land remaining in this priority category then apply steps (1) through (6) to the land in the next highest priority category

(b) If the amount of candidate land remaining in this priority category can accommodate some, but not all, of the industrial land deficit then:

- Add the remaining land in this priority (including any land identified in step (6)) to the UGB; and
- Apply steps (1) through (6) to the land in the next highest priority category

(c) If the amount of candidate land remaining in this priority category is more than is needed to accommodate the need for industrial land deficit, apply the boundary location factors of Goal 14 to select the land for inclusion in the UGB (within priority category four, give higher priority to poor soils (ORS 197.298(2))

As stated in (7)(c), above, all four of the boundary location factors of Goal 14 are to be used when the amount of suitable land in a particular priority category is more than is needed to satisfy the identified need. OAR 660-024-0060(1)(b). The Goal 14 factors are applied to choose which land, within that priority, to include in the UGB. This process comes into play only for fourth priority land in Eugene’s industrial UGB analysis. When addressing fourth priority land, ORS 197.298(2) requires that “[h]igher
priority shall be given to lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.”

The locational factors of Statewide Planning Goal 14 are:

1) Efficient accommodation of identified land needs;
2) Orderly and economic provision of public facilities and services;
3) Comparative environmental, energy, economic and social consequences; and
4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

To provide direction regarding the application of the Goal 14 locational factors, above, OAR 660-0024-0060 provides:

3) The boundary location factors of Goal 14 are not independent criteria. When the factors are applied to compare alternative boundary locations and to determine the UGB location, a local government must show that all the factors were considered and balanced.

* * *

7) For purposes of Goal 14 Boundary Location Factor 2, "public facilities and services" means water, sanitary sewer, storm water management, and transportation facilities.

8) The Goal 14 boundary location determination requires evaluation and comparison of the relative costs, advantages and disadvantages of alternative UGB expansion areas with respect to the provision of public facilities and services needed to urbanize alternative boundary locations. This evaluation and comparison must be conducted in coordination with service providers, including the Oregon Department of Transportation with regard to impacts on the state transportation system. "Coordination" includes timely notice to service providers and the consideration of evaluation methodologies recommended by service providers. The evaluation and comparison must include:
   a. The impacts to existing water, sanitary sewer, storm water and transportation facilities that serve nearby areas already inside the UGB;
   b. The capacity of existing public facilities and services to serve areas already inside the UGB as well as areas proposed for addition to the UGB; and
   c. The need for new transportation facilities, such as highways and other roadways, interchanges, arterials and collectors, additional travel lanes, other major improvements on existing roadways and, for urban areas of 25,000 or more, the provision of public transit service.

### III. Analysis of Land for UGB Expansion

#### a. Establish the Study Area / Candidate Land for Evaluation (ORS 197.298(1)(b) / 660-024-0060(4))

For purposes of determining where the City of Eugene will expand its UGB to accommodate the industrial land needs that exceed the capacity of its existing UGB, an extraterritorial study area was
established. As explained under II.a, above, the study area established by the City must be “adjacent” to the UGB, including “land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency.” ORS 197.298(1)(b); OAR 660-024-0060(4).

Specifically, Eugene’s study area for industrial land includes all land west of Interstate 5, south of the McKenzie River, and within ½ mile of Eugene’s current UGB or within the Eugene-Springfield Metropolitan Area General Plan boundary (which extends beyond ½ mile in some areas). The study area includes some additional land to allow for analysis of exception areas or non-resource areas that abut the current UGB and extend beyond the boundary described above. Through a separate study (the UGB Expansion Analysis for School Land), a 54-acre portion of this study area has already been identified for an expansion to site a new school facility and will, therefore, not be considered in this UGB Expansion Analysis for Employment Land. The industrial land study area includes about 18,734 acres, more than enough land to ensure consideration of all land with a reasonable potential to satisfy the need.

The location of the study area is shown on the “Study Area” map.

12 The acknowledged regional comprehensive plan (the Metro Plan) provides that “[t]he division of responsibility for metropolitan planning between the two cities is the Interstate 5 Highway.” ORS 197.304 requires Eugene and Springfield to establish separate UGBs “consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan.”
b. **Categorize Candidate Land into the Four Priority Categories of ORS 197.298(1)**

As explained under II.b, above, ORS 197.298(1) requires the City to identify the land in its study area as follows:

**First Priority Land:** land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan

**Second Priority Land:** land identified in the Lane County Rural Comprehensive Plan or the Metro Plan as an exception area or non-resource land, including resource land that is completely surrounded by exception areas unless such resource land is high-value farmland

**Third Priority Land:** land designated as marginal land in the Lane County Rural Comprehensive Plan

**Fourth Priority Land:** land designated in the Lane County Rural Comprehensive Plan or the Metro Plan for agriculture or forestry, or both.

Because these priority categories are based on land use designations, the first map below, Land Use Designations, shows the designations of both the Metro Plan and the Lane County Rural Comprehensive Plan. For land use designations that are used by both plans (e.g. “Agriculture” in Metro Plan and “Agricultural” in the Lane County Rural Comprehensive Plan), the same mapping color and label is used for the purposes of this study. This map and following maps with candidate land also show the site identified in the UGB Expansion Analysis for School Land for an urban growth boundary expansion to accommodate a need for school land. The base designations shown on this map have been aggregated into priority categories, as shown on the subsequent map, Priority Categories of Candidate Land.

In Eugene’s study area, there are no lands designated as urban reserves (See ORS 197.298(1)(a), above); therefore there is no first priority land included on the map or in the analysis that follows. Land within the study area that does not fall into any of the four priority categories is identified on the “Priority Categories of Candidate Land” map as “Other Lands.”

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13 These lands include those designated for Sand and Gravel, Airport Reserve, and Parks and Open Space, as well as a small portion of a tax lot designated Government and Education for which an exception was not required to be taken.
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Land Use Designations

- Comprehensive Plan Designations
  - Sand and Gravel
  - Rural Commercial
  - Rural Industrial
  - Airport Reserve
  - Marginal
  - Non Resource

- Land Inside UGB
- School Expansion
- Major Streets
- Water Bodies
- Government & Education
- Parks and Open Space
- Natural Resource

Note: This map is based on incomplete source data, subject to change, and for general reference only.
Appendix B to Findings
Due to the large extent of the study area and the level of detail used to conduct the analysis, each of the priority categories of land is addressed below by dividing it into smaller subareas. The purpose of these subareas is exclusively to provide a closer view of the characteristics of land in each priority category that are essential to meet the identified needs for industrial expansion. The analysis does not evaluate any subarea as a whole for suitability, but rather evaluates all of the land within each subarea for its ability to meet the City’s industrial land need.

Because maps of each subarea show a limited view of the relevant constraints, and because many constraints overlap, a series of contextual maps (“Land Constrained by Slopes in Excess of 5%,” “Land Constrained by the Special Flood Hazard Area,” “Land Constrained by Goal 5 Wetland or Mineral Aggregate Protections”, and “Land Constrained by Uses or Development”) are provided below to show the extent of each individual development constraint across the study area.
Appendix B to Findings

City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Land Constrained by the Special Flood Hazard Area

Note: This map is based on imprecise source data, subject to change, and for general reference only.
This map only notes wetland and mineral and aggregate Goal 5 protections. Additional Goal 5 protected areas may be identified upon detailed analysis.
c. **First Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

There is no land designated for urban reserves around Eugene. Therefore, there is no first priority land to consider for the proposed UGB expansion.

d. **Second Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

The second priority land in Eugene’s study area is divided into 12 subareas for evaluation. These Priority 2 (“P2”) subareas are shown below on the “Subareas of Second Priority Land” map. As noted above, these subareas allow for a more detailed view of the land within the study area. The analysis that follows evaluates all land in each subarea. It does not determine the suitability of subareas as a whole. Each of the twelve subareas of second priority land was evaluated using the standards and process set out in Section II.c, above. An analysis that walks through that evaluation follows.
(1) **Subarea P2.1**

Subarea P2.1 is located to the southeast of the current UGB, near 30th Avenue and Interstate 5, as shown on the “Extent” map. It is composed of 272.8 acres of second priority land in three closely located areas separated from each other by fourth priority land. The land in this subarea is designated as either Rural Residential, Rural Commercial, Rural Industrial, or Government and Education.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

The map “Subarea P2.1: Development Constraints” shows the development constraints present in Subarea P2.1. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.1 subarea has more than one type of development constraint. The map “Subarea P2.1: Development Constraints” is a visual representation of the following information:

*Dismissal of Land with Slopes in Excess of 5 Percent Grade*

The United States Geological Survey’s 10-meter digital elevation model shows that 120.6 acres of the land in Subarea P2.1 (44 percent) are constrained by slopes greater than 5%.
None of the land in Subarea P.2.1 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

13 acres of the land in Subarea P.2.1 (5 percent) are constrained by Lane County Goal 5 protections.\(^\mathrm{15}\)

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Nineteen (19) tax lots totaling 186.7 acres of the land in Subarea P.2.1 (68 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses.

The majority of this land is in 6 tax lots adjacent to 30th Avenue that are owned by Lane Community College. The largest lot contains the main campus of the college, while other lots are committed to future development as the college expands. The remaining 13 tax lots are developed by businesses along McVay Highway (Big Foot Beverages, Doug’s Place Restaurant and Catering, Over the Top Services, Mid-State Industrial Service, Inc., Emerald Valley Gardens, JDD LCC, and the SeQuential Biofuels Station).\(^\mathrm{16}\) These businesses already contribute to the employment of the region, and so adding these lots with the intent of converting them to large-

\(^{15}\) Lane County Goal 5 resources in this study are: mineral and aggregate resources designated as Sand and Gravel in the Metro Plan, wetlands identified in the State/National Wetland Inventory based on data from 1982, 1989, and 1990; riparian corridors identified by the Oregon Department of Forestry in 2000 as fish-bearing streams; or wildlife habitat identified by the Oregon Natural Heritage Program or the Oregon Department of Fish and Wildlife.

\(^{16}\) Except for the site owned by Lane Community College, all P.2.1 sites dismissed due to existing uses would need to be dismissed below under (b) due to insufficient size.
lot industrial properties would fail to meet the City’s economic development needs, resulting in either the same number of jobs or a net loss, depending on employment density.

**Summary of Development Constraints**

In all, 241.3 acres of the land in Subarea P2.1 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 31.5 acres of land in Subarea P2.1 are addressed below.

**(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**
The map “Subarea P2.1: Site Characteristics of Unconstrained Land”, above, shows the remaining / unconstrained land in Subarea P2.1 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.1 is Interstate 5. All remaining land under consideration in this subarea is within one mile of an access point to I-5 except the western-most site.\(^\text{17}\)

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**
- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

Subarea P2.1 is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. None of the remaining land in this subarea is of sufficient size to accommodate any of the needed industrial sites. Further, none of the remaining sites are adjacent to lower priority land that has potential, when combined with the second priority land, to create sites large enough to accommodate a needed industrial site.

**Subarea P2.1 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.1 is suitable for industrial expansion.

(2) **Subarea P2.2**

Subarea P2.2 is located to the southeast of the current UGB, near Dillard Road and Hidden Meadows Drive, as shown on the “Extent” map. This subarea is composed of 633.1 acres of highly parcelized and developed second priority land designated Rural Residential.

\(^{17}\) Were it not discarded for distance from a Freight Route, the western-most site would be discarded for insufficient size to meet the identified site characteristics.
(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

The map “Subarea P2.2: Development Constraints” shows the development constraints present in Subarea P2.2. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. The map “Subarea P2.2: Development Constraints” is a visual representation of the following information:

*Dismissal of Land with Slopes in Excess of 5 Percent Grade*

The United States Geological Survey’s 10-meter digital elevation model shows that 599.7 acres of the land in Subarea P2.2 (95 percent) are constrained by slopes greater than 5%.

*Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)*

None of the land in Subarea P2.2 is constrained by the FEMA mapped Special Flood Hazard Area.

*Dismissal of Land with Goal 5 Protections (natural resources)*

None of the land in Subarea P2.2 is constrained by Lane County Goal 5 protections.

*Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period*

None of the land in Subarea P2.2 is constrained by existing uses or development.

**Summary of Development Constraints**

In all, 599.7 acres of the land in Subarea P2.2 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 33.4 acres of land in Subarea P2.2 are addressed below.
(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**
The map “Subarea P2.2: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.2 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.2 is Interstate 5. No remaining land under consideration in this Subarea P2.3 is within one mile of I-5. 18

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.2 remain for consideration under this criterion.

**Subarea P2.2 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.2 is suitable for industrial expansion.

(3) **Subarea P2.3**

Subarea P2.3 is located to the south of the current UGB, near Fox Hollow Road and Willamette Street, as shown on the “Extent” map. This subarea is composed of 70.2 acres of second priority land designated Rural Residential.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

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18 Were these sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P2.3: Development Constraints” shows the development constraints present in Subarea P2.3. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.3 subarea has more than one type of development constraint. The map “Subarea P2.3: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 68.5 acres of the land in Subarea P2.3 (98 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P2.3 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

None of the land in Subarea P2.3 is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

One (1) tax lot totaling 1.7 acres of the land in Subarea P2.3 (2 percent) has existing uses or development that makes it highly unlikely that, if added to the UGB, it would be redeveloped for industrial uses. This tax lot is a part of the trailhead for Spencer Butte Park (one of an interconnected series of parks that make up the Ridgeline Trail System with over 12 miles of trails).

**Summary of Development Constraints**

In all, 68.5 acres of the land in Subarea P2.3 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 1.7 acres of land in Subarea P2.3 are addressed below.
(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use

The map “Subarea P2.3: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.3 with the following site characteristic elements displayed:
Appendix B to Findings

Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P2.3 is Interstate 5. No remaining land under consideration in this subarea is within one mile of I-5. 19

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.3 remain for consideration under this criterion.

Subarea P2.3 Summary. Based on these findings, the City has determined that none of the land in Subarea P2.3 is suitable for industrial expansion.

(4) Subarea P2.4

Subarea P2.4 is located to the south of the current UGB, near Lorane Highway, as shown on the “Extent” map. This subarea is composed of 552.6 acres of second priority land designated Rural Residential.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

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19 Were these sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P2.4: Development Constraints” shows the development constraints present in Subarea P2.4. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.4 subarea has more than one type of development constraint. The map “Subarea P2.4: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 501.8 acres of the land in Subarea P2.4 (91 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P2.4 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

11.3 acres of the land in Subarea P2.4 (2 percent) is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Two (2) tax lots totaling 7.5 acres of the land in Subarea P2.4 (1 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. These tax lots are owned by Eugene Parks and Open Space.20

**Summary of Development Constraints**

In all, 513.1 acres of the land in Subarea P2.4 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic

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20 Were these tax lots not discarded for uses/development that make industrial redevelopment highly unlikely, they would be discarded for slope in excess of 5% grade.
development” per OAR 660-009-005(2)). The remaining 39.5 acres of land in Subarea P2.4 are addressed below.

(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**

![Diagram of City of Eugene Urban Growth Boundary Study Industrial Land Evaluation Subarea P2.4: Site Characteristics of Unconstrained Land]
The map “Subarea P2.4: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.4 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Routes to Subarea P2.4 are Interstate 105 and Highway 126. No remaining land under consideration in this subarea is within one mile of these Freight Routes.21

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.4 remain for consideration under this criterion.

**Subarea P2.4 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.4 is suitable for industrial expansion.

(5) **Subarea P2.5**

Subarea P2.5 is located to the south of the current UGB, near Gimpl Hill Road and Bailey Hill Road, as shown on the “Extent” map. This subarea is composed of 142.1 acres of second priority land designated Rural Residential.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

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21 Were these sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P2.5: Development Constraints” shows the development constraints present in Subarea P2.5. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.5 subarea has more than one type of development constraint. The map “Subarea P2.5: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 140.4 acres of the land in Subarea P2.5 (99 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P2.5 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

0.6 acres of the land in Subarea P2.5 (less than 1 percent) is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

One (1) partial tax lot totaling 1.2 acres of the land in Subarea P2.5 (less than 1 percent) has existing uses or development that makes it highly unlikely that, if added to the UGB, these sites would be redeveloped for industrial uses. This tax lot serves as an access point to the parkland, Wild Iris Ridge.22

**Summary of Development Constraints**

In all, 140.4 acres of the land in Subarea P2.5 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic

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22 Were these tax lots not discarded for uses/development that make industrial redevelopment highly unlikely, they would be discarded for slope in excess of 5% grade.
The remaining 1.7 acres of land in Subarea P2.5 are addressed below.

(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**

![Map of City of Eugene Urban Growth Boundary Study Industrial Land Evaluation Subarea P2.5: Site Characteristics of Unconstrained Land](image)

**Displayed Site Characteristics of Unconstrained Land**
- Sites More than 1 Mile from Freight Route
- Sites of Insufficient Size within 1 Mile of Freight Route
- Second Priority Land for Further Consideration (None)

*Note: This map is based on imprecise source data, subject to change, and for general reference only.*
The map “Subarea P2.5: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.5 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.5 is Highway 126. No remaining land under consideration in this subarea is within one mile of Highway 126.\(^{23}\)

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.5 remain for consideration under this criterion.

**Subarea P2.5 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.5 is suitable for industrial expansion.

(6) **Subarea P2.6**

Subarea P2.6 is located to the south of the current UGB, near Willow Creek Road, as shown on the “Extent” map. This subarea is composed of 113.8 acres of second priority land designated Rural Residential.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

\(^{23}\) Were these sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P2.6: Development Constraints” shows the development constraints present in Subarea P2.6. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. The map “Subarea P2.6: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 112.6 acres of the land in Subarea P2.6 (99 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P2.6 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

None of the land in Subarea P2.6 is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

None of the land in Subarea P2.6 is constrained by existing uses or development.

**Summary of Development Constraints**

In all, 112.6 acres of the land in Subarea P2.6 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 1.2 acres of land in Subarea P2.6 are addressed below.
(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**

City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Subarea P2.6: Site Characteristics of Unconstrained Land

*Displayed Site Characteristics of Unconstrained Land*
- Sites More than 1 Mile from Freight Route
- Sites of Insufficient Size within 1 Mile of Freight Route
- Second Priority Land for Further Consideration (None)

*Note: This map is based on imprecise source data, subject to change, and for general reference only.*
The map “Subarea P2.6: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.6 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.6 is Highway 126. No remaining land under consideration in this subarea is within one mile of Highway 126.24

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.6 remain for consideration under this criterion.

**Subarea P2.6 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.6 is suitable for industrial expansion.

(7) **Subarea P2.7**

Subarea P2.7 is located to the southwest of the current UGB, near Green Hill Road and Highway 126, as shown on the “Extent” map. This subarea is composed of 59.1 acres of second priority land designated Rural Residential.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

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24 Were these sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P2.7: Development Constraints” shows the development constraints present in Subarea P2.7. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. The map “Subarea P2.7: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 40.2 acres of the land in Subarea P2.7 (68 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P2.7 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

None of the land in Subarea P2.7 is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

None of the land in Subarea P2.7 is constrained by existing uses or development.

**Summary of Development Constraints**

In all, 40.2 acres of the land in Subarea P2.7 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 18.9 acres of land in Subarea P2.7 are addressed below.
(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use
The map “Subarea P2.7: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.7 with the following site characteristic elements displayed:

Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P2.7 is Highway 126. All remaining land under consideration in this subarea is within one mile of Highway 126 except the two southern-most sites.25

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. None of the remaining land in this subarea is of sufficient size to accommodate any of the needed industrial sites. While insufficient to accommodate any need exclusively with second priority land, two sites (identified above on the map “Subarea P2.7: Site Characteristics of Unconstrained Land”) are adjacent to fourth priority land that has some potential to be combined with the second priority land to create sites large enough to accommodate some portion of the industrial need. For this reason, these two sites of second priority land are not dismissed at this point. They will be considered for inclusion in the UGB when the subject fourth priority land (Subarea P4.6) is analyzed for inclusion under Section III(f)6, below.

Subarea P2.7 Summary. Based on these findings, the City has determined that none of the land in Subarea P2.7 is suitable for industrial expansion without combining it with suitable lower priority land. The two sites noted as candidates for further consideration will be analyzed for inclusion in association with adjacent fourth priority land under Section 2(f)6 below.

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25 Were these two sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
Subarea P2.8

Subarea P2.8 is located to the west of the current UGB, near the Amazon Creek Diversion Channel and Bodenhamer Road, as shown on the “Extent” map. This subarea is composed of 104.0 acres of second priority land designated Rural Residential and Rural Commercial.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

The map “Subarea P2.8: Development Constraints” shows the development constraints present in Subarea P2.8. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.8 subarea has more than one type of development constraint. The map “Subarea P2.8: Development Constraints” is a visual representation of the following information:
Dismissal of Land with Slopes in Excess of 5 Percent Grade

The United States Geological Survey’s 10-meter digital elevation model shows that 6.6 acres of the land in Subarea P2.8 (6 percent) are constrained by slopes greater than 5%.

Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)

29.8 acres of the land in Subarea P2.8 (29 percent) is constrained by the FEMA mapped Special Flood Hazard Area.

Dismissal of Land with Goal 5 Protections (natural resources)

0.1 acres of the land in Subarea P2.8 (less than 1 percent) is constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Three (3) tax lots totaling 15.6 acres in Subarea P2.8 (15 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. Two tax lots are used for wetland mitigation by the City of Eugene. The third tax lot is developed by Brownings Dog Ranch Tails Inn.26 This business already contributes to the employment of the region, and so adding this lot with the intent of converting it to a large-lot industrial properties would fail to meet the City’s economic development needs, resulting in either the same number of jobs or a net loss, depending on employment density.

Summary of Development Constraints

In all, 51.9 acres of the land in Subarea P2.8 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 52.1 acres of land in Subarea P2.8 are addressed below.

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26 Were these tax lots not discarded for uses/development that make industrial redevelopment highly unlikely, they would be discarded for lack of access within one mile to a Freight Route.
(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use
The map “Subarea P2.8: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.8 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.8 is Highway 126. No remaining land under consideration in this subarea is within one mile of Highway 126.

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**
- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.8 remain for consideration under this criterion.

**Subarea P2.8 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.8 is suitable for industrial expansion.

(9) **Subarea P2.9**

Subarea P2.9 is located to the west of the current UGB, near the Eugene Airport, as shown on the “Extent” map. This subarea is composed of 2,269.1 acres of second priority land designated Government & Education and Rural Residential.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**
The map “Subarea P2.9: Development Constraints” shows the development constraints present in Subarea P2.9. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.9 subarea has more than one type of development constraint. The map “Subarea P2.9: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 8.8 acres of the land in Subarea P2.9 (less than 1 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

139.8 acres of the land in Subarea P2.9 (6 percent) are constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

66.8 acres of the land in Subarea P2.9 (3 percent) are constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Thirty (30) tax lots totaling 2,209 acres in Subarea P2.9 (97 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. These tax lots are committed to use by the Eugene Airport, an important transportation facility for the region.

**Summary of Development Constraints**

In all, 2,227.6 acres of the land in Subarea P2.9 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 41.5 acres of land in Subarea P2.9 are addressed below.
(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use
The map “Subarea P2.9: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.9 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.9 is Highway 99. Only the easternmost remaining site under consideration in this subarea is within one mile of Highway 99.

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

None of the remaining land in this subarea is of sufficient size to accommodate any of the needed industrial sites. Further, the only remaining site is not adjacent to lower priority land that has potential, when combined with the second priority land, to create a site large enough to accommodate a needed industrial site.

**Subarea P2.9 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.9 is suitable for industrial expansion.

**Subarea P.2.10**

Subarea P2.10 is located to the north of the current UGB, near Prairie Road, as shown on the “Extent” map. This subarea is composed of 115.7 acres of second priority land designated Rural Residential and Rural Industrial.

**Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**
The map “Subarea P2.10: Development Constraints” shows the development constraints present in Subarea P2.10. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.10 subarea has more than one type of development constraint. The map “Subarea P2.10: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

None of the land in Subarea P2.10 is constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

2.7 acres of the land in Subarea P2.10 (2 percent) are constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

0.3 acres of the land in Subarea P2.10 (less than 1 percent) are constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Six (6) tax lots totaling 49.6 acres in Subarea P2.10 (43 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. These tax lots are developed by businesses along Awbrey Lane and Prairie Road (Valley Iron and Steel Company, Industrial Scrap Corporation, Eugene Pallet Services LLC, Eugene RV and Boat Storage, and Oregon Aquatics). These businesses already contribute to the employment of the region, and so adding these lots with the intent of converting them to large-lot industrial properties would fail to meet the City’s economic
development needs, resulting in either the same number of jobs or a net loss, depending on employment density.

Summary of Development Constraints

In all, 49.9 acres of the land in Subarea P2.10 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 65.8 acres of land in Subarea P2.10 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use

The map “Subarea P2.10: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.10 with the following site characteristic elements displayed:

Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P2.10 is Highway 99. All remaining land under consideration in this subarea is within one mile of Highway 99 except the land east of the Union Pacific Railroad.27

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. None of the remaining land in this subarea is of sufficient size to accommodate any of the needed industrial sites. While insufficient to accommodate any need exclusively with second priority land, three sites (identified above on the map “Subarea P2.10: Site Characteristics of Unconstrained Land”) are adjacent to fourth priority land that has some potential to be combined with the second priority land to create sites large enough to accommodate some portion of the industrial need. For this reason, these three sites of second priority land are not dismissed at this point; they will be considered for inclusion in the UGB when the subject fourth priority land (Subarea P4.8) is analyzed for inclusion under section III(f)8, below.

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27 Were these sites not discarded for distance from a Freight Route, they would be discarded for insufficient size to meet the identified site characteristics.
Subarea P2.10 Summary. Based on these findings, the City has determined that none of the land in Subarea P2.10 is suitable for industrial expansion without combining it with suitable lower priority land. The three sites noted as candidates for further consideration will be analyzed for inclusion in association with adjacent fourth priority land under Section 2(f)8 below.
(11) **Subarea P2.11**

Subarea P2.11 is located to the north of the current UGB, near the Willamette River and East Beacon Drive, as shown on the “Extent” map. This subarea is composed of 275.2 acres of second priority land designated Rural Residential.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

The map “Subarea P2.11: Development Constraints” shows the development constraints present in Subarea P2.11. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P2.11 subarea has more than one type of development constraint. The map “Subarea P2.11: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 22.5 acres of the land in Subarea P2.11 (8 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

217.6 acres of the land in Subarea P2.11 (79 percent) is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

2.2 acres of the land in Subarea P2.11 (less than 1 percent) is constrained by Lane County Goal 5 protections.
Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Four (4) tax lots totaling 18.9 acres in Subarea P2.11 (7 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. These tax lots are identified (see the Park Expansion Study) as land for future development as a community park needed for the Santa Clara neighborhood.

Summary of Development Constraints

In all, 217.6 acres of the land in Subarea P2.11 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 57.6 acres of land in Subarea P2.11 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use

The map “Subarea P2.11: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P2.11 with the following site characteristic elements displayed:
Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P2.11 are Highway 99 and the Randy Papé Beltline. No remaining land under consideration in this subarea is within one mile of these Freight Routes.
Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P2.11 remain for consideration under this criterion.

Subarea P2.11 Summary. Based on these findings, the City has determined that none of the land in Subarea P2.11 is suitable for industrial expansion.

(12) Subarea P2.12

Subarea P2.12 is located to the north of the current UGB, near the Willamette River and the Randy Papé Beltline, as shown on the “Extent” map. It is composed of 5.4 acres of second priority land surrounded by the current UGB and land designated Sand and Gravel (a Goal 5 protected Mineral and Aggregate designation). The land in this subarea is designated as Industrial.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit
The map “Subarea P2.12: Development Constraints” shows the development constraints present in Subarea P2.12. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. The map “Subarea P2.12: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

None of the land in Subarea P2.12 is constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P2.1 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

None of the land in Subarea P2.12 is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

None of the land in Subarea P2.12 is constrained by existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses.

**Summary of Development Constraints**

None of the land in Subarea P2.12 has one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The full 5.4 acres of land in Subarea P2.12 are addressed below.
(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**

The map “Subarea P2.12: Site Characteristics of Unconstrained Land”, above, shows the remaining / unconstrained land in Subarea P2.12 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P2.12 is and the Randy Papé Beltline. All land under consideration in this subarea is within one mile of an access point to and the Randy Papé Beltline.

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

Subarea P2.12 is divided into two small lots and small portions of two additional lots owned by a single organization. None of the remaining land in this subarea is of sufficient size to
accommodate any of the needed industrial sites. Further, none of the remaining sites are adjacent to lower priority land that has potential, when combined with the second priority land, to create sites large enough to accommodate a needed industrial site.

**Subarea P2.12 Summary.** Based on these findings, the City has determined that none of the land in Subarea P2.12 is suitable for industrial expansion.

### (13) Second Priority Land -- Conclusion

Based on these findings, the City has determined that the study area has no second priority land suitable for industrial expansion as independent sites. Four sites will be reconsidered with fourth priority land to determine whether they could be combined to create a viable site for meeting the industrial need.
e. Third Priority Land – Apply State’s Factors for Dismissal of Candidate Land

The third priority land in Eugene’s study area is evaluated within a single Priority 3 ("P3") subarea shown below on the “Subareas of Third Priority Land” map. This subarea allows for a more detailed view of the land within the study area. The analysis that follows evaluates all land in the subarea. It does not determine the suitability of the subarea as a whole.

![Map showing third priority land subarea](image-url)
(1) **Subarea P3.1**

Subarea P3.1 is located to the south of the current UGB, near Lorane Highway, as shown on the “Extent” map. It is composed of 488.6 acres of third priority. The land in this subarea is designated as Marginal Land.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

The map “Subarea P3.1: Development Constraints” shows the development constraints present in Subarea P3.1. See constraint maps, in Section II.b above, showing the location of each development constraint throughout the study area. Some land in the P3.1 subarea has more than one type of development constraint.

The map “Subarea P3.1: Development Constraints” is a visual representation of the following information:

*Dismissal of Land with Slopes in Excess of 5 Percent Grade*

The United States Geological Survey’s 10-meter digital elevation model shows that 453.3 acres of the land in Subarea P3.1 (93 percent) are constrained by slopes greater than 5%.

*Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)*

None of the land in Subarea P3.1 is constrained by the FEMA mapped Special Flood Hazard Area.
8.8 acres of the land in Subarea P3.1 (2 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Two (2) tax lots totaling 66.6 acres of the land in Subarea P3.1 (14 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. These two tax lots are owned by City of Eugene Parks and Open Space. The western lot is part of the Wild Iris Ridge and the eastern lot is held for future park development.28

Summary of Development Constraints

In all, 457.7 acres of the land in Subarea P3.1 have one or more development constraints

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use

The map “Subarea P3.1: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P3.1 with the following site characteristic elements displayed:

28 All P3.1 sites dismissed due to existing uses would also be dismissed for slope in excess of 5%.
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Subarea P3.1: Site Characteristics of Unconstrained Land

Displayed Site Characteristics of Unconstrained Land

- Sites More than 1 Mile from Freight Route
- Sites of Insufficient Size within 1 Mile of Freight Route
- Third Priority Land for Further Consideration (None)

Note: This map is based on imprecise source data, subject to change, and for general reference only.

Current UGB
Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P3.1 is Highway 126. No land under consideration in this subarea is within one mile of Highway 126.\(^{29}\)

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P3.1 remain for consideration under this criterion.

Subarea P3.1 Summary. Based on these findings, the City has determined that none of the land in Subarea P3.1 is suitable for industrial expansion.

(3) Third Priority Land -- Conclusion

Based on these findings, the City has determined that no third priority land in the study area is suitable for industrial expansion.

\(^{29}\) Were they not discarded for distance from a Freight Route, these sites would be discarded for insufficient size to meet the identified site characteristics.
f. Fourth Priority Land – Apply State’s Factors for Dismissal of Candidate Land

The fourth priority land in Eugene’s study area is divided into 10 subareas for evaluation. These Priority 4 (“P4”) subareas are shown on the “Subareas of Fourth Priority Land” map. As noted above, these subareas allow for a more detailed view of the land within the study area. The analysis that follows evaluates all land in each subarea. It does not determine the suitability of subareas as a whole.

Each of the ten subareas of fourth priority category land was evaluated using the standards and process set out in Section II.c, above. Analysis that walks through that evaluation follows.
(1) **Subarea P4.1**

Subarea P4.1 is located to the southeast of the current UGB, near 30th Avenue and Interstate 5, as shown on the “Extent” map. It is composed of 1804.4 acres of fourth priority land. The land in this subarea is designated as either Forest or Agriculture.

![Map of Subarea P4.1: Extent](image)

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

The map “Subarea P4.1: Development Constraints” shows the development constraints present in Subarea P4.1. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.1 subarea has more than one type of development constraint. The map “Subarea P4.1: Development Constraints” is a visual representation of the following information:

*Dismissal of Land with Slopes in Excess of 5 Percent Grade*

The United States Geological Survey’s 10-meter digital elevation model shows that 1594.6 acres of the land in Subarea P4.1 (88 percent) are constrained by slopes greater than 5%. 

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Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)

None of the land in Subarea P4.1 is constrained by the FEMA mapped Special Flood Hazard Area.

Dismissal of Land with Goal 5 Protections (natural resources)

12.9 acres of the land in Subarea P4.1 (less than 1 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Fifteen (15) tax lots totaling 572.8 acres of the land in Subarea P4.1 (32 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses.

The majority of this land is in 2 tax lots that the City of Eugene owns and maintains as Moon Mountain Park to the north and Mt. Baldy Park (one of an interconnected series of parks that make up the Ridgeline Trail System with over 12 miles of trails) to the south. Lane Community College owns 4 tax lots to support future growth of the college. Other government agencies own 7 remaining tax lots, including: Oregon Department of Transportation (2 tax lots), Eugene Water and Electric Board (2 tax lots), Lane County (2 tax lots), and the Bonneville Power Administration (1 tax lot). The final 2 tax lots are owned and operated by Oak Hill School as a K-12 school campus.

Summary of Development Constraints

In all, 1,633.3 acres of the land in Subarea P4.1 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 171.1 acres of land in Subarea P4.1 are addressed below.

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30 Except for one site owned by Lane Community College (immediately north of the main campus), all P4.1 sites dismissed due to existing uses would otherwise need to be dismissed due to excessive slope or below under (b) due to insufficient size.
(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use
The map “Subarea P4.1: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.1 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P4.1 is Interstate 5. All remaining land under consideration in the eastern portion of this subarea is within one mile of I-5 except land south of Lane Community College main campus, which lacks access within a mile of I-5.31

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

Subarea P4.1 is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. Two sites in this subarea are of sufficient size to accommodate any of the needed industrial sites. These sites are labeled as P4.1a and P4.1b on the map “Subarea P4.1: Site Characteristics of Unconstrained Land” above.

**Subarea P4.1 Summary.** Based on these findings, the City has determined that Subarea P4.1 has two sites (P4.1a and P4.1b) suitable for further consideration for industrial expansion.

- (c) **Dismiss Candidate Land to which Future Urban Services Could not Reasonably be Provided Due to Topographical or other Physical Constraints**
  
  All land in Subarea P4.1 can be served.
  
- (d) **Dismiss Candidate Land if its Inclusion in the UGB would be Untenable Considering the Comparative Environmental, Energy, Economic and Social Consequences that would Result from its Inclusion in the UGB**

**Site P4.1a**

This site is 28 contiguous acres of a 50 acre tax lot designated for Agriculture. Land to the west is designated for forest use, while land to the north and east is designated for rural residential use. Land to the south is currently developed as the primary campus for Lane Community College.

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31 Were they not discarded for distance from a Freight Route, these southern sites would be discarded for insufficient size to meet the identified site characteristics.
Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to forest land to the west. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: While the addition of industrial employment near residential areas may decrease energy use from commuter traffic, an isolated employer or two is unlikely to have significant benefits, and is just as likely to draw employees from other parts of the region. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.1a to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.1a is separated from the current UGB by productive forest land. For Site P4.1a to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.1a until the site is contiguous with the city limits, either through annexation of the intervening forest land (which would not serve an identified need for the City), or a significant (and arguably unreasonable) “cherry stem” annexation of 30th Avenue. Given that it is therefore highly unlikely that Site P4.1a would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Additionally, the cost of extending urban services to this site (including transportation improvements for the connection to I-5) is disproportionate to the site’s benefits. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for nearby rural residents and students exposed to traffic and other impacts of such uses adjacent to their homes and school. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to the economic challenges to developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.1a is discarded from further consideration.

Site P4.1b –

This site is assembled from 15.7 contiguous acres of an 8.6 acre tax lot and a 36.5 acre tax lot both designated for Forest. Land to the south, west and north is designated for forest use, while land to the east is designated for Government and Education and is currently developed as the primary campus for Lane Community College.

Environmental: Expansion onto this site for industrial purposes would create an industrial site surrounded by forest land on three sides. This adjacency could have potential minor environmental consequences. This site also has the negative consequence of more than half of the acreage of the two tax lots is constrained by slope, leading to a considerable amount of forest land that would be taken into the urban growth boundary by expanding for this site without serving an identified need. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative.
Energy: While the addition of industrial employment moderately close to residential areas may decrease energy use from commuter traffic, an isolated employer or two is unlikely to have significant benefits, and is just as likely to draw employees from other parts of the region. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.1b to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.1b is separated from the current UGB by productive forest land. For Site P4.1b to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.1b until the site is contiguous with the city limits, either through annexation of the intervening forest land (which would not serve an identified need for the City), or a significant (and arguably unreasonable) “cherry stem” annexation of 30th Avenue. Given that it is therefore highly unlikely that Site P4.1b would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Additionally, the cost of extending urban services to this site (including transportation improvements for the connection to I–5) is disproportionate to the site’s benefits. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for students exposed to traffic and other impacts of such uses adjacent to their school. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to the economic challenges to developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.1b is discarded from further consideration.

(e) Dismiss Candidate Land if its Inclusion in the UGB to Address the Identified Industrial Land Deficit would be Incompatible with Nearby Agricultural or Forest Activities Occurring on Farm or Forest Land Outside the UGB

As explained above, Site P4.1a and Site P4.1b are separated from the existing UGB by productive forest land that is not suitable for the City’s industrial land needs. Development of these sites could require the City to also bring that intervening forest land into the UGB and to annex it into the city limits if the lengthy “cherry stem” annexation is determined to be unreasonable. In that way, inclusion of either of these sites in the UGB to address the identified industrial land deficit would be incompatible with the nearby forest activities now occurring on forest land outside the UGB. Even if there was not a sufficient basis for dismissing Site P4.1a and Site P4.1b based on the ESEE consequences discussed above, these sites would be dismissed from further consideration for this reason.

Subarea P4.1 Summary. Based on these findings, the City has determined that none of the land in Subarea P4.1 is suitable for industrial expansion.
(2) **Subarea P4.2**

Subarea P4.2 is located to the southeast of the current UGB, between Mt. Baldy and Spencer’s Butte, as shown on the “Extent” map. It is composed of 499.4 acres of fourth priority land. The land in this subarea is designated as either Forest or Agriculture.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

The map “Subarea P4.2: Development Constraints” shows the development constraints present in Subarea P4.2. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.2 subarea has more than one type of development constraint. The map “Subarea P4.2: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 490.9 acres of the land in Subarea P4.2 (98 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P4.2 is constrained by the FEMA mapped Special Flood Hazard Area.
None of the land in Subarea P4.2 is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Goal 5 Protections (natural resources)**

Four (4) tax lots totaling 9.7 acres of the land in Subarea P4.2 (2 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. Two of these tax lots are owned by the Eugene Water and Electric Board, one is owned by the City of Eugene as a portion of Mt. Baldy Park (one of an interconnected series of parks that make up the Ridgeline Trail System with over 12 miles of trails), and one is owned and operated by Lane Electric Coop as a substation.

**Summary of Development Constraints**

In all, 490.9 acres of the land in Subarea P4.2 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 8.5 acres of land in Subarea P4.2 are addressed below.

**(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**

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32 All P4.2 sites dismissed due to existing uses would otherwise need to be dismissed due to excessive slope.
The map “Subarea P4.2: Site Characteristics of Unconstrained Land” shows the remaining unconstrained land in Subarea P4.2 with the following site characteristic elements displayed:
Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P4.2 is Interstate 5. All remaining land under consideration in this subarea is more than one mile from I-5.33

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:
- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P4.2 remain for consideration under this criterion.

Subarea P4.2 Summary. Based on these findings, the City has determined that none of the land in Subarea P4.2 is suitable for industrial expansion.

(3) Subarea P4.3

Subarea P4.3 is located to the south of the current UGB, between Spencer’s Butte and Lorane Highway, as shown on the “Extent” map. It is composed of 352.8 acres of fourth priority land. The land in this subarea is designated as either Forest or Agriculture.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

33 Were they not discarded for distance from a Freight Route, the remaining sites would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P4.3: Development Constraints” shows the development constraints present in Subarea P4.3. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.3 subarea has more than one type of development constraint. The map “Subarea P4.3: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 339.8 acres of the land in Subarea P4.3 (96 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P4.3 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

None of the land in Subarea P4.3 is constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Three (3) tax lots totaling 17.0 acres of the land in Subarea P4.3 (5 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. All of these tax lots are owned by the City of Eugene. Two are portions of parks (Blanton Ridge Trailhead and Spencer’s Butte, which are part of an interconnected series of parks that make up the Ridgeline Trail System with over 12 miles of trails), and the other provides water storage.

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34 All P4.3 sites dismissed due to existing uses would otherwise need to be dismissed due to excessive slope.
**Summary of Development Constraints**

In all, 339.8 acres of the land in Subarea P4.3 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 13.0 acres of land in Subarea P4.3 are addressed below.

(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**
The map “Subarea P4.3: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.3 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P4.3 is Interstate 5. All remaining land under consideration in this subarea is more than one mile from I-5.\(^{35}\)

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P4.3 remain for consideration under this criterion.

**Subarea P4.3 Summary.** Based on these findings, the City has determined that none of the land in Subarea P4.3 is suitable for industrial expansion.

(4) **Subarea P4.4**

Subarea P4.4 is located to the south of the current UGB, between Lorane Highway and Bailey Hill Road, as shown on the “Extent” map. It is composed of 656.9 acres of fourth priority land. The land in this subarea is designated as either Forest or Agriculture.

(a) **Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

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\(^{35}\) Were they not discarded for distance from a Freight Route, the remaining sites would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P4.4: Development Constraints” shows the development constraints present in Subarea P4.4. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.4 subarea has more than one type of development constraint. The map “Subarea P4.4: Development Constraints” is a visual representation of the following information:

Dismissal of Land with Slopes in Excess of 5 Percent Grade

The United States Geological Survey’s 10-meter digital elevation model shows that 628.2 acres of the land in Subarea P4.4 (96 percent) are constrained by slopes greater than 5%.

Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)

None of the land in Subarea P4.4 is constrained by the FEMA mapped Special Flood Hazard Area.

Dismissal of Land with Goal 5 Protections (natural resources)

10.1 acres of the land in Subarea P4.4 (2 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Six (6) tax lots totaling 173.0 acres of the land in Subarea P4.4 (26 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses.36 Five of these tax lots are owned by Eugene Parks and Open Space and are a portion of Wild Iris Ridge. One tax lot is owned and operated by the Eugene Water and Electric Board as a substation.

36 All P4.4 sites dismissed due to existing uses would otherwise need to be dismissed due to excessive slope.
Summary of Development Constraints

In all, 638.2 acres of the land in Subarea P4.4 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 18.7 acres of land in Subarea P4.4 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use
The map “Subarea P4.4: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.4 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P4.4 is Highway 126. All remaining land under consideration in this subarea is more than one mile from Highway 126.37

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

As explained above, no sites in Subarea P4.4 remain for consideration under this criterion.

**Subarea P4.4 Summary.** Based on these findings, the City has determined that none of the land in Subarea P4.4 is suitable for industrial expansion.

*(5) Subarea P4.5*

Subarea P4.5 is located to the southwest of the current UGB, between Bailey Hill Road and Green Hill Road, as shown on the “Extent” map. It is composed of 986.4 acres of fourth priority land. The land in this subarea is designated as either Forest or Agriculture.

*(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit*

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37 Were they not discarded for distance from a Freight Route, the remaining sites would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P4.5: Development Constraints” shows the development constraints present in Subarea P4.5. See constraint maps, in Section II.b above, showing the location of each development constraint throughout the study area. Some land in the P4.5 subarea has more than one type of development constraint. The map “Subarea P4.5: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 962.5 acres of the land in Subarea P4.5 (98 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

None of the land in Subarea P4.5 is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

3.8 acres of the land in Subarea P4.5 (less than 1 percent) are constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Seven (7) tax lots totaling 71.7 acres of the land in Subarea P4.5 (7 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses.38 Six of these tax lots are owned by Eugene Parks and Open Space and are a portion of Murray Hill Park and two undeveloped park areas. One tax lot is owned by the Eugene Water and Electric Board.

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38 All P4.5 sites dismissed due to existing uses would otherwise need to be dismissed due to excessive slope.
Summary of Development Constraints

In all, 962.5 acres of the land in Subarea P4.5 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 23.9 acres of land in Subarea P4.5 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use
The map “Subarea P4.5: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.5 with the following site characteristic elements displayed:

Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P4.5 is Highway 126. All remaining land under consideration in this subarea is more than one mile from Highway 126 except small pockets of land in the three more northwestern tax lots.39

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:
- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. None of the remaining land in this subarea is of sufficient size to accommodate any of the needed industrial sites.

Subarea P4.5 Summary. Based on these findings, the City has determined that none of the land in Subarea P4.5 is suitable for industrial expansion.

(6) Subarea P4.6

Subarea P4.6 is located to the west of the current UGB, between Green Hill Road and the Amazon Creek Diversion Channel, as shown on the “Extent” map. It is composed of 961.2 acres of fourth priority land. The land in this subarea is designated as either Forest or Agriculture.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

39 Were they not discarded for distance from a Freight Route, the remaining sites would be discarded for insufficient size to meet the identified site characteristics.
The map “Subarea P4.6: Development Constraints” shows the development constraints present in Subarea P4.6. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.6 subarea has more than one type of development constraint. The map “Subarea P4.6: Development Constraints” is a visual representation of the following information:

Dismissal of Land with Slopes in Excess of 5 Percent Grade

The United States Geological Survey’s 10-meter digital elevation model shows that 441.6 acres of the land in Subarea P4.6 (46 percent) are constrained by slopes greater than 5%.

Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)

81.6 acres of the land in Subarea P4.6 (8 percent) is constrained by the FEMA mapped Special Flood Hazard Area.

Dismissal of Land with Goal 5 Protections (natural resources)

50.6 acres of the land in Subarea P4.6 (5 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Twelve (12) tax lots totaling 223.2 acres of the land in Subarea P4.6 (23 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. The ten tax lots north of Highway 126 are owned by a variety of public entities (Bureau of Land Management, Oregon Department of Transportation, Eugene Water and Electric Board, and the Port of Coos Bay) to protect them as a part of the West
Eugene Wetlands / Rivers to Ridges Program.\textsuperscript{40} The two tax lots south of Highway 126 include one developed as an active business (2002 Restorations)\textsuperscript{41} and one owned by the Eugene Water and Electric Board.\textsuperscript{42}

**Summary of Development Constraints**

In all, 673.2 acres of the land in Subarea P4.6 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 288.0 acres of land in Subarea P4.6 are addressed below.

**b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**

The map “Subarea P4.6: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.6 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P4.6 is Highway 126. Most remaining land under consideration in this subarea is within one mile of Highway 126. The areas dismissed for being more than a mile from a Freight Route are some small pockets of land along the southern boundary of the subarea and some northerly land that is not immediately adjacent to Green Hill Road.\textsuperscript{43}

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

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\textsuperscript{40} In the early 1990s, based upon objectives set out in the West Eugene Wetlands Plan, a partnership of multiple agencies and non-profit organizations was formed in an effort to conserve and restore wetlands in the West Eugene area. See https://www.eugene-or.gov/650/Rivers-to-Ridges-Partnership.

\textsuperscript{41} Were this site not discarded for existing development, it would be discarded for insufficient size to meet the identified site characteristics.

\textsuperscript{42} Were this site not discarded for existing development, it would be discarded for excessive slope and distance from a Freight Route.

\textsuperscript{43} Were they not discarded for distance from a Freight Route, the southern sites would be discarded for insufficient size to meet the identified site characteristics.
Appendix B to Findings

Subarea P4.6: Site Characteristics of Unconstrained Land

- Subarea Boundary
- Current Eugene UGB
- Taxlots
- Street Rights of Way
- Major Streets
- Designated Freight Route
- Streets within a Mile of Freight Route Access
- Constrained Land

Note: This map is based on imprecise source data, subject to change, and for general reference only.

Typical text accompanying the map:

- Current UGB
- Royal Avenue
- Highway 126
- Green Hill Road
- Second Priority Land Pending Fourth Priority Analysis
- Displayed Site Characteristics of Unconstrained Land
- Sites More than 1 Mile from Freight Route
- Sites of Insufficient Size within 1 Mile of Freight Route
- Fourth Priority Land for Further Consideration

Additional descriptive text:

- Note: This map is based on imprecise source data, subject to change, and for general reference only.
This subarea is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. Additionally, two small areas of second priority land in Subarea P2.7 were identified in prior analysis, above, as being of insufficient size to meet a portion of the industrial land need, but which would be considered here in association with adjacent sites of fourth priority land. Eight sites in this subarea are of sufficient size to accommodate a needed industrial site. These sites are labeled as P4.6a through P4.6h on the map “Subarea P4.6: Site Characteristics of Unconstrained Land.”

Subarea P4.6 Summary. Based on these findings, the City has determined that Subarea P4.6 has eight sites (P4.6a-h) suitable for further consideration for industrial expansion.

(c) Dismiss Candidate Land to which Future Urban Services Could not Reasonably be Provided Due to Topographical or other Physical Constraints

All land in Subarea P4.6 can be served.

(d) Dismiss Candidate Land if its Inclusion in the UGB would be Untenable Considering the Comparative Environmental, Energy, Economic and Social Consequences that would Result from its Inclusion in the UGB

Site P4.6a –

This site is 16.9 contiguous acres of a 19.9 acre tax lot designated for Agriculture. It is immediately adjacent to the UGB on its eastern edge, where land inside the UGB is designated Industrial. Land to the west and south is designated for a mixture of Agriculture and Forest use, while land to the north is designated Rural Residential. The tax lot immediately to the south is developed by the Greenhill Humane Society.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to forest and agricultural land to the west. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The mix of surrounding uses and the adjacency of this site to the current UGB suggests potential positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.6a would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. Negative economic consequences include the cost to extend urban services to this site, which is isolated from all but one other small potential industrial expansion site (P4.6b). Overall economic consequences from expanding onto this site for industrial use would be positive.
**Social**: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for immediately adjacent residents exposed to traffic and other impacts of such uses adjacent to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary**: Although there are some environmental, energy, economic and social concerns associated with expanding on this site, they are insufficient to discard it from further consideration at this juncture. Site P4.6a is, therefore, to be considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.6b**

This site is a 19.8 acre unconstrained tax lot designated for Agriculture, with a small portion of the southwest corner of the tax lot designated for Forest. It is immediately adjacent to the UGB on its eastern edge, where land inside the UGB is designated Industrial. Land to the west is designated for forest use, while land to the north and south is designated Agriculture.

**Environmental**: Expansion onto this site for industrial purposes would create an industrial site adjacent to forest and agricultural land to the west. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

**Energy**: The mix of surrounding uses and the adjacency of this site to the current UGB suggests potential positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic**: A UGB expansion to include Site P4.6b would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. Negative economic consequences include the cost to extend urban services to this site, which is isolated from all but one other small potential industrial expansion site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social**: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for nearby residents exposed to traffic and other impacts of such uses close to their homes. A more significant negative social consequence would be the displacement of the Greenhill Humane Society animal shelter currently operating on this site, which saves the lives of approximately 3,000 dogs, cats and other animals each year. Overall social consequences from expanding onto this site for industrial use would be negative.

**Summary**: Although there are some environmental, energy, economic and social concerns associated with expanding on this site, they are insufficient to discard it from further consideration at this juncture. Site P4.6b is, therefore, to be considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.6c**

This site is 29.8 contiguous acres of a 33.7 acre tax lot designated for Agriculture. It is immediately adjacent to the UGB on its eastern edge, where land inside the UGB is designated Campus Industrial. Rural land surrounding the site is designated for Agriculture. Site P4.6c is bordered by the railroad to the north and Highway 126 to the south.
Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural land. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The mix of nearby uses and the adjacency of this site to the current UGB suggests potential positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.6c would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. Negative economic consequences include the cost to extend urban services to this site, which is isolated from all but one other potential industrial expansion site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have minimal social consequences of any kind due to its separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Although there are some environmental, energy, economic and social concerns associated with expanding on this site, they are insufficient to discard it from further consideration at this juncture. Site P4.6c is, therefore, to be considered as a candidate industrial expansion site in Section III.g, below.

Site P4.6d –

This site is 15.7 contiguous acres of a 22.9 acre tax lot designated for Agriculture. It is immediately adjacent to the UGB on its eastern edge, where land inside the UGB is designated Commercial. Rural land surrounding the site is designated for Agriculture, with the exception of a narrow strip of Rural Residential to the immediate south. Site P4.6d is bordered by Bonnie Heights Road to the north and Highway 126 to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural land. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The mix of nearby uses and the adjacency of this site to the current UGB suggests potential positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.6d would have positive economic consequences, as it is contiguous with the UGB and near the city limits, making it likely to develop within the planning period. Negative economic consequences include the cost to extend urban services to this site, which is relatively isolated from all but one other potential industrial expansion site. Overall economic consequences from expanding onto this site for industrial use would be positive.
**Social**: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for nearby residents exposed to traffic and other impacts of such uses close to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary**: Although there are some environmental, energy, economic and social concerns associated with expanding on this site, they are insufficient to discard it from further consideration at this juncture. Site P4.6d is, therefore, to be considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.6e**

This site is 12.8 contiguous acres of a 45.1 acre tax lot designated Agricultural. If suitable, Site P4.6e could meet the need for one of four sites of between 10 and 20 acres. It could potentially be assembled with the adjacent second priority site, which is a 3.1 acre tax lot designated Rural Residential (see analysis of Subarea P2.7, above). If combined with the second priority site (3.1 acres), however, it would still fall into the 10-20 acre category at 15.9 acres. As such, including the second priority site does not enable the City to include fewer acres of lower priority land, because the adjacent fourth priority site is equally viable without it. The second priority site therefore does not assist the City in meeting any industrial land need, and is now dismissed from further analysis. Site P4.6e is surrounded by land designated Agriculture, with the exception of Rural Residential designated land to the south. The site is bordered by Crow Road to the east.

**Environmental**: Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural land. This adjacency could have potential minor environmental consequences. Additionally, 72% of the tax lot is constrained by slope, leading to a considerable amount of fourth priority land that would be taken in by expanding for this site, but would not directly serve the industrial need. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative.

**Energy**: The mix of nearby uses and the proximity of this site to the current UGB suggests potential positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic**: A UGB expansion to include Site P4.6e to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.6e is separated from the current UGB by Rural Residential and agricultural land. For Site P4.6e to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.6e until the site is contiguous with the city limits, either through annexation of the intervening residential or agricultural land (which would not serve an identified need for the City), or an (arguably unreasonable) “cherry stem” annexation of Crow Road. Given that it is highly unlikely that Site P4.6e would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Additionally, the cost of extending urban services to this area for the few available candidate sites is disproportionate to the benefit. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

**Social**: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for residents exposed to traffic and other impacts of such uses adjacent to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.
**Summary:** Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.6e is discarded from further consideration.

**Site P4.6f –**

This site is 9.8 contiguous acres of a 13.8 acre tax lot designated Agricultural. It could potentially be assembled with the adjacent second priority site, which is 4.3 contiguous acres of a 4.8 acre tax lot designated Rural Residential (see analysis of Subarea P2.7, above). Together, these two tax lots meet the minimum size need of 10 acres (at 14.2 acres), where neither tax lot meets this minimum independently. The contiguous, unconstrained area of these two tax lots will therefore be considered as a single site (P4.6f) below. Land to the north and west is designated Rural Residential, while land to the south and east is designated Agricultural and Forest. The site is bordered by Crow Road to the east.

**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural and forest land. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

**Energy:** While the addition of industrial employment near residential areas may decrease energy use from commuter traffic, a given employer is just as likely to draw employees from other parts of the region. Overall energy consequences from expanding onto this site for industrial use would be neutral.

**Economic:** A UGB expansion to include Site P4.6f to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.6f is separated from the current UGB by residential and agricultural land. For Site P4.6f to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.6f until the site is contiguous with the city limits, either through annexation of the intervening residential or agricultural land (which would not serve an identified need for the City), or an (arguably unreasonable) “cherry stem” annexation of Crow Road. Given that it is therefore highly unlikely that Site P4.6f would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Additionally, the cost of extending urban services to this area for the few available candidate sites is disproportionate to the benefit. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

**Social:** Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for residents exposed to traffic and other impacts of such uses adjacent to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to the economic challenges of developing this site into the City during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.6f is discarded from further consideration.
Site P4.6g –

This site is 13.5 contiguous acres of a 115.5 acre tax lot designated Agricultural and Forest. Land to the north and west is designated Agricultural with some nearby Rural Residential, while land to the south and east is designated Forest. The site is bordered by Crow Road to the west.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural and forest land. This adjacency could have potential minor environmental consequences. Additionally, 88% of the tax lot is constrained by slope, leading to a considerable amount of fourth priority land that would be taken into the UGB by expanding for this site, but would not directly serve the industrial need. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative.

Energy: While the addition of industrial employment near residential areas may decrease energy use from commuter traffic, a given employer is just as likely to draw employees from other parts of the region. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.6g to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.6g is separated from the current UGB by rural residential and agricultural land. For Site P4.6g to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.6g until the site is contiguous with the city limits, either through annexation of the intervening residential or agricultural land (which would not serve an identified need for the City), or an (arguably unreasonable) “cherry stem” annexation of Crow Road. Given that it is highly unlikely that Site P4.6g would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Additionally, the cost of extending urban services to this area for the few available candidate sites is disproportionate to the benefit. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for residents exposed to traffic and other impacts of such uses close to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.6g is discarded from further consideration.

Site P4.6h –

This site is assembled from 8.8 contiguous acres of a 12.2 acre tax lot and a 3.4 contiguous acres of a 5.42 acre tax lot both designated Agricultural. Together they form a 12.2 acre site. Land to the east and west is designated Forest, while land to the north is designated Rural Residential. Land to the south and northeast is designated Agricultural.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural and forest land. This adjacency could have potential minor environmental consequences.
Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

**Energy:** While the addition of industrial employment near residential areas may decrease energy use from commuter traffic, a given employer is just as likely to draw employees from other parts of the region. Overall energy consequences from expanding onto this site for industrial use would be neutral.

**Economic:** A UGB expansion to include Site P4.6h to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.6h is separated from the current UGB by residential and agricultural land. For Site P4.6h to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.6h until the site is contiguous with the city limits, either through annexation of the intervening residential or agricultural land (which would not serve an identified need for the City), or an (arguably unreasonable) “cherry stem” annexation of Crow Road. Given that it is highly unlikely that Site P4.6h would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Additionally, the cost of extending urban services to this area for the few available candidate sites is disproportionate to the benefit. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

**Social:** Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for residents exposed to traffic and other impacts of such uses adjacent to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.6h is discarded from further consideration.

(e) **Dismiss Candidate Land if its Inclusion in the UGB to Address the Identified Industrial Land Deficit would be Incompatible with Nearby Agricultural or Forest Activities Occurring on Farm or Forest Land Outside the UGB**

As explained above, Sites P4.6e, P4.6f, P4.6g, and P4.6h are separated from the existing UGB by productive agricultural land that is not suitable for the City’s industrial land needs. Expanding the UGB to include any of these sites would require the City to also bring that intervening agricultural land into the UGB (or extend the city limits in an arguably unreasonable “cherry stem”), making it urbanizable land. In that way, inclusion of Sites P4.6e, P4.6f, P4.6g, and P4.6h in the UGB to address the identified industrial land deficit would be incompatible with the nearby agricultural activities now occurring on land outside the UGB. Even if there was not a sufficient bases for dismissing Sites P4.6e, P4.6f, P4.6g, and P4.6h based on the ESEE consequences discussed above, they are dismissed from further consideration for this reason.
(7) Subarea P4.7

Subarea P4.7 is located adjacent to and to the west of the current UGB, between the Amazon Creek Diversion Channel and Eugene Airport, as shown on the “Extent” map. It is composed of 2,601.5 acres of fourth priority land. The land in this subarea is designated as Agriculture.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

The map “Subarea P4.7: Development Constraints” shows the development constraints present in Subarea P4.7. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.7 subarea has more than one type of development constraint. The map “Subarea P4.7: Development Constraints” is a visual representation of the following information:

Dismissal of Land with Slopes in Excess of 5 Percent Grade

The United States Geological Survey’s 10-meter digital elevation model shows that 13.3 acres of the land in Subarea P4.7 (less than 1 percent) are constrained by slopes greater than 5%.

Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)

1,312.2 acres of the land in Subarea P4.7 (50 percent) is constrained by the FEMA mapped Special Flood Hazard Area.

Dismissal of Land with Goal 5 Protections (natural resources)

135.5 acres of the land in Subarea P4.7 (5 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period
Twelve (12) tax lots totaling 265.3 acres of the land in Subarea P4.7 (10 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. Six of these tax lots are owned by City of Eugene as open space/future park use around the Golden Gardens Ponds. The two tax lots adjacent to the school expansion are owned by Bethel School District for future, collocated school facilities.44 One tax lot, which is owned and operated by Bonneville Power Administration for power lines, bisects a larger tax lot just north of the school property. Two tax lots adjacent to the airport are owned by the Airport for the airport’s needs. The last tax lot is predominantly constrained by several large ponds, and is owned and operated by the Oregon Department of Transportation.

Summary of Development Constraints

In all, 1,534.3 acres of the land in Subarea P4.7 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 1,067.2 acres of land in Subarea P4.7 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use

44 In the City’s School Expansion Study, this acreage owned by the Bethel School District was found to be in excess of what the school district needs to meet its needs at this time, so that land was not included in the school UGB expansion area as part of this legislative review of the UGB. Bethel School anticipates that the land is likely to be needed in the future.
The map “Subarea P4.7: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.7 with the following site characteristic elements displayed:
Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route

The nearest State Designated Freight Route to Subarea P4.7 is Highway 99. All remaining land under consideration that is east of the eastern edge of the airport in this subarea is within one mile of Highway 99 except a single tax lot at the intersection of the airport reserves and Clear Lake Road. Remaining land to the west of that line is too far from Highway 99 access.

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided into a mixture of large and small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. Fourteen sites in this subarea are of sufficient size to accommodate any of the needed industrial sites. These sites are labeled as P4.7a through P4.7n on the map “Subarea P4.7: Site Characteristics of Unconstrained Land” above.

Subarea P4.7 Summary. Based on these findings, the City has determined that Subarea P4.7 has fourteen sites (P4.7a-n) suitable for further consideration for industrial expansion.

(c) Dismiss Candidate Land to which Future Urban Services Could not Reasonably be Provided Due to Topographical or other Physical Constraints

All land in Subarea P4.7 can be served.

(d) Dismiss Candidate Land if its Inclusion in the UGB would be Untenable Considering the Comparative Environmental, Energy, Economic and Social Consequences that would Result from its Inclusion in the UGB

Site P4.7a –

This site is 62.0 contiguous acres of an 84.5 acre tax lot designated Agricultural and Government and Education. The portion of the tax lot designated Government and Education falls under the “Other” category with regard to priority. It is immediately adjacent to the current UGB at its northeastern corner, where land inside the UGB is designated Light Medium Industrial. Non-UGB land not under consideration surrounding the site is designated Government and Education, with the exception of a

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45 Were this tax lot not discarded for distance from a Freight Route, it would be discarded for insufficient size to meet the identified site characteristics.
narrow strip of Agricultural to the southeast. The site is bordered by Airport Road to the north and Clear Lake Road to the south.

*Environmental:* Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites and the Eugene Airport, and separated from active agriculture by Clear Lake Road. This separation could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

*Energy:* The mix of surrounding uses and the adjacency of this site to the current UGB and airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

*Economic:* A UGB expansion to include Site P4.7a would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

*Social:* Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

*Summary:* Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7a is considered as a candidate industrial expansion site in Section III(g), below.

**Site P4.7b –**

This site is 63.3 contiguous acres of a 113.6 acre tax lot (which also contains Site P4.7e) designated Agricultural. It is immediately adjacent to the current UGB on its northern edge, where land inside the UGB is designated Light Medium Industrial. Rural land not under consideration south of the site is designated Agricultural. The tax lot is bordered by Clear Lake Road to the south.

*Environmental:* Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites, and separated from active agriculture by Clear Lake Road. This separation could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

*Energy:* The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

*Economic:* A UGB expansion to include Site P4.7b would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to
extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social**: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary**: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7b is considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.7c –**

This site is 13.1 contiguous acres of a 38.8 acre tax lot (which also contains Site P4.7d) designated Agricultural. It is immediately adjacent to the current UGB on its northern edge, where land inside the UGB is designated Light Medium Industrial. All rural surrounding the site is under consideration for industrial expansion.

**Environmental**: Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites. This separation from agricultural and forest land could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

**Energy**: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic**: A UGB expansion to include Site P4.7c would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social**: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary**: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7c is considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.7d –**
This site is 12.0 contiguous acres of a 38.8 acre tax lot (which also contains Site P4.7c) designated Agricultural. It is just south of the current UGB, where land inside the UGB is designated Light Medium Industrial. All rural land surrounding the site is under consideration for industrial expansion. **Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites. This separation from agricultural and forest land could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

**Energy:** The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic:** A UGB expansion to include Site P4.7d would have positive economic consequences, as the tax lot containing it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social:** Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7d is considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.7e –**

This site is 37.2 contiguous acres of a 113.6 acre tax lot (which also contains Site P4.7b) designated Agricultural. Rural land not under consideration for industrial expansion south of the site is designated Agricultural. The site is bordered by Clear Lake Road to the south.

**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites, and separated from active agriculture by Clear Lake Road. This separation could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

**Energy:** The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic:** A UGB expansion to include Site P4.7e would have positive economic consequences, as the tax lot containing it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.
Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7e is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.7f –

This site is 33.5 contiguous acres of a 40.0 acre tax lot designated Agricultural. It is immediately adjacent to the current UGB on its northern edge, where land inside the UGB is designated Light Medium Industrial. Rural land not under consideration surrounding the site is designated Agricultural. The site is bordered by Highway 99 on its northeastern corner.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites. This separation from agricultural and forest land could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

Energy: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.7f would have positive economic consequences, as the tax lot containing it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7f is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.7g –

This site is a 37.7 acre unconstrained tax lot designated Agricultural. Non-UGB land not under consideration surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the south.
**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent, almost entirely, to other potential industrial sites. This separation from agricultural and forest land could significantly reduce potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

**Energy:** The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic:** A UGB expansion to include Site P4.7g would have positive economic consequences, as the tax lot containing it is contiguous with the UGB and near the city limits, making it likely to develop during the planning period. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social:** Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7g is considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.7h –**

This site is 12.9 contiguous acres of a 13.4 acre tax lot designated Agricultural. It is immediately adjacent to the current UGB on its eastern edge, where land inside the UGB is designated Light Medium Industrial. Non-UGB land surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the south.

**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent, mostly, to other potential industrial sites and lots too small to meet the industrial need. This limited adjacency could significantly reduce potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

**Energy:** The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic:** A UGB expansion to include Site P4.7h would have positive economic consequences, as the tax lot containing it is contiguous with the UGB and near the city limits, making it likely to develop during the planning period. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.
Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7h is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.7i –

This site is a 44.3 acre unconstrained tax lot designated Agricultural. Rural land not under consideration for industrial expansion surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites and tax lots under consideration for a community park. This adjacency to a park would be unlikely to have negative environmental consequences, given the developed nature of community parks. This limited adjacency to agricultural and forest land could significantly reduce potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

Energy: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.7i would have positive economic consequences, as the tax lot containing it is contiguous with the UGB and relatively near the city limits, making it likely to develop during the planning period. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7i is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.7j –

This site is a 30.6 acre unconstrained tax lot designated Agricultural. Land not under consideration for industrial expansion surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the north.
Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites and tax lots under consideration for a community park. This adjacency to a park would be unlikely to have negative environmental consequences, given the developed nature of community parks. This limited adjacency to agricultural and forest land could significantly reduce potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

Energy: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.7j would have positive economic consequences, as the tax lot containing it is connected to the UGB by other potential industrial sites and relatively near the city limits, making it likely to develop during the planning period. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7j is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.7k –

This site is assembled from a 9.8 acre unconstrained tax lot and an 8.0 acre unconstrained tax lot totaling 17.8 acres, both designated Agricultural. Rural land not under consideration surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites and tax lots under consideration for a community park. This adjacency to a park would be unlikely to have negative environmental consequences, given the developed nature of community parks. This limited adjacency to agricultural and forest land could significantly reduce potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

Energy: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.7k would have positive economic consequences, as the tax lot containing it is connected to the UGB by other potential industrial sites and relatively near the
city limits, making it likely to develop during the planning period. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7k is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.7l –

This is 29.1 contiguous acres of a 40.1 acre tax lot designated Agricultural. Rural land not under consideration surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to tax lots identified for a school expansion and tax lots under consideration for a community park, and near other potential industrial sites across Clear Lake Road. This adjacency to a park or school would be unlikely to have negative environmental consequences, given the developed nature of these uses. This limited adjacency could significantly reduce potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

Energy: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.7l would have positive economic consequences, as the tax lot containing it is connected to the UGB by the identified school expansion and other potential industrial sites and relatively near the city limits, making it likely to develop during the planning period. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences based on the adjacency to the identified school expansion. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.
**Summary:** Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7I is considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.7m –**

This site is 26.6 contiguous acres of a 40.1 acre tax lot designated Agricultural. It is immediately adjacent to the current UGB on its southeastern corner, where land inside the UGB is designated Low Density Residential. Non-UGB land surrounding the site is designated Agricultural, with the exception of a narrow strip of Residential to the immediate south. The site is bordered by Clear Lake Road to the north.

**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural land to the northeast. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

**Energy:** The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic:** A UGB expansion to include Site P4.7m would have positive economic consequences, as the tax lot containing it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social:** Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for immediately adjacent residents and students exposed to traffic and other impacts of such uses adjacent to their homes and school. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7I is considered as a candidate industrial expansion site in Section III.g, below.

**Site P4.7n –**

This site is 43.1 contiguous acres of a 63.6 acre tax lot designated for Agriculture. It is immediately adjacent to the current UGB on its southern edge, where land inside the UGB is designated Low Density Residential. Non-UGB land surrounding the site is designated Agricultural. The site is bordered by Clear Lake Road to the north.

**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent to agricultural land to the west. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.
Energy: The mix of surrounding uses and the adjacency of this site to the current UGB and proximity to the airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: A UGB expansion to include Site P4.7n would have positive economic consequences, as the tax lot containing it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated with multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

Social: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for immediately adjacent residents exposed to traffic and other impacts of such uses adjacent to their homes. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.7n is considered as a candidate industrial expansion site in Section III.g, below.

(e) Dismiss Candidate Land if its Inclusion in the UGB to Address the Identified Industrial Land Deficit would be Incompatible with Nearby Agricultural or Forest Activities Occurring on Farm or Forest Land Outside the UGB

As explained above, all of the sites in this area are either adjacent to the existing UGB, or connected by other potential industrial expansion sites. While some sites may impact farm or forest land, those impacts would depend on the configuration of expansion, and will therefore be evaluated in Section III.g, below. No sites in this subarea are dismissed from further consideration for incompatibility with nearby agricultural or forest activities.
(8) **Subarea P4.8**

Subarea P4.8 is located to the west of the current UGB, between Eugene Airport and Prairie Road, as shown on the “Extent” map. It is composed of 1,326.3 acres of fourth priority land. The land in this subarea is designated as Agriculture.

**a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit**

The map “Subarea P4.8: Development Constraints” shows the development constraints present in Subarea P4.8. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.8 subarea has more than one type of development constraint. The map “Subarea P4.8: Development Constraints” is a visual representation of the following information:

*Dismissal of Land with Slopes in Excess of 5 Percent Grade*

The United States Geological Survey’s 10-meter digital elevation model shows that none of the land in Subarea P4.8 is constrained by slopes greater than 5%.

*Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)*

117.7 acres of the land in Subarea P4.8 (9 percent) is constrained by the FEMA mapped Special Flood Hazard Area.
Dismissal of Land with Goal 5 Protections (natural resources)

56.0 acres of the land in Subarea P4.8 (4 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Ten (10) tax lots totaling 499.6 acres of the land in Subarea P4.8 (38 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. The southernmost tax lot, which is also constrained by a large pond, is owned and managed by Oregon Department of Fish and Wildlife. The small tax lot to the far north of the subarea is operated as a mobile home park by Lane County.46 The two tax lots adjacent to Eugene Airport are developed as Fiddler's Green Golf Course.47 The largest area dismissed for existing uses consists of five tax lots owned by Springfield Metropolitan Wastewater as a bio-cycle facility for sewage. The easternmost tax lot (the majority of which is located outside of the study area) is owned by the City of Eugene.48

Summary of Development Constraints

In all, 437.7 acres of the land in Subarea P4.8 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 808.6 acres of land in Subarea P4.8 are addressed below.

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46 Were this site not discarded for existing development, it would be discarded for insufficient size to meet the identified site characteristics.
47 Were this site not discarded for existing development, it would be discarded for environmental impacts, including inability to annex into the city limits within the planning period.
48 Were it not discarded for existing development, this site would be discarded for distance from a Freight Route.
(b) **Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use**
The map “Subarea P4.8: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.8 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Route to Subarea P4.8 is Highway 99. All remaining land under consideration in this subarea is within one mile of Highway 99 except six tax lots (or portions of tax lots fragmented by constraints) to the far east and west of the study area.

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided primarily into large lots, with some small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. Additionally, three small areas of second priority land in Subarea P2.10 were identified in prior analysis, above, as being of insufficient size to meet a portion of the industrial land need, but which would be considered here, in association with adjacent sites of fourth priority land. Twelve sites in this subarea are of sufficient size to accommodate the needed industrial sites. These sites are labeled as P4.8a through P4.8l on the map “Subarea P4.8: Site Characteristics of Unconstrained Land.”

**Subarea P4.8 Conclusion.** Based on these findings, the City has determined that Subarea P4.8 has twelve sites (P4.8a-l) suitable for further consideration for industrial expansion.

(c) **Dismiss Candidate Land to which Future Urban Services Could not Reasonably be Provided Due to Topographical or other Physical Constraints**

All land in Subarea P4.8 can be served.

(d) **Dismiss Candidate Land if its Inclusion in the UGB would be Untenable Considering the Comparative Environmental, Energy, Economic and Social Consequences that would Result from its Inclusion in the UGB**

**Site P4.8a –**

This site is 115.9 contiguous acres of a 133.6 acre tax lot designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the north and west, and Government and Education to the south. The site is bordered by Meadowview Road to the north.
Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north and west. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.8a to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8a is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8a to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8a until the site is contiguous with the city limits, either through annexation of the intervening land which would not serve an identified need for the City, or an unreasonable “cherry stem” annexation along Highway 99. Given that it is therefore highly unlikely that Site P4.8a would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to the inability to annex this site into the City during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8a is discarded from further consideration.

Site P4.8b –

This site is 30.1 contiguous acres of a 76.4 acre tax lot (which also contains Site P4.8c) designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the north, and Government and Education to the south. The site is bordered by Meadowview Road to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.8b to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8b is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8b to be developed for the needed urban industrial use, it would first need
to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8b until the site is contiguous with the city limits, either through annexation of the intervening land which would not serve an identified need for the City, or an (arguably unreasonable) “cherry stem” annexation of Highway 99. Given that it is highly unlikely that Site P4.8b would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8b is discarded from further consideration.

Site P4.8c –

This site is 30.6 contiguous acres of a 76.4 acre tax lot (which also contains Site P4.8b) designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the north, and Government and Education to the south. The site is bordered by Meadowview Road to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.8c to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8c is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8c to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8c until the site is contiguous with the city limits, either through annexation of the intervening land which would not serve an identified need for the City, or an (arguably unreasonable) “cherry stem” annexation of Highway 99. Given that it is highly unlikely that Site P4.8c would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.
Summary: Due to the economic challenges of developing this site into the City during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8c is discarded from further consideration.

Site P4.8d –

This site is 24.1 contiguous acres of an 85.2 acre tax lot (which also contains Site P4.8f) designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the north. The site is bordered by Meadowview Road to the north.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be neutral.

Economic: A UGB expansion to include Site P4.8d to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8d is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8d to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8d until the site is contiguous with the city limits, either through annexation of the intervening land which would not serve an identified need for the City, or an (arguably unreasonable) “cherry stem” annexation of Highway 99. Given that it is therefore highly unlikely that Site P4.8d would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

Social: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8d is discarded from further consideration.

Site P4.8e –

This site is 33.7 contiguous acres of a 40.3 acre tax lot designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the south. The site is bordered by Green Hill Road to the west.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to designated agriculture to the south. This adjacency could have potential minor environmental
consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

*Energy:* The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be neutral.

*Economic:* A UGB expansion to include Site P4.8e to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8e is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8e to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8e until the site is contigous with the city limits, either through annexation of the intervening land which would not serve an identified need for the City, or an (arguably unreasonable) “cherry stem” annexation of Highway 99. Given that it is highly unlikely that Site P4.8e would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

*Social:* Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

*Summary:* Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8e is discarded from further consideration.

**Site P4.8f**

This site is 51.4 contiguous acres of an 85.2 acre tax lot (which also contains Site P4.8d) designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the north and east. The site is bordered by Meadowview Road to the north and Highway 99 to the east.

*Environmental:* Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

*Energy:* The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be neutral.

*Economic:* A UGB expansion to include Site P4.8f to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8f is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8f to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8f until the site is contigous with the city limits, either through annexation of the intervening land which would not
serve an identified need for the City, or an (arguably unreasonable) “cherry stem” annexation of Highway 99. Given that it is highly unlikely that Site P4.8f would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

*Social:* Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8f is discarded from further consideration.

**Site P4.8g**

This site is an 84.6 acre unconstrained tax lot designated Agricultural. It is immediately adjacent to the current UGB on its eastern edge, where land inside the UGB is designated Heavy Industrial and Light Medium Industrial. Rural land not under consideration surrounding the site is designated Government and Education. The site is bordered by Highway 99 to the east.

**Environmental:** Expansion onto this site for industrial purposes would create an industrial site adjacent other potential industrial sites and the Eugene Airport, and significantly separated from active agriculture. This separation could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

**Energy:** The mix of surrounding uses and the adjacency of this site to the current UGB and airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

**Economic:** A UGB expansion to include Site P4.8g would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated near multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

**Social:** Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary:** Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.8g is considered as a candidate industrial expansion site in Section III.g, below.
Site P4.8h –

This site is 58.6 contiguous acres of a 60.7 acre tax lot designated Agricultural. It is immediately adjacent to the current UGB on its eastern edge, where land inside the UGB is designated Light Medium Industrial. Rural land not under consideration surrounding the site is designated Government and Education, with the exception of a narrow strip of Agricultural to the southeast. The site is bordered by Airport Road to the south.

*Environmental*: Expansion onto this site for industrial purposes would create an industrial site adjacent to other potential industrial sites and the Eugene Airport, and significantly separated from active agriculture. This separation could significantly limit potential environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be neutral.

*Energy*: The mix of surrounding uses and the adjacency of this site to the current UGB and airport suggests positive energy impacts due to efficient location of employment relative to other uses. Overall energy consequences from expanding onto this site for industrial use would be positive.

*Economic*: A UGB expansion to include Site P4.8h would have positive economic consequences, as it is contiguous with both the UGB and the city limits, making it immediately developable. This site is also collocated near multiple other potential industrial expansion sites, allowing for efficiencies in the cost to extend urban services to this site. Overall economic consequences from expanding onto this site for industrial use would be positive.

*Social*: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Should several of the potential sites in a contiguous area be selected for industrial expansion, the collective impact would have both positive consequences of an employment hub and potential negative consequences resulting in additional regulation. Overall social consequences from expanding onto this site for industrial use would be neutral.

*Summary*: Due to minimal environmental, energy, economic and social concerns associated with expanding on this site, Site P4.8h is considered as a candidate industrial expansion site in Section III.g, below.

Site P4.8i –

This site is 26.4 contiguous acres of a 31.9 acre tax lot designated Agricultural and Industrial. The 3.4 acre portion of this tax lot that is designated Industrial is second priority land (identified in Subarea P2.10, above) that was identified through the second priority analysis to be of insufficient size to accommodate need as an independent site. Despite the fact that the second priority land does not change the size category of the site, it is part of a single tax lot, and will therefore be included in the analysis. Considered together with the fourth priority portion, this tax lot will be evaluated as a single 29.8 acre site. Land not under consideration surrounding the site is designated Agricultural.

*Environmental*: Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.
*Energy:* The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods and other potential industrial expansion sites. Overall energy consequences from expanding onto this site for industrial use would be slightly negative to neutral.

*Economic:* A UGB expansion to include Site P4.8i to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8i is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8i to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8i until the site is contiguous with the city limits, either through annexation of the intervening land which would not serve an identified need for the City, or an (arguably unreasonable) “phantom” annexation of Highway 99 and Meadowview Road, extending outside of the study area. Given that it is highly unlikely that Site P4.8i would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

*Social:* Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

*Summary:* Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8i is discarded from further consideration.

**Site P4.8j —**

This site is 13.3 acres within the study area of a 78.8 acre tax lot designated Agricultural (83% of the tax lot in question is outside of the study area. Land not under consideration surrounding the site is designated Agricultural. The site is bordered by the railroad to the east.

*Environmental:* Expansion onto this site for industrial purposes would create an industrial site adjacent to active agriculture to the north. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

*Energy:* The adjacency of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods and other potential industrial expansion sites. Overall energy consequences from expanding onto this site for industrial use would be slightly negative to neutral.

*Economic:* A UGB expansion to include Site P4.8j to serve the City’s need for industrial employment land is not likely to actually result in a site that is truly available for economic development during the planning period. Site P4.8j is separated from the current UGB by land that does not serve an identified need for the City. For Site P4.8j to be developed for the needed urban industrial use, it would first need to be annexed into the city limits. The City would be legally prohibited from annexing Site P4.8j until the site is contiguous with the city limits, either through annexation of the intervening land which would not
serve an identified need for the City, or an (arguably unreasonable) “cherry stem” annexation of Highway 99 and Meadowview Road, extending outside of the study area. Given that it is highly unlikely that Site P4.8j would be annexable during the planning period, expanding the UGB to include it for industrial employment would create “phantom” capacity, failing to meet the goals of the expansion. Overall economic consequences of expanding the UGB onto this site for industrial use would be negative.

**Social**: Expanding the UGB for industrial use in this location would have neutral social consequences given the separation from residential areas. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary**: Due to the economic challenges of developing this site during the planning period, as well as other environmental, energy, economic and social concerns, Site P4.8j is discarded from further consideration.

**Site P4.8k**

This site is a 23.0 acre unconstrained tax lot designated Agricultural. Land not under consideration surrounding the site is designated Agricultural to the north and east, and Rural Residential to the west. The site is bordered by Brown Lane to the west.

**Environmental**: Expansion onto this site for industrial purposes would create an industrial site adjacent to one other potential industrial site and tax lots designated for Agriculture. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

**Energy**: The proximity of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be slightly negative to neutral.

**Economic**: This site is connected to the UGB by another potential industrial expansion site (P4.8l), but is at a considerable distance from the current city limits, making it questionable whether the site would develop (be annexable) during the planning period. Additionally, the cost of extending urban services to this area for the few available candidate sites is disproportionate to the benefit. Overall economic consequences of expanding the UGB onto this site for industrial use would be slightly negative to neutral.

**Social**: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for adjacent residents exposed to traffic and other impacts of such uses close to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

**Summary**: Although there are some environmental, energy, economic and social concerns associated with expanding on this site, they are insufficient to discard it from further consideration at this juncture. Site P4.8k is considered as a candidate industrial expansion site in Section III.g, below.
Site P4.8l –

This site is a 20.4 acre tax lot designated Agricultural. Two adjacent second priority tax lots (identified in Subarea P2.10, above) measuring 4.5 (western site) and 4.2 (eastern site) acres could be considered with this site, connecting it to the current UGB. Inclusion of one of these sites would not change the size category of land need addressed by the site, but because it is necessary to make the fourth priority site contiguous with the UGB and viable with regard to annexation, they will be evaluated as a single site. The western second priority tax lot is actively used for agricultural activities, while the eastern second priority tax lot is vacant, only serving as a driveway. For the purposes of this analysis, therefore, the eastern site is considered more appropriate and will be included in the analysis of the fourth priority site. Together, these two tax lots form a 24.6 acre site.

Environmental: Expansion onto this site for industrial purposes would create an industrial site adjacent to one other potential industrial site and tax lots designated for Agriculture. This adjacency could have potential minor environmental consequences. Overall environmental consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Energy: The proximity of this site to the airport presents positive energy impacts that are balanced by negative impacts arising from the site’s considerable distance from urban neighborhoods. Overall energy consequences from expanding onto this site for industrial use would be slightly negative to neutral.

Economic: This site is connected to the UGB, but is at a considerable distance from the current city limits, making it questionable whether the site would develop (be annexable) during the planning period. Additionally, the cost of extending urban services to this area for the few available candidate sites is disproportionate to the benefit. Overall economic consequences of expanding the UGB onto this site for industrial use would be slightly negative to neutral.

Social: Expanding the UGB for industrial use in this location would have slight potentially negative social consequences for adjacent residents exposed to traffic and other impacts of such uses close to their homes. Overall social consequences from expanding onto this site for industrial use would be neutral.

Summary: Although there are some environmental, energy, economic and social concerns associated with expanding on this site, they are insufficient to discard it from further consideration at this juncture. Site P4.8l is considered as a candidate industrial expansion site in Section III.g, below.

(e) Dismiss Candidate Land if its Inclusion in the UGB to Address the Identified Industrial Land Deficit would be Incompatible with Nearby Agricultural or Forest Activities Occurring on Farm or Forest Land Outside the UGB

As explained above, Sites P4.8a, P4.8b, P4.8c, P4.8d, P4.8e, P4.8f, P4.8i, and P4.8j are separated from the existing UGB by agricultural land that is not suitable for the City’s industrial land needs. Expanding the UGB to include any of these sites would require the City to also bring that intervening agricultural land into the UGB (or extend the city limits in an arguably unreasonable “cherry stem”), making it urbanizable land. In that way, inclusion of Sites P4.8a, P4.8b, P4.8c, P4.8d, P4.8e, P4.8f, P4.8i, and P4.8j in the UGB to address the identified industrial land deficit would be incompatible with the nearby
agricultural activities now occurring on land outside the UGB. Even if there was not a sufficient bases for dismissing Sites P4.8a, P4.8b, P4.8c, P4.8d, P4.8e, P4.8f, P4.8i, and P4.8j based on the ESEE consequences discussed above, they are dismissed from further consideration for this reason.

(9) Subarea P4.9

Subarea P4.9 is located to the north of the current UGB, between Prairie Road and the Willamette River, as shown on the “Extent” map. It is composed of 1,311.4 acres of fourth priority land. The land in this subarea is designated as Agriculture.

(a) Dismiss Candidate Land with “Development Constraints” – Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

The map “Subarea P4.9: Development Constraints” shows the development constraints present in Subarea P4.9. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.9 subarea has more than one type of development constraint. The map “Subarea P4.9: Development Constraints” is a visual representation of the following information:

Dismissal of Land with Slopes in Excess of 5 Percent Grade

The United States Geological Survey’s 10-meter digital elevation model shows that 14.5 acres of the land in Subarea P4.9 (less than 1 percent) are constrained by slopes greater than 5%.

Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)

700.1 acres of the land in Subarea P4.9 (53 percent) is constrained by the FEMA mapped Special Flood Hazard Area.
Dismissal of Land with Goal 5 Protections (natural resources)

72.2 acres of the land in Subarea P4.9 (6 percent) are constrained by Lane County Goal 5 protections.

Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period

Seven (7) tax lots totaling 89.7 acres of the land in Subarea P4.9 (6 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for industrial uses. All P4.9 sites dismissed due to existing uses would otherwise need to be dismissed due to distance from a Freight Route.

Summary of Development Constraints

In all, 795.3 acres of the land in Subarea P4.9 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 516.1 acres of land in Subarea P4.9 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be

49 Two tax lots form part of the right-of-way for Prairie Road. A small tax lot adjacent to these right-of-way lots is owned and operated by the Eugene Water and Electric Board. The largest tax lot is owned and operated by the Oregon Horse Center. Two lots west of River Road are owned and operated by Springfield Metro Wastewater. The easternmost tax lot is owned by the Oregon Department of Transportation.

49 Two tax lots form part of the right-of-way for Prairie Road. A small tax lot adjacent to these right-of-way lots is owned and operated by the Eugene Water and Electric Board. The largest tax lot is owned and operated by the Oregon Horse Center. Two lots west of River Road are owned and operated by Springfield Metro Wastewater. The easternmost tax lot is owned by the Oregon Department of Transportation.
Expected to Provide the Appropriate Site Characteristics for the Proposed Use

City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Subarea P4.9: Site Characteristics of Unconstrained Land

Subarea Boundary
Current Eugene UGB
Taxlots
Street Rights of Way
Major Streets
Designated Freight Route
Streets within a Mile of Freight Route Access
Constrained Land

Displayed Site Characteristics of Unconstrained Land
- Sites More than 1 Mile from Freight Route
- Sites of Insufficient Size within 1 Mile of Freight Route
- Fourth Priority Land for Further Consideration (None)

Note: This map is based on imprecise source data, subject to change, and for general reference only.
The map “Subarea P4.9: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.9 with the following site characteristic elements displayed:

**Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route**

The nearest State Designated Freight Routes to Subarea P4.9 are Highway 99 and Randy Papé Beltline. All remaining land under consideration in this subarea is more than one mile from these Freight Routes, except for the southernmost sites, which have access within one mile of Randy Papé Beltline.50

**Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:**

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. None of the remaining land in this subarea is of sufficient size to accommodate any of the needed industrial sites.

**Subarea P4.9 Summary.** Based on these findings, the City has determined that none of the land in Subarea P4.9 is suitable for industrial expansion.

(10) **Subarea P4.10**

Subarea P4.10 is located to the north of the current UGB, between the Willamette River and I-5, as shown on the “Extent” map. It is composed of 567.2 acres of fourth priority land. The land in this subarea is designated as Agriculture.

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50 Were they not discarded for distance from a Freight Route, these sites would be discarded for insufficient size to meet the identified site characteristics.
(a) **Dismiss Candidate Land with “Development Constraints” –** Factors that Temporarily or Permanently Limit or Prevent Use of Land to Address the Identified Industrial Land Deficit

The map “Subarea P4.10: Development Constraints” shows the development constraints present in Subarea P4.10. See constraint maps, in Section II.b above, showing the location of each development constraint throughout study area. Some land in the P4.10 subarea has more than one type of development constraint. The map “Subarea P4.10: Development Constraints” is a visual representation of the following information:

**Dismissal of Land with Slopes in Excess of 5 Percent Grade**

The United States Geological Survey’s 10-meter digital elevation model shows that 39.3 acres of the land in Subarea P4.10 (7 percent) are constrained by slopes greater than 5%.

**Dismissal of Land within FEMA Flood Zones (Special Flood Hazard Area)**

343.8 acres of the land in Subarea P4.10 (61 percent) is constrained by the FEMA mapped Special Flood Hazard Area.

**Dismissal of Land with Goal 5 Protections (natural resources)**

17.0 acres of the land in Subarea P4.10 (3 percent) are constrained by Lane County Goal 5 protections.

**Dismissal of Land with Existing Uses / Development that makes Industrial Redevelopment Highly Unlikely in Planning Period**

Six (6) tax lots totaling 185.1 acres of the land in Subarea P4.10 (33 percent) have existing uses or development that makes it highly unlikely that, if added to the UGB, the sites would be redeveloped for
industrial uses. Two tax lots are owned and operated by Lane County as part of Armitage Park. The other four lots are owned and operated as Camp Harlow.51

**Summary of Development Constraints**

In all, 518.3 acres of the land in Subarea P4.10 have one or more development constraints (“factors that temporarily or permanently limit or prevent the use of land for economic development” per OAR 660-009-005(2)). The remaining 48.9 acres of land in Subarea P4.10 are addressed below.

(b) Dismiss Remaining Candidate Land that Cannot Reasonably Accommodate the Specific Types of Land Needs / Cannot be Expected to Provide the Appropriate Site Characteristics for the Proposed Use

The map “Subarea P4.10: Site Characteristics of Unconstrained Land” shows the remaining / unconstrained land in Subarea P4.10 with the following site characteristic elements displayed:

*Dismissal of sites that are more than 1 mile by road from access to a State Designated Freight Route*

The nearest State Designated Freight Routes to Subarea P4.10 are Interstate-5 and Randy Papé Beltline. The two access points nearest this subarea from I-5 are north of the area at Coburg, and south of the area where it joins Randy Papé Beltline. Due to this distribution of highway exits from I-5, all remaining land under consideration in this subarea is more than one mile from these Freight Routes, except for small

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51 All P4.10 sites dismissed due to existing uses would otherwise need to be dismissed due to distance from a Freight Route.
portions of land in the southeastern part of the subarea and fragments of the westernmost tax lot, both of which have access within one mile of Randy Papé Beltline.

Dismissal of land that could not accommodate one of the following sites on a contiguous area comprised of one or two tax lots:

- an industrial site of 75 acres or larger (Eugene needs to add 2 such sites)
- an industrial site of between 50 and 75 acres (Eugene needs to add 3 such sites)
- an industrial site of between 20 and 50 acres (Eugene needs to add 2 such sites)
- an industrial site of between 10 and 20 acres (Eugene needs to add 4 such sites)

This subarea is divided into many small lots in a diversity of ownership. The sites are fragmented by the constraints identified in the previous section. The only remaining land in this subarea is of insufficient size to accommodate any of the needed industrial sites.

Subarea P4.10 Summary. Based on these findings, the City has determined that none of the land in Subarea P4.10 is suitable for industrial expansion.

(11)        Fourth Priority Land -- Conclusion

Based on these findings, the City has determined that the industrial study area has 22 sites of fourth priority land (in one case combined with a small lot of second priority land) that are suitable candidates for meeting the City’s industrial land need, as shown in the “Remaining Candidate Sites for Expansion” map.
Appendix B to Findings
g. **Apply the Boundary Location Factors of Goal 14 to Select which Remaining Fourth Priority Land should be Included in the UGB**

(1) **Prioritizing Land with Lower-Capability Soil (ORS 197.298(2))**

State law requires that, among the Fourth Priority land that is suitable to accommodate the City’s need, “higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.” The capability classification system pertains to agricultural land; the cubic foot site classification system pertains to forest land. Since none of the remaining land under consideration is designated for Forest, the forestry classification of cubic foot site is not applicable in this analysis.

All remaining land under consideration is designated primarily for Agriculture.\(^{52}\) Therefore, the agriculture soil capability classification system is used in this analysis. There are several components to the “soil capability classification system.” The USDA (through the Natural Resources Conservation Service or “NRCS”) has categorized all the nation’s soil types into eight general capability classifications. At that macro level, “Class I” soil types have the highest agricultural capability and “Class VIII” soil types have the lowest. The NRCS recognizes that these classifications are only an “indicator” of soil value, however. The agricultural capability of these soils is variable, depending upon the kinds of crops grown in a state or locality. Therefore, for more accurate soil classification, the NRCS has identified certain soils as “prime” or “unique” soils for particular regions. Lane County includes some prime, but no unique, soils. For purposes of Oregon’s land use program, DLC classifies the most productive agricultural soils in Oregon as “high value farmland.” The Agricultural Land Rule (OAR 660-033) specifies the way in which “high value farmland” is to be identified.\(^{53}\) Eugene is situated in the Willamette Valley which includes large areas of high value farmland, many of which carry a Class III or Class IV general classification on a national level.

The (pre-2016) OARs that apply to Eugene’s UGB expansion do not include any direction regarding the statutory requirement that “higher priority shall be given to land of lower capability as measured by the capability classification system.” Further, there are no LCDC, LUBA or Court decisions that explain how

\(^{52}\) Two sites that remain under consideration at this point in the analysis include some non-agricultural land. Site P4.8l is predominantly designated Agriculture, but the second priority tax lot that would connect it to the current UGB is designated Residential. Site P4.7c is on a tax that has a split designation; the northern portion is designated Government and Education, which is noted in earlier in this report as “other” with regard to the priority system.

\(^{53}\) As applicable to Eugene’s expansion area, OAR 660-033-0020(8)(a) defines "High-Value Farmland" as: “land in a tract [OAR 660-033-0020 (14) “Tract” means one or more contiguous lots or parcels under the same ownership] composed predominantly of soils that are: (A) Irrigated and classified prime, unique, Class I or II; or (B) Not irrigated and classified prime, unique, Class I or II. ** * * * and (c) . . . tracts composed predominantly of the following soils in Class III or IV or composed predominantly of a combination of the soils described in subsection (a) of this section and the following soils: (A) Subclassification Ille, specifically, Bellpine, Bornstedt, Burlington, Friedwell, Carlton, Cascade, Chehalis, Cornelius Variant, Cornelius and Kinton, Helvetia, Hillsboro, Hult, Jory, Kinton, Latourell, Laurelwood, Melbourne, Multnomah, Nekia, Powell, Price, Quatama, Salkum, Santiam, Saum, Sawtell, Silverton, Veneta, Willakenzie, Woodburn and Yamhill; (B) Subclassification Illw, specifically, Concord, Conser, Cornelius Variant, Dayton (thick surface) and Sifton (occasionally flooded); (C) Subclassification IIV, specifically, Bellpine Silty Clay Loam, Carlton, Cornelius, Jory, Kinton, Latourell, Laurelwood, Powell, Quatama, Springfield, Willakenzie and Yamhill; and (D) Subclassification IIV, specifically, Awbrig, Bashaw, Courtney, Dayton, Natroy, Noti and Whiteson.”
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
High Value Farmland Designations

- Land Inside UGB
- Remaining Candidate Tax Lots
- High Value Farmland
- Not High Value Farmland
- Unidentified Soil (Primarily Under Water)

Note: This map is based on imprecise source data, subject to change, and for general reference only.
this sub-prioritization should take place. DLCD’s new UGB administrative rules (2016) provide some
direction for cities and counties in terms of how the classification system should be used to prioritize
potential expansion areas. Cities that fall under the new UGB expansion rules at OAR 660-024-0067 are
explicitly required to prioritize in terms of “farm land that is not predominantly high-value farm land”
versus “agricultural land that is predominantly high-value farmland.” While the current UGB expansion
for Eugene and Lane County are not subject to this new rule, the rule demonstrates the significance of
Oregon’s “high value farmland” in terms of prioritizing land under the capability classification system.

Lane County’s “Lane County Soil Ratings for Forestry and Agriculture” document provides a list of all the
high value soils in Lane County based on data from the United States Department of Agriculture –
Natural Resources Conservation Service (NRCS) and the Oregon Department of Land Conservation and
Development (DLCD). Both those agencies, and the Oregon Department of Forestry (ODA), reviewed
Lane County’s list and support the methodology used to produce it.

As the “High Value Farmland Designations” map shows, the portion of Eugene’s industrial expansion
study area that contains the remaining candidate sites is almost completely composed of high value
farmland soils. Furthermore, although small portions of soil not identified as high value farmland soil is
present on a few sites, every remaining candidate site is predominantly high value farmland. Sites, as
defined in this analysis, are consistent with the use of the term “tracts” in OAR 660-033-0020 in that
tracts presuppose tax lots with common ownership, and sites (including the options that combine sites)
indicate areas with the opportunity for aggregation of ownership.

Considering that all of Eugene’s options for expanding its UGB to add suitable industrial sites require
expansion onto high value farmland, Eugene’s prioritization is based on identifying the expansion option
that disrupts as few areas of high value farmland as possible. This prioritization is addressed along with
the application of the boundary location factors of Goal 14, below.

(2) Boundary Location Factors of Goal 14 / Selecting the Land for Inclusion in
the UGB

Twenty-two (22) sites were identified in Section (f), above, as sufficiently unconstrained and having the
needed site characteristics for at least one of the acreage-based categories of industrial land needed. As
addressed previously, the City of Eugene has identified a need for eleven (11) total sites, with the
following size characteristics:

- Two (2) industrial sites of 75 acres or larger
- Three (3) industrial sites of between 50 and 75 acres
- Two (2) industrial sites of between 20 and 50 acres
- Four (4) industrial sites of between 10 and 20 acres

The remaining candidate land includes sites that meet all of these size characteristics, as shown in the
map “Size Categories of Remaining Candidate Sites.” Multiple combinations of these sites could be used
to meet the need for the full 11-site portfolio. Different combinations would have a different impact on
the urban form, and so are evaluated below for how they address the Goal 14 boundary location factors.

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54 Appendix A analyzes the specific soil content of each candidate site and corresponding tax lot.
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Size Categories of Remaining Candidate Sites

Land Inside UGB
Major Streets
Water Bodies
Industrial Expansion Study Area
Tax Lots Selected for School Expansion
Remaining Candidate Tax Lots

75+ Acre Options
50-75 Acre Options
20-50 Acre Options
10-20 Acre Options

Note: This map is based on imprecise source data, subject to change, and for general reference only.
The Goal 14 boundary location factors are:

1. Efficient accommodation of identified land needs
2. Orderly and economic provision of public facilities and services
3. Comparative environmental, energy, economic, and social consequences
4. Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

This analysis evaluates the Goal 14 boundary location factors for five high-level expansion options. Each option focuses the expansion in one or more of the geographic regions with remaining candidate sites. While these five options do not show all possible portfolios of candidate sites, they do exemplify the consequences with regard to the Goal 14 boundary location factors for the full range of sites. Because candidate sites of 75 acres or larger and 50-75 acres are only present in the area around Clear Lake Road, sites from that area are necessarily included in every expansion area evaluated below.

(3) Evaluation of Possible Expansion Areas

**Focused Expansion Option 1.** The first possible expansion option evaluated for the Goal 14 boundary location factors focuses on the Clear Lake Road area, which contains the only potential 50-75 acre and 75+ acre sites that meet the needs of the industrial expansion portfolio.

The expansion option presented in the map “Focused Expansion Option: Clear Lake Road” presents one possible site configuration. This particular area provides multiple possible site configurations to meet the full needed portfolio, geographically focused around the 50-75 and 75+ acre candidate sites. Each of the Goal 14 boundary location factors are evaluated for this expansion option below.

**Factor 1: Efficient accommodation of identified land needs**

This expansion option accommodates the entire portfolio of needed sites in a single cohesive area. In association with the school expansion and parkland that is under consideration for expansion to develop as a community park, this area also fills in an indentation in the urban growth boundary, reducing the urban/rural interface from 6.0 miles along this stretch to 3.4 miles, much of which is adjacent to the Eugene Airport. This area would require the inclusion of nine small tax lots and part of one tax lot totaling 46.3 acres (up to a possible 268.4 acres depending on park expansion proposals) that are otherwise not under consideration to avoid the creation of small islands of rural land inside the UGB.55

**Factor 2: Orderly and economic provision of public facilities and services**

As a single expansion area, this option would allow for master planned public facilities, maximizing the efficiency and orderliness of providing services as development requires. Extending facilities in a single area is also far more cost effective than doing so in multiple areas.

**Factor 3: Comparative environmental, energy, economic, and social consequences**

*Environmental:* The Clear Lake-focused expansion option contains some scattered Goal 5 protected areas and two areas constrained by the Special Hazard Flood Area. These environmental constraints

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55 This is addressed in more detail in the Addendum to this study.
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Focused Expansion Option 1: Clear Lake Road

Note: This map is based on imprecise source data, subject to change, and for general reference only.
would require additional guidelines or regulation to mitigate potential consequences. The cohesive nature of the area would allow such regulations to be integrated into planning considerations. Overall environmental consequences from expanding into this area for industrial use would be neutral.56

Energy: This expansion option would promote energy efficiencies through proximity to the airport and transportation corridors, and relative proximity to residential areas to the south. The cohesive nature of the expansion option also increases energy efficiency opportunities for transit by including multiple destinations in a single area. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: This expansion option would create additional industrial employment land, as all expansions would. Comparative economic benefits of this expansion option include the efficiency of providing services to a single area and the high level of connection to the current urban growth boundary. The overall economic consequences of expanding the UGB for industrial uses in this location are positive.

Social: While expanding the UGB for industrial use in this area would impact very few residents, it could have potentially negative social consequences for students exposed to traffic and other impacts of such uses adjacent to proposed school expansion. These impacts would require planning to limit the intensity of uses allowed in close proximity to the school facility. Additional employment sites near but not directly adjacent to residential neighborhoods provide a positive social consequence. Overall social consequences of expanding into this area for industrial use would be neutral to positive.

Factor 4: Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

The configuration of this area presents a unique opportunity to expand urban uses in such a way that no agricultural or forest land would be adjacent to the expansion. The area north of Clear Lake Road is bordered by the Eugene Airport, Airport Reserves, and Clear Lake Road itself. The school expansion would transition between the industrial uses south of Clear Lake Road and farmland to the west. This separation provides the highest level of compatibility with nearby agricultural and forest activities.

Focused Expansion Option 2. The second possible expansion area evaluated for the Goal 14 boundary location factors focuses on the Green Hill Road area, which contains one 10-20 acre site, one 20-50 acre site, and two additional 10-20 acre sites that could be combined to create a single 20-50 acre site. The expansion option presented in the map “Focused Expansion Option: Green Hill Road” presents one possible configuration of sites using all sites west of Green Hill Road and additional sites in the Clear Lake area as needed to meet the full needed portfolio. Each of the Goal 14 boundary location factors are evaluated for this expansion option below.

Factor 1: Efficient accommodation of identified land needs

This expansion option meets the entire portfolio of needed sites in three distinct expansion areas. Expanding onto the two areas on Green Hill Road would increase the urban/rural interface from 0.6 miles to 2.3 miles along those boundaries. This area would require the inclusion of one small tax lot totaling 5.3 acres (between Sites P4.6c and P4.6d) that is otherwise not under consideration to avoid the creation of a small island of rural land inside the UGB.

56 This is addressed in more detail in the Addendum to this study.
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Focused Expansion Option 2: Green Hill Road

Note: This map is based on imprecise source data, subject to change, and for general reference only.
The area north of Clear Lake Road that supplements this area would complete the needed portfolio of sites. This would reduce the urban/rural interface from 6.0 miles along this stretch to 3.4 miles due to additional lands incorporated, noted below. This option would require the inclusion of nine small tax lots and part of one tax lot totaling 58.8 acres that are otherwise not under consideration as would be required under Option 1, but it would also require the inclusion of a significant number of additional unneeded acres due to a larger rural island that would otherwise be created. Because the school expansion connects to Clear Lake Road, and City policy requires that the urban growth boundary include bordering rights-of-way, this expansion option would also require the inclusion of all land east of the school expansion and south of Clear Lake Road, or 362.2 acres. Some of this land (222.1 acres) is under consideration for a park expansion, but the remaining 140.1 acres taken in by this expansion, plus the 58.8 acres north of Clear Lake Road and the 5.3 acres on Green Hill Road (for a total of 204.2 acres up to a possible 462.3 acres depending on park expansion proposals) would not meet any established need. This option is extremely inefficient.

**Factor 2: Orderly and economic provision of public facilities and services**

As a three-area expansion, this option would require planning of public facilities and services with three different sets of conditions and timing, reducing the efficiency and orderliness of providing services as development requires.

**Factor 3: Comparative environmental, energy, economic, and social consequences**

*Environmental:* The Green Hill-focused expansion option contains some scattered Goal 5 protected areas and two areas constrained by the Special Hazard Flood Area. The two northern sites are also adjacent to the West Eugene Wetlands area. These environmental constraints would require additional guidelines or regulation to mitigate potential consequences. Overall environmental consequences from this expansion option would be neutral to slightly negative.

*Energy:* Portions of this expansion area would promote energy efficiencies through proximity to the airport and transportation corridors, and relative proximity to various residential areas. The divided nature of the expansion option would limit energy efficiency opportunities for transit. Overall energy consequences from this expansion option would be neutral.

*Economic:* This expansion option would create additional industrial employment land, as all expansions would. Providing public services to the three areas would be comparatively costly, creating negative economic consequences. The overall economic consequences of this expansion option are neutral.

*Social:* This expansion option would impact very few residents, and would not include land adjacent to the proposed school expansion. Additional employment sites near but not directly adjacent to residential neighborhoods provide a positive social consequence. Expanding onto Site P4.6b for industrial purposes would potentially limit the viability of the non-profit animal shelter currently in operation on this site. Overall social consequences of expanding into this area for industrial use would be neutral to positive.
Factor 4: Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

The configuration of this expansion option includes direct adjacency to both farm and forest land surrounding the southern sites. While compatibility issues with this adjacency are likely to be minimal, there is a possibility of undesirable impacts.

**Focused Expansion Option 3.** The third possible expansion option evaluated for the Goal 14 boundary location factors focuses on the Awbrey Lane area, which contains two 20-50 acre sites, one of which requires the other to connect to the current UGB. The expansion option presented in the map “Focused Expansion Option: Awbrey Lane” presents one possible configuration of sites using both sites north of Awbrey Lane and additional sites in the Clear Lake area as needed to meet the full needed portfolio. Each of the Goal 14 boundary location factors are evaluated for this expansion option below.

**Factor 1: Efficient accommodation of identified land needs**

This expansion option meets the entire portfolio of needed sites in two distinct expansion areas. Expanding onto the two sites north of Awbrey Lane would increase the urban/rural interface from 0.1 miles to 1.4 miles along those boundaries.

The area around Clear Lake Road that supplements this area would complete the needed portfolio of sites. This would ultimately reduce the urban/rural interface from 6.0 miles along this stretch to 3.4 miles due to additional lands incorporated, noted below. This option would require the inclusion of nine small tax lots and part of one tax lot totaling 46.3 acres, as well as one larger tax lot and a significant portion of a tax lot totaling 89.1 acres that would not be used to meet an identified need. Like Option 2, this option would also require the inclusion of a significant number of additional acres due to a larger rural island that would otherwise be created. Because the school expansion connects to Clear Lake Road, and City policy requires that the urban growth boundary include bordering rights-of-way, this expansion option would also require the inclusion of all land east of the school expansion and south of Clear Lake Road, including land accounted for above, a 5.0 acre tax lot and 222.1 acres that are under consideration for a park expansion. In total, 140.4 acres up to a possible 362.5 depending on park expansion proposals would be included in this expansion option without meeting any established need. This option is extremely inefficient.

**Factor 2: Orderly and economic provision of public facilities and services**

As a two-area expansion, this option would require planning of public facilities and services with two different sets of conditions and timing, reducing the efficiency and orderliness of providing services as development requires.

**Factor 3: Comparative environmental, energy, economic, and social consequences**

*Environmental:* The Awbrey Lane-focused expansion option contains some scattered Goal 5 protected areas and one area constrained by the Special Hazard Flood Area. These environmental constraints would require additional guidelines or regulation to mitigate potential consequences. Overall environmental consequences from expanding into this area for industrial use would be neutral.
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Focused Expansion Option 3: Awbrey Lane

Note: This map is based on imprecise source data, subject to change, and for general reference only.
Energy: Portions of this expansion area would promote energy efficiencies through proximity to the airport and transportation corridors, and relative proximity to various residential areas, with the exception of the northern sites, which are distant from urban residential neighborhoods, but adjacent to a rural residential neighborhood. The divide nature of the expansion option would limit energy efficiency opportunities for transit. Overall energy consequences from this expansion option would be neutral.

Economic: This expansion option would create additional industrial employment land, as all expansions would. Providing public services to the two areas would be comparatively costly, creating negative economic consequences. The overall economic consequences of this expansion option are neutral. Social: This expansion option would impact more residents than the other two options due to the rural residential neighborhood to the west of the northern sites. A mix of additional employment sites directly adjacent to and near but not directly adjacent to residential neighborhoods provide a neutral to positive social consequence. Overall social consequences of expanding into this area for industrial use would be neutral.

Factor 4: Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

The configuration of this expansion option includes direct adjacency to land designated for agriculture around the northern sites. While compatibility issues with this adjacency are likely to be minimal, there is a possibility of undesirable impacts.

Focused Expansion Option 4. The fourth possible expansion option evaluated for the Goal 14 boundary location factors focuses on the Green Hill Road and Awbrey Lane areas, which contain three 20-50 acre sites, one 10-20 acre site, and two additional 10-20 acre sites that can be combined into a single 20-50 acre site. The expansion option presented in the map “Focused Expansion Option: Green Hill Road and Awbrey Lane” presents one possible configuration of sites using all sites west of Green Hill Road and one site north of Awbrey Lane, with additional sites in the Clear Lake area as needed to meet the full needed portfolio. Each of the Goal 14 boundary location factors are evaluated for this expansion option below

Factor 1: Efficient accommodation of identified land needs

This expansion option meets the entire portfolio of needed sites in four distinct expansion areas. Expanding onto the site adjacent to Awbrey Lane would increase the urban/rural interface from 0.1 miles to 0.9 miles along that boundary. Expanding onto the four areas on Green Hill Road would increase the urban/rural interface from 0.6 miles to 2.3 miles along those boundaries and would require the inclusion of one small tax lot totaling 5.3 acres (between Sites P4.6c and P4.6d) that is otherwise not under consideration to create a contiguous urban growth boundary.

The area north of Clear Lake Road that supplements this area would complete the needed portfolio of sites. Expanding into this area would ultimately reduce the urban/rural interface from 6.0 miles along this stretch to 3.4 miles due to additional lands incorporated, noted below. This area north of Clear Lake Road would require the inclusion of nine small tax lots and part of one tax lot totaling 58.8 acres and 48.9 acres of a partial tax lot that are otherwise not under consideration. Like Option 2, this option would also require the inclusion of a significant number of additional acres due to a larger rural island that would otherwise be created. Because the school expansion connects to Clear Lake Road, and City policy requires that the urban growth boundary include bordering rights-of-way, this expansion option
City of Eugene Urban Growth Boundary Study
Industrial Land Evaluation
Focused Expansion Option 4: Green Hill Road and Awbrey Lane

Note: This map is based on imprecise source data, subject to change, and for general reference only.
would also require the inclusion of all land east of the school expansion and south of Clear Lake Road, or 362.2 acres. Some of this land (222.1 acres) is under consideration for a park expansion, but the remaining 140.1 acres taken in by this expansion, plus the 107.7 acres north of Clear Lake Road and the 5.3 acres on Green Hill Road (for a total of 253.1 acres up to a possible 475.2 acres depending on park expansion proposals) would not meet any established need. This option is extremely inefficient.

**Factor 2: Orderly and economic provision of public facilities and services**

As a four-area expansion, this option would require planning of public facilities and services with four different sets of conditions and timing, dramatically reducing the efficiency and orderliness of providing services as development requires.

**Factor 3: Comparative environmental, energy, economic, and social consequences**

*Environmental:* The Green Hill and Awbrey Lane-focused expansion option contains some scattered Goal 5 protected areas and two areas constrained by the Special Hazard Flood Area. The two northern Green Hill sites are also adjacent to the West Eugene Wetlands area. These environmental constraints would require additional guidelines or regulation to mitigate potential consequences. Overall environmental consequences from expanding into this area for industrial use would be neutral to slightly negative.

*Energy:* Portions of this expansion area would promote energy efficiencies through proximity to the airport and transportation corridors, and relative proximity to various residential areas. The divided nature of the expansion option would limit energy efficiency opportunities for transit. Overall energy consequences from expanding onto this site for industrial use would be neutral.

*Economic:* This expansion option would create additional industrial employment land, as all expansions would. Providing public services to the four areas would be comparatively costly, creating negative economic consequences. The overall economic consequences of this expansion option are neutral to negative.

*Social:* This expansion option would impact relatively few residents, and would not include land adjacent to the proposed school expansion. A mix of additional employment sites adjacent to and near but not directly adjacent to residential neighborhoods provide a positive social consequence. Expanding onto Site P4.6b for industrial purposes would potentially limit the viability of the non-profit animal shelter currently in operation on this site. Overall social consequences of expanding into this area for industrial use would be neutral.

**Factor 4: Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB**

The configuration of this expansion option includes direct adjacency to both farm and forest land surrounding several sites. While compatibility issues with this adjacency are likely to be minimal, there is a possibility of undesirable impacts.

**Focused Expansion Option 5.** The fifth possible expansion option evaluated for the Goal 14 boundary location factors focuses on the area south of Clear Lake Road, which contains the identified school expansion and a potential expansion area for parks. It is also broadly in the area with the only potential 50-75 acre and 75+ acre sites that meet the needs of the industrial expansion portfolio. The expansion option presented in the map “Focused Expansion Option: South of Clear Lake Road” presents one
possible configuration of sites. This particular area provides multiple possible configurations to meet the full needed portfolio, geographically focused around the southern portion of the area. Each of the Goal 14 boundary location factors are evaluated for this expansion option below.
Factor 1: Efficient accommodation of identified land needs

This expansion option accommodates the entire portfolio of needed sites in a relatively cohesive area with one outlier site. In association with the school expansion and parkland that is under consideration for expansion to develop as a community park, this area also fills in an indentation in the urban growth boundary, reducing the urban/rural interface from 6.5 miles along this stretch to 3.1 miles. This area would require the inclusion of fifteen small tax lots and part of one tax lot totaling 6570 acres (up to a possible 289.1 acres depending on park expansion proposals) that are otherwise not under consideration.

Factor 2: Orderly and economic provision of public facilities and services

As a two-area expansion without much spread, this option would still allow for master planned public facilities, enhancing the efficiency and orderliness of providing services as development requires.

Factor 3: Comparative environmental, energy, economic, and social consequences

Environmental: The south Clear Lake-focused expansion option contains some scattered Goal 5 protected areas and three areas constrained by the Special Hazard Flood Area. These environmental constraints would require additional guidelines or regulation to mitigate potential consequences. The cohesive nature of the area with constraints would allow such regulations to be integrated into planning considerations. Overall environmental consequences from expanding into this area for industrial use would be neutral.

Energy: This expansion option would promote energy efficiencies through proximity to the airport and transportation corridors, and relative proximity (even adjacency in the case of the southernmost site) to residential areas to the south. The cohesive nature of the site also increases energy efficiency opportunities for transit by including multiple destinations in a single area. Overall energy consequences from expanding onto this site for industrial use would be positive.

Economic: This expansion option would create additional industrial employment land, as all expansions would. Comparative economic benefits of this expansion option include the efficiency of providing services to a single area and the high level of connection to the current urban growth boundary. The overall economic consequences of expanding the UGB for industrial uses in this location are positive.

Social: While expanding the UGB for industrial use in this area would have impact very few residents, it could have potentially negative social consequences for students exposed to traffic and other impacts of such uses adjacent to both sides of the proposed school expansion. These impacts would require planning to limit the intensity of uses allowed in close proximity to the school facility. Additional employment sites near but not directly adjacent to residential neighborhoods provide a positive social consequence. Overall social consequences of expanding into this area for industrial use would be neutral to positive.
Factor 4: Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

The configuration of this expansion option includes direct adjacency to farm land bordering a single site. While compatibility issues with this adjacency are likely to be minimal, there is a possibility of undesirable impacts.

(4) Conclusion of Goal 14 Boundary Location Factors

Factor 1: Efficient accommodation of identified land needs

Efficient accommodation of identified land needs is best evaluated based on the most compact configuration of sites. This can be measured by comparing the number of collateral acres that must be included in each of the five options. Of the five options evaluated above, Option 1 was the most efficient, based on the fact that it requires the inclusion of between 46.3 and 267.4 acres of collateral land (depending on park expansion analysis). In order or efficiency, the other options were:

- Option 5 – includes between 67.0 and 289.1 acres,
- Option 3 – includes between 140.4 and 362.5 acres,
- Option 2 – includes between 204.2 and 426.3 acres, and
- Option 4 – includes between 253.1 and 475.2 acres.

Factor 2: Orderly and economic provision of public facilities and services

In Eugene, where services can be extended to any of the areas, the most orderly and economic provision of public facilities and services is maximized by expanding in the most compact way, in the fewest total number of areas, allowing for master planned facilities and services. Of the five options evaluated above, Option 1 allows for the most orderly and economic provision of services due to its concentration in a single area. In order of most orderly and economic provision of services, the other options were:

- Option 5 – two close areas,
- Option 3 – two dispersed areas,
- Option 2 – three dispersed areas, and
- Option 4 – four dispersed areas.

Factor 3: Comparative environmental, energy, economic, and social consequences

Comparative environmental, energy, economic and social consequences are dependent on the context of the candidate expansion areas. Of the five expansion areas, Option 1 and Option 5 are evaluated equally, with neutral environmental consequences, positive energy and economic consequences and neutral to positive social consequences. In order of evaluation of consequences, the other options were:

- Option 2 – neutral/slightly negative environmental, neutral energy and economic, neutral/positive social consequences;
- Option 3 – neutral for environmental, energy, economic and social consequences; and
- Option 4 – neutral/slightly negative environmental, neutral energy, neutral to negative economic, and neutral social consequences.
Factor 4: Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB

Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB is maximized by limiting the direct adjacency of urban uses with farm and forest land (i.e. maximizing adjacency to roads and non-farm or forest uses). Negative consequences arising from adjacency to industrial sites is expected to be minimal. Of the five expansion areas, Option 1 avoids all compatibility concerns through the separation from farm or forest land. In order of least to most adjacency to farm or forest land, the other options are:

- Option 3 – adjacent to land designated for agriculture, but under long-term anticipated public use,
- Option 5 – adjacent to farmland along a single tax lot,
- Option 2 – adjacent to both active farm and forest land, and
- Option 4 – adjacent to both active and potential farm and forest land along the greatest length.

Conclusion

Based on the evaluation of these factors, the area that maximizes each of the four Goal 14 Location Factors is Option 1. This area is therefore identified as the preferred expansion area to meet the City of Eugene’s industrial land deficit.

(5) Evaluation of Tax Lots Required for a Contiguous Urban Growth Boundary

As discussed above, in order to include the eleven (11) sites selected above for industrial expansion, nine (9) additional tax lots and one partial tax lot totaling 46.3 acres must also be included to maintain a contiguous urban growth boundary. These tax lots are identified in the “Contiguous Industrial Expansion Area” map, and are evaluated below in detail.

<table>
<thead>
<tr>
<th>Contiguity Lot</th>
<th>Map &amp; Taxlot Number</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1704050003100</td>
<td>3.62</td>
</tr>
<tr>
<td>2</td>
<td>1704050001100</td>
<td>8.30</td>
</tr>
<tr>
<td>3</td>
<td>1704050001000</td>
<td>1.54</td>
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<tr>
<td>4</td>
<td>1704080001401</td>
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</tr>
<tr>
<td>5</td>
<td>1704080002300</td>
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<tr>
<td>6</td>
<td>1704080003000</td>
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<tr>
<td>7</td>
<td>1704092001400</td>
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<td>9</td>
<td>1704090001400</td>
<td>4.88</td>
</tr>
<tr>
<td>10</td>
<td>1704090002600</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Lot 1 is one of three contiguous tax lots owned by Blachly Lane County Electric. The other two tax lots of this property are inside the current urban growth boundary. Including this property within the expansion area would not change its current function.

Lot 2 is owned by the Gary R Henry Revocable Trust. While it is under separate ownership from Site P4.8, which it is adjacent to, aerial photography suggests that the two sites currently function as a single agricultural property. Upon development, the tax lots may continue to function as a single property, or may be developed separately.

Lot 3 is a privately owned small residential lot. As with Lot 2, this lot may be combined with larger adjacent tax lots upon development, or kept separate.
Lot 4 is a small portion of a larger tax lot that is owned by the Eugene Airport. While the majority of the tax lot is dedicated to use by the Airport, this small portion is expected to be incorporated into the Airport Road right-of-way when future improvements are needed. Including this portion of the tax lot in the urban growth boundary is necessary to include the current Airport Road right-of-way, as required by City policies.

Lot 5 is a privately owned small residential lot. This lot, like Lot 2 and Lot 3, may be combined with larger adjacent tax lots upon development, or kept separate.

Lot 6 is an electric transmission right-of-way owned by the Bonneville Power Administration. Lot 7 is a property owned by the Oregon Department of Transportation for large ponds. Including these properties within the expansion area would not change their current function.

Lot 8 is owned by CBS Outdoor, Inc. and developed as a small apartment building. Lot 9 is a privately owned manufactured home residence. Either or both of these sites could be combined with site P4.7h or developed separately.

Lot 10 is a privately owned residence. Its location on Clear Lake Road, near the school expansion site, Golden Gardens Park and within half a mile of a residential neighborhood makes it ideally located to serve as a smaller-scale support business or service for the expansion area, as noted in City policies, and will therefore be designated for commercial use in the expansion area.
3. Conclusion – UGB Expansion Area to Address the Industrial Land Deficit

Through the preceding analysis, the entire study area of 18,734 acres was evaluated for suitability to meet the City’s industrial land deficit. 633 acres were selected as the most desirable for expansion as shown on the map below, “Complete Industrial Expansion Area.” In accordance with City of Eugene policies, this expansion area will undergo further analysis (see the Addendum to this study) to enable land use planning that is sensitive to environmental issues such as wetlands not identified in the current Goal 5 inventory and environmental justice concerns regarding the expansion. This further analysis may lead to adjustments in the specific distribution of sites within the area, but will maintain the large lots needed to meet the identified industrial need.
Appendix A. Soil Evaluation of Suitable Candidate Sites

This appendix to the City of Eugene Industrial Land Study provides a detailed account of the soil analysis used to address the state mandate to give higher priority to suitable land of lower soil capability for purposes of urban growth boundary expansion. The first section summarizes the legal basis (found in more detail in subsection II.g.1 of the Industrial Land Study) for the use of high value farmland designation for identifying lower and higher capability soils within the study area. The second section lists the specific soil makeup of each tax lot under consideration. This analysis shows that all tax lots that contain land that meets the development constraint and site characteristics required for industrial expansion are predominantly composed of soil classified as high value farmland.

High Value Farmland and Soil Capability

State law requires that, among the Fourth Priority land, “higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.” The capability classification system pertains to agricultural land, while the cubic foot site classification system pertains to forest land. Since none of the remaining land under consideration is designated for Forest, the forestry classification of cubic foot site is not applicable in this analysis.

There are several components to the “soil capability classification system.” The USDA (through the Natural Resources Conservation Service or “NRCS”) has categorized all the nation’s soil types into eight general capability classifications. At that macro level, “Class I” soil types have the highest agricultural capability and “Class VIII” soil types have the lowest. The NRCS recognizes that these classifications are only an “indicator” of soil value, however. For purposes of Oregon’s land use program, DLCD classifies the most productive agricultural soils in Oregon as “high value farmland.” The Agricultural Land Rule (OAR 660-033) specifies the way in which “high value farmland” is to be identified. Eugene is situated in the Willamette Valley which includes large areas of high value farmland, many of which carry a Class III or Class IV general classification on a national level.

The (pre-2016) OARs that apply to Eugene’s UGB expansion do not include any direction regarding the statutory requirement that “higher priority shall be given to land of lower capability as measured by the capability classification system.” DLCD’s new UGB administrative rules (2016) provide some direction for

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1 As applicable to Eugene’s expansion area, OAR 660-033-0020(8)(a) defines “High-Value Farmland” as: “land in a tract [OAR 660-033-0020 (14) “Tract” means one or more contiguous lots or parcels under the same ownership] composed predominantly of soils that are: (A) Irrigated and classified prime, unique, Class I or II; or (B) Not irrigated and classified prime, unique, Class I or II. * * * and (c) . . . tracts composed predominantly of the following soils in Class III or IV or composed predominantly of a combination of the soils described in subsection (a) of this section and the following soils: (A) Subclassification IIe, specifically, Bellpine, Bornstedt, Burlington, Briedwell, Carlton, Cascade, Chehalem, Cornelius Variant, Cornelius and Kinton, Helvetia, Hillsboro, Hult, Jory, Kinton, Latourell, Laurelhwood, Melbourne, Multnomah, Nekia, Powell, Price, Quatama, Salkum, Santiam, Saum, Sawtell, Silverton, Veneta, Willakenzie, Woodburn and Yamhill; (B) Subclassification IIw, specifically, Concord, Conser, Cornelius Variant, Dayton (thick surface) and Sifton (occasionally flooded); (C) Subclassification IVe, specifically, Bellpine Silty Clay Loam, Carlton, Cornelius, Jory, Kinton, Latourell, Laurelhwood, Powell, Quatama, Springwater, Willakenzie and Yamhill; and (D) Subclassification IVw, specifically, Awbrig, Bashaw, Courtney, Dayton, Natroy, Noti and Whiteson.”
cities and counties in terms of how the classification system should be used to prioritize potential expansion areas. Cities that fall under the new UGB expansion rules at OAR 660-024-0067 are explicitly required to prioritize in terms of “farm land that is not predominantly high-value farm land” versus “agricultural land that is predominantly high-value farmland.” While the current UGB expansion for Eugene and Lane County are not subject to this new rule, the rule demonstrates the significance of Oregon’s “high value farmland” in terms of prioritizing land under the capability classification system.

**Soil Analysis Tables**

The following tables show the specific soil makeup of each of the twenty-two sites and the tax lots that they are in that were sufficiently unconstrained and had the needed site characteristics to be considered potential candidate sites for meeting the City’s industrial need. The tables include percentage and acreage of the tax lot for each soil type description, what the NRCS agricultural soil class is for that soil type, and whether that type is considered high value farmland. The soil analysis is organized by candidate site as identified in the Industrial Expansion Study. In two instances (Site P4.7k and Site P4.8l) a site is composed of two tax lots, which are analyzed as a single unit. In two other instances (Site P4.7b/P4.7e and Site P4.7c/P4.7d) a single tax lot contains two distinct sites that are created by development constraints. In this case the tax lot analysis is presented once, with the notation that it applies to both sites.

Although the analysis of the suitability of candidate sites excludes constrained portions of tax lots, this analysis includes the entire tax lot (or tax lots) in question. This inclusion reflects the acknowledgement that although constrained portions of a tax lot may not be suitable for industrial development, they would nevertheless be included in the expansion, and thereby removed from agricultural use. These tables show that all twenty-two (22) tax lots under consideration as potential candidate sites for expansion are predominantly (and in most cases exclusively) composed of soil classified as high value farmland.

**Site P4.6a: Soil Classification**

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<th>17-04-30-00-00801</th>
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<table>
<thead>
<tr>
<th>Soil Type Description</th>
<th>% of Taxlot</th>
<th>Acres</th>
<th>Agriculture Class</th>
<th>High Value Farmland</th>
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<tbody>
<tr>
<td>Willakenzie clay loam, 2-12% slopes</td>
<td>3%</td>
<td>0.60</td>
<td>3</td>
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<tr>
<td>Dayton silt loam, clay substratum</td>
<td>97%</td>
<td>19.30</td>
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---

2 All soil analysis information was drawn from the Regional Land Information Database of Lane County (RLID)
### Site P4.6b: Soil Classification

**Map & Taxlot#** 17-04-30-00-00800

<table>
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<tr>
<th>Soil Type Description</th>
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<th>Agriculture Class</th>
<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willakenzie clay loam, 2-12% slopes</td>
<td>32%</td>
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<td>Pengra silt loam, 1-4 % slopes</td>
<td>1%</td>
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<td>Dayton silt loam, clay substratum</td>
<td>67%</td>
<td>13.27</td>
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* Pengra silt loam is considered high value farmland only when drained. This area is noted as "somewhat poorly drained"

### Site P4.6c: Soil Classification

**Map & Taxlot#** 17-04-31-00-00200

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<td>Pengra silt loam, 1-4 % slopes</td>
<td>7%</td>
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<td>Bellpine silty clay loam, 3-12% slopes</td>
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<td>Dayton silt loam, clay substratum</td>
<td>92%</td>
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</table>

* Pengra silt loam is considered high value farmland only when drained. This area is noted as "somewhat poorly drained"

### Site P4.6d: Soil Classification

**Map & Taxlot#** 17-04-31-00-00400

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<th>Soil Type Description</th>
<th>% of Taxlot</th>
<th>Acres</th>
<th>Agriculture Class</th>
<th>High Value Farmland</th>
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<tbody>
<tr>
<td>Pengra silt loam, 1-4 % slopes</td>
<td>30%</td>
<td>6.87</td>
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<td>Bellpine silty clay loam, 12-20% slopes</td>
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* Pengra silt loam is considered high value farmland only when drained. This area is noted as "somewhat poorly drained"
### Site P4.7a: Soil Classification
**Map & Taxlot#** 17-04-08-00-01000

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<th>Soil Type Description</th>
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<td>Salem gravelly silt loam</td>
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<tr>
<td>Bashaw clay</td>
<td>39%</td>
<td>32.96</td>
<td>4</td>
<td>Yes</td>
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### Site P4.7b/P4.7e: Soil Classification
**Map & Taxlot#** 17-04-08-00-02400

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<tr>
<th>Soil Type Description</th>
<th>% of Taxlot</th>
<th>Acres</th>
<th>Agriculture Class</th>
<th>High Value Farmland</th>
</tr>
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<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>10%</td>
<td>11.36</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Salem gravelly silt loam</td>
<td>59%</td>
<td>67.02</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Conser silty clay loam</td>
<td>1%</td>
<td>1.14</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>Bashaw clay</td>
<td>23%</td>
<td>26.13</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Awbrig silty clay loam</td>
<td>8%</td>
<td>9.09</td>
<td>4</td>
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### Site P4.7c/P4.7d: Soil Classification
**Map & Taxlot#** 17-04-09-20-00800

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<th>Acres</th>
<th>Agriculture Class</th>
<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>33%</td>
<td>12.80</td>
<td>1</td>
<td>Yes</td>
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<tr>
<td>Salem gravelly silt loam</td>
<td>15%</td>
<td>5.82</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Coburg silty clay loam</td>
<td>4%</td>
<td>1.55</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Bashaw clay</td>
<td>45%</td>
<td>17.46</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Awbrig silty clay loam</td>
<td>3%</td>
<td>1.16</td>
<td>4</td>
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### Site P4.7f: Soil Classification
**Map & Taxlot#** 17-04-09-20-01300

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<th>Agriculture Class</th>
<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>13%</td>
<td>5.20</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Salem gravelly silt loam</td>
<td>46%</td>
<td>18.40</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Coburg silty clay loam</td>
<td>4%</td>
<td>1.60</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Bashaw clay</td>
<td>37%</td>
<td>14.80</td>
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### Site P4.7g: Soil Classification

**Map & Taxlot#:** 17-04-09-00-01100

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<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>9%</td>
<td>3.39</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Coburg silty clay loam</td>
<td>29%</td>
<td>10.93</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Salem gravelly silt loam</td>
<td>19%</td>
<td>7.16</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Bashaw clay</td>
<td>32%</td>
<td>12.06</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Awbrig silty clay loam</td>
<td>11%</td>
<td>4.15</td>
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### Site P4.7h: Soil Classification

**Map & Taxlot#:** 17-04-09-00-01200

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<tbody>
<tr>
<td>Malabon-Urban land complex</td>
<td>30%</td>
<td>4.02</td>
<td>1</td>
<td>Yes</td>
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<tr>
<td>Coburg silty clay loam</td>
<td>3%</td>
<td>0.40</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Awbrig silty clay loam</td>
<td>66%</td>
<td>8.84</td>
<td>4</td>
<td>Yes</td>
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### Site P4.7i: Soil Classification

**Map & Taxlot#:** 17-04-09-00-02400

<table>
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<th>Acres</th>
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<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>20%</td>
<td>8.86</td>
<td>1</td>
<td>Yes</td>
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<tr>
<td>Malabon-Urban land complex</td>
<td>1%</td>
<td>0.44</td>
<td>1</td>
<td>Yes</td>
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<tr>
<td>Coburg silty clay loam</td>
<td>40%</td>
<td>17.72</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Salem gravelly silt loam</td>
<td>7%</td>
<td>3.10</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Awbrig silty clay loam</td>
<td>31%</td>
<td>13.73</td>
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### Site P4.7j: Soil Classification

**Map & Taxlot#:** 17-04-09-00-02500

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<th>Acres</th>
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<th>High Value Farmland</th>
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<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>32%</td>
<td>9.79</td>
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<td>Yes</td>
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<tr>
<td>Coburg silty clay loam</td>
<td>16%</td>
<td>4.90</td>
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<tr>
<td>Salem gravelly silt loam</td>
<td>5%</td>
<td>1.53</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Bashaw clay</td>
<td>32%</td>
<td>9.79</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Awbrig silty clay loam</td>
<td>15%</td>
<td>4.59</td>
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### Site P4.7k: Soil Classification

**Map & Taxlot#** 17-04-09-00-02501 and 17-04-09-00-02502

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<th>High Value Farmland</th>
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<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>0%</td>
<td>0.00</td>
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<td>Yes</td>
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<tr>
<td>Salem gravelly silt loam</td>
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<tr>
<td>Bashaw clay</td>
<td>0%</td>
<td>0.00</td>
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### Site P4.7l: Soil Classification

**Map & Taxlot#** 17-04-09-00-02700

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<tbody>
<tr>
<td>Malabon silty clay loam</td>
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<td>17.64</td>
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<td>Salem gravelly silt loam</td>
<td>26%</td>
<td>10.43</td>
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<tr>
<td>Coburg silty clay loam</td>
<td>12%</td>
<td>4.81</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Awbrig silty clay loam</td>
<td>12%</td>
<td>4.81</td>
<td>4</td>
<td>Yes</td>
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<td>Bashaw clay</td>
<td>6%</td>
<td>2.41</td>
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### Site P4.7m: Soil Classification

**Map & Taxlot#** 17-04-17-00-00400

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<th>Agriculture Class</th>
<th>High Value Farmland</th>
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<tbody>
<tr>
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<td>2.01</td>
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<td>Yes</td>
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<tr>
<td>Salem gravelly silt loam</td>
<td>37%</td>
<td>14.84</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Oxley gravelly silt loam</td>
<td>12%</td>
<td>4.81</td>
<td>3</td>
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<tr>
<td>Conser silty clay loam</td>
<td>3%</td>
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<td>3</td>
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<td>Bashaw clay</td>
<td>42%</td>
<td>16.84</td>
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### Site P4.7n: Soil Classification

**Map & Taxlot#** 17-04-17-00-00500

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<th>Agriculture Class</th>
<th>High Value Farmland</th>
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<tbody>
<tr>
<td>Malabon silty clay loam</td>
<td>8%</td>
<td>5.09</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Salem gravelly silt loam</td>
<td>20%</td>
<td>12.72</td>
<td>2</td>
<td>Yes</td>
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<tr>
<td>Oxley gravelly silt loam</td>
<td>5%</td>
<td>3.18</td>
<td>3</td>
<td>No</td>
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<tr>
<td>Conser silty clay loam</td>
<td>3%</td>
<td>1.91</td>
<td>3</td>
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<td>Bashaw clay</td>
<td>65%</td>
<td>41.34</td>
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### Site P4.8g: Soil Classification
**Map & Taxlot#:** 17-04-05-00-00400

<table>
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<tr>
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<th>Agriculture Class</th>
<th>High Value Farmland</th>
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<tbody>
<tr>
<td>Coburg silty clay loam</td>
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<tr>
<td>Awbrig silty clay loam</td>
<td>55%</td>
<td>46.53</td>
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### Site P4.8h: Soil Classification
**Map & Taxlot#:** 17-04-05-00-00900

<table>
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<tbody>
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<td>Coburg silty clay loam</td>
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<td>4</td>
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</tr>
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<td>Bashaw clay</td>
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### Site P4.8k: Soil Classification
**Map & Taxlot#:** 16-04-33-00-01006

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<th>Agriculture Class</th>
<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coburg silty clay loam</td>
<td>66%</td>
<td>15.18</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Awbrig silty clay loam</td>
<td>34%</td>
<td>7.82</td>
<td>4</td>
<td>Yes</td>
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### Site P4.8l: Soil Classification
**Map & Taxlot#:** 16-04-33-00-01000 and 16-04-33-00-01004

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<tbody>
<tr>
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<td>Awbrig silty clay loam</td>
<td>21%</td>
<td>5.05</td>
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UGB Expansion Analysis for Park Land

I. Introduction

This study sets out the standards and process by which the City determined a need for additional park land within its urban growth boundary and the characteristics of that land, then follows that process to conclude by identifying the most suitable land to meet the City’s park land need.

Oregon’s Statewide Planning Goal 14 and its administrative rules (See OAR 660-024-0040) require a City to ensure that its UGB is located based, in part, on its population’s 20-year need for parks and open space. The City of Eugene’s most comprehensive consideration of its need for park land is captured in the “Parks, Recreation and Open Space Project and Priority Plan” that was adopted by the Eugene City Council in May 2006. This document includes more than 200 projects, including the need to acquire and develop park sites, to be implemented over a 20-year period to serve the city’s population. Each project is prioritized from 1 (highest) to 5 (lowest) as an indication of the order in which the projects should be implemented, while recognizing unique opportunities and other circumstances may lead the City, in some cases, to address lower priority projects before higher priority projects. The projects in the plan are depicted on maps, and are also listed in a variety of tables, and are organized by park planning sub-areas in which they occur.

The legislative review of Eugene’s UGB requires the City to consider its population’s park needs for the 20-year planning period and any requisite addition of park land to the City’s UGB. As Eugene’s population has increased over time, the need for additional homes has been largely met through infill and redevelopment. As a result, Eugene finds itself in a situation where it needs more parkland to serve residents within the current UGB than is available within that UGB. This is particularly relevant for parks with urban amenities, such as community and regional parks.

Much of the justification for the needs and priorities set out in the Parks, Recreation and Open Space (PROS) Project and Priority Plan is based on a document referred to as the City’s Parks, Recreation and Open Space Comprehensive Plan. That guiding document was the textual result of a planning process conducted from 2002 to 2006, in which community needs for parks, open spaces, facilities, and programs were identified through extensive public engagement. During that process, City staff interacted with thousands of community members through meetings with neighborhood associations, representatives of interest groups, youth, seniors, adults, people with disabilities, and people from a variety of cultural backgrounds.

II. DETERMINATION OF NEED FOR NEW COMMUNITY PARK SITES

Eugene’s park needs are explained and discussed in a guiding, background document approved (but not formally adopted) by the Eugene City Council and referred to as the PROS Comprehensive Plan. (References to “strategies” in this study are to the strategies identified in the PROS Comprehensive Plan.)

The City considers its needs for park land and development in terms of six planning sub-areas that comprise the entire city (see “Planning Area Index Map” below from the PROS Project and Priority Plan). The PROS Project and Priority Plan identifies the need for new parks in all six of the planning sub-areas.
Eugene determines its park needs based on a numerical standard expressed in terms of acres of parkland per 1,000 residents, as well as on equitable distribution of park land. In Eugene, the desired numerical standard for total park land is 20 acres per 1,000 residents. Each park type has a standard as well. For community parks, the numerical strategy is to provide 1.5 acres of community parkland per 1,000 residents (Strategy B-30). It is equally important to ensure the equitable distribution of parks, recreation and open space areas throughout Eugene (Strategy B-2).

The majority of the need is for new “neighborhood parks,” which generally are smaller parks located within an existing or emerging neighborhood. The City has determined that there is an adequate supply of suitable land within the current Eugene UGB to meet the neighborhood park needs of all six planning sub-areas. However, the City has also identified a need for new “community parks” to serve its Bethel/Danebo and River Road/Santa Clara planning sub-areas in Northwest and North Eugene, respectively.

The PROS Comprehensive Plan describes community parks as larger parks that provide both active and passive recreational opportunities for City residents, intended to serve a 2-mile radius. Community parks have a minimum of 40 acres, potentially including school sites when the two uses are co-located. Community parks are intended to accommodate large group activities and are to include the following facilities (Strategies B-28 and B-31):

- Neighborhood park components, including children’s play area, basketball courts, open play area, etc.
- Reservable picnic areas;
- Performance and gathering space;
- Restrooms;
- Soccer and softball/baseball fields;
- Paved pathways and trails;
- Natural areas; and
- Off-street parking, transit access and bike parking.

Many of the features of community parks (community recreation facilities, restrooms, competitive sports fields, etc.) require urban levels of service, which cannot be provided outside of the UGB. Because of the minimum size requirements for community parks of 40 acres, it is more difficult to find suitable and available land for such parks as compared to neighborhood parks.

Aware of these needs for some time, the City of Eugene has actively searched for the most suitable property in the Bethel/Danebo and River Road/Santa Clara planning sub-areas. The City acted on opportunities to purchase land in 2007-2008 for the Bethel/Danebo sub-area and in 2007-2013 for the River Road/Santa Clara sub-area. Later sections of this study set out the Goal 14 analysis demonstrating that the properties are appropriate for inclusion in the UGB at this time.
Bethel/Danebo

The Bethel/Danebo planning sub-area is currently served by only three community parks. The Bethel Community Park, a 33-acre multi-facility park, is co-located with Meadowview K-8 School and located south of Barger Drive, west of Terry Street. The Shasta Ballfields Park, which consists of four ball fields and a soccer field on 15 acres, is co-located with Shasta Middle School and Clear Lake Elementary School and is located south of Barger Drive, east of Terry and west of Randy Papé Beltline. Petersen Park, a 19-acre park that includes the Petersen Barn Community Center, is located south of Barger and east of Randy Papé Beltline. Each of these parks is approximately three-fourths of a mile from the next community park within the sub-area. All three of the existing community parks in the Bethel/Danebo area are located south of Barger Drive, which is a minor arterial. The residential area north of Barger Drive does not have a community park.

The PROS Project and Priority Plan identifies the need for two community parks within the Bethel/Danebo park planning sub-area (Table 1: Proposed Projects & Priorities for Parks, Open Space and Recreation Facilities for Bethel Danebo). Both new community parks are identified to serve specific geographical areas that are currently underserved by recreational opportunities. The projects to meet the area’s needs are identified in the plan as follows:

- Acquire 100+ acres surrounding Golden Gardens ponds for community park (Priority 1&2)
- Develop Golden Gardens and acquired property as community park with significant natural area components and trails (Priority 2 & 3)
- Acquire portion of Union Pacific area for a neighborhood and community park, including improved connections, recreation and open space. (Priority 4)

The first is identified to be located in the area of Golden Gardens ponds, which is north of Barger Drive and west of Beltline. There is land both inside and outside the UGB in this area, which is evaluated in future sections.

The second needed community park for Bethel/Danebo is identified to be located in the Union Pacific area (between the Northwest Expressway and Highway 99 in the vicinity of the railroad tracks). Because the Union Pacific area is fully within the current urban growth boundary, development of an urban community park would not necessitate an urban growth boundary expansion. Therefore, it will not be addressed any further as part of this study.

River Road / Santa Clara

The River Road/Santa Clara planning sub-area does not contain any community parks. Within this park planning sub-area, the PROS Project and Priority Plan identifies the need for one new community park (Table 1: Proposed Projects & Priorities for Parks, Open Space and Recreation Facilities for River Road/Santa Clara). The needed park is specifically intended to serve the Santa Clara area, which is located north of Randy Papé Beltline. (Although the River Road area (south of Beltline) is also not served by a community park, it does contain Emerald Park, which is a River Road Park and Recreation District facility that serves as a community park for this area.) The needed project is identified in the plan as follows:

- Acquire community park site to serve Santa Clara (Priority 1)
There is land both inside and outside the UGB in this area, which is evaluated in future sections.

## III. CHARACTERISTICS OF NEEDED COMMUNITY PARK SITES

Statewide Planning Goal 14 requires that the “[e]stablishment and change of the [urban growth] boundaries shall be based on the following: (1) Demonstrated need to accommodate long-range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and (2) Demonstrated need for . . . parks or open space.” It provides that “[i]n determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need.” See also OAR 660-024-0040(1).

The new community park sites would need to have a number of site characteristics to meet the identified needs. In order to meet the need for equitable distribution, each park must be located within the boundaries of its planning area (Bethel-Danebo and River Road-Santa Clara, respectively). Within those boundaries, which are addressed through the establishment of each study area, there are more specific location-based, and other characteristics associated with the specific qualities needed in the new park sites.

Within the first category of “location-based site characteristics,” this analysis will consider both issues of feasible development of each new park, and planning area-specific issues of distribution to serve their local residents. In order to access the necessary urban services, each community park must be located within the urban growth boundary. Therefore, the new park sites must be either within the current UGB or near enough to be brought into the UGB.

For equitable distribution of parks, the two planning areas have different location-based characteristics. For the Bethel-Danebo area, the area north of Barger Drive has been identified as particularly underserved. Because the planning area does have some community parks, the new park site should be located no less than half a mile from existing parks. For the River Road-Santa Clara area, the Santa Clara portion, north of Randy Papé Beltline has been identified as particularly underserved. The new community parks should be located in these specific portions of the planning areas.

In order for parks to provide the most convenient access, as well as for health, safety and equity considerations, it is desirable for the new park sites to be adjacent to an urban residential neighborhood. This enhances the ability of residents, particularly children, to access the parks by active modes of transportation, such as walking or bicycling, and to make parks accessible to community members with limited mobility or transportation options.

Beyond identifying general areas that are appropriate for a new park sites (“location-based site characteristics”), individual properties also need certain characteristics to meet the need for a community park (“other site characteristics”). These characteristics include the needed size of sites, access via appropriate roads, and geographic attributes that enhance the recreational value of prospective parkland.

As noted above under “Determination of Need for Community Park Sites,” community parks require a minimum of 40 acres, either independently or in conjunction with a school site, to accommodate the range of activities and opportunities that they provide. Therefore, 40 acres is the minimum size criterion...
for a new community park site. A wider range of recreational opportunities can be provided with more acreage, therefore, many community parks larger than 40 acres exist throughout the city.

Because community parks create significant foot, bicycle and vehicular traffic, it is important that the new park site be located adjacent to a street designated as an existing or planned arterial or collector. These streets are designed for higher volumes of vehicular traffic and connections for alternative modes of transportation.

Parks serve multiple functions for the community, including recreation, community gathering spaces, performance venues, educational opportunities, and spaces for respite and relaxation. A number of geographic attributes enable or enhance a site’s ability to perform those functions. While a site does not need to have all of the characteristics below to function as a community park, it must have at least some of these attributes. One attribute that is essential is availability. In order to develop and operate the park facility, thereby meeting the identified need, the City must have the ownership rights to do so. Therefore, a property’s availability for park use/City ownership is a key site characteristic in this evaluation. The City cannot lawfully redesignate and rezone privately owned land to limit it to a public park use. The City is attempting to address an imminent need for two parks that is a longstanding existing need, not only a future need. For this reason, current availability for public park development is especially important.

Adjacency to a school facility is another desirable geographic advantage. Eugene has historically found that collocation of community parks with school sites provides mutual benefit and significantly greater value to Eugene residents. As such, collocation with an existing or planned school is perhaps not necessary, but is a very desirable site characteristic of future community parks. Significant natural features (water bodies, high quality habitat, scenic viewpoints, etc.) also contribute to the experience of visiting a park. Therefore, sites that offer such features are prioritized in terms of park acquisition and development.

In summary, the site characteristics below are necessary for land to be suitable for the needed community parks.

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1 The PROS Comprehensive Plan (p. 2-3) explains that the City relies on voluntary participation of property owners when acquiring land or purchasing conservation easements. A key objective of the plan is to devise strategies that will not infringe upon the rights of property owners and will stress voluntary participation. Most park and open space protection programs rely on responsible negotiations with willing sellers based on appraisals of fair market value to benefit the public’s and owner’s interests.

2 Existing examples of co-located schools and parks are:
   - Amazon Park/South Eugene High School/Roosevelt Middle School
   - Ascot Park/Monroe Middle School
   - Bethel Community Park/Meadowview School
   - Cal Young Sports Park/Cal Young Middle School
   - Churchill Sports Park/Churchill High School/Kennedy Middle School
   - Crest Heights Park/Crest Elementary
   - Garfield Park/Chavez Elementary School
   - Gilham Park/Gilham Elementary School
   - Kincaid Park/Parker Elementary
   - Shasta Ballfields/Shasta Middle School/Clear Lake School
   - Sheldon Sports Park/Meadow Lark Elementary/Sheldon High School
   - Westmoreland Park/Arts & Technology Academy
Location-based Site Characteristics:

- **Distribution.** These characteristics provide for equitable distribution of parks within each of the following planning sub-areas:
  - Within the Bethel-Danebo parks planning area
    - North of Barger Drive
    - More than half a mile from existing community parks
  - Within the River Road-Santa Clara parks planning area
    - North of Randy Papé Beltline
- **Adjacency to urban residential neighborhoods.** This characteristic provides a site that is safely accessible to active modes of transportation, including walking and bicycling, as well as maximizing the number of residents who are able to live in close proximity to the parks.
  - Adjacent to an existing or planned urban residential neighborhood

Other Site Characteristics:

- **Size.** This characteristic ensures that the future park sites are of an appropriate size for the intended use:
  - Minimum size of 40 acres, either independently or in association with a collocated school facility
- **Accessibility.** This characteristic ensures that the future parks are fronting a street that carries or is intended to carry higher volumes of traffic, has or will have a high degree of connectivity, and provides or is intended to provide for pedestrian, bicycle and transit travel:
  - Located on existing or planned collector or arterial street
- **Geographic Attributes.** This characteristic ensures that the future parks are suitable for development, as evidenced by a sufficiency of the following attributes:
  - Owned or available to be owned by the City for purposes of park development
  - Adjacent to an existing or planned school facility
  - Presence of substantial natural features

### IV. DETERMINATION OF NEED FOR EXPANSION (Screening)

Before evaluating land outside of the urban growth boundary, the City is required to determine whether the park need can be met with land already within the UGB. For the two areas identified above under characteristics of needed community park sites, the City evaluated possible sites within the urban growth boundary. Each planning area is evaluated below.

**Bethel-Danebo**

As described by the “Distribution” characteristic above, the needed Bethel-Danebo site must be north of Barger Drive and more than half a mile from an existing community park. Due to the configuration of the current UGB, there are three separate areas of land inside the current UGB that meet these distribution characteristics, shown in the map “Vacant and Partially Vacant Land – Bethel-Danebo.” The northern area (north of Clear Lake Road and west of Highway 99 (the eastern boundary of the Bethel-Danebo parks planning area) includes some vacant land (there is no partially vacant land in this area), but it is

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3 These distribution characteristics could have, alternatively, been a factor in establishing the study areas.
entirely composed of industrial land that is distant from urban neighborhoods and is therefore clearly unsuitable for park siting based on the needed characteristics described above.

The southwestern area, near the intersection of Terry Street and Barger Drive, is designated Residential. The City’s Buildable Lands Inventory shows only seven vacant (and no partially vacant) sites in this area. None of these sites are larger than 0.2 acres, and most of these sites are isolated from each other, providing no suitable park sites.

The southeastern area, near Highway 99 north of Barger Drive but south of Clear Lake Road, includes land designated both for employment and residential uses. No sites in this area are of sufficient size for a community park, with the largest vacant area being composed of fourteen (14) residential lots with a maximum individual size of 1.0 acres. This area, therefore, also has no suitable sites for a community park.

These factors of size and location require the City to conclude that there is insufficient available land within the urban growth boundary with the characteristics needed for a new community park site for the Bethel-Danebo area. Because of the lack of available land, an expansion of the urban growth boundary is necessary to accommodate a community park for the Bethel-Danebo planning area.

**River Road-Santa Clara**

In the mid to late 2000s, City of Eugene Parks and Open Space Planning staff conducted an exhaustive analysis of land suitable for a community park to serve the Santa Clara sub-area, considering size, location, land use, service availability, surrounding uses and access. While there are vacant and partially vacant properties within the current urban growth boundary (as shown on the City’s Buildable Lands Inventory) that were of sufficient size and suitability for a community park in the Santa Clara sub-area, staff found that there were no willing sellers. None have come to light, since. As described in the PROS Comprehensive Plan (p. 2-3), a willing seller is a key criterion for the City when prioritizing acquisition...
opportunities. Because of the lack of available land, an expansion of the urban growth boundary is necessary to accommodate a community park to serve the Santa Clara area.

V. ANALYSIS OF LAND FOR UGB EXPANSION

ORS 197.298(1) and OAR 660-024-0060(1) set out a “priority” system among four land categories. The categories are described below. The order of priority is the order in which the categories are listed, highest (a) to lowest (d). This priority system begins with the general rule that cities will expand onto land in the highest-priority land category, expanding onto lower priority land only if the higher-priority land is “inadequate to accommodate the amount of land needed.” ORS 197.298(b), (c) and (d). A number of regulations, together, direct the way in which the City must apply the priority system. In the case of land for parks, they include: ORS 197.298, the locational factors of Statewide Planning Goal 14 and OAR 660-024-0060(1), (5) and (6).

ORS 197.298 provides:

1. In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary except under the following priorities:
   (a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan. [Note: Eugene has no land in this category.]
   (b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.
   (c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition). [Note: the study area has no land in this category.]
   (d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.

2. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

3. Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:
   (a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;
   (b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or
   (c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

Statewide Planning Goal 14 provides:
The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

1. Efficient accommodation of identified land needs;
2. Orderly and economic provision of public facilities and services;
3. Comparative environmental, energy, economic and social consequences; and
4. Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

OAR 660-024-0060 provides:
(1) When considering a UGB amendment, a local government must determine which land to add by evaluating alternative boundary locations. This determination must be consistent with the priority of land specified in ORS 197.298 and the boundary location factors of Goal 14, as follows:
   (a) Beginning with the highest priority of land available, a local government must determine which land in that priority is suitable to accommodate the need deficiency determined under OAR 660-024-0050.
   (b) If the amount of suitable land in the first priority category exceeds the amount necessary to satisfy the need deficiency, a local government must apply the location factors of Goal 14 to choose which land in that priority to include in the UGB.
   (c) If the amount of suitable land in the first priority category is not adequate to satisfy the identified need deficiency, a local government must determine which land in the next priority is suitable to accommodate the remaining need, and proceed using the same method specified in subsections (a) and (b) of this section until the land need is accommodated.
   (d) Notwithstanding subsection (a) to (c) of this section, a local government may consider land of lower priority as specified in ORS 197.298(3).
   (e) For purposes of this rule, the determination of suitable land to accommodate land needs must include consideration of any suitability characteristics specified under section (5) of this rule, as well as other provisions of law applicable in determining whether land is buildable or suitable.

* * *
(5) If a local government has specified characteristics such as parcel size, topography, or proximity that are necessary for land to be suitable for an identified need, the local government may limit its consideration to land that has the specified characteristics when it conducts the boundary location alternatives analysis and applies ORS 197.298.
(6) The adopted findings for UGB adoption or amendment must describe or map all of the alternative areas evaluated in the boundary location alternatives analysis. If the analysis involves more than one parcel or area within a particular priority category in ORS 197.298 for which circumstances are the same, these parcels or areas may be considered and evaluated as a single group.

Because the City needs two community parks, to serve two different areas, the UGB expansion study is necessarily split into two sections, below.

**Bethel/Danebo Community Park**

### a. Establish the Study Area / Candidate Land for Evaluation
To identify the right location for its urban growth boundary expansion, the City of Eugene established a very expansive study area that includes all land west of Interstate 5 and south of the McKenzie River within ½ mile of Eugene’s current UGB or within the Eugene-Springfield Metropolitan Area General Plan boundary (which extends beyond ½ mile in some areas). The study area includes some additional land to allow for analysis of exception areas or non-resource areas that abut the current UGB and extend beyond the study area described above.

For purposes of determining how the City of Eugene would meet its need for more an additional park site for the Bethel/Danebo planning sub-area, the study area was narrowed to meet the area-specific need of the parks planning area.

Eugene’s study area for a Bethel/Danebo community park site includes all land that is:

1. Within Bethel/Danebo park planning sub-area; and
2. Within one or more of these categories:
   a. within one-half mile from the current UGB;
   b. beyond one-half mile from the current UGB, but within the Eugene-Springfield Metropolitan Area General Plan (Metro Plan) boundary; or
   c. beyond one-half mile from the current UGB, but part of an exception area or nonresource area (see ORS 197.298(1)(b)) that abuts the current UGB.

The location of the study area is shown on the “Study Area” map, above. The study area includes about 4,621 acres. Of this land, 54 acres have already been identified for a school expansion for Bethel School District, and 648 acres have been identified for an industrial land expansion. Excluding those acres, the remaining 3,919 acres is 9,800% of the 40 acre minimum land needed for a community park.

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4 The acknowledged regional comprehensive plan (the Metro Plan) provides that “[t]he division of responsibility for metropolitan planning between the two cities is the Interstate 5 Highway.” ORS 197.304 requires Eugene and Springfield to establish separate UGBs “consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan.”
b. **Categorize Candidate Land into the Four Priority Categories of ORS 197.298(1)/(ORS 197.298(1)(b)**

ORS 197.298(1) requires the City to identify the land in its study area as follows:

- **First Priority Land:** land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan
- **Second Priority Land:** land identified in the Lane County Rural Comprehensive Plan or the Metro Plan as an exception area or non-resource land, including resource land that is completely surrounded by exception areas unless such resource land is high-value farmland
- **Third Priority Land:** land designated as marginal land in the Lane County Rural Comprehensive Plan
- **Fourth Priority Land:** land designated in the Lane County Rural Comprehensive Plan or the Metro Plan for agriculture or forestry, or both.

As required by state law, these priority categories are based on comprehensive plan land use designations. Therefore, the first map below, “Land Use Designations,” shows the designations of both the Metro Plan and the Lane County Rural Comprehensive Plan as they apply inside the study area. The base designations shown on this map are aggregated into priority categories, which are shown on the second map, “Priority Categories of Candidate Land.”

In Eugene’s park expansion study area, there are no lands designated as urban reserves (See ORS 197.298(1)(a), above) or as marginal land ((c), above); therefore there are no first priority or third priority lands included on the map or in the analysis that follows. Land within the study area that does not fall into any of the four priority categories is identified on the Priority Categories of Candidate Land map as “Other Lands.”

In addition to forming the basis for the priority category of candidate land, land use designations are referenced in the subsequent analysis to identify proximity of candidate land to incompatible uses (such as heavy industrial or airport), or desired uses (such as urban residential neighborhoods). These land use designations include those within the study area and those adjacent to the study area. For ease of reference, these designations are shown on the third map below, “Contextual Land Use Designations.”

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5 These lands include those designated for Sand and Gravel, Airport Reserve, and Parks and Open Space, as well as a small portion of a tax lot designated Government and Education for which an exception was not required to be taken.
City of Eugene Urban Growth Boundary Study
Park Land Evaluation - Bethel/Danebo
Priority Categories of Candidate Land

Land Inside UGB
Major Streets
Water Bodies
Identified School Expansion
Identified Industrial Expansion

Land Types
Priority 2
Priority 3 (None)
Priority 4
Other Lands - land that does not fall within any priority category

Note: This map is based on imprecise source data, subject to change, and for general reference only.
c. **First Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

There is no land designated for urban reserves around Eugene. Therefore, there is no first priority land to consider for the proposed UGB expansion.

d. **Second Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

The Bethel/Danebo park expansion study area includes 802.6 acres of second priority land, shown on the “Second Priority Land within Study Area” map. The largest area of second priority land in the study area is a portion of the Eugene Airport, designated Government and Education (Metro Plan), and Airport (Lane County). Other second priority areas are designated Rural Residential (Metro Plan), and Rural Commercial (Metro Plan).

The determination of the City’s need for an additional community park site to serve the Bethel/Danebo park planning sub-area is discussed above under Section I, while Section II addresses the characteristics required to make a site suitable for a park expansion. These site characteristics fall into two categories: location-based and other site characteristics. Analysis of location-based site characteristics (below) is the first step in evaluating whether any of the second priority land in the study area has the characteristics necessary to make it suitable to accommodate the needed park facility.
(1) Dismiss Candidate Land without Needed “Location-based” Site Characteristics

**Location-based Site Characteristics:**
- **Distribution.**
  - North of Barger Drive
  - More than half a mile from existing community parks
- **Adjacency to urban residential neighborhoods.**
  - Adjacent to an existing or planned urban residential neighborhood

The map below, “Second Priority Land: Location-based Site Characteristics,” is a visual representation of the analysis that follows.6

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6 All maps in this analysis represent site characteristics in the order they are listed. For example, land that is dismissed because it is south of Barger Drive may also be dismissed because it is not adjacent to urban residential neighborhoods. However, it would only show on the map as being dismissed for the first noted site characteristic.
Distribution

- Dismissal of Land South of Barger Drive

One area of second priority land is located south of Barger Drive within the study area. The southern-most area of second priority land (94.1 acres) is therefore outside of the established needed location and is dismissed from further consideration.

- Dismissal of Land Within Half a Mile of an Existing Community Park

No second priority land is within half a mile of an existing community park. Therefore, no second priority land is dismissed from consideration on this basis.

Adjacency to urban residential neighborhoods

- Dismissal of Land that is not Adjacent to an Existing or Planned Urban Residential Neighborhood

The remaining second priority land includes a large area of 642.8 acres and a smaller area to the south (52.1 acres), which are both designated Government and Education, and owned and used by the Eugene Airport, an important Goal 12 transportation facility. A very small area of land designated Rural Residential (3.3 acres) is also adjacent to the western edge of the Airport. There is also approximately 10.3 acres designated Rural Commercial on Bodenhamer Road, surrounded by land designated Agriculture. All of this land is significantly separated from the current urban growth boundary, and therefore remote from existing or planned urban residential neighborhoods, making it unsuitable for a community park. The remaining second priority land (totaling 708.5 acres) is therefore dismissed from further consideration.

(2) Conclusion for Second Priority Land within Bethel/Danebo Community Park Expansion Study Area

The location-based site characteristics needed for the new Bethel/Danebo community park are not present on any second priority land within the study area. Based on the analysis above, the City has determined that none of the second priority land within the study area is suitable for park expansion.

e. Third Priority Land – Apply State’s Factors for Dismissal of Candidate Land

There is no land designated as marginal land within the study area. Therefore, there is no third priority land to consider for the proposed park expansion.

f. Fourth Priority Land – Apply State’s Factors for Dismissal of Candidate Land

The park expansion study area includes 2,813.5 acres of fourth priority land (that is not already identified for school or industrial expansions), as shown on the “Fourth Priority Land within Study Area”
map below. Most (2,754.6 acres) of the fourth priority land in the study area is designated Agriculture, and 58.9 acres is designated Forest.

The determination of the City’s need for an additional community park site to serve the Bethel/Danebo parks planning sub-area is discussed above under Section I, while Section II addresses the characteristics required to make a site suitable for a parks expansion. These site characteristics fall into two categories: location-based and other site characteristics. Analysis of location-based site characteristics (below) is the first step in evaluating whether any of the fourth priority land in the study area has the characteristics necessary to make it suitable to accommodate the needed park facility.
(1) Dismiss Candidate Land without Needed “Location-based” Site Characteristics

*Location-based Site Characteristics:*

- **Distribution.**
  - North of Barger Drive
  - More than half a mile from existing community parks
- **Adjacency to urban residential neighborhoods.**
  - Adjacent to an existing or planned urban residential neighborhood

The map below, “Fourth Priority Land: Location-based Site Characteristics,” is a visual representation of the analysis that follows.
Distribution

- **Dismissal of Land South of Barger Drive**

  923.9 acres of fourth priority candidate land in the study area are located south of Barger Drive, and are therefore outside of the established needed location. Therefore, this land is dismissed from further consideration.

- **Dismissal of Land Within Half a Mile of an Existing Community Park**

  265.3 acres are within half a mile of the Bethel Community Park/Meadowview School complex, and therefore do not meet the criteria for equitable distribution. Therefore, this area is dismissed from consideration (79.2 of the acres within a half mile of the existing community park are also south of Barger Drive and are therefore dismissed for both reasons).

Adjacent to urban residential neighborhoods

- **Dismissal of Land that is not Adjacent to an Existing or Planned Urban Residential Neighborhood**

  1,305.1 acres of fourth priority candidate land in the study area (both north and south of the Eugene Airport) are located on tax lots that are not adjacent to existing or planned urban residential neighborhoods, and are therefore dismissed as unsuitable for park siting.

Summary

After dismissing candidate land without appropriate location-based site characteristics, 377.3 acres (943% of the minimum needed 40 acres) of fourth priority land remains for further evaluation. These acres are made up of twelve (12) tax lots that, based on ownership, form six (6) potential park sites (labeled “P4.1” “P4.2” “P4.3” “P4.4” “P4.5” “P4.6” on the map below).

(2) Dismiss Candidate Land without Other Needed Site Characteristics

The next step is to evaluate the remaining fourth priority land in terms of the other needed site characteristics.

Other Site Characteristics:

- **Size.**
  - Minimum size of 40 acres, either independently or in association with a collocated school facility
- **Accessibility.**
  - Located on existing or planned collector or arterial street
- **Geographic Attributes.**
  - Owned or available to be owned by the City for purposes of park development
  - Adjacent to an existing or planned school facility
  - Presence of substantial natural features
The map below, “Fourth Priority Land: Other Site Characteristics,” is a visual representation of the analysis that follows.
Size

- **Dismissal of Sites with Fewer than 40 Acres**

  The narrow strip of land ("P4.4") that connects Clear Lake Road to a tax lot primarily inside the current urban growth boundary is one acre total, far less than the needed 40 acres. Site “P4.6” is a 5.0 acre lot abutting the current UGB, which is substantially less than the 40 needed acres. Due to insufficient size, sites “P4.4” and “P4.6” are dismissed from further consideration.

Accessibility

- **Dismissal of Land that is not Accessible by an Existing or Planned Arterial or Collector Street**

  The two streets that qualify as an “existing or planned arterial or collector street” adjacent to the remaining candidate land are Terry Street and Clear Lake Road, which are both existing major collectors. The westernmost site (labeled “P4.1” on the map above) is a 40.1 acre tax lot that is not accessible by either of these streets. The other remaining sites are all accessible by one or (in the case of site “P4.5”) both of these streets. Due to insufficient accessibility, site “P4.1” is dismissed from further consideration.

Geographic Attributes

- **Dismissal of Land Lacking Sufficient Attributes Necessary for Park Development:**
  **Availability for City Ownership for Purposes of Park Development, Adjacency to a Planned or Existing School Site, and Presence of Substantial Natural Features**

  In anticipation of the need for an additional community park, the City has made efforts to purchase land in the appropriate area for several years. Site “P4.2” is owned by the Eugene Water and Electric Board, and is not available for park development. The site is also not adjacent to a planned or existing school facility, and lacks noteworthy natural features. This site therefore lacks sufficient geographic attributes for park development, and is dismissed from further consideration.

  Site “P4.3” is privately owned, and not available for park development. This site is separated from the future school site by Site “P4.4” (a portion of a tax lot primarily within the UGB), and lacks noteworthy natural features. This site therefore lacks sufficient geographic attributes for park development, and is dismissed from further consideration.

  The City was able to purchase the full extent of the easternmost site (“P4.5”) for future park siting as the most obviously fitting site in the area based on geographic attributes. This site surrounds the significant natural feature of the Golden Gardens ponds, and is adjacent to the future Bethel school facility. It is also worth noting that selection of this site would maximize efficient urban form by “filling in” an area which would otherwise be an island of rural land surrounded by urban land, giving it accessibility from urban / urbanizable land on all sides.
Summary of Other Site Characteristics

After dismissing candidate land without appropriate site characteristics, Site “P4.5” is the only remaining site.

(3) Conclusion for Fourth Priority Land within Bethel/Danebo Park Expansion Study Area

Site “P4.5” is composed of 222.1 acres that meet the site requirements for a community park. The site is composed of six tax lots, as shown on the “Fourth Priority Land: Other Site Characteristics” map, above. Although this site is larger than the 40-acre minimum required for a community park, as noted above, many existing community parks are also larger than 40 acres, and the additional size enables additional recreational opportunities to be provided, enhancing the site’s ability to serve the community. The map below, “Site Selected for Park Expansion,” shows the identified expansion area for the Bethel/Danebo park planning area.

In order to create a contiguous UGB, Site “P4.6” is also included in the expansion. This site would otherwise be a small island of rural land completely surrounded by urban/urbanizable land. To avoid this and the complications it would create in terms of land uses, service provision, annexations and jurisdiction, the City and County will include Site P4.6 in the UGB expansion area, providing a contiguous boundary.
River Road/Santa Clara Community Park

a. Establish the Study Area / Candidate Land for Evaluation

To identify the right location for its urban growth boundary, the City of Eugene established a very expansive study area that includes all land west of Interstate 5 and south of the McKenzie River that is within ½ mile of Eugene’s current UGB or within the Eugene-Springfield Metropolitan Area General Plan boundary (which extends beyond ½ mile in some areas). The study area includes some additional land to allow for analysis of exception areas or non-resource areas that abut the current UGB and extend beyond the study area described above.

For purposes of determining how the City of Eugene would meet its need for more an additional park site for the River Road/Santa Clara planning sub-area, the study area was narrowed to meet the area-specific need of the parks planning area.

Eugene’s study area for a park site to serve the River Road / Santa Clara residents includes all land in the vicinity of the UGB that has a reasonable potential to satisfy the need for a community park for the River Road / Santa Clara area. This includes only the land that is:

1. Within the River Road / Santa Clara park planning sub-area; and
2. Within one or more of these categories:
   (a) within one-half mile from the current UGB;
   (b) beyond one-half mile from the current UGB, but within the Eugene-Springfield Metropolitan Area General Plan (Metro Plan) boundary; or
   (c) beyond one-half mile from the current UGB, but part of an exception area or non-resource area (see ORS 197.298(1)(b)) that abuts the current UGB.

The location of the study area is shown in the “Study Area” map, above. The study area includes about 2,756.3 acres, or 6,890% of the 40 acre minimum land need.

The acknowledged regional comprehensive plan (the Metro Plan) provides that “[t]he division of responsibility for metropolitan planning between the two cities is the Interstate 5 Highway.” ORS 197.304 requires Eugene and Springfield to establish separate UGBs “consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan.”
b. **Categorize Candidate Land into the Four Priority Categories of ORS 197.298(1)/ (ORS 197.298(1)(b)**

ORS 197.298(1) requires the City to identify the land in its study area as follows:

First Priority Land: land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan

Second Priority Land: land identified in the Lane County Rural Comprehensive Plan or the Metro Plan as an exception area or non-resource land, including resource land that is completely surrounded by exception areas unless such resource land is high-value farmland

Third Priority Land: land designated as marginal land in the Lane County Rural Comprehensive Plan

Fourth Priority Land: land designated in the Lane County Rural Comprehensive Plan or the Metro Plan for agriculture or forestry, or both.

Because these priority categories are based on comprehensive plan land use designations, the first map below, “Land Use Designations,” shows the designations of both the Metro Plan and the Lane County Rural Comprehensive Plan as they apply inside the study area. The base designations shown on this map are aggregated into priority categories, which are shown on the second map, “Priority Categories of Candidate Land.”

In Eugene’s park expansion study area, there are no lands designated as urban reserves (See ORS 197.298(1)(a), above) or as marginal land ((c), above); therefore there are no first priority or third priority lands included on the map or in the analysis that follows. Land within the study area that does not fall into any of the four priority categories is identified on the Priority Categories of Candidate Land map as “Other Lands.”

In addition to forming the basis for the priority category of candidate land, land use designations are referenced in the subsequent analysis to identify proximity of candidate land to incompatible uses (such as heavy industrial or airport), or desired uses (such as urban residential neighborhoods). These land use designations include those within the study area and those adjacent to the study area. For ease of reference, these designations are shown on the third map below, “Contextual Land Use Designations.”

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8 These lands include those designated for Sand and Gravel, Airport Reserve, and Parks and Open Space, as well as a small portion of a tax lot designated Government and Education for which an exception was not required to be taken.
City of Eugene Urban Growth Boundary Study
Park Land Evaluation - River Road/Santa Clara
Priority Categories of Candidate Land

Note: This map is based on imprecise source data, subject to change, and for general reference only.
c. **First Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

There is no land designated for urban reserves around Eugene. Therefore, there is no first priority land to consider for the proposed UGB expansion.

d. **Second Priority Land – Apply State’s Factors for Dismissal of Candidate Land**

The River Road/Santa Clara park expansion study area includes 392.3 acres of second priority land, shown on the “Second Priority Land within Study Area” map below. The majority of second priority land in the study area is designated either Rural Residential (if within the Metro Plan boundaries) or Residential (if within the Lane County Comprehensive Plan boundaries). The remaining second priority land includes three small areas designated Industrial (Lane County Comprehensive Plan), and one area designated Rural Industrial (Metro Plan).

The determination of the City’s need for an additional community park site to serve the River Road/Santa Clara park planning sub-area is discussed above under Section I, while Section II addresses the characteristics required to make a site suitable for a park expansion. These site characteristics fall into two categories: location-based and other site characteristics. Analysis of location-based site characteristics (below) is the first step in evaluating whether any of the second priority land in the study area has the characteristics necessary to make it suitable to accommodate the needed park facility.
(1) **Dismiss Candidate Land without Needed “Location-based” Site Characteristics**

*Location-based Site Characteristics:*
- **Distribution.**
  - North of Randy Papé Beltline
- **Adjacency to urban residential neighborhoods.**
  - Adjacent to an existing or planned urban residential neighborhood

The map below, Second Priority Land: Location-based Site Characteristics, is a visual representation of the analysis that follows.
Distribution
- **Dismissal of Land South of Randy Papé Beltline**

  No second priority land within the study area is south of Randy Papé Beltline. Therefore no second priority land is dismissed on this basis.

Adjacency to urban residential neighborhoods
- **Dismissal of Land that is not Adjacent to an Existing or Planned Urban Residential Neighborhood**

  Of the seven general areas of second priority land, five are distant from urban residential neighborhoods. In the far northwest, a 3.7-acre area is located near the edge of the study area. Three additional areas of second priority land (from west to east, a 52.9-acre area, a 36.5-acre area, and a 17.3-acre area) are adjacent to or near the current UGB around Awbrey Lane and Prairie Road. A fifth area of second priority (19.3 acres) in the far eastern portion of the study area is also distant from the current UGB. All five of these areas (totaling 129.7 acres) are not adjacent to existing or planned urban residential neighborhoods, and are therefore dismissed from further consideration.

Summary of Location-based Site Characteristics

After dismissing candidate land without appropriate location-based site characteristics, two areas totaling 254.8 acres (637% of the minimum needed 40 acres) of second priority land remains for further evaluation.

(2) **Dismiss Candidate Land without Needed “Other” Site Characteristics**

The next step is to evaluate the remaining second priority land in terms of the other needed site characteristics.

**Other Site Characteristics:**
- **Size.**
  - Minimum size of 40 acres, either independently or in association with a collocated school facility
- **Accessibility.**
  - Located on existing or planned collector or arterial street
- **Geographic Attributes.**
  - Owned or available to be owned by the City for purposes of park development
  - Adjacent to an existing or planned school facility
  - Presence of substantial natural features

The map below, “Second Priority Land: Other Site Characteristics,” is a visual representation of the analysis that follows. Due to the large number of tax lots and the diversity of ownership (53 distinct property owners of different parcels of remaining second priority land), individual sites are not distinguished by label at this phase of the analysis.
Size

- **Dismissal of Sites with Fewer than 40 Acres**

The remaining second priority land is highly parcelized. Based on tax lot ownership, the remaining tax lots form fifty-three (53) sites, none of which are of sufficient size, either independently or in association with a school facility, for a community park. Because these small sites of second priority land could be combined with lower priority land that has yet to be evaluated, sites that meet the remaining other site characteristics will be reconsidered as part of the parks expansion with fourth priority land. In light of this possibility, no second priority land is dismissed on this basis.
Accessibility

- **Dismissal of Land that is not Accessible by an Existing or Planned Arterial or Collector Street**

The two “existing or planned arterial or collector streets” (identified on the map as “major streets”) adjacent to the two areas of remaining candidate land are: River Loop 2 (until it changes classification at the edge of the current UGB) and Beacon Drive (until it changes classification at its intersection with Scenic Drive). Both are existing neighborhood collectors. All of the second priority land that is not accessible from Beacon Drive east of Scenic Drive (29.2 acres), or is not accessible from River Loop 2 east of the western edge of the current UGB (110.9 acres), is therefore dismissed from further consideration.

Geographic Attributes

- **Dismissal of Land Lacking Sufficient Attributes Necessary for Park Development: Availability for City Ownership for Purposes of Park Development, Adjacency to a Planned or Existing School Site, and Presence of Substantial Natural Features**

Of the remaining second priority land, none of the sites north of Beacon Drive are available for City ownership, nor adjacent to a planned or existing school site. Additionally, none of the sites possess substantial natural features. Given this absence of any of the geographic attributes necessary for park development, this 89.7 acre area is dismissed from further consideration.

Two second priority sites are accessible from River Loop 2. The smaller of the two sites is located on the north side of River Loop 2. It is a single 3.0 acre tax lot that is not available for City ownership, and is not adjacent to a planned or existing school site. It is crossed by a tributary of the East Santa Clara Waterway, an identified Goal 5 resource, and stream that was noted as being of particular interest with regard to park acquisition.\(^9\) While this natural feature is one geographic attribute that potentially lends itself to park development, this site lacks both the essential characteristic of availability for City ownership and adjacency to a school, and is therefore dismissed from further consideration. The second site is composed of four tax lots, totaling 20.4 acres, located on the south side of River Loop 2. In response to the need for a community park in this area, and this being the most fitting site, the City of Eugene has pursued and successfully purchased this site. This site is adjacent to Madison Middle school, and the East Santa Clara Waterway runs along its western edge. Other than being short of the 40-acre minimum (even in association with the adjacent school), this site meets all identified site characteristics and is highly desirable for park development. This area of second priority land will therefore be reconsidered as part of the park expansion in association with adjacent fourth priority land.

**Summary**

The four tax lots just north of Madison Middle School create the only second priority site that meets the site characteristics (other than size) for a community park. Although it does not meet

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\(^9\) The identification of the East Santa Clara Waterway as a desirable natural feature in a community park was made in a work session with the Eugene City Council on November 27, 2006.
the size criterion, it is worthy of consideration in conjunction with lower priority land, and is reconsidered in that context below.

(2) Conclusion for Second Priority Land within the River Road/Santa Clara Community Park Expansion Study Area

After dismissing candidate land without appropriate site characteristics, 18.9 acres of second priority land has the potential to meet the required site characteristics for the park expansion if and only if it is considered in conjunction with school land currently within the urban growth boundary and additional, adjacent lower priority land. If adjacent fourth priority land meets the needed site characteristics for a community park, such an aggregated site would allow the City to expand on some of this higher priority land, minimizing expansion on lower priority land.

e. Third Priority Land – Apply State’s Factors for Dismissal of Candidate Land

There is no land designated as marginal land within the study area. Therefore, there is no third priority land to consider for the proposed park expansion.

f. Fourth Priority Land – Apply State’s Factors for Dismissal of Candidate Land

The park expansion study area includes 1,930.1 acres of fourth priority land, shown on the Fourth Priority Land within Study Area map below. All fourth priority land in the study area is designated Agriculture.

The determination of the City’s need for an additional community park site to serve the River Road/Santa Clara parks planning sub-area is discussed above under Section I, while Section II addresses the characteristics required to make a site suitable for a parks expansion. These site characteristics fall into two categories: location-based and other site characteristics. Analysis of location-based site characteristics (below) is the first step in evaluating whether any of the fourth priority land in the study area has the characteristics necessary to make it suitable to accommodate the needed park facility.
(1) Dismiss Candidate Land without Needed “Location-based” Site Characteristics

*Location-based Site Characteristics:*
- **Distribution.**
  - North of Randy Papé Beltline
- **Adjacency to urban residential neighborhoods.**
  - Adjacent to an existing or planned urban residential neighborhood

The map below, “Fourth Priority Land: Location-based Site Characteristics,” is a visual representation of the analysis that follows.
Distribution

- **Dismissal of Land South of Randy Papé Beltline**

  No second priority land within the study area is south of Randy Papé Beltline. Therefore no fourth priority land is dismissed on this basis.

Adjacency to urban residential neighborhoods

- **Dismissal of Land that is not Adjacent to an Existing or Planned Urban Residential Neighborhood**

  1,464.5 acres of fourth priority candidate land are located on tax lots that are not adjacent to existing or planned urban residential neighborhoods, and are dismissed from further consideration.

Summary

After dismissing candidate land without appropriate location-based site characteristics, 501.9 acres (1,255% of the minimum needed 40 acres) of fourth priority land remains for further evaluation. This land is located in three general regions of the study area and is divided into twenty-five (25) tax lots. Based on ownership, these tax lots form sixteen (16) potential park sites. In addition to this fourth priority land, the 39.3 acres of second priority land that were identified above are reconsidered in association with adjacent fourth priority land.

(2) **Dismiss Candidate Land without Other Needed Site Characteristics**

The next step is to evaluate the remaining fourth priority land in terms of the other needed site characteristics.

*Other Site Characteristics:*

- **Size.**
  - Minimum size of 40 acres, either independently or in association with a collocated school facility
- **Accessibility.**
  - Located on existing or planned collector or arterial street
- **Geographic Attributes.**
  - Owned or available to be owned by the City for purposes of park development
  - Adjacent to an existing or planned school facility
  - Presence of substantial natural features

The map below, “Fourth Priority Land: Other Site Characteristics,” is a visual representation of the analysis that follows. Due to the large number and small size of many of the sixteen (16) total sites, only those five (5) that meet the size and accessibility characteristics are labeled on the map below (P4.1, P4.2, P4.3, P4.4, and P4.5).
Size

- **Dismissal of Sites with Fewer than 40 Acres**

Of the sixteen (16) remaining sites by ownership, twelve (12) are of fewer than 40 acres. One of these sites (P4.4) is adjacent to Madison Middle School and the second priority land that remains under consideration, making that site of sufficient size.\(^\text{10}\) In all, 11 sites are dismissed from further consideration based on insufficient size.

The western portion of the study area contains seven total sites, of which four sites are of fewer than 40 acres, each made up of a small tax lot under individual ownership. The largest of these is 3.3 acres. Those four sites are, therefore, dismissed from further consideration.

All four (4) sites in the northeastern portion of the study area are also fewer than 40 acres. One of those sites is two tax lots totaling 39.2 acres under common ownership, which in addition to being under 40 acres, is also divided by Beacon Road. The other three sites in this portion of the study area are tax lots under individual ownership, the largest of which is 14.6 acres. These sites are therefore dismissed from further consideration.

The southeastern portion of the study area contains five total sites, including the site (P4.4) noted above as meeting the size criteria when considered in conjunction with Madison Middle School and the second priority land remaining under consideration. Three sites in this area are dismissed for insufficient size, the largest of which is composed of two tax lots totaling 28.1 acres under common ownership. Due to insufficient size, the three sites in the southeastern portion of the study area are dismissed from further consideration.

Accessibility

- **Dismissal of Land that is not Accessible by an Existing or Planned Arterial or Collector Street**

Each of the remaining five sites is accessible by an arterial or collector street, or two in some cases. Site “P4.1” is accessible via Irvington Drive, a minor arterial, and Lancaster Drive, a neighborhood collector. Sites “P4.2” and “P4.3” are accessible via Beacon Drive, a neighborhood collector. Site “P4.3” is also accessible via River Road, a minor arterial at that point. Site “P4.4” is directly accessible via Wilkes Drive, a major collector, and in conjunction with the second priority land that remains under consideration and Madison Middle School, via River Loop 2, a neighborhood collector. Site “P4.5” is accessible on its southern border via Hunsaker Lane, a major collector. None of the remaining sites are dismissed for insufficient accessibility.

Geographic Attributes

- **Dismissal of Land Lacking Sufficient Attributes Necessary for Park Development: Availability for City Ownership for Purposes of Park Development, Adjacency to a Planned or Existing School Site, and Presence of Substantial Natural Features**

\(^{10}\) See “Conclusion for Second Priority Land within the River Road/Santa Clara Community Park Expansion Study Area,” above.
In anticipation of the need for a community park to serve this neighborhood, the City has made efforts to purchase land in the appropriate area for several years. The western portion of the study area includes Site “P4.1” (191.0 acres), “P4.2” (50.8 acres), and “P4.3” (41.8 acres), which are privately owned tax lots that have been unavailable for City ownership, are not adjacent to a planned or existing school facility, and lack noteworthy natural features. These sites lack sufficient geographic attributes for park development, and are dismissed from further consideration.

Site “P4.4” (16.3 acres of fourth priority land combined with the 18.9 acres of second priority identified above) is especially well suited for future park siting due to its geographic attributes. As such, the City pursued and successfully purchased this site, which is adjacent to Madison Middle School, and contains a branch of the East Santa Clara Waterway, a natural feature previously identified as being of particular interest with regard to park acquisition.

Site “P4.5” is composed of seven (7) tax lots totaling 71.2 acres that is owned by Delta Property Company. These tax lots are part of a larger property that includes a significant gravel mining operation, and is unavailable for City ownership. While this site a large water body that could serve as a substantial natural feature, its lack of adjacency to a school facility and unavailability for City ownership make it inappropriate for a park expansion at this time. Site “P4.5” is therefore dismissed from further consideration.

**Summary**

After dismissing candidate land without appropriate site characteristics, 16.3 acres of fourth priority land, in conjunction with Madison Middle School and 18.9 acres of second priority land identified above, meets all of the required site characteristics for the park expansion. This site has excellent accessibility via two collector streets, both of which run directly through an urban residential neighborhood to which the site is adjacent. The land is owned by the City and therefore available for development. It is also adjacent to an existing school facility, and an includes both the main channel and a branch of the East Santa Clara Waterway, a significant natural feature and Goal 5 protected resource in this neighborhood.
(3) Conclusion for Fourth Priority Land within River Road/Santa Clara Park Expansion Study Area

The second priority and the fourth priority land together create a 35.2 acre expansion that, in association with the adjacent Madison Middle School, meet the site requirements for a community park. The site is composed of five tax lots, as shown on the “Site Selected for Park Expansion” map. This expansion meets the land need for a new River Road/Santa Clara community park without the need for non-park land to be brought into the UGB in this area.

V. Conclusion – Land to be Added to Eugene’s UGB for Community Park Use

Based on the above findings and analysis, the City finds that the areas identified in the “Site Selected for Community Park Expansion” map for each park planning area are the most suitable sites for new community parks to serve the Bethel/Danebo park planning sub-area and the River Road/Santa Clara park planning sub-area.
Addendum to UGB Expansion Analysis for Employment Land

Through the City of Eugene UGB Expansion Analysis for Employment Land, the City evaluated the area around the current UGB to identify sites that could meet the City’s need for additional industrial land. The City’s need is for eleven (11) total sites, including:

- Two (2) industrial sites of 75 acres or larger
- Three (3) industrial sites of between 50 and 75 acres
- Two (2) industrial sites of between 20 and 50 acres
- Four (4) industrial sites of between 10 and 20 acres

The UGB Expansion Analysis for Employment Land concluded that sites of this size with the characteristics needed could best be accommodated in the Clear Lake area, between the current UGB and Eugene Airport. This area also includes land to meet the City’s need for additional school and park land. The tax lots in this area could be assembled in multiple combinations to meet the identified industrial need. Regardless of configuration, some sites of less than 10 acres in size, in addition to the identified need for 11 large sites, are necessarily included in the expansion area to avoid having islands of rural land inside the UGB.\(^1\) In addition, as noted in the Employment Land Supply Study, efficiency measures applied to address commercial land need and public uses on existing industrial land have created a small deficit (26 acres) of industrial sites under 10 acres. This deficit is accommodated by sites that must be brought into the UGB to meet the large lot industrial need.

After reaching the general conclusion of the UGB Expansion Analysis for Employment Land, the City of Eugene engaged in additional analysis and planning in order to preserve the ability of the Clear Lake expansion area to provide the needed portfolio of large industrial lots. This additional analysis examined future services and environmental considerations throughout the Clear Lake expansion area. This Addendum summarizes that analysis and provides a more detailed conclusion to preserve the Clear Lake area for development of the large lot portfolio.

**Initial Constraint Analysis**

In the UGB Expansion Analysis for Employment Land, land with the following constraints was dismissed as unsuitable for industrial development:

- Land that has a slope of 5 percent or greater
- Land within a Special Flood Hazard Areas (SFHA) (aka floodplain)
- Land subject to Statewide Planning Goal 5 protections
- Tax lots committed to a use or development that is not reasonably likely to be discontinued during the planning period, making industrial redevelopment highly unlikely during planning period

The map below, “Development Constraints within Industrial Expansion Area,” shows the extent of those constraints in the thirteen (13) large tax lots, and eleven (11) small tax lots filling in the spaces between (including one partial tax lot and one small tax lot identified for inclusion in the UGB through the UGB

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\(^1\) For a map of these small sites, see the “Contiguous Industrial Expansion Area” map in Section 2.g.5 of the UGB Expansion Analysis for Employment Land.
Expansion Analysis for Park Land). Only two tax lots include any slope in excess of 5%, which constrains only very small areas.

The Special Flood Hazard Area (commonly known as the floodplain or 100-year floodplain) crosses the expansion area in two places. The larger area crosses from Clear Lake Road northeast to the current UGB, bisecting two tax lots, and constraining the northern portion of a third. The smaller area bisects a single industrial tax lot south of Clear Lake Road, with more significant impact on the school and park expansion areas.

The third constraint is land subject to Statewide Planning Goal 5 protections. The areas shown as “land with Goal 5 protections” on the map below are identified by Lane County for Goal 5 protection, based solely on their inclusion on the National Wetlands Inventory.

In response to concerns that the area likely has additional wetlands that could complicate development of the area for industrial uses, the City of Eugene conducted a more detailed analysis of the wetlands in the Clear Lake expansion area. The City contracted with Pacific Habitat Services, Inc. (PHS) to conduct a thorough wetlands inventory of the area, including the school and park expansion areas, and to identify which of those wetlands are “significant.” The City of Eugene then contracted with Winterbrook Planning to prepare a “Goal 5 ESEE (Economic, Social, Environmental, and Energy) Analysis for Significant Wetlands and Riparian Corridors” (Winterbrook, 2016). This ESEE analysis formed the basis for shifting from Lane County’s Goal 5 protections to a Eugene-specific program (upon adoption of the UGB), discussed in more detail below.
The fourth constraint evaluated in the Industrial Expansion Study was for tax lots committed to a use or development that is not reasonably likely to be discontinued during the planning period, making industrial redevelopment highly unlikely during planning period. Two small tax lots in the expansion area are constrained by such uses, including an electric transmission right-of-way owned by the Bonneville Power Administration and a property owned by the Oregon Department of Transportation that contains large ponds.

**Updated Wetlands Inventory and Goal 5 ESEE Analysis**

As noted above, instead of continuing to rely on the National Wetlands Inventory, the City of Eugene conducted a new analysis of the wetlands in the Clear Lake expansion area. In preparing the local Goal 5 determination of the wetlands and riparian corridors in the expansion area, the City of Eugene relied on an inventory of wetlands and an assessment of the wetlands for their “significance” under Statewide Planning Goal 5, both produced by Pacific Habitat Services, Inc. entitled “City of Eugene Local Wetlands Inventory – Clear Lake Area UGB Expansion” (May 2014). These are shown on the map, “Wetlands Inventory within Industrial Expansion Area.” This served as a foundation for a Goal 5 ESEE analysis of the consequences of local Goal 5 programs for full protection, limited protection, and no local protection of the wetlands.²

² The “ESEE analysis” required by the State’s Goal 5 regulations is different from the “EEES analysis” required by Statewide Planning Goal 14.
These protection options also take into account that certain regulations and protections exist for wetlands beyond the local level. Both the Oregon Department of State Lands and national regulations play a role in determining whether a wetland can be filled, and if so, what mitigation may be required. Local protections of wetlands and other natural resources simply augment other regulations.

Those wetlands determined to be “significant” by Pacific Habitat Services, Inc. were identified as such based on their water quality or hydrological functions, not from fish and wildlife habitat values. In other regards, these wetlands are considerably degraded from agricultural activities in the area over the past several decades. Therefore, the ESEE analysis (to determine the appropriate level of Goal 5 protection for the significant wetlands) resulted in a decision to apply no local Goal 5 protections when the land is added to the Eugene UGB. Instead, wetlands in the area (regardless of local “significance”) will continue to be subject to State and federal wetland protections. Key water quality functions of specific wetlands will be protected through the City’s application of its /WQ water quality management overlay zone. The decision to apply no local Goal 5 protections to these degraded wetlands reflects the balance of the environmental and economic impacts of seeking industrial sites further from the UGB in order to protect relatively low-value wetlands in this area. The map “Updated Development Constraints within Industrial Expansion Area” reflects this more in-depth look and determination about Goal 5 protections, with updated development constraints, including the water quality management area. (The Water Quality Overlay
Zone does include some limitations on development, so the areas that will receive that overlay zone are added to the constraints map.

**Transportation Improvements**

In addition to these existing constraints to development, the City of Eugene has engaged in some preliminary planning for the types of transportation improvements that may be needed to better serve this new industrial area. One proposed transportation project would impact the buildable land in the Clear Lake large lot portfolio of industrial land. This project is an extension of Terry Street from its current terminus at the school expansion site north to the current UGB. The specific route for this extension is yet to be determined, and will be based on local planning efforts with residents and businesses in the area as development occurs. The extension will likely occur in phases, first connecting Terry Street to Clear Lake Road, then completing the connection at a later time. The map below, “Long-term Transportation Projects within Industrial Expansion Area” shows a possible path for the street extension.

**Large Lot Accommodation**

The impacts described above should be taken into account as the City identifies strategies for preserving this area to accommodate the 11 sites needed, in the various size categories listed above. The City refers to this as its “large lot industrial portfolio.” The impacted areas are shown together in the map “Large Industrial Lot Considerations.”
Development Constraints

- Slopes in Excess of 5% Grade
- Special Flood Hazard Area
- Constrained by Uses/Development
- Water Quality Management Area
- Proposed Transportation Project

Note: This map is based on imprecise source data, subject to change, and for general reference only.
Some of the tax lots in the Clear Lake expansion area are large enough to accommodate even the largest needed site (a site of more than 75 acres), while others would need to be assembled with another tax lot to achieve the needed size. As determined in Part II of the Employment Land Supply Study (the Economic Opportunities Analysis), the need to assemble tax lots adds to the cost and complexity of development, particularly when more than two tax lots need to be assembled. This complication can make an otherwise viable development infeasible. Taking this consideration into account, both the Industrial Expansion Study and this Addendum only consider sites that are composed of one or two tax lots.

The City of Eugene cannot require private property owners to buy, sell, or otherwise combine tax lots. With that limitation in mind, the full range of possible ways to accommodate the large lot portfolio in the Clear Lake expansion area is explored in this Addendum, acknowledging that market forces will have a significant impact on ultimate development decisions. City policy, code and programs will then implement strategies for the preservation of the land to accommodate the large lot portfolio in this expansion area, given the uncertainties. The following four maps show all possible locations for each needed size category of industrial sites, considering the location of the constraints discussed above. The fifth map is a composite of the first four maps.

Given the need to preserve large industrial sites, no tax lot is shown as a candidate for a size category smaller than its unconstrained area. For example, the northernmost tax lot is, by itself, larger than 75 acres. While this tax lot could be divided into smaller sites that also meet a portion of the large lot portfolio, doing so would prevent its use for the largest size category, which is the most difficult category to find. Therefore, this tax lot is only shown as a candidate on the 75+ acre sites map. Because of the tentative nature of the transportation corridor, options that cross potential routes are shown as possible options.
City of Eugene Urban Growth Boundary Study Addendum
Industrial Land Evaluation
Large Industrial Lot Considerations: 75+ Acre Sites

Note: This map is based on imprecise source data, subject to change, and for general reference only.
City of Eugene Urban Growth Boundary Study Addendum
Industrial Land Evaluation
Large Industrial Lot Considerations: 50-75 Acre Sites

Note: This map is based on imprecise source data, subject to change, and for general reference only.
Large Industrial Lot Considerations: 20-50 Acre Sites

- Large Industrial Lot Considerations: 20-50 Acre Sites

- Land Inside UGB
- Tax Lots
- Street Rights of Way
- Tax Lots Selected for School Expansion
- Tax Lots Selected for Park Expansion
- Tax Lots Selected for Industrial Expansion

**Development Constraints**
- Slopes in Excess of 5% Grade
- Special Flood Hazard Area
- Constrained by Uses/Development
- Water Quality Management Area
- Proposed Transportation Project

**Note:** This map is based on imprecise source data, subject to change, and for general reference only.
City of Eugene Urban Growth Boundary Study Addendum
Industrial Land Evaluation
Large Industrial Lot Considerations: 10-20 Acre Sites

Note: This map is based on imprecise source data, subject to change, and for general reference only.
City of Eugene Urban Growth Boundary Study Addendum
Industrial Land Evaluation
Large Industrial Lot Considerations: All Sites

- 75+ Acre Options
- 50-75 Acre Options
- 20-50 Acre Options
- 10-20 Acre Options

Development Constraints:
- Slopes in Excess of 5% Grade
- Special Flood Hazard Area
- Constrained by Uses/Development
- Water Quality Management Area
- Proposed Transportation Project

Note: This map is based on imprecise source data, subject to change, and for general reference only.
Conclusion

After further analysis, including conducting a local Goal 5 evaluation and long-range transportation planning for the Clear Lake expansion area, there are multiple possible site configurations to accommodate all needed industrial site sizes. In general, the northwest portion of the area must be preserved for the largest site sizes, while the eastern portion must be preserved for the smaller needed sites. Some tax lots have greater uncertainty than others, particularly those potentially impacted by the future extension of Terry Street. Additionally, while the decision to impose no local Goal 5 protections to the wetlands will allow for filling of some wetlands due to their degraded nature, both the cost of filling wetlands and the requirements of state and federal agencies (which are unknown until a specific development is proposed) may impact the full utilization of the tax lots in this area.3

Through a new overlay zone for the Clear Lake expansion area (the /CL Clear Lake Overlay Zone), the land will be preserved to accommodate the large lot industrial portfolio, consistent with the possible configurations set out in this Addendum.

3 For more information about the potential impact of state and national wetland requirements in this area, see Appendix A to the Clear Lake UGB Expansion Area ESEE Analysis.
Summary of Methodology to Refine the Eugene Urban Growth Boundary Location

Purpose

To establish a tax lot-specific map of the City of Eugene Urban Growth Boundary, in accordance with OAR 660-024-0020(2).

Background

1. The Eugene-Springfield Metropolitan Urban Growth Boundary (UGB) was originally acknowledged by the Land Conservation and Development Commission on August 19, 1982.
2. Subsequently, the Eugene-Springfield Metropolitan Urban Growth Boundary was amended twice on the City of Eugene side (west of I-5). The most current map that depicts the City of Eugene’s portion of the Metropolitan UGB was adopted by Eugene City Council on April 21, 2004, by Ordinance No. 20319.
3. The methodology used to determine the location of the acknowledged Metropolitan UGB is based on the adopted policies and text contained in the Eugene-Springfield Metropolitan Area General Plan (Metro Plan).
4. The acknowledged Metropolitan UGB is only tax lot-specific where it:
   a. Is coterminous with city limits;
   b. Has been determined through the annexation process; or
   c. Falls on the outside edge of existing or planned rights-of-way.
5. Where it is not tax lot-specific, the Metropolitan UGB is approximately 200 feet wide (based on the scale on the adopted map) and is determined on a case-by-case basis through interpretation of the Metro Plan Plan Boundaries Map and associated factors identified in Chapter II of the Metro Plan.
6. As a result of the adoption of ORS 197.304, the City of Eugene is required to establish a UGB separate from the City of Springfield, consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan.
7. The Eugene Urban Growth Boundary Location Map on the attached compact disc (Exhibit B-2 to the Ordinance), is the City’s official adopted Eugene Urban Growth Boundary Location Map. The depiction of the Eugene Urban Growth Boundary included in the Envision Eugene Comprehensive Plan (Chapter 11 Eugene Urban Growth Boundary) is a representative depiction of the UGB location shown on Exhibit B-2 to the Ordinance, and should be referenced only for illustrative purposes.
Legal Standard

OAR 660-024-0020(2): “The UGB and amendments to the UGB must be shown on the city and county plan and zone maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. Where a UGB does not follow lot or parcel lines, the map must provide sufficient information to determine the precise UGB location.”

Methodology

1. The methodology to determine the precise location of the Eugene UGB is based on the methodology to determine the Eugene-Springfield Metropolitan Urban Growth Boundary.
2. For areas of the Eugene UGB where the Metro Plan methodology provided room for interpretation, Eugene adapted the methodology used by the City of Springfield to establish a Springfield-specific UGB.
3. The Eugene UGB is tax lot-specific where it:
   a. Is coterminous with city limits;
   b. Has been determined through the annexation process; or
   c. Falls on the outside edge of existing or planned rights-of-way
4. With the exception of I-5, the UGB shall lie along the outside edge of existing and planned rights-of-way that form a portion of the UGB so that the full right-of-way is within the UGB.
5. The location of the UGB in relation to the I-5 corridor is based on the “Jurisdictional Responsibility” section in Chapter II of the Metro Plan, which identifies the area within the UGB on the west side of I-5 as Eugene.
   a. General Description. Generally, the Eugene UGB follows the centerline of I-5. The southbound lane (west side of I-5) is inside the Eugene UGB.
   b. Northern Terminus. The Eugene UGB terminates at a point where of the northern outside edge of the Game Farm Road right-of-way and the centerline of the I-5 right-of-way intersect.
   c. Southern Terminus. The Eugene UGB terminates at a point created by extending a line from the easterly corner of tax lot 1803034001001 (as of July 31, 2015) to the east until it intersects with the centerline of the I-5 right-of-way.
   d. Specific Description. The City obtained a surveyor’s description of the UGB along I-5.
6. Where the Metropolitan UGB is not clearly coterminous with city limits, has not been determined through the annexation process, does not falls on the outside edge of existing or planned rights-of-way or does not follow the centerline of I-5, the following
factors from Chapter II the Metro Plan were used to determine the precise location of the Eugene UGB:
   a. Protection of Agricultural Lands
   b. Protection of Forest Lands
   c. Ridgeline (Drainage Basin)
   d. Orderly and Economic Public Services
   e. Floodway Fringe
   f. Protection of Wetlands
   g. Protection of Sand and Gravel Resources
   h. Airport Protection
   i. Existing Development and Services (City Limits)
   j. Meet Economic Goals
   k. Meet Housing Goals

7. The above factors were applied to 29 areas around the UGB where the tax-lot specific location was unclear, including where the UGB crosses tax lots. These determinations, which are described below, are based on the tax lot boundaries and city limits as of July 31, 2015. In the event of conflict between these descriptions and the adopted map, the map is the prevailing representation. Tax lot line, right-of-way adjustments, or city limit expansions after this date will not result in an automatic corresponding adjustment to the UGB. See detail maps and supporting documentation, included in this methodology document.

8. In order to provide advance notice to property owners of tax lots in these 29 areas, 22 letters were sent to property owners (some addressing multiple lots) whose tax lots appeared to have an ambiguous relationship to the UGB in previous representations of the UGB.

Tax Lot-Specific Determinations

1. **Highway 99 Area.** The Eugene UGB follows the western edge of the Highway 99 right-of-way until a point 517 feet south of the northeast corner of tax lot 16-04-32-20-00100. At that point, the Eugene UGB crosses Highway 99 and continues east across tax lots 16-04-32-00-00300 and 16-04-32-00-00200 until it intersects with the eastern boundary of tax lot 16-04-32-00-00200 at an unnamed private road, and continues south along the tax lot boundary.

2. **Beacon Drive Area.** The Eugene UGB follows the southern boundary of tax lot 16-04-35-44-00100 until it intersects with Beacon Drive. At that point it crosses the Beacon Drive right-of-way perpendicularly, and continues southward along the eastern edge of the right-of-way until it is directly across from the westernmost intersection of the
right-of-way and tax lot 17-04-01-22-04100. At that point, it re-crosses the Beacon Drive right-of-way to follow the northern and western boundaries of tax lot 17-04-01-22-04100 (see East Santa Clara Waterway Area below).

3. **East Santa Clara Waterway Area.** The Eugene UGB is coterminous with the western boundary of tax lot 17-04-01-22-04100 and the northern boundary of tax lot 17-04-01-22-04100 to the west of the Beacon Drive right-of-way.

4. **River Loop 2 Area.** The location of the Eugene UGB as it crosses the southern portion of tax lot 17-04-01-00-08500 is parallel to the River Loop 2 right-of-way and aligns with the southern boundary of tax lot 17-04-01-31-00328.

5. **Echo Lane Area.** The Eugene UGB crosses Echo Lane and then turns south along the right-of-way’s eastern boundary until it turns eastward along the northern boundary of tax lot 17-04-12-31-00100.

6. **Division Avenue Area.** The Eugene UGB where it crosses tax lot 17-04-12-40-00800 is coterminous with the city limits.

7. **Beltline Area.** The Eugene UGB is coterminous with the city limits for the entire section where it crosses tax lot 17-03-18-00-00700, crosses into and northward within the Willamette River, and turns eastward to become coterminous with the northern boundary of tax lot 17-03-18-00-04400.

8. **North Delta Highway Area.** The Eugene UGB is coterminous with the northern boundaries of tax lots 17-03-18-00-00200 and 17-03-18-00-00102.

9. **North Willamette River Area.** The Eugene UGB as it crosses tax lot 17-03-07-00-00304 is coterminous with the city limits.

10. **Gilham Road Area.** The Eugene UGB crosses tax lot 17-03-08-00-00300 from the southeast corner of tax lot 17-03-08-22-01300 east until it intersects with the western boundary of lot 17-03-08-00-07500. From that point, it continues southward along the lot boundary for 637 feet before turning east parallel to Country Haven Drive and continuing for 350 feet. From that point, it turns south and continues until it intersects with the southern boundary of the tax lot.

11. **Lathen Way Area.** The location of the Eugene UGB follows the southern boundary of tax lot 17-03-08-00-07500 until it intersects with tax lot 17-03-08-00-00103. At that point, it continues south along the western boundaries of tax lots 17-03-08-00-00103 and 17-03-08-00-00100.

12. **County Farm Road Area.** The location of the Eugene UGB where it crosses tax lots 17-03-09-00-00800 and 17-03-09-00-00600 begins at a point 380 feet north of the point where the northern edge of the County Farm Road right-of-way and the western edge of the Wildish Lane right-of-way intersect and continues east until it reaches a point that is 320 feet north from the southwestern corner of tax lot 17-03-09-24-00600 where it abuts County Farm Road.
13. **Armitage Park Area.** The Eugene UGB crosses tax lot 17-03-09-00-00400 from a point 200 feet south of tax lot 17-03-09-00-00500 on the western boundary to a point 224 feet south of tax lot 17-03-09-00-00500 on the eastern boundary.

14. **North Game Farm Road Area.** The Eugene UGB follows the eastern edge of the North Game Farm Road right-of-way until it turns east at the northern boundary of the triangular tax lot 17-03-09-00-02806. At the point where it intersects with tax lot 17-03-09-00-03100, the Eugene UGB turns north along the western boundary of tax lots 17-03-09-00-03100 and 17-03-09-13-01000 until it intersects with and crosses the Coburg Road right-of-way.

15. **I-5/Rockcress Road Area.** The Eugene UGB follows the tax lot boundary between lots 18-03-03-40-01001 and 18-03-03-40-01000.

16. **Firland Boulevard Area.** The Eugene UGB crosses tax lot 18-03-09-30-10501 after it crosses Firland Boulevard and continues southeastward to the most northern corner of tax lot 18-03-09-33-07000.

17. **Spring Boulevard Area.** The location of the Eugene UGB where it crosses lots 18-03-16-10-02604, 18-03-16-24-00600, 18-03-16-24-00700, 18-03-16-24-00900, 18-03-16-30-00100, and 18-03-16-30-00200 is a fixed distance of 160 feet from the eastern edge of the Spring Boulevard right-of-way.

18. **Mt. Baldy Area.** The location of the Eugene UGB as it crosses tax lots 18-03-16-30-02500 and 18-03-16-30-04504 is a fixed distance of 250 feet from the city limits.

19. **Dillard Road Area.** The Eugene UGB follows the eastern edge of the Dillard Road right-of-way from the southern corner of tax lot 18-03-16-30-04504 until the southern boundary of tax lot 18-03-21-00-01400, where crosses Dillard Road, aligns with the tax lot boundary and becomes conterminous with the city limits again.

20. **South Fox Hollow Road Area.** The location of the Eugene UGB where it crosses tax lots 18-03-20-00-04208 and 18-03-20-00-04204 generally follows the ridgeline from the northeastern corner of lot 18-03-20-00-04208 to a point 413 feet south of the northern tax lot boundary, and 1,149 feet east of the western boundary. From that point the UGB generally follows the ridgeline to a point 718 feet south of the northern tax lot boundary of tax lot 18-03-20-00-04208, and 592 feet east of the western boundary. From that point the UGB crosses both lots to the western boundary of lot 18-03-20-00-04204, 735 feet south of the northern tax lot boundary of tax lot 18-03-20-00-04204.

21. **South Willamette Street Area.** The Eugene UGB follows the eastern and northern boundaries of tax lot 18-03-19-00-01103 before crossing South Willamette Street and turning north along the western edge of the right-of-way.
22. **Blanton Road Area.** The Eugene UGB crosses tax lot 18-04-13-11-01700 from the northwestern corner of tax lot 18-04-13-00-04500 to the southwestern corner of tax lot 18-04-13-11-00800.

23. **McNaul Drive Area.** The Eugene UGB is coterminous with the city limits along the eastern and northern boundaries of tax lot 18-04-11-00-00104.

24. **Winter Creek Drive Area.** The location of the Eugene UGB where it crosses tax lot 18-04-11-00-00201 follows the ridgeline from a point that is 80 feet south of the northeastern corner of the tax lot to a point 289 feet south of the northern boundary and 299 feet east of the western boundary. From that point, the UGB follows the ridgeline to a point 550 feet south of the northern boundary and 108 feet east of the western boundary. From that point, the UGB connects with the city limits on the western lot boundary at a point that is 635 feet south of the northwestern corner of the tax lot.

25. **Bailey Hill Road (East) Area.** The Eugene UGB crosses tax lot 18-04-10-00-00503 from the southeastern corner of tax lot 18-04-10-00-00500 to the northwestern corner of tax lot 18-04-10-00-00504. The Eugene UGB crosses tax lot 18-04-10-00-00502 from the southwestern corner of tax lot 18-04-10-00-00504 to the northwestern corner of tax lot 18-04-10-00-00505.

26. **Bailey Hill Road (West) Area.** The Eugene UGB follows the southern and western boundaries of tax lot 18-04-09-00-02800.

27. **Rathbone Road Area.** The Eugene UGB follows the southern boundary of tax lot 18-04-04-00-01309.

28. **Willow Creek/Gypsy Lane Area.** From the far southern point of tax lot 18-04-05-00-04700, the Eugene UGB follows the boundary between tax lot 18-04-05-00-04700 and tax lot 18-04-04-00-02300 northward and then eastward. At the point where the boundary between the tax lots turns north along Mt. Valvue Lane, the Eugene UGB crosses tax lot 18-04-04-00-02300 to the northwest corner of tax lot 18-04-04-00-01313. From that point, the Eugene UGB follows the western and southern boundaries of tax lot 18-04-04-00-01313 and the southern boundaries of tax lot 18-04-04-00-01300 and tax lot 18-04-04-00-01316. From the southeastern corner of tax lot 18-04-04-00-01316, the Eugene UGB crosses tax lot 18-04-04-00-02300 for a second time, continuing south 133 feet. From that point, the Eugene UGB turns east for 308 feet, at which point it intersects with the city limits, and continues to the south.

29. **Green Hill Road Area.** The Eugene UGB is coterminous with the city limits as it crosses tax lots 17-04-30-00-02100, 17-04-30-00-02202, 17-04-30-00-02600, 17-04-30-00-02400, and 17-05-00-00-00500.
Attachments

Maps - Detailed maps of areas with tax lots crossed by UGB

1. Highway 99 Area
2. Beacon Drive Area
3. East Santa Clara Waterway Area
4. River Loop 2 Area
5. Echo Lane Area
6. Division Avenue Area
7. Beltline Area
8. North Delta Highway Area
9. North Willamette River Area
10. Gilham Road Area
11. Lathen Way Area
12. County Farm Road Area
13. Armitage Park Area
14. North Game Farm Road Area
15. I-5/Rockcress Road Area
16. Firland Boulevard Area
17. Spring Boulevard Area
18. Mt. Baldy Area
19. Dillard Road Area
20. South Fox Hollow Road Area
21. South Willamette Street Area
22. Blanton Road Area
23. McNaul Drive Area
24. Winter Creek Drive Area
25. Bailey Hill Road (East) Area
26. Bailey Hill Road (West) Area
27. Rathbone Road Area
28. Willow Creek Road/Gypsy Lane Area
29. Green Hill Road Area
This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
UGB Detail Map 6 - Division Avenue Area

This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.

Legend:
- Refined UGB Line
- Taxlots
- Eugene City Limits

Eugene City Limits
Partial UGB Extent

Beltline Road
Division Avenue
This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
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This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
UGB Detail Map 23/24 - McNaul Drive and Wintercreek Drive Areas

Partial UGB Extent

Legend
- Refined UGB Line
- Taxlots
- Eugene City Limits

This map is shown at an imprecise scale. For the official, adopted UGB, see Appendix A of the Envision Eugene Comprehensive Plan.
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Information shown on the map is for planning purposes, represents the conditions that exist at the map date, and is subject to change. The location and extent of wetlands and other waters is approximate. There may be unmapped wetlands and other waters present that are subject to regulation. A current Oregon Department of State Lands-approved wetland delineation is required for state removal-fill permits. You are advised to contact the Department of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

EUGENE, OREGON - Clear Lake Subarea
Local Wetlands Inventory - Index Map

Legend:
- Clear Lake Study Area
- Matchline
- Taxlots
- Sample Plots (SP#)
- Streams
- Wetlands
- Locally Significant Wetlands
- Probable Wetlands
- Artificial Wetlands and Water Features
- Public Lands Survey System
- 6th Field HUC
Information shown on this map is for planning purposes, represents the conditions that exist at the map date, and is subject to change. The location and extent of wetlands and other waters is approximate. There may be unmapped wetlands and other waters present that are subject to regulation. A current Oregon Department of State Lands-approved wetland delineation is required for state removal-fill permits. You are advised to contact the Department of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

LEGEND

- Streams
- Clear Lake Study Area
- Matchline
- Taxlots
- Sample Plots (SP#)
- Locally Significant Wetlands
- Wetlands
- Probable Wetlands
- Artificial Wetlands and Water Features
- Public Lands Survey System
- 6th Field HUC
Information shown on this map is for planning purposes, represents the conditions that exist at the map date, and is subject to change. The location and extent of wetlands and other waters is approximate. There may be unmapped wetlands and other waters present that are subject to regulation. A current Oregon Department of State Lands-approved wetland delineation is required for state removal-fill permits. You are advised to contact the Department of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.
Eugene Local Wetlands Inventory:
Santa Clara and Maclay Subarea

- Sample Locations
- Taxlots
- Study Area Boundary
- PLSS
- Potential Wetlands

Date: 10/22/2014

Information shown on this map is for planning purposes, represents the conditions last seen at the map date, which is subject to change. The location and extent of wetlands, boundaries, and other features depicted are for planning purposes only. The information shown may be subject to change and is not intended to represent a legal description of the property. You are advised to contact the Oregon Department of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

EUGENE, OREGON - Santa Clara
Local Wetlands Inventory - FIGURE 2
Goal 5 ESEE Analysis for Significant Wetlands and Riparian Corridors

Winterbrook Planning prepared this analysis of the economic, social, environmental and energy consequences of three regulatory options for protecting significant wetlands and riparian corridors within the Clear Lake Road Urban Growth Boundary Expansion Area east of the Eugene Airport. The ESEE Analysis is required by Statewide Planning Goal 5 (Natural Resources) and serves as the basis for adoption of a locally tailored program to resolve conflicts between planned urban development and protection of significant resource sites. The Clear Lake Road UGB expansion area will provide large, suitable sites for an elementary and/or middle school, a community park, and future employment identified in the Eugene Economic Opportunities Analysis.
Figure 1 Planned Land Uses in the Clear Lake Urban Growth Boundary Expansion Area
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Commonly Used Acronyms

DSL  Oregon Department of State Lands
DLCD  Oregon Department of Land Conservation and Development
EOA  Economic Opportunities Analysis (in this case the *Eugene 2012 Economic Opportunities Analysis*, ECONorthwest)
ESEE  Goal 5 Economic, Social, Environmental and Energy Consequences Analysis (in this case, the *Clear Lake UGB Expansion Area ESEE Analysis*, Winterbrook Planning, 2016)
Goal 5  Statewide Planning Goal 5 (Natural, Scenic and Cultural Resources)
Goal 5 Rule  OAR 660, Division 023 (Procedures and Requirements for Complying with Goal 5)

Goal 5 Program Options (as used in this document):

- **Prohibit or Full Protection Program** means adopt local Goal 5 regulations that prohibit all uses that conflict with the full protection of significant water resources
- **Limit or Limited Protection Program** means adopt local Goal 5 regulations that limit conflicting uses for significant water resources (in Eugene’s case, the WR/ Water Resource Conservation Overlay District)
- **Allow or No Local Protection Program** means do not adopt Goal 5 regulations to protect significant water resources, but instead rely on the Eugene’s adopted Goal 6 (Water Quality) and Goal 7 (Floodplain Management) regulations, in combination voluntary programs and state and federal wetland regulations to conserve and enhance water quality and storage functions of wetlands and stream corridors.

Goal 6  Statewide Planning Goal 6 (Air, Land and Water Resources Quality)
Goal 7  Statewide Planning Goal 7 (Natural Hazards)
Goal 8  Statewide Planning Goal 8 (Parks and Recreation)
Goal 9  Statewide Planning Goal 9 (Economic Development)
Goal 14  Statewide Planning Goal 14 (Urbanization)
LCDC  Oregon Land Conservation and Development Commission
LSW  Locally Significant Wetlands (Wetlands determined by PHS to meet Department of State Lands criteria for determining local significance)
LWI  Local Wetland Inventory (in this case the *Clear Lake Local Wetlands Inventory*, PHS 2014 and referred to in this document as the *Clear Lake LWI*).
PHS  Pacific Habitat Services (the firm that prepared the *Clear Lake Local Wetlands Inventory*)
URIAG  Urban Riparian Inventory and Assessment Guide (a method for evaluating riparian corridors development by PHS for DSL)
UGB  Urban Growth Boundary (in this case, the Eugene UGB – which separates urban land that will eventually be annexed to the City from rural lands in Lane County)
USACE  United States Army Corps of Engineers
Introduction
This report includes an analysis of the ESEE (economic, social, environmental and energy) consequences of three potential programs for protecting significant wetlands and riparian corridors in the proposed Clear Lake Urban Growth Boundary Expansion Area (UGB Expansion Area) in Eugene. The ESEE Analysis has been prepared in accordance with applicable provisions of Statewide Planning Goal 5 (Goal 5) and the Goal 5 Rule (OAR Chapter 660, Division 023).

Why do an ESEE Analysis?
Statewide Planning Goal 5 and the Goal 5 Rule require that “significant” resource sites be “inventoried” and “protected”. According to the Goal 5 Rule, the ESEE analysis must:

- Serve as the basis for the local government decision to adopt local Goal 5 protection programs for significant resource sites;
- Be adopted as part of the comprehensive plan;
- Be consistent with applicable statewide planning goals;
- Identify uses and activities that conflict with resource protection; and
- Consider ESEE consequences of three Goal 5 regulatory options for each significant water resource site or groups of similar sites: (1) “prohibit” uses that conflict with Goal 5 resource sites; (2) “allow” conflicting uses or (3) “limit” conflicting uses.

Notably, Goal 5 does not require a specific outcome. Although Goal 5 on its face appears to require that natural resources be “protected”,1 Goal 5 and its implementing rule are more about going through a conflict-resolution process than actually protecting particular resource sites. The term “protection” is defined in the Goal 5 Rule (OAR 660-023-0010) as follows:

(7) “Protect,” when applied to an individual resource site, means to limit or prohibit uses that conflict with a significant resource site... When applied to a resource category, “protect” means to develop a program consistent with this division.

The Goal 5 Rule requires that the economic, social, environmental and energy consequences of these three regulatory options (or programs) be considered. In this ESEE analysis, the three Goal 5 regulatory options are interpreted as follows:

- “Prohibit” means prohibit all land uses that conflict with full protection of significant Goal 5 water resource sites by adopting and applying highly-restrictive local Goal 5 regulations.
- “Limit” means allow some conflicting uses on a limited basis by applying the Eugene WR/ Water Resources Conservation Overlay Zone to significant Goal 5 water resource sites.
- “Allow” means to allow conflicting uses fully – without applying Goal 5 regulations to protect significant water resource sites, but relying instead on existing Goal 6 Water Quality and Goal 7 Flood Hazard regulations combined with voluntary programs and state and federal wetland regulations to avoid, minimize and mitigate for development impacts. In this ESEE analysis, “allow” means “no Goal 5 protection” but recognizes that other local, state and federal regulations do, in fact, conserve many wetland water quality and flood storage functions and values.

1 Goal 5 reads as follows: To protect natural resources and conserve scenic and historic areas and open spaces.
However, an ESEE Analysis is not required when local governments apply Goal 6 (Water Quality) or Goal 7 (Flood Hazard) regulations to wetlands and stream corridors.

(6) "Program" or "program to achieve the goal" is a plan or course of proceedings and action either to prohibit, limit, or allow uses that conflict with significant Goal 5 resources, adopted as part of the comprehensive plan and land use regulations (e.g., zoning standards, easements, cluster developments, preferential assessments, or acquisition of land or development rights).

This ESEE Analysis supports the rigorous application of Eugene’s existing Goal 6 (water quality) and Goal 7 (flood management) regulations to ensure that existing wetlands and stream corridors function as “green infrastructure”. As documented below, wetlands and riparian corridors that are braided throughout the Clear Lake UGB Expansion Area are of relatively low quality. Full or limited Goal 5 protection of these water resources plus related conservation setback areas would make it extremely difficult to provide large, buildable sites for industrial development, schools and parks.

Eugene already has an array of local measures that mitigate impacts from run-off and flooding to wetlands and riparian corridors under Statewide Planning Goals 6 (Water Quality) and 7 (Natural Hazards). Moreover, Department of State Lands (DSL) and US Army Corps of Engineers (Corps) already provide limited protection to wetlands in the UGB Expansion Area – regardless of whether they are deemed “locally significant” and regulated by local land use regulations. Thus, in Eugene’s case, the “allow” option is really a “no additional Goal 5 protection” option – that relies on existing Goal 6 and 7 regulations in combination with state and federal wetland protection programs to ensure that water quality and storage values are protected.

Given Eugene’s values and planning context, the relevant question addressed in this ESEE Analysis is:

Do Eugene’s existing stormwater and flood management regulations – when combined with state and federal wetland rules – provide a reasonable level of protection for significant stream corridors and wetlands in the Clear Lake UGB Expansion Area?

The Eugene Planning Context

To be meaningful, any ESEE analysis needs to consider the local planning context. This ESEE analysis is conducted in the context of Eugene’s vision for its future and related growth management, natural resource and economic development planning efforts. We specifically consider the following important documents and studies in this iterative analysis.

Envision Eugene

In June 2012, the Eugene City Council reviewed and accepted Envision Eugene: A Community Vision for 2032. This document established the community vision for managing growth based on seven basic principles, or “pillars” – six of which are relevant to the Goal 5 ESEE analysis found in this report:

- Provide ample economic opportunities for all community members
- Promote compact urban development and efficient transportation options
- Protect, restore, and enhance natural resources
- Plan for climate change and energy resiliency
- Protect, repair, and enhance neighborhood livability
- Provide for adaptable, flexible and collaborative implementation

As part of the Envision Eugene process the City prepared an analysis of social justice issues related to the proposed Clear Lake Road UGB expansion (Environmental Justice Issue Briefing, Au and Harding, July 30, 2014).
**Eugene Economic Opportunities Analysis**

Over the last few years, *Envision Eugene* has helped to guide the preparation of the *Eugene Economic Opportunities Analysis* (EOA), which, among other things, identified commercial and industrial land needs and supply through 2032. The EOA determined that the Eugene UGB lacked sites with size and locational characteristics reasonably necessary to attract targeted employment opportunities. To meet employment needs for the next 20 years, Eugene should amend its UGB to include 11 large employment sites ranging from 10 to 75+ acres, with an estimated need of about 495 suitable acres.² Notably, significant wetlands and riparian corridors that are fully protected through the Goal 5 process are not considered “suitable” for commercial and industrial development.

**Plans for Community Park**

The City’s Parks, Recreation and Open Space Project and Priority Plan identifies the need for a new community park surrounding the Golden Garden ponds, and calls for developing the site as a community park with significant natural areas components and trails. The future park is also anticipated to be developed with athletic fields and courts and associated lighting and other active and passive recreational uses. The city’s website describes recent natural area enhancements.

*Golden Gardens is a natural area park. **Enhancements to the ponds for improved wildlife habitat and user safety were completed in 2009. With help from the Friends of Golden Gardens, Prairie Mountain School, Active Bethel Citizens and the entire Bethel community, several new features were added: a mile-long soft surface walking path around the ponds; natural, gently sloping pond edges that provide greater safety for park users and also benefit wildlife; additional native trees, shrubs, and grasses; improved wildlife habitat; emergency access roads and ramps to each pond.*

The community park site is shown in green on Figure 1 as “Parks and Open Space”.

**Bethel School District Facility Plan**

In 2012, *Envision Eugene* (p. 2-17) called for the expansion of the UGB by 80 acres to “encompass Bethel School District owned property (south of Clear Lake Road) to address projected enrollment.” Subsequently, the Bethel School District Long Range Facility Plan (2013) refined the need to 25 suitable acres, including the following discussion of its Terry Street site (pp. 28-29):

*Over the 2012 to 2032 period, the School District will need to have about 25 acres of the 78 acre site brought into the Eugene UGB to allow for development of an elementary, middle, or K-8 school. The new site will require land for the following uses: (1) a new school building, (2) transportation facilities, and (3) outdoor recreational facilities such as playgrounds and ball fields. **The School District selected the North Terry street site because when the full site was assembled it was large enough to co-locate at least two schools and possibly other facilities as needed.***

The Bethel School District site is shown in blue on Figure 1 as “Government and Education”.

**UBG Alternatives Analysis**

After identifying a need to add 11 large employment sites, or about 495 suitable employment acres to the UGB, the City applied Statewide Planning Goal 14 (Urbanization)³ location factors and ORS 197.298 Priorities for urban growth boundary expansion to determine where to expand the UGB. Except where special site needs are identified, the City is required to include parcelized “exception areas” before

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² The 495 acre number is the mid-point based on a range of site sizes identified in the EOA. At the low end of the range, a minimum of 380 suitable acres is required; at the high end of the range, approximately 605 suitable acres are required.

³ Goal 14 reads as follows: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.
bringing in farm land. Based on a thorough Goal 14 alternatives analysis, the City determined that the Clear Lake UGB Expansion Area best meets identified employment land needs.

As noted above, the Eugene EOA identifies specific site characteristics for targeted employment opportunities (notably large, flat sites with access to state-designated truck routes such as Highway 99W). These site characteristics are not found in highly parcelized exception areas; after evaluating alternatives, the City determined that sites with these characteristics are available in the proposed Clear Lake UGB Expansion Area.

**Figure 2** shows hydric soils in the UGB Expansion Area. Hydric soils often indicate the presence of wetlands. The known presence of extensive wetlands east of the Eugene Airport led to the City’s decision to prepare a local wetlands inventory (LWI).

![Figure 2 Hydric Soils in Clear Lake UGB Expansion Area](image)

**Figure 2 Hydric Soils in Clear Lake UGB Expansion Area**

In July 2014, Pacific Habitat Services (PHS) completed the *City of Eugene Local Wetlands Inventory for the Clear Lake Road UGB Expansion Area*. All these wetlands are of relatively low quality: they have been drained and actively farmed for many years.

As noted in the Clear Lake LWI, and as shown on **Figure 3**, wetlands are distributed throughout the UGB Expansion Area. However, “locally significant wetlands” (LSW) are found only in the southern two-thirds (Maps 2 and 3) of the study area.

The Goal 5 rule makes it clear that only LSW can be considered in the local ESEE analysis and only LSW may be protected by local Goal 5 regulations. However, Goal 6 and 7 protection may be applied to any water resource, regardless of Goal 5 “significance”.

*Clear Lake UGB Expansion Area ESEE Analysis* • Winterbrook Planning • December 8, 2016
Figure 3 Clear Lake Wetlands, Stream Corridors and Locally Significant Wetlands (LSW)
PHS determined that seven wetlands (covering 131 acres) marginally meet DSL criteria for “local significance.” Although all wetlands are protected by DSL and the United States Army Corps of Engineers (USACE); only LSW may be considered for local Goal 5 protection. The Clear Lake LWI also describes and maps the Amazon Channel (locally named A-2 to distinguish it from Amazon Creek) riparian corridor in the southern portion of the UGB Expansion Area. PHS calculated the width of the riparian corridor based on the potential cottonwood tree height of 120 feet; Winterbrook used this information to determine that there are about 12 acres of potential riparian corridor area. **Thus, the UGB Expansion Area includes approximately 143 significant resource (LSW and riparian corridor) acres.**

**Public Facilities and Transportation Projects**

As part of the *Envision Eugene* planning process, City staff prepared preliminary public facilities and transportation sketches and project lists for the Clear Lake Expansion Area. Transportation and public facilities projects necessary to serve the area include:

- Extend Terry Street north to serve industrial, park and school properties
- Extend Theona Drive westward to serve park and industrial properties
- Make additional local street connections as development necessitates
- Construct bicycle facilities along Clear Lake Road (multi-use path), Jesson Drive (shared use path along A-2 Channel), and through the community park (connecting to the Terry Street extension)
- Upgrade EWEB water line in Greenhill Road to at least 24 inches in diameter and construct additional water lines in street rights-of-way
- Construct wastewater collection facilities (Clear Lake Road and Terry Street) and pump station at topographic divide
- Utilize existing and construct new electrical facilities
- Utilize wetland system where feasible for storm water storage and treatment (*i.e.*, green infrastructure concept)

**Airport Master Plan**

*The Eugene Airport Master Plan Update* (2010) identifies potential conflicts between wildlife (especially birds) and airport operational safety (pp. 6-2 - 6-5).

*Wildlife-aircraft strikes have resulted in the loss of life, and billions of dollars in aircraft and property damage. Airports are often surrounded by open, undeveloped land intended to enhance safety and reduce noise impacts. These open areas can present potential hazards to aviation, especially if they attract wildlife. Constructed and natural areas, such as wetlands, detention/retention ponds, waste water treatment plants, and landfills, can provide ideal habitat for wildlife. These uses on and near airports can cause a hazard to safe air navigation, driving the need for proper land use planning.*

FAA guidelines recommend that wildlife attractors not be developed within 10,000 feet of the Eugene Airport. The Clear Lake Road UGB Expansion Area is entirely within this 10,000 foot radius.

*FAA AC 150/5200-33N, Hazardous Wildlife Attractant on or near Airports, recommends airports used by jet aircraft (as opposed to piston) have a 10,000 foot separation between current and new development of wildlife attractants such as water impoundments. * * * Similar projects should be considered regarding their proximity to the Airport, and their potential to attract wildlife.*

The Airport Master Plan includes a Runway Protection Zone (RPZ) that limits conflicting uses within its boundaries:

*One design standard is the Runway Protection Zone (RPZ). An RPZ is an area beyond each runway end that protects against incompatible objects and land uses. It is desirable to clear all objects from the RPZ, although some objects and land uses are permitted, provided they do not attract wildlife and do not interfere with navigational aids.*
Land uses specifically prohibited from the RPZ include fuel storage facilities, residences, and places of public assembly (churches, schools, hospitals, office buildings, shopping centers, or other uses with similar concentrations of people). The RPZ is designed with the intent to protect people and property on the ground.

Due to recognized conflicts between airport safety and creation of new wildlife habitat, the recommended Goal 5 program will provide that there be no net increase in wetland area as a result of proposed on-site mitigation.

Eugene Wetlands Mitigation Bank
Since the 1980s, the Eugene Wetlands Mitigation Bank has provided an effective alternative to on-site mitigation. Although the bank is nearing capacity the City is committed to working with employment land developers in the UGB Expansion Area to find alternative banking options. The Coyote Creek Mitigation Bank has been recognized by DSL as an excellent example of how wetland mitigation banking should work.

As noted on the City’s website http://www.eugene-or.gov/497/Wetland-Mitigation-Bank:

The Eugene Wetland Mitigation Bank (Bank) is a venture in which the City of Eugene Parks and Open Space Division undertakes projects that restore, create or enhance wetlands, and sells credits to interested parties to offset wetland impacts as a requirement of their approved Joint Fill-Removal Permit from the Department of State Lands (DSL) and U.S. Army Corps of Engineers. The Bank is the cornerstone of the nationally acclaimed West Eugene Wetlands Program. The first wetlands mitigation bank in the state, Eugene’s Bank has been providing exceptionally high-quality habitat restoration involving wet prairie, vernal pool, emergent, and riparian habitats for the Eugene-Springfield metro area and beyond since the early 1990s.

The Bank’s service area includes the City of Eugene’s Urban Growth boundary, but also extends from just north of Cottage Grove to west of Salem.

Eugene Stormwater Management Manual
In 2014, the City adopted revised stormwater management controls to address the link between urban development, which entails vegetation removal, excavation and creation of impervious surface areas) and stormwater quantity and quality. Wetlands (whether locally significant or not) play an important role
in stormwater retention and quality. Notably, these are the key functional attributes (as opposed to fish and wildlife habitat) of wetlands in the UGB Expansion Area. As noted in the Introduction to the Stormwater Management Manual:

* * * This Stormwater Management Manual was developed in order to implement the Stormwater Development Standards as outlined in Eugene Code 9.6791 through 9.6797. Stormwater management is a key element in maintaining and enhancing the City’s livability. There is a direct link between stormwater runoff and the City’s surface and ground water quality and quantity. As cities develop, impervious surfaces that are created increase the amount of runoff during rainfall events and prevent groundwater recharge. Stormwater runoff picks up pollutants from parking lots, roadways, and rooftops and transports them to streams, rivers, and groundwater. Without controls, these conditions cause eroded stream channels and increased levels of water pollution. Properly managing stormwater is vital to protecting our water resources for a great number of uses, including fish and wildlife habitat, recreation, and drinking water.

The Federal Clean Water Act of 1972 established a national commitment to restore and maintain the chemical, physical, and biological integrity of the nation's waters. * * * The City’s Stormwater Development Standards, as set forth in Eugene Code 9.6791 through 9.6797 and this Stormwater Management Manual, emphasize low-impact development practices, source control measures for certain land use and activities, and operations and maintenance practices designed to properly manage stormwater runoff and protect our water resources.

Revision of the Stormwater Management Manual is timely. The manual can now be used as the basis for preparation of an area-wide stormwater management plan prior to annexation of land within the UGB Expansion Area to the City. This plan will incorporate wetlands and the A-2 Channel into the “green infrastructure” that will help maintain the water quality and water storage functions of both significant and non-significant wetlands identified in the Clear Lake LWI.

The /WR Water Resource Conservation Overlay Zone
The /WR overlay zone has been applied to significant wetlands, riparian corridors and associated wildlife habitat within the existing Eugene UGB. The /WR overlay zone protects the resource site itself plus a conservation setback area: the setback for streams ranges from 0’ to 100’ depending on the nature of the stream; the setback for wetlands ranges from 0’ to 50’ depending on the quality of affected wetlands. (Eugene Land Use Code, Section 9.4920) Because the LSW and riparian corridors in the Clear Lake UGB Expansion Area are of relatively low quality, wetland and stream conservation setback areas would be at the lower end of the range.

Construction of new public facilities (including streets) may be permitted subject to a determination that that there is no reasonable alternative and strict mitigation standards. (LUC Section 9.4930(2) and (3)) However, “filling, grading and excavating” necessary for industrial, commercial and active park development projects is prohibited. (LUC, Section 9.4930(4)) Since industrial, commercial, school and active recreational uses (such as athletic fields) typically have large, flat footprints, the /WR prohibition would make it extremely difficult to meet the siting requirements for these uses. This issue is addressed in more detail in subsequent sections of this ESEE Analysis.

Land Need and Supply Considerations
The UGB Expansion Area includes 924 gross acres – 10 of which are in street rights-of-way and another five acres or so are developed. Overall, over a third of the UGB Expansion Area is constrained (276 acres) by a combination of wetlands, riparian corridors, floodplains and open water areas. The Bethel School District and the City of Eugene own about 300 acres which are planned for schools and parks. Planned public streets and facilities will consume another 15 acres or so.
The *Eugene Economic Opportunities Analysis (Eugene EOA)* identifies a need for 380-605 acres, with a mid-range estimate of 495 acres in 11 large parcels ranging in size from 10-75+\(^4\) acres.

Table 1 summarizes employment land supply characteristics in the UGB Expansion Area. The figures are rounded to the nearest acre. The area planned for employment covers 648 gross acres. However, wetlands (both locally significant and not) and floodplain constrain 213 acres – leaving 433 unconstrained acres. Constrained areas amount to almost one-third of the gross area planned for employment in the UGB Expansion Area. If land with wetlands and floodplains were considered unsuitable for employment uses, the City would be about 62 acres short of the 495-acre employment acreage target within the broader range described previously.

**Table 1. Employment Land Characteristics in the UGB Expansion Area**

<table>
<thead>
<tr>
<th>Gross Land Area</th>
<th>Significant Water Resources</th>
<th>Non-LSW Wetlands</th>
<th>Floodplain Acres (Outside Wetlands)</th>
<th>Subtotal Constrained</th>
<th>Unconstrained</th>
<th>Proposed New Streets</th>
</tr>
</thead>
<tbody>
<tr>
<td>648</td>
<td>114</td>
<td>82</td>
<td>18</td>
<td>213</td>
<td>435</td>
<td>10</td>
</tr>
</tbody>
</table>

Moreover, about 10 additional acres will be needed for access streets and public facilities within the proposed employment area, further reducing the effective land supply to about 425 acres. Of greater importance, wetlands and floodplains are braided throughout employment area, making it impossible to find large, unconstrained sites on existing tax lots in a developable configuration. The unavoidable conclusion is that some wetlands will need to be filled and removed to make room for the 11 large, suitable sites called for in the EOA.

**The Feasibility of Providing Large Employment Sites**

Winterbrook Planning worked with city staff to prepare a preliminary concept plan for the UGB Expansion Area to illustrate one way that wetlands could potentially be partially filled, removed and mitigated to make room for planned employment, park, school, transportation and public facility projects.

**Figure 8 Concept Plan: Large Employment Area Feasibility** (Section 2 under Goal 9 Economic Development, page 57) shows one way that 12 sites comprising about 490 acres (within the 380-605 acre range determined to be needed by the EOA) of large, developable sites could be created – provided that some wetlands are filled and removed consistent with state and federal regulations.\(^5\) The feasibility concept plan also identifies planned streets and public facilities, and appropriate areas for on-site wetland mitigation.

The non-binding concept plan shows how large-site Campus Industrial and Light-Medium Industrial needs can be met in the north-central portion of the UGB Expansion Area while protecting (or mitigating for the loss of) most of the locally significant and non-significant wetlands. The concept plan (shown and

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\(^4\) To determine the upper range of needed site acres Winterbrook assumed that the largest sites would be from 75-100 acres. In Table 1 of the Eugene EOA, ECONorthwest used 88 acres (the midpoint between 75 and 100) to reach its estimate of 495 total needed acres.

\(^5\) Recognizing that tax lots likely will be reconfigured through lot consolidation and property line adjustments during the 20-year planning period, the concept plan does not account for tax lot lines as they currently exist. In actuality, individual property owners will apply for future DSL/USACE wetland fill and removal permits for tax lots under their control, which will result in a somewhat different map of conserved wetlands and buildable area than shown in the concept plan.
discussed further under Goal 9 Economic Development) also shows how large developable areas for the following land uses potentially could be accommodated:

- Commercial service areas where Highway 99W intersects with Clear Lake Road and Airport Road;
- A school site with at least 25 developable acres on land owned by the Bethel School District in the southwest portion of the expansion area;
- Development of a community park; and
- Potential on-site wetland mitigation areas.  

The Basis for the Proposed No Local Protection and Limited Protection Program Options

One of the problems commonly faced by local governments in the ESEE process is determining the baseline from which to evaluate potential Goal 5 regulations. Since Eugene has adopted effective Goal 6 (water quality and storage) and Goal 7 (floodplain management) regulations, the “allow” option means relying on a combination of state, federal and local regulations to protect water quality and storage (Goal 6) and floodplain management (Goal 7) values provided by wetlands.

- **Full protection** would mean adoption of stringent local land use regulations that prohibit all conflicting uses and activities—ranging from trails near wetlands, public facility and street crossings over or under wetlands or riparian corridors, to industrial buildings constructed over wetlands. Full protection could result in no reasonable use of private property. In practice, we know of no local governments that have chosen to implement the full protection option.

- **Limited protection** would mean application of the /WR overlay zone to significant stream corridors and wetlands in addition to local Goal 6 and 7 regulations. This is the overlay zone that the City has applied to most significant riparian corridors and wetlands within the existing UGB and requires that the area within the boundaries of LSW, significant stream corridors and related conservation setback areas be protected from most types of urban development—including schools, active park and recreation facilities, and industrial development.

- In Eugene’s case, the **Allow** option means “no additional Goal 5 protection” and reliance on local water quality and flood management regulations in combination with state and federal wetland and floodplain regulations to mitigate for development impacts on significant water resource sites. In this sense, it is a misnomer to imply that the local protection is the only way to protect significant Goal 5 resources. The No Local Protection Program proposed by Eugene planning, engineering and parks and open space staff effectively balances conflicting local objectives (resource conservation vs. development) in the Clear Lake UGB Expansion Area, consistent with applicable statewide planning goals. As documented below, such a balanced approach can be implemented without applying the /WR overlay zone to LSW and the A1 riparian corridor. Overall, the No Local Protection Program is designed to implement and balance the six applicable “pillars” set forth in Envision Eugene by:

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6 Appendix A is a memorandum prepared by Anita Smyth, Certified Wetland Scientist, which provides the rationale for wetland potential fill and mitigation options. The memorandum was based on her understanding of state and federal regulations as they existed in 2016.

7 In the case of wetlands and riparian corridors, this includes fairly effective programs managed by the Oregon Departments of State Lands (DSL), Fish and Wildlife (ODFW) and Environmental Quality (DEQ), to the US Army Corps of Engineers (USACE), Environmental Protection Agency (EPA), Department of Fish and Wildlife (USDFW), and the Fisheries Division of the Oceanic and Atmospheric Administration (NOAA). While primary responsibility for review of wetland fill and removal permits rests with DSL and USACE, the other agencies listed above frequently comment on fill and removal permits.
• Providing ample economic opportunities for all community members by providing at least 11 large employment sites consistent with the Eugene EOA; while
• Promoting compact urban development and efficient transportation options by providing the minimum area necessary to meet and provide access to planned employment, school and park sites as documented in the UGB Alternatives Analysis; while to the extent practicable
• Protecting, restoring, and enhancing natural resources by (a) conserving most of the wetlands through the DSL and USACE review process and coordinating with DSL and USACE to mitigate for wetland functions and values lost through wetland fill and removal; (b) applying the Water Quality (WQ) overlay to the two major drainageways within the UGB Expansion Area; (c) maintaining opportunities for off-site wetland banking; (d) working with property owners and volunteer efforts to restore and enhance some of the wetland water quality and storage functions on-site; (e) relying on the environmental policies of the Parks and Open Space Comprehensive Plan to guide the Division of Parks and Open Space in future designs of the community park; and (f) incorporating wetlands, riparian corridors and floodplains into an area-wide stormwater management plan; while
• Planning for climate change and energy resiliency by providing employment, parks and schools adjacent to the existing UGB and near existing neighborhoods and planned transportation facilities, and maintaining floodwater capacity through stormwater master planning; while
• Protecting, repairing, and enhancing neighborhood livability by providing employment opportunities, a community park, and a school near the under-served Bethel neighborhood; while
• Providing for adaptable, flexible and collaborative implementation through effective master planning (for the Eugene Airport, the community park, and storm drainage based on ecosystem management principles); minimizing local regulatory obstacles and coordinating with state and federal agencies to accomplish the objectives outlined above; and by limiting the creation of new bird habitat areas that could adversely affect aviation safety near the Eugene Airport.

Thus, the proposed No Local Protection Program relies on a combination of wetland banking, interagency coordination and stormwater management planning to provide limited protection for most significant wetland and riparian corridor resources within the UGB Expansion Area. Due to the relatively low quality of wetlands in the UGB Expansion Area – and conflicts with airport operations and safety – city staff from several departments has concluded that it is inappropriate to encourage additional restoration of wildlife habitat near the Eugene Airport. Therefore, the focus of the No Local Protection Program is on protecting water quality and storage functions of wetlands and drainage channels – rather than protecting the area within existing boundaries of wetlands that have been significantly degraded as a result of farming practices.

Summary of Recommended No Local Protection Program based on the ESEE Analysis

The combination of low-quality interspersed wetlands, planned large-scale urban development and the Goal 14 requirement that urban land be used efficiently make it impractical to apply the WR/overlay to LSW and significant riparian corridors in the UGB Expansion Area. By explaining why substantial fill and removal within the UGB Expansion Area is necessary to meet large-site employment needs identified in the Eugene EOA, this ESEE analysis also provides support for future wetland fill and removal permit applications on individual properties that will be necessary to accommodate planned employment uses.
The recommended No Local Protection Program relies on the following adopted regulations to resolve conflicts between planned development and locally significant wetlands:

- Apply the /WQ Water Quality overlay to the two major stormwater conveyance channels in the UGB Expansion Area: first to the floodplain north of Clear Lake Road (referred to in this document as the “Clear Lake Channel”) which includes portions of W-5, W-6 and W-7 from the PHS report); and second to the A-2 Channel (referenced as CL-R-1 and CL-R-3 in the Clear Lake LWI). The /WQ Overlay zone is designed to implement Statewide Planning Goals 6 and 7 by improving stormwater water quality, storage capacity, and conveyance. The /WQ overlay also encourages wetland and riparian corridor restoration and enhancement as “green infrastructure” within an area-wide stormwater system.
- Require city approval of an area-wide stormwater master plan that incorporates ecosystem management (i.e., green infrastructure) principles, prior to annexation to the City.
- Coordinate with and rely on state and federal agencies (DSL and USACE) to implement the Clean Water Act by reviewing and providing limited wetland protection in this area.
- Support opportunities for on-site wetland mitigation (such as illustrated on Figure 8 Concept Plan: Large Employment Area Feasibility) and off-site mitigation through wetland banking supported by the City of Eugene.
- Retain the City’s requirement to notify DSL of proposal to develop on properties with known wetlands.
SECTION 1: REQUIRED STEPS IN THE GOAL 5 PROCESS

Goal 5 requires that wetlands and riparian corridors be inventoried, that their “significance” be determined, that conflicting uses be identified, that natural resource “impact areas” be described, and that a local program to “protect” (resolve development conflicts) each significant resource be adopted based on an analysis of economic, social, environmental and energy (ESEE) consequences. Before responding to the ESEE process requirements, the results of the Goal 5 inventory and significance determination are addressed.

Local Wetlands and Riparian Corridor Inventory and Significance Determination

The Goal 5 rule requires that the location, quality and quantity of wetlands and riparian corridors be inventoried and the “significance” of each resource site determined. PHS prepared the Goal 5 inventory for wetlands and riparian corridors in the Clear Lake Road UGB Expansion Area consistent with Goal 5 rule requirements. (See City of Eugene Local Wetland Inventory – Clear Lake Area UGB Expansion Area, Pacific Habitat Resources, May 2014).

As shown on Figure 3 Clear Lake Wetlands, Stream Corridors and Locally Significant Wetlands (LSW), the Clear Lake Road UGB Expansion Area has two types of natural resources: wetlands and riparian corridors. Figure 3 shows that wetlands are braided throughout the entire UGB Expansion Area. The location and approximate size of LSW (outlined in dark blue), non-significant wetlands (light blue), and streams (dotted blue lines) are shown within the UGB Expansion Area.

Table 4 from the Clear Lake LWI (p. 14) provides a summary of the quality (functions) and size of each of the 17 wetlands (totaling 218 acres) inventoried by PHS. As shown on Winterbrook Table 2 (Table 4 of the Clear Lake LWI), the wetlands in the UGB Expansion Area are of relatively low quality. PHS, in consultation with DSL, determined that over half (131 acres) of the 219 acres of wetlands are “locally-

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8 The Goal 5 rule (OAR 660-023-0040) summarizes the Goal 5 conflict resolution process as follows:

**ESEE Decision Process**

1. Local governments shall develop a program to achieve Goal 5 for all significant water resource sites based on an analysis of the economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use. This rule describes four steps to be followed in conducting an ESEE Analysis, as set out in detail in sections (2) through (5) of this rule. Local governments are not required to follow these steps sequentially, and some steps anticipate a return to a previous step. However, findings shall demonstrate that requirements under each of the steps have been met, regardless of the sequence followed by the local government. The ESEE Analysis need not be lengthy or complex, but should enable reviewers gain a clear understanding of the conflicts and the consequences to be expected. The steps in the standard ESEE process are as follows: (a) Identify conflicting uses; (b) Determine the impact area; (c) Analyze the ESEE consequences; and (d) Develop a program to achieve Goal 5.

9 For areas inside urban growth boundaries (UGBs) ***, local governments shall: (a) Conduct a local wetlands inventory (LWI) using the standards and procedures of OAR141-086-0110 through 141-086-0240 and adopt the LWI as part of the comprehensive plan or as a land use regulation; and (b) Determine which wetlands on the LWI are “significant wetlands” using the criteria adopted by the Division of State Lands (DSL) pursuant to ORS 197.279(3)(b) and adopt the list of significant wetlands as part of the comprehensive plan or as a land use regulation.

10 The Clear Lake UGB Expansion area also contains significant upland wildlife habitat on publicly owned land. While that resource is not addressed as part of this ESEE, it is addressed separately by the City as part of the UGB Adoption Package as it does not relate to wetland dependent wildlife species.
significant” based on Goal 5 rule criteria. Notably, the “significance” of these wetlands resulted from their water quality or hydrological functions – not from fish and wildlife habitat values.

### Table 2. PHS Functional Ranking of 17 Wetlands in the Clear Lake UGB Expansion Area

<table>
<thead>
<tr>
<th>Wetland Code</th>
<th>Wildlife Habitat</th>
<th>Fish Habitat*</th>
<th>Water Quality</th>
<th>Hydrologic Control</th>
<th>Education</th>
<th>Recreation</th>
<th>Size (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL-W-1</td>
<td>2</td>
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<td>2</td>
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<tr>
<td>CL-W-2</td>
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<td>NA</td>
<td>2</td>
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<td>3</td>
<td>3</td>
<td>25.03</td>
</tr>
<tr>
<td>CL-W-3</td>
<td>2</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>26.71</td>
</tr>
<tr>
<td>CL-W-4</td>
<td>2</td>
<td>NA</td>
<td>2</td>
<td>2</td>
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<td>3</td>
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<td>CL-W-5</td>
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<td>2</td>
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<td>1</td>
<td>3</td>
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<td>CL-W-6</td>
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<td>2</td>
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<td>CL-W-7</td>
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<td>2</td>
<td>2</td>
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<td>CL-W-8</td>
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<td>2</td>
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<td>CL-W-9</td>
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<td>2</td>
<td>3</td>
<td>3</td>
<td>2.58</td>
</tr>
</tbody>
</table>

*NA – designates that this function was not assessed for a particular wetland

PHS ranked seven of these wetlands as “locally significant” (acreage figures are rounded to the nearest 10th): W-3 (26.7 acres); W-5 (58.9 acres); W-8 (01.7 acres); W-14 (27.1 acres); W-15 (11.9 acres); W-16 (01.7 acres); and W-17 (02.6 acres) – for a total of 130.6 acres. [Note: For the remainder of this report, wetland references will drop the “CL” because all referenced wetlands are in the UGB Expansion Area.]

**Notably:**

- None of the 17 wetlands provides “diverse wildlife habitat” (all provide habitat for “some species”);
- Only one of the 17 wetlands provides fish habitat (W-5 provides “degraded fish habitat”);
- Seven11 of the 17 wetlands provide “intact water quality function”
- Only two of the 17 wetlands provide “intact hydrological control function” (the hydrological control function of the remaining 15 wetlands is degraded);
- None of the 17 wetlands provide educational or recreational opportunities – in part because of their relatively low quality.

---

11 W-10 shows a score of “1” meaning that water quality function is intact. However, the work sheet for C-W-10 shows a score of “2”. Figure 3, which is copied from the Clear Lake LWI, also shows C-W-10 as non-significant.
From the above, it is clear that even locally-significant wetlands (LSW) are of relatively low quality. Importantly, the significance of the seven LSW is based on water quality and (to a lesser extent) hydrological control functions— but not fish and wildlife habitat values.

PHS also prepared a riparian corridor inventory using the URIAG (Urban Riparian Inventory Assessment Guidelines) method developed for and approved by DSL. The A-2 Channel, located in the southern portion of UGB Expansion Area, is the only significant riparian corridor identified by PHS. The Eugene LWI (pp. 17-19) defines “riparian corridor” as follows:

A "riparian area" is defined as the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem. A "riparian corridor" is a Goal 5 resource that includes the water areas, fish habitat, adjacent riparian areas, and often wetlands, within the riparian boundary.

The A-2 Channel is the only significant riparian corridor in the UGB Expansion Area. This channel feeds into the ponds (barrow pits) that are the centerpiece of the community park. The channel is ranked “high” for its water quality function, with moderate to low wildlife habitat and flood management functions. PHS used URIAG (Urban Riparian Inventory and Assessment Guide) methods to determine the quantity, quality and location of this significant resource area.

PHS determined the width of the A-2 Channel riparian corridor based on the “potential tree height” of the tallest mature tree (in this case cottonwood) growing adjacent to the channel (120 feet). Winterbrook calculated the area of the riparian corridor by measuring 120 feet on either side of the channel centerline. The A-2 Channel riparian corridor (outside of the ponds) covers 22.3 acres. Most of the riparian corridor is within the 100-year floodplain.

**Impact Area Determination**

The Goal 5 Rule defines “impact area” as “a geographic area within which conflicting uses could adversely affect a significant Goal 5 resource.” (OAR 660-023-0010(3))

As shown on Figure 3 Clear Lake Wetlands, Stream Corridors and Locally Significant Wetlands (LSW), wetlands and floodplain areas are braided throughout the UGB Expansion Area and serve both water quality and hydrological control (flood mitigation) functions for surrounding upland areas. As noted in the 2014 LWI prepared by PHS, the entire UGB Expansion Area is located in the same “hydrological unit” (sub-watershed). LSW within this hydrological unit are interconnected and have been substantially modified over time:

Watersheds within the study area are defined by the boundaries of the 6th field hydrologic unit (HUC). As such, the entire study area is located with the Amazon Creek 6th field HUC. Hydrologic features within the study area include several agricultural drainages and ditches, the A-2 Channel of Amazon Creek, and five excavated ponds. Though the field drainages are ephemeral to intermittent, being driven by seasonal hydrology, the A-2 Channel is perennial.

The A-2 Channel is a tributary to Amazon Creek. The headwaters of Amazon Creek are located in the hills of east Eugene, flowing down from the slopes of Mt. Baldy and Spencer Butte. The A-2 Channel is not fed from these headwaters but is rather a collection of stormwater drainages and channels that flow from industrial and residential area south and east of the study area. The A-2 Channel flows into the main stem of Amazon Creek about two miles downstream from the Clear Lake area. Amazon Creek continues an additional 10 miles to the north before its confluence with the Long Tom River.

The excavated ponds, three in Golden Gardens Park, and two west of 99W, are all barrow pits where material was excavated for local roadway projects. Each maintains annual inundation and is presumed to be connected to a local groundwater source of hydrology because water levels in these features does not appear to fluctuate seasonally.
LSW and floodplains are found on land in all three of the major land use categories: schools, parks and employment sites. The proposed /WQ overlay will be applied to the major drainageways within identified floodplains that include wetlands. The required stormwater management plan will cover the entire UGB Expansion Area and will incorporate existing wetlands, riparian corridors and floodplains as green infrastructure – relying on these highly impacted (but originally natural) features as part of the solution to stormwater quality and quantity issues.

To the extent that wetlands are filled and removed through the DSL / USACE review process, on-site mitigation could occur anywhere within the UGB Expansion Area and is likely to occur within floodplain areas. For all of these reasons, Winterbrook recommends that the “impact area” for this ESEE analysis include the entire UGB Expansion Area.

**Description of Conflicting Uses**

Once the inventory has been completed and the significance of each “resource site” determined, the next step in the Goal 5 process is to identify conflicting uses and activities that typically are regulated by municipal zoning. The Goal 5 Rule (OAR 660-23-010) defines conflicting uses as follows:

(1) "Conflicting use" is a land use, or other activity reasonably and customarily subject to land use regulations, that could adversely affect a significant Goal 5 resource (except as provided in OAR 660-023-0180(1)(b)). Local governments are not required to regard agricultural practices as conflicting uses.

The Goal 5 Administrative Rule describes how conflicting uses are identified:

(2) Identify conflicting uses. Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site. The following shall also apply in the identification of conflicting uses: (a) If no uses conflict with a significant resource site, acknowledged policies and land use regulations may be considered sufficient to protect the resource site.

**Figure 1** shows the draft proposed plan designations and uses within the UGB Expansion Area. The primary land uses are employment (light-medium and campus industrial, office and limited commercial uses that require sites of 10-75+ acres according to the EOA); the community park (which may require large, flat sites for athletic fields, sports courts and parking areas); and a school property (which requires large, flat sites for school construction, associated play grounds and parking areas). Urban development (industrial, parks and schools, streets and public facilities) and activities (vegetation removal, grading, construction) may or may not be directly associated with a specific land use. For example, vegetation removal often occurs at the time of building construction, but may occur independently. This section identifies land uses and activities which are (a) likely to develop based on ownership, adopted plans and needs identified in the Eugene EOA; (b) allowed by the planned underlying zoning district; and (c) conflict with full protection of the seven LSW and the A-2 Channel Riparian Corridor in the UGB Expansion Area.

**Figure 5** on the following page shows proposed zoning to implement proposed plan designations.
Figure 5 Proposed UGB Expansion Area Zoning
Conflicting Employment Uses

Upon inclusion of the expansion area within the UGB and annexation to the City, the following employment plan designations and related zoning districts will be applied:

- **Campus Industrial** (implemented by the E-1 Campus Employment Zone)
- **Light Medium Industrial** (implemented by the I-2 Light-Medium Industrial Zone)

The implementing zones employment and industrial zones allow a wide variety of industrial and supporting office and retail/service uses. The C-1 zone, which will be applied to a portion of the UGB Expansion Area, allows small scale commercial uses. The E-1 zone allows more supporting retail/service uses, and requires more landscaping than the more intensive I-2 zone. Outdoor storage is more limited in the E-1 zone than in the I-2. (Eugene Land Use Code, Section 9.2400 E-1 – Campus Employment and Section 9.2410 – I-2 Light-Medium Industrial Zones)

The purpose of and range of uses found in the Campus Employment zone is described as follows:

**Purpose of E-1 Campus Employment Zone.** The purpose of the E-1 Campus Employment zone is to implement the Campus Industrial designation of the Metro Plan by providing large areas for a variety of light industrial and office-based scientific, medical, research and development, or other professional firms to locate in a campus-like setting. In general, this zone is designed for firms that will help achieve economic diversification objectives and that typically have a large number of employees per acre. The activities of such firms do not generate offensive external impacts and usually do not tolerate substantial noise, pollution, or vibration from surrounding uses. The “campus” setting is characterized by enhanced landscaping, pedestrian amenities, and unique architectural design. Provision is also made for small-scale complementary commercial uses that primarily serve employees in the area and are preferably part of a mixed-use development.

The purpose of and range of uses found in the Light-Medium Industrial zone is described as follows:

**Purpose of I-2 Light-Medium Industrial Zone.** The purpose of the I-2 Light-Medium Industrial zone is to implement the Light-Medium Industrial designation of the Metro Plan by providing areas to serve a wide variety of manufacturing and other industrial activities with controlled external impacts in locations designated for Light-Medium Industry in the Metro Plan. These types of industries are often involved in the secondary processing of materials into components, the assembly of components into finished products, transportation, communication and utilities, wholesaling, and warehousing. The external impact from these uses is generally less than Heavy Industrial, and transportation needs are often met by truck. Activities are generally located indoors, although there may be some outdoor storage. Supporting offices and small-scale commercial uses that serve employees in the immediate area are permitted.

Table 9.2450 in the Eugene City Code provides a detailed list of permitted and conditional uses in the E-1 and I-2 zones. Both zones permit financial services, government, information technology, and low-impact manufacturing and assembly, and office uses. Both zones allow a range of commercial, medical and professional services uses; however, the E-1 zone allows a broader range of such uses and has more demanding development standards.

The nature of conflicting employment uses in the Clear Lake UGB Expansion Area is refined by the /CL Clear Lake Overlay Zone, which requires that 11 large sites be retained for targeted employment development. The purpose of the draft /CL Overlay Zone (Section 9.4150) is described as follows:

**Purpose of /CL Clear Lake Overlay Zone.** The /CL Clear Lake Overlay Zone is intended to provide and protect the City’s large-lot industrial portfolio in the Clear Lake expansion area. A minimum of eleven large lots of various sizes (10-20, 20-50, 50-75, and greater than 75 acres) will be provided as a means to ensure future development fulfills the community’s desired outcomes for economic prosperity and increased employment opportunities, while addressing environmental justice concerns. The /CL Overlay implements supporting comprehensive plan policies that call for fairness and equity in achieving a healthy environment, vibrant community, and improved quality of life for surrounding neighborhoods. To this end, the /CL Overlay regulations identify certain uses that are restricted or prohibited. These prohibitions and restrictions are intended to avoid incompatibilities between odorous emissions or particulate discharges and nearby residences.
The need for large, flat developable sites changes the nature of wetland conflicts substantially. As documented in the Goal 9 (Economic Development) section of this report, it is much more difficult to avoid wetland impacts from employment uses that require large, contiguous development areas.

**Conflicting Park Uses**

Park uses also can conflict with full protection of significant resource sites in the community park. The Eugene (PL) Public Land Zone allow a wide range of park and recreation facilities, including recreational buildings and land-extensive athletic fields, sports courts and parking areas.

Envision Eugene staff notes describe potential uses at the community park site as follows:

> The City of Eugene Parks and Open Space Division envisions a large scale community park with active recreational facilities – athletic fields and courts, lighting, concessions, etc.

The City has not approved final plans for the community park.

**Conflicting School Uses**

The Bethel School District selected the North Terry street site because when the full site was assembled it was large enough to co-locate two schools and possibly other facilities as needed. Between 50 and 60 acres of developable land will be needed for these school uses. The Eugene Public Land (PL) Zone allows school facilities, including athletic fields and parking areas.

**Conflicting Transportation and Public Facilities Uses**

Public facilities also conflict with full protection of wetlands and riparian corridors. Transportation and public facilities projects necessary to serve the area include (at least) the following:

- Extend Terry Street north to serve industrial, park and school properties
- Extend Theona Drive westward to serve park and industrial properties
- Make additional local street connections as development necessitates
- Construct bicycle facilities along Clear Lake Road (multi-use path), Jesson Drive (shared use path along A-2 Channel), and through the community park (connecting to the Terry Street extension)
- Upgrade EWEB water lines, where appropriate, and construct additional water lines in street rights-of-way
- Construct wastewater collection facilities (Clear Lake Road and Terry Street) and pump station at topographic divide
- Utilize existing and construct new electrical facilities
- Utilize wetland system where feasible for storm water storage and treatment (*i.e.*, green infrastructure concept)

**Conflicting Airport Uses**

*The Eugene Airport Master Plan Update* (2010) identifies potential conflicts between wildlife (especially birds) and airport operational safety (pp. 6-2 - 6-5).

Wildlife-aircraft strikes have resulted in the loss of life, and billions of dollars in aircraft and property damage. Airports are often surrounded by open, undeveloped land intended to enhance safety and reduce noise impacts. These open areas can present potential hazards to aviation, especially if they attract wildlife. Constructed and natural areas, such as wetlands, detention/retention ponds, waste water treatment plants, and landfills, can provide ideal habitat for wildlife. These uses on and near airports can cause a hazard to safe air navigation, driving the need for proper land use planning.
FAA guidelines recommend that wildlife attractors not be developed within 10,000 feet of the Eugene Airport. The Airport Master Plan includes a Runway Protection Zone (RPZ) that limits conflicting uses within its boundaries:

*One design standard is the Runway Protection Zone (RPZ). An RPZ is an area beyond each runway end that protects against incompatible objects and land uses. It is desirable to clear all objects from the RPZ, although some objects and land uses are permitted, provided they do not attract wildlife and do not interfere with navigational aids.*

**Conflicting Use Matrix – by Water Resource Number**

Table 3 summarizes identified conflicting uses and activities for each significant resource site. The matrix shows broad categories of conflicting uses and activities as well as specific public facilities projects. Table 3 does not identify proposed overlay zones, including the /CL Clear Lake (that will apply to employment zones in the UGB Expansion Area) and /WQ Water Quality overlay zones (that will apply to conserved wetlands and riparian corridors in the UGB Expansion Area).

<table>
<thead>
<tr>
<th>LSW Resource Site Numbers</th>
<th>Employment Conflicts</th>
<th>Applicable Overlay Zone(s)</th>
<th>Public Facilities Conflicts</th>
<th>Parks or Schools Conflicts</th>
<th>Vegetation Removal, Grading, New Structures or Impervious Surfaces¹²</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-3</td>
<td>LM Industrial Airport</td>
<td>Sewer pump station</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>W-5</td>
<td>LM Industrial Airport</td>
<td>Terry St ext; Clear Lake Rd widening</td>
<td></td>
<td>No</td>
<td></td>
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<tr>
<td>W-8</td>
<td>LM Industrial Airport</td>
<td>Terry St ext; Clear Lake Rd widening</td>
<td></td>
<td>No</td>
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<tr>
<td>W-14</td>
<td>Campus Ind Airport</td>
<td>Terry St ext; Local access road; Clear Lake Rd widening</td>
<td></td>
<td>Park/School</td>
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<tr>
<td>W-15</td>
<td>Campus Ind Airport</td>
<td>Theona Dr ext; Clear Lake Rd widening</td>
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<td>W-16</td>
<td>Campus Ind Airport</td>
<td>Theona Dr ext; Clear Lake Rd widening</td>
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<td>Park</td>
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<td>W-17</td>
<td>Campus Ind Airport</td>
<td>Clear Lake Rd widening</td>
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<td>A-2 Channel Riparian Corridor</td>
<td>No</td>
<td>Airport</td>
<td>Terry St ext; Trail</td>
<td>Park/School</td>
<td></td>
</tr>
</tbody>
</table>

¹² OAR 660-023-0090(7) applies to riparian corridors (in this case the A-2 Channel) and provides a “safe harbor” when identifying conflicting activities:

(7) When following the standard ESEE process in OAR 660-023-0040 and 660-023-0050, a local government shall comply with Goal 5 if it identifies at least the following activities as conflicting uses in riparian corridors:

(a) The permanent alteration of the riparian corridor by placement of structures or impervious surfaces, except for:

(A) Water-dependent or water-related uses; and

(B) Replacement of existing structures with structures in the same location that do not disturb additional riparian surface area; and

(b) Removal of vegetation in the riparian area, except:

(A) As necessary for restoration activities, such as replacement of vegetation with native riparian species;

(B) As necessary for the development of water-related or water-dependent uses; and

(C) On lands designated for agricultural or forest use outside UGBs.
Table 4 shows conflicting use information in another format. It is organized by conflicting use category, identifies significant resource sites that fit within each category, and further describes conflicting uses allowed by zoning. This table also explains where conflicting uses are addressed in Section 2.

**Table 4. Summary of Conflicting Uses by Water Resource Site**

<table>
<thead>
<tr>
<th>Conflicting Use Categories</th>
<th>LSW / RC Sites</th>
<th>Conflicting Use Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (Development Impacts Addressed Under Goal 9, Economy)</td>
<td>W-3, W-5, W-8, W-14, W-15, W-17</td>
<td>The Light-Medium and Campus Industrial zones permit a wide range of industrial, retail, service and related uses. Most industrial and some commercial uses require single-story buildings with large areas devoted to on-site parking, resulting in substantial impervious surface areas, and high vegetation removal and site grading requirements. Other commercial and office uses may be developed in multi-story buildings to reduce the impacts upon surface areas.</td>
</tr>
<tr>
<td>Eugene Airport Impacts Addressed Under Goal 11, Public Facilities)</td>
<td>All</td>
<td>The Eugene Airport Master Plan strongly recommends against providing additional wildlife habitat (especially bird habitat) areas near the airport.</td>
</tr>
<tr>
<td>Public Facilities (Development Impacts Addressed Under Goal 11, Public Facilities)</td>
<td>All</td>
<td>Transportation, sanitary sewer, water and storm sewer facilities are necessary to serve primary conflicting use categories. Transportation facilities increase impervious surface area and sometimes must be routed through natural resources to achieve connectivity objectives. Other facilities, such as gravity flow sewer and storm detention facilities, benefit from location near or in natural drainageways, floodplains and wetlands.</td>
</tr>
<tr>
<td>Schools and Parks (Development Impacts Addressed Under Goal 8, Recreational Needs and Goal 11, Public Facilities)</td>
<td>W-14, W-16, A-2 Channel</td>
<td>Although schools and parks usually have large open space areas, school and recreational buildings and parking areas have impacts similar to industrial and commercial buildings. Active recreational activities (e.g., athletic fields and courts) typically require large development areas and grading, drainage, and removal of native plants. Even passive recreational activities may involve limited grading and vegetation removal for trails or observation areas.</td>
</tr>
</tbody>
</table>

**Administrative Rule Requirements for ESEE Analysis**

OAR 660-023-040(4) requires that cities and counties conduct an ESEE analysis to determine the consequences of three regulatory options: full resource protection (i.e., allow no conflicting development or land use activities), limited resource protection (application of the City’s /WR overlay zone), and no local resource protection (i.e., allow development within Goal 6, Goal 7, State and Federal restrictions).

4. **Analyze the ESEE consequences.** Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use.

The analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more sites that are within the same area or that are similarly situated and subject to the same zoning.

The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource.

The ESEE Analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5.

The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation.

Although the Goal 5 Rule says that the ESEE analysis need not be lengthy or complex, the Goal 5 Rule requires that this ESEE analysis analyze four (4) types of consequences (economic, social, environmental and energy), for three (3) decision options (full protection, no protection, and limited protection), for two
(2) categories of significant resources (Locally Significant Wetlands, and Significant Riparian Corridors), for five (5) categories of conflicting uses (employment, parks, schools, public facilities and transportation). This ESEE analysis must also be consistent with applicable Statewide Planning Goals, must consider public comments, and must explain why Eugene officials selected a specific level of protection program option for each.

**ESEE Approach**

Consistent with this section of the Goal 5 Rule, this analysis:

- Analyzes the ESEE consequences that could result from decisions to prohibit, allow or limit a conflicting use or activity;
- Addresses groups of similar conflicting uses for LSW and the A-2 Channel riparian corridor (A-2 Channel) within the UGB Expansion Area that will be subject to five plan designations and corresponding implementing zones in parentheses: Campus Industrial (E-1 Campus Employment Zone), Light-Medium Industrial (I-2 Light Medium Industrial Zone), Commercial (C-1 Neighborhood Commercial), Government and Education (PL Public Land Zone). These zones all allow permanent alteration of riparian corridors and wetlands through placement of new buildings and impervious surface areas, grading and vegetation removal in conjunction with permitted and conditional uses.
- Establishes a matrix of commonly occurring conflicting uses, applies the matrix to LSW and the A-2 Channel to facilitate the analysis.
- Considers all applicable statewide goals and any acknowledged plan requirements, including the requirements of Goal 5.

Section 2 is organized around the applicable Statewide Planning Goals for the expansion area and discusses the ESEE consequences of the three decision options in the context of these Goals.

- The *Environmental consequences* of prohibiting, allowing (no additional Goal 5 protection) and limiting (by applying the /WR overlay zone to significant water resources) conflicting uses and activities within the UGB Expansion Area are addressed under **Goal 5 (Natural Resources)**;

- The *Economic and Social consequences* of prohibiting, allowing and limiting conflicting uses and activities within the UGB Expansion Area are found under the relevant Statewide Planning Goal:
  - **Goal 8 (Recreation)** considers the economic and social consequences related to potential development of the community park;
  - **Goal 9 (Economic Development)** considers economic and social consequences related to planned employment in the Campus Industrial and Light-Medium Industrial plan designations and implementing zones;
  - **Goal 11 (Public Facilities)** considers economic and social consequences related to the provision of the planned school and public sanitary sewer, water and storm drainage facilities;
  - **Goal 12 (Transportation)** considers economic and social consequences related to the provision of the planned streets and trails;

- The *Energy consequences* of prohibiting, allowing and limiting all conflicting uses and activities within the UGB Expansion Area are addressed under **Goal 13 (Energy Conservation)**.

**Correlation among Goal 5 ESEE Factors and Goals 1-15**

Table 5 below (not to be confused with Table 4 in the *Clear Lake LWI*) shows the relationship between the four Goal 5 ESEE factors and the 13 applicable Statewide Planning Goals.
<table>
<thead>
<tr>
<th>ESEE Consequence Statewide Planning Goal</th>
<th>Economic, Social, Environmental and Energy Consequences Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1 (Citizen Involvement) Document and Consider Citizen Comments</td>
<td>This is a procedural goal and requires documentation that citizens have been involved in all phases of the Goal 5 process.</td>
</tr>
<tr>
<td>Goal 2 (Land Use Planning) Adequate Factual Base Agency Coordination Consider Alternatives Ultimate Policy Choices / Implementation</td>
<td>This is a procedural goal and requires documentation that there is an adequate factual base, that coordination with affected state agencies has occurred, that the consequences of alternative policy options have been considered (the ESEE analysis provides this documentation), that an ultimate policy choice has been made based on the ESEE analysis (the no local protection program would meet this requirement) and that the no local protection program is adequate to carry out the approved program.</td>
</tr>
<tr>
<td>Goals 3 and 4 (Agricultural and Forest Lands)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Goal 5 (Natural Resource Protection) Adequate Goal 5 Inventory Significance Determination ESEE Analysis 3 Decision Options Clear and Objective Standards</td>
<td>Goal 5 is also procedural in nature. This report documents the facts that the Eugene LWI complies with Goal 5 rule requirements for (a) the wetland and riparian corridor inventory and (b) the significance determination. This report identifies the conflicting land uses and activities and provides the rationale for using the entire UGB Expansion Area as the &quot;impact area.&quot; Grading, vegetation removal and construction of impervious surface area (including buildings and parking areas) are the conflicting activities shared by each identified conflicting land use. The analysis of environmental consequences of prohibiting, allowing and limiting (through the identified No Local Protection program) conflicting land uses/activities is found in the Goal 5 discussion.</td>
</tr>
<tr>
<td>Goal 6 (Water Quality)</td>
<td>The No Local Protection Program relies heavily on Goal 6 (water quality) measures: application of the /WQ overlay to the two principle drainage channels in the UGB Expansion Area, compliance with the Eugene Stormwater Management Manual and the requirement that an area-wide stormwater master plan be prepared prior to annexation and development of land within the UGB Expansion Area. Notably, all wetlands – whether locally-significant or not – will be incorporated into planned “green stormwater infrastructure.”</td>
</tr>
<tr>
<td>Goal 7 (Natural Hazards) Flood Hazards (100-Year Floodplain)</td>
<td>City floodplain management regulations prohibit most types of development in the floodway and limit development within the 100-year floodplain. Goal 7 floodplain regulations, in combination with inventoried wetlands and drainage channels, reinforce the negative environmental consequences of developing in floodplain areas. The No Local Protection Program therefore applies the /WQ overlay to drainage channels that are within the 100-year floodplain and encompass adjacent LSW.</td>
</tr>
<tr>
<td>Goal 8 (Recreational Opportunities) Suitable Park Development Areas Park Development Impacts</td>
<td>The economic and social consequences of developing LSW and the A-2 Channel riparian corridor are unique to the community park. Therefore, the economic and social consequences of prohibiting, allowing and limiting planned park uses are addressed under Goal 8 (Recreation Opportunities).</td>
</tr>
<tr>
<td>Goal 9 (Economic Development) Adequate Land Supply / Suitable Sites Provide Jobs Development Impacts</td>
<td>The economic and social consequences of developing over LSW in the CI and LMI employment zones are unique to the planned employment area. Therefore, the economic and social consequences of prohibiting, allowing and limiting planned employment uses are addressed under Goal 9 (Economic Development).</td>
</tr>
<tr>
<td>Goal 10 (Housing)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ESEE Consequence Statewide Planning Goal</td>
<td>Economic, Social, Environmental and Energy Consequences Analysis</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Goal 11 (Public Facilities / Services)</td>
<td>The economic and social consequences of crossing LSW and the A-2 Channel riparian corridor to allow planned public facilities apply throughout the UGB Expansion Area – regardless of underlying land use. Therefore, the economic and social consequences of prohibiting, allowing and limiting planned public facilities projects are addressed under Goal 11 (Public Facilities).</td>
</tr>
<tr>
<td>School Land Needs</td>
<td></td>
</tr>
<tr>
<td>Efficient Provision of Urban Services</td>
<td></td>
</tr>
<tr>
<td>Project Impacts</td>
<td></td>
</tr>
<tr>
<td>Goal 12 (Transportation)</td>
<td>The economic and social consequences of crossing LSW and the A-2 Channel riparian corridor to allow planned streets and trails apply throughout the UGB Expansion Area – regardless of underlying land use. Therefore, the economic and social consequences of prohibiting, allowing and limiting planned transportation projects are addressed under Goal 12 (Transportation).</td>
</tr>
<tr>
<td>Safety and Efficiency</td>
<td></td>
</tr>
<tr>
<td>Connectivity</td>
<td></td>
</tr>
<tr>
<td>Multi-Modal Opportunities</td>
<td></td>
</tr>
<tr>
<td>Project Impacts</td>
<td></td>
</tr>
<tr>
<td>Goal 13 (Energy Conservation)</td>
<td>The energy consequences of prohibiting, allowing and limiting planned employment, park and school uses – and planned public facility and transportation projects – are inter-related and over-lapping. Therefore, the energy consequences of prohibiting, allowing and limiting planned development in the UGB Expansion Area are considered under Goal 13 (Energy Conservation).</td>
</tr>
<tr>
<td>Housing Near Employment</td>
<td></td>
</tr>
<tr>
<td>Micro-Climate / Climate Change</td>
<td></td>
</tr>
<tr>
<td>Efficient Public Facilities</td>
<td></td>
</tr>
<tr>
<td>Transportation Connectivity</td>
<td></td>
</tr>
<tr>
<td>Goal 14 (Urbanization)</td>
<td>The Goal 14 discussion explains why the No Local Protection Program makes sense for the point of view of achieving a compact urban growth form, avoiding higher value farmlands, providing suitable employment sites, and providing adequate public facilities at least cost, and providing open space and schools near under-served residential neighborhoods.</td>
</tr>
<tr>
<td>Compact Urban Growth Form</td>
<td></td>
</tr>
<tr>
<td>Maximum Efficiency of Land Use</td>
<td></td>
</tr>
<tr>
<td>Goal 15 (Willamette Greenway)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

This ESEE analysis supports Eugene’s decision (in coordination Lane County) to provide no additional Goal 5 protection for significant Goal 5 resources within the UGB expansion area. As shown in Table 6, PHS has shown that the UGB Expansion Area has seven LSW comprising about 131 acres and the A-2 significant riparian corridor about 22 acres, for a total of 153 acres of significant water resource sites.

Table 6. Significant Water Resources in the UGB Expansion Area

<table>
<thead>
<tr>
<th>Resource Site Number</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-3</td>
<td>26.7</td>
</tr>
<tr>
<td>W-5</td>
<td>58.9</td>
</tr>
<tr>
<td>W-8</td>
<td>1.7</td>
</tr>
<tr>
<td>W-14</td>
<td>27.2</td>
</tr>
<tr>
<td>W-15</td>
<td>11.9</td>
</tr>
<tr>
<td>W-16</td>
<td>1.7</td>
</tr>
<tr>
<td>W-17</td>
<td>2.6</td>
</tr>
<tr>
<td>A-2 Channel (R-1-3)</td>
<td>22.4</td>
</tr>
<tr>
<td>All Water Resources</td>
<td>153</td>
</tr>
</tbody>
</table>

Winterbrook estimates that the proposed No Local Protection Program decision (no additional Goal 5 protection with reliance on local water quality and flood management regulations in combination with State and Federal wetland protection regulations) would protect and/or mitigate on-site most of the 153 acres) of significant water resource sites within the UGB Expansion Area and would result in the restoration / enhancement of other wetlands that were not determined to be “locally significant”. Off-
site mitigation (wetland banking) would mitigate for the fill and removal of remaining wetlands in the UGB Expansion Area.

**Figure 6 Significant Water Resources: Potential Results of the Clear Lake No Local Protection Program**

on the following page shows the potential results of the No Local Protection Program. Note that this is one possible scenario based on the professional judgment of Anita Cate Smyth, a certified wetland scientist who works with Winterbrook Planning. Figure 6 does not represent a city recommendation to protect certain wetlands in the UGB Expansion Area.

By applying the /WQ overlay zone, this program would provide some protection (through non-Goal 5 tools) for almost all of the A-2 Channel and for a portion of W-5 (14 acres) and smaller portions of two non-significant wetlands (W-7 and W-9) by applying the /WQ overlay. As shown on Figure 6, the DSL/USACE review process will likely result in some protection for portions of the remaining LSW – while allowing wetlands to be filled and removed to accommodate the large employment sites called for in the Eugene EOA. Local restoration and enhancement programs are likely to restore and enhance additional wetlands in the community park and the Bethel School District sites which include W-14 (27 acres).

Finally, incorporation of wetlands and the A-2 Channel into the integrated stormwater management plan required before land is annexed to the City will help ensure that the most important functions of the wetlands and riparian corridor in the UGB Expansion Area (water quality and hydrological control) will be maintained and enhanced.

Despite the need to fill and remove substantial portions of LSW to make room for at least 11 large employment sites, the ESEE Analysis demonstrates that additional Goal 5 protection of LSWs and the A-2 Channel is unnecessary because the following results can be achieved without applying a Goal 5 overlay zone:

- Provide adequate land for planned park and recreational needs, which has positive social consequences (Statewide Planning Goal 8, Recreational Needs).
- Provide suitable employment sites consistent with economic needs projections set forth in the Eugene EOA, which has positive economic consequences (Statewide Planning Goal 9, Economy).
- Efficiently provide supporting sanitary sewer, water, and stormwater services, which has positive economic, social, or energy consequences (Goal 11, Public Facilities and Services).
- Provide for an inter-connected and multi-modal transportation system that minimizes out-of-direction travel, which has positive economic, social and energy consequences (Goals 12, Transportation, and 13, Energy Conservation).
- Maintain a compact urban form and maximum efficiency of land use, which has positive economic, social and energy consequences (Goal 13, Energy Conservation and Goal 14, Urbanization).

The ESEE Analysis notes the substantial role that remaining and mitigated wetlands (both LSW and non-LSW) and the A-2 Channel will make toward maintaining water quality as part of the required stormwater master plan (Goal 6, Air, Land and Water Resources Quality) and reducing potential flooding impacts from natural hazards (Goal 7, Natural Hazards).

However, the ESEE Analysis concludes that LSWs will receive no local Goal 5 protection, because of adverse economic and social impacts on the availability of suitable employment, active community park facilities and school sites (Statewide Planning Goals 8, 9 and 11 - Parks and Recreation, Economic Development and Public Facilities).
Figure 6 Significant Goal 5 Water Resources: Potential Results of the Clear Lake No Local Protection Program
Section 2: Goal 5 ESEE Factors and Statewide Planning Goals

Goal 1 Citizen Involvement

As noted in the Clear Lake LWI:

Prior to beginning the inventory field work, selected landowners (i.e. those suspected of having wetlands or stream on their property) were mailed notices describing the project and asking permission to enter their property. Right of access was granted to PHS by landowner permission only. The properties of those not responding were not accessed. Access information was collected in a database by the City of Eugene and provided to PHS for incorporation into project field maps. The City of Eugene held one public meeting on May 23, 2012, for citizens to discuss details of the inventory and comment. The City is planning additional meetings as necessary to facilitate the land use process for expansion of the urban growth boundary. Such meetings have not yet been scheduled.

* An additional meeting with property owners was held on June 25th, 2014.

Since the ESEE Analysis must be adopted as part of the comprehensive plan, public hearings will also be required before the Planning Commission and elected officials of both the City of Eugene and Lane County.

At the end of the day, the ESEE Analysis should support the final decision of the Eugene City Council regarding the appropriate level of protection for significant wetlands and riparian corridors within the UGB Expansion Area. Since elected officials may decide to change the proposed No Local Protection Program as a result of public and agency review and comment, the ESEE Analysis should be viewed as preliminary. The public and agency review process could, therefore, change the analysis of economic, social, environmental and energy consequences that follows.

The final ESEE analysis will include an appendix that documents (a) citizen, property owner and agency comments; and (b) changes to the draft Goal 5 program in response to these comments. Thus, the ESEE Analysis process is iterative, not static. This draft ESEE analysis is the starting point for a broader community discussion.

Goal 2 Land Use Planning

Goal 2, like Goal 5, is essentially a procedural goal. Goal 2 requires that:

- There be an adequate factual base for making land use decisions;
- Local, state, and federal agencies be notified and their concerns be considered and accommodated to the extent possible;
- Alternatives be considered before making ultimate policy choices;
- Policy choices be clearly articulated in the comprehensive plan; and that
- Implementation measures be consistent with and adequate to carry out such policy direction.

ESEE Relationship to Goal 2

This ESEE analysis, combined with the documents described in the Introduction (the Eugene Planning Context) provide the factual and analytical basis that supports adoption of the recommended local protection program. These documents provide City and County decision-makers with the information necessary to make informed policy decisions related to balancing sometimes-conflicting development and natural resource conservation objectives.

Overall, the Clear Lake Area UGB Expansion Project provides a positive model for City-County coordination. City and County staff and the consultant team have worked collaboratively in each phase of this multi-year project. State and federal agencies have also been involved in this process, and their concerns have been considered and accommodated wherever possible. Key state agencies include the...
Department of Land Conservation and Development (DLCD), the Department of State Lands (DSL), the Department of Fish and Wildlife (ODFW), and the Department of Environmental Quality (DEQ). Federal agencies with comparable areas of jurisdiction will be invited to review and comment on the LWI, ESEE analysis and recommended No Local Protection Program.

Goal 5 requires that the ESEE consequences of three decision options be considered as part of the Goal 5 process. This ESEE Analysis considers the economic, social, environmental and energy conservation consequences of three regulatory programs:

- **Prohibit conflicting uses** by fully protecting all significant water resource analysis areas (LSWs and the A-2 riparian corridor) by applying strict Goal 5 regulations.
- **Allow conflicting uses** by providing no additional Goal 5 protection for significant LSWs and riparian corridors. The Allow option relies on the existing Goal 6 and 7 implementation program and provides reasonably clear and objective regulatory measures (application of the /WQ (Water Quality) overlay zone and Eugene Stormwater Management Standards) and supporting wetland mitigation (through DSL/USACE) and the area-wide stormwater management plan, to implement the policy direction provided by City and County elected officials.
- **Limit conflicting uses** by applying the /WR (Water Resources) overlay zone to significant LSWs and riparian corridors in addition to local, state and federal water quality and flood hazard regulations. The WR/ overlay protects the water resource plus land within the water conservation setback area.

**Goal 2 Conclusion**

For the reasons stated above, the process that led to adoption of the proposed No Local Protection Program meets Goal 2 procedural requirements. The No Local Protection Program provides a reasonable level of protection to LSW and the A-2 Channel while allowing for planned employment, school, park and public facility development.

**Goal 5 Natural Resources**

Goal 5 reads (in relevant part) as follows:

*To protect natural resources and conserve scenic and historic areas and open spaces.*

Local governments shall adopt programs that will protect natural resources and conserve scenic, historic and open space resources for present and future generations. These resources promote a healthy environment and natural landscape that contributes to Oregon’s livability. * * *

Following procedures, standards, and definitions contained in commission rules, local governments shall determine significant sites for inventoried resources and develop programs to achieve the goal.

Goal 5 also is largely procedural in nature: it requires that certain steps be followed before making a decision regarding the level of protection – if any – that should be afforded to each significant Goal 5 resource site. It sets forth a process for resolving conflicts between natural resource preservation on the one hand, and urban development on the other. Goal 5 does not mandate “protection” of significant water resources as that term is commonly used. Rather, as explained in the Goal 5 Rule (OAR Chapter 660, Division 23), “‘protect’ means to develop a program consistent with this division.”

- As required by the Goal 5 Rule, the Clear Lake LWI (PHS, May 2014) includes valid Goal 5 inventories showing the location, quantity, and quality of significant wetlands and riparian corridors in the Clear Lake UGB Expansion Area. The quantity and location of significant Goal 5 resources are summarized in Section 2 of this report. The qualitative and quantitative characteristics of significant Goal 5 resources (seven LSW and the A-2 Channel) are found in the Clear Lake LWI Final Report (May 2014).
The Goal 5 Rule also requires that uses (i.e., land uses and related activities) that conflict with the full protection of significant Goal 5 resources be identified. Section 2 describes conflicting uses that are planned for the UGB Expansion Area and which are either permitted or conditional uses allowed in the C-1, E-1, I-2, or PL zones.

Finally, the Goal 5 Rule requires that local governments make a "decision" regarding the level of protection that should be afforded significant Goal 5 resources – but only after conducting an ESEE (Economic, Social, Environmental and Energy) Consequences Analysis.

The Introduction to this report describes the three program options available to Eugene: prohibit conflicting uses / full resource protection; allow conflicting uses / no additional Goal 5 protection; and limit conflicting uses – by applying the WR/ overlay zone. The Introduction also describes in more detailed form the No Local Protection Program recommended by Eugene Planning, Public Works and Park and Recreation staff.

ESEE Relationship to Goal 5 Resource Sites
This section considers the environmental consequences of the three Goal 5 decision options. As noted in above economic and social consequences of the Goal 5 decision options are addressed under Goals 8 (Parks and Recreation), 9 (Economic Development), 11 (Public Facilities and Services), 12 (Transportation) and 14 (Urbanization). The discussion of energy consequences is consolidated under Goal 13 (Energy Conservation).

Environmental Consequences
The A-2 Channel and the seven LSW provide a variety of independent ecological functions that form a part of the City’s “green infrastructure” (see also Goals 6, 7, and 13 discussions). These functions include:

- Water quality improvement
- Hydrological Control / stormwater storage
- Microclimate amelioration

The environmental and limited wildlife habitat values of these significant resource types are described in detail in the Clear Lake LWI, which is incorporated into this ESEE Analysis by reference. LSW and the A-2 Channel are valued primarily for their water quality benefits. As noted in the LWI (p. 19):

The quality of the riparian corridors using URIAG indicate that **the inventoried riparian areas rate “high” for water quality functioning. This is a result of low slopes within the riparian area, the presence of complete vegetative cover, and the near lack of impervious areas. In the flood management category, all four rate “medium.” Flood management is determined by the presence of flood prone areas, the dominance or absence of woody vegetation in flood prone areas, and whether the water resource is constricted by man-made features. All reaches rated “low” for thermal regulation, the result of few trees in the riparian area and no vegetation shading the water resources. As a result of these same conditions, and the open mowed to agricultural lands uses, these areas rated low to medium for wildlife habitat.**

Wetlands provide important water quality functions. They reduce the impacts of excess nutrients in storm water runoff on downstream waters. Essentially equivalent to pollution removal, a wetland contributes to water quality by trapping sediment during periods of heavy rainfall, keeping it from entering adjacent downstream resources. Wetlands also trap nutrients such as nitrogen and phosphorus, helping to prevent or minimize algal blooms and subsequent oxygen deficiencies downstream. Wetlands reduce downstream flood peaks and store floodwaters by acting as flood regulators, trapping water during periods of high precipitation or flooding, and slowly releasing the flow downstream. By reducing the velocity and volume of stormwater flows, wetlands also reduce erosion and thereby help to preserve water and land quality.

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The Clear Lake LWI evaluated the effectiveness of wetlands within the Eugene UGB to provide both of these functions. The LWI includes an assessment of each wetland’s water quality and hydrologic control functions as “intact,” “impacted,” or “not present.” Table 4 of the Clear Lake LWI (also shown in the Introduction) documents water quality and hydrological control functions of Clear Lake wetlands.

Table 4. Oregon Freshwater Wetland Assessment Methodology Numerical Ranking Results for the Clear Lake Area LWI

<table>
<thead>
<tr>
<th>Wetland Code</th>
<th>Wildlife Habitat</th>
<th>Fish Habitat*</th>
<th>Water Quality</th>
<th>Hydrologic Control</th>
<th>Education</th>
<th>Recreation</th>
<th>Size (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL-W-1</td>
<td>2</td>
<td>NA</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>38.05</td>
</tr>
<tr>
<td>CL-W-2</td>
<td>2</td>
<td>NA</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>25.03</td>
</tr>
<tr>
<td>CL-W-3</td>
<td>2</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>26.71</td>
</tr>
<tr>
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<td>2</td>
<td>NA</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2.45</td>
</tr>
<tr>
<td>CL-W-5</td>
<td>2</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>58.86</td>
</tr>
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<td>1.18</td>
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<tr>
<td>CL-W-7</td>
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<td>NA</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>11.30</td>
</tr>
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<td>CL-W-8</td>
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<td>2</td>
<td>3</td>
<td>3</td>
<td>0.59</td>
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<td>3</td>
<td>3</td>
<td>1.36</td>
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<tr>
<td>CL-W-11</td>
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<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3.73</td>
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<td>CL-W-12</td>
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<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3.37</td>
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<td>CL-W-13</td>
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<td>2</td>
<td>3</td>
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<td>0.74</td>
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<tr>
<td>CL-W-14</td>
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<td>1</td>
<td>27.12</td>
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<tr>
<td>CL-W-15</td>
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<td>3</td>
<td>3</td>
<td>11.87</td>
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<tr>
<td>CL-W-16</td>
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<td>1</td>
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<td>3</td>
<td>3</td>
<td>1.71</td>
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<tr>
<td>CL-W-17</td>
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<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2.58</td>
</tr>
</tbody>
</table>

*NA – designates that this function was not assessed for a particular wetland

Notably, only seven of the 17 inventoried wetlands have “intact” water quality function; and only two have “intact” hydrological control function. The remainder have “impacted” or “degraded” water quality and hydrological functions due to ongoing agricultural operations. And, despite the existing quality of wetlands in the UGB Expansion Area, the effectiveness of wetlands in maintaining water quality and storing stormwater can be improved by integrating wetlands into an area-wide storm water management plan.

Riparian Corridors also provide benefits for air, land, and water resources quality. Like wetlands, riparian corridors can enhance water quality in many ways. Undisturbed, densely-vegetated riparian corridors trap sediments, inhibit erosion, and filter runoff originating from impervious surfaces, lawns, golf courses, and the like. Sedimentation and erosion, although natural processes, are accelerated in urban areas by increased impervious surfaces. Impervious surfaces also inhibit infiltration. Sediment within a riparian corridor can be from erosion of poorly vegetated uplands, runoff from impervious surfaces, or floods from an adjacent water resource. Sediments often carry nutrients (e.g. phosphates and nitrates) and pollutants (e.g. heavy metals, hydrocarbons) to water resources, altering water chemistry, burying spawning gravels and impacting fish and wildlife habitat. Excessive concentration of nutrients in the water can trigger algal blooms, depleting the water of oxygen required by fish and other aquatic organisms. The ability of a riparian corridor to resist erosion is related to slope, soil type, vegetation type, vegetative cover, landscape position, and degree of human disturbance. In this case, the A-2 Channel was constructed to drain wetlands to allow for agriculture and has a high degree of human disturbance.
Riparian corridors, associated wetlands and floodplains together provide a valuable flood management function by reducing the force and volume of floodwaters. Floodwaters flowing into a vegetated, flood-prone riparian corridor can be slowed or temporarily stored, reducing peak flows and downstream flooding. Woody vegetation, in particular, resists floodwaters and reduces its velocity. Topographic features such as swales and depressions can enhance a riparian corridor’s ability to manage flood flows. Reducing the velocity of floodwaters in the riparian corridor allows infiltration of water into the soil. Water entering the soil is slowly released into the main channel, delaying its movement downstream.

Water temperature affects the ability of a stream to support viable populations of certain aquatic organisms. Riparian shade, especially forest canopy, moderates temperature within and adjacent to a water resource. Although stream temperatures are important throughout the year, summer temperature is generally more critical for fish species such as salmonids. High water temperatures and sunlight are factors that can promote algal blooms, reducing dissolved oxygen required by anadromous fish and other cold-water dependent organisms. The aspect or orientation of the water resource and the height of the adjacent riparian vegetation play important roles in how effective riparian vegetation is in providing shade.

However, the A-2 Channel riparian corridor, broken into several reaches in Table 7 from the Clear Lake LWI, has little tree cover and therefore “low” to “medium” thermal regulation value. It does, however, have “high” water quality value.

Table 7. Summary of the Clear Lake Area’s Riparian Functional Assessments

<table>
<thead>
<tr>
<th>Riparian Code</th>
<th>Water Quality</th>
<th>Flood Management</th>
<th>Thermal Regulation</th>
<th>Wildlife Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL-R-1</td>
<td>H</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>CL-R-21L</td>
<td>H</td>
<td>M</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>CL-R-2R</td>
<td>H</td>
<td>M</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>CL-R-3</td>
<td>H</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
</tbody>
</table>

H = High      M = Medium     L = Low

The Prohibit (full protection) option would apply new Goal 5 regulations that prohibit all urban land uses and activities that conflict with (i.e., could further reduce) identified functions of significant wetlands and riparian corridors. Therefore, the prohibit option would have positive environmental consequences with respect to the functions summarized in Tables 4 and 7 of the Clear Lake LWI. However, the prohibit option would do nothing to prevent continued degradation of wetlands resulting from ongoing agricultural operations.

Notably, the only “intact” functions identified for LSW and the A-2 Channel are “water quality” and, in the cases of two LSW, “hydrological function”. Thus, the positive effect of full protection is much less than if all these resources had intact fish, wildlife and hydrological functions.

Conversely, the Allow (No Local Goal 5 Protection) option could have marginal negative environmental consequences for water quality and hydrological control, by relying on existing Goal 6 and 7 regulations to protect wetland functions identified above and deferring regulation of conflicting urban uses and activities (identified in Chapter 3) to state and federal regulatory authorities. Thus, under the no

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13 Riparian corridors and wetland resources in the UGB Expansion Area have already been substantially degraded by ongoing agricultural operations (they barely qualify as “significant” under DSL rules). Notably, Goal 5 does not require local governments to limit impacts from agricultural operations on significant water resources on EFU land outside UGBs.

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additional Goal 5 protection option, the environmental values outlined above, and discussed in greater detail in the *Clear Lake Local Wetlands Inventory*, might be slightly compromised.

The No Local Protection Program represents an effective balance that avoids many of the adverse environmental and social problems associated with the other two options. The No Local Protection Program provides flexibility for public and private developers in creating large, developable sites for parks, schools and employment – and for constructing infrastructure projects required to serve planned development – while protecting the key water quality and detention functions provided by wetlands and riparian corridors in the Clear Lake LWI.

Overall, The No Local Protection Program is designed to implement and balance the six applicable “pillars” set forth in *Envision Eugene* and applicable statewide planning goals by:

- **Providing ample economic opportunities for all community members** by providing 11 large employment sites (approximately 495 suitable acres) consistent with the Eugene EOA and Goal 9; while
- **Promoting compact urban development and efficient transportation options** by providing the minimum area necessary to meet and provide access to planned employment, school and park sites as documented in the UGB Alternatives Analysis and Goal 14; while to the extent practicable,
- **Protecting, restoring, and enhancing natural resources** by (a) conserving most of the relatively low quality wetlands and riparian corridors by applying the Water Quality/WQ overlay to the two major drainageways within the UGB Expansion Area; (b) coordinating with DSL and USACE to mitigate for wetland functions and values lost through wetland fill and removal; (c) maintaining opportunities for off-site wetland banking; and (d) working with community volunteers and property owners to restore and enhance some of the wetland and riparian corridor water quality and storage functions on-site; and (e) incorporating wetlands, riparian corridors and floodplains into an area-wide stormwater management plan; while
- **Planning for climate change and energy resiliency** consistent with Goal 13 by providing employment, parks and schools adjacent to the existing UGB and near existing neighborhoods and planned transportation facilities; while
- **Protecting, repairing, and enhancing neighborhood livability and social equity** by providing low-impact employment opportunities, a community park, and schools near the under-served Bethel neighborhood (Goals 8 and 11); while
- **Providing for adaptable, flexible and collaborative implementation** (Goal 2) through effective master planning (for the Eugene Airport, the community park, storm drainage based on ecosystem management principles); minimizing local regulatory obstacles and coordinating with state and federal agencies to accomplish the objectives outlined above; and by limiting the creation of new bird habitat areas that could adversely affect aviation safety near the Eugene Airport.

Thus, the proposed No Local Protection Program relies on a combination of water quality overlay zoning, wetland banking, interagency coordination and stormwater management to protect significant wetland and riparian corridor resources within the UGB Expansion Area. Due to the relatively low quality of wetlands in the UGB Expansion Area – and conflicts with airport operations and safety – city staff from several departments has concluded that it is inappropriate to encourage restoration of wildlife habitat near the Eugene Airport. Therefore, the focus of the No Local Protection Program is on water quality and storage – rather than protecting the boundaries of wetlands that have been significantly degraded.
Environmental Consequences

The No Local Protection Program maintains the basic integrity of UGB Expansion Area’s system of riparian corridors and wetlands because most types of urban development (industrial structures, parking areas, school structures, active park uses) are prohibited within the /WQ overlay. This program allows adjustments in the boundaries of LSW if allowed the DSL/USACE fill, removal and mitigation process. Given the need to provide large sites in areas that are inter-woven with wetlands, complete avoidance of LSW is not a reasonable possibility.

Figure 6 Significant Goal 5 Water Resources: Potential Result of Clear Lake No Local Protection Program and Figure 8 Concept Plan: Large Employment Site Feasibility show how partial fill and removal of some LSW (and other wetlands) could provide large development areas. Such areas are needed to attract targeted employment opportunities identified in the EOA, and to accommodate schools and parks on publicly-owned land. Both figures also identify potential on-site mitigation areas.

The requirement that an integrated storm water master plan precede annexation to the City means that portions of LSW (which are marginally significant) and other wetlands (which marginally don’t meet DSL significance criteria) will be integrated as “green infrastructure” into the area-wide stormwater quality and quantity management system. Volunteer wetland restoration and enhancement programs on publicly-owned land will help improve the quality of retained and constructed wetlands. This approach will achieve the balance called for in the Metro Plan and Envision Eugene, and will avoid the adverse social, economic, and energy consequences that would result from the full protection and limited (additional Goal 5 regulations) protection options.

The Limit (application of the WR/overlay zone) option would provide an additional level of water resource protection that (a) allows public facilities and services under prescribed conditions but (b) does not allow employment, school, land-extensive park and other public facility uses within the boundaries of significant water resources or their respective conservation setback areas. City staff has reviewed potential economic impacts affecting public and private property owners and developers, and the community’s ability to meet long-term employment, park and school needs while minimizing the relatively small size of the expanded UGB area. This resulted in the recommendation not to apply the /WR (Water Resources) overlay to LSW within the UGB Expansion Area. This overlay district lacks the flexibility necessary to create the large development areas required by public and private users in this area. \(^{14}\)

Goal 5 Conclusion

The No Local Protection Program maintains most of the LSW and riparian corridor functions described in the Clear Lake Local Wetlands Inventory. As a result of this ESEE Analysis (as shown on Figure 6 Significant Goal 5 Water Resources: Potential Results of the Clear Lake No Local Protection Program) the proposed No Local Protection Program would likely conserve approximately three-fourths of LSW and the A-2 Channel riparian corridor within the UGB Expansion Area, which providing large, buildable sites needed for planned employment, school and park uses.

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\(^{14}\) City staff considered applying the Water Resource (/WR) overlay zone to LSW in the UGB Expansion Area. This overlay would have protected the wetland itself plus a buffer area. This idea was rejected because of (a) the need to provide large sites to construct schools, active parks uses, and large-scale employment structures; (b) the lack of unconstrained land within the UGB Expansion Area compared with identified suitable land need; and (c) the fact that wetlands are braided throughout the UGB Expansion Area, which makes it imperative to adjust the boundaries of wetlands to create large, flat building areas. The /WR overlay zone lacks the flexibility to achieve these objectives.
Goal 6 Water Quality

Statewide Planning Goal 6 requires that cities adopt policies and implementation measures to ensure that air, land, and water quality are not “degraded” and that state and federal environmental quality standards are met.

ESEE Relationship to Goal 6

The Metro Plan commits the City to continued coordination with the Department of Environmental Quality (DEQ) to ensure that Oregon Environmental Quality Commission standards related to air, land and water quality are met. As documented in the Introduction to this ESEE analysis, Eugene has adopted effective programs to achieve the purposes of Goal 6, including:

- The Eugene Stormwater Management Manual
- The /WQ Water Quality overlay zone (to be applied to the A-2 Channel and the ditch north of Clear Lake Road)

Maintaining the flood storage capacity of the land within the 100-year floodplain can also improve water quality. This issue is further addressed under the Goal 7 discussion in this report.

As noted several times in this report, “intact water quality” function is the principal reason why PHS (with advice from DSL) determined that certain wetlands in the UGB Expansion Area are locally-significant. Thus, there is considerable overlap between Goals 5 and 6 with respect to water quality.\(^\text{15}\) Intact riparian corridors and wetlands help to maintain air, land, and water resource quality within the UGB expansion area by reducing the impacts of urban development on water resources. If significant wetland and riparian corridors were not protected by Goal 6 regulations, there would be adverse consequences for air, land and water resource quality.

Eugene has adopted the /WQ overlay zone and the Stormwater Management Manual to comply with Goal 6; however application of this overlay zone to primary drainageways in the UGB Expansion also provides effective water quality protection to affected LSW and the A-2 Channel riparian corridor.

The Role of Goal 6 in the Proposed No Local Protection Program

The Eugene Stormwater Management Manual recognizes the relationship between best management practices and stormwater quality and quantity:

> There is a direct link between stormwater runoff and the City’s surface and ground water quality and quantity. As cities develop, impervious surfaces that are created increase the amount of runoff during rainfall events and prevent groundwater recharge. Stormwater runoff picks up pollutants from parking lots, roadways, and rooftops and transports them to streams, rivers, and groundwater. Without controls, these conditions cause eroded stream channels and increased levels of water pollution. Properly managing stormwater is vital to protecting our water resources for a great number of uses, including fish and wildlife habitat, recreation, and drinking water.

The proposed No Local Protection Program combines Goal 7 and 6 measures to protect water quality and storage functions of LSW and the A-2 Channel by incorporating these resources into an area-wide

\(^\text{15}\) The Goal 5 administrative rule (OAR 66-023-0240) states that Goal 5 procedural requirements do not apply to measures that implement Goal 6, provided that such measures do not “exceed” the requirements of these goals.

(1) The requirements of Goal 5 do not apply to the adoption of measures required by Goals 6 and 7. However, to the extent that such measures exceed the requirements of Goals 6 or 7 and affect a Goal 5, the local government shall follow all applicable steps of the Goal 5 process.

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A stormwater management plan. The program would apply the WQ/ overlay zone to the two primary drainageways in the UGB Expansion Area: A-2 Channel and the channel within the 100-year floodplain that drains land north of Clear Lake Road and overlaps with W-5.

Under the No Local Protection Program, portions of most wetlands (including LSW) would likely be filled and removed to meet large-site employment site needs, and possibly school and active park needs. Portions of other wetlands (including LSW) would be filled and removed to allow for planned transportation and utility infrastructure.

However, as shown on Figure 7, Potential Water Resources Management Plan, Winterbrook estimates that most of the area covered by wetlands within the UGB Expansion Area would likely be conserved through the DSL/USACE review process; moreover, some on-site mitigation would likely occur. On-site and off-site (wetland banking) mitigation will help ensure that wetland and riparian corridor functions are maintained and, in some cases, restored and enhanced. Remaining wetlands and wetland mitigation areas will subsequently be incorporated into the area-wide stormwater master plan.

When compared with the Prohibit (full protection) and Limit (WR overlay) options, the No Local Protection program has similar consequences for maintaining and improving water resource quality. As noted above, the No Local Protection Program would afford a moderate level of protection to the A-2 Channel riparian corridor and LSW, ensuring that water quality will not be degraded as a result of urban development.

Eugene’s Prohibit and Limit options should be viewed in the context of other local and state programs to maintain environmental quality. Adopted Goal 5 and 6 programs include The Eugene Stormwater Management Plan (2014), erosion control standards, floodplain management standards and coordination with DSL/USACE in implementing their programs – which require development to avoid wetlands if feasible, minimize impacts to wetlands if avoidance is not feasible, and mitigate for lost wetland functions and values.

As noted in the Goal 11 discussion, the economic consequences of the Allow and Limit options are positive, because they will have the effect of reducing public and private stormwater collection and treatment costs while providing suitable school, active park, employment and infrastructures sites. The social consequences of the No Local Protection Program are positive, because they will have the effect of reducing public and private stormwater collection and treatment costs while providing opportunities for jobs, recreation and education near area residents.

Goal 6 Conclusion
The city of Eugene has strong and effective stormwater planning and regulatory tools that will ensure that the water quality and stormwater storage functions of LSWs, other wetlands, and drainage channels within the UGB Expansion Area are maintained and enhanced. Existing Goal 6 related programs will provide a solid basis for and will augment the effectiveness of Goal 7 flood management regulations without the need for additional Goal 5 regulations in the Clear Lake UGB Expansion Area.
Figure 7 Potential Water Resources Management Plan
Goal 7 Natural Hazards

Goal 7 reads (in relevant part) as follows:

To protect people and property from natural hazards.

A. Natural Hazard Planning

1. Local governments shall adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards.

2. Natural hazards for purposes of this goal are: floods (coastal and riverine), landslides, earthquakes and related hazards, tsunamis, coastal erosion, and wildfires. Local governments may identify and plan for other natural hazards.

ESEE Relationship to Goal 7

Eugene Code (EC) 9.6705 regulates development within the 100-year floodplain. The floodplain is shown on Federal Emergency Management Act maps and on Figure 7 Potential Water Resources Management Plan above. EC 9.6705(2) prohibits most types of development in the floodway (generally the immediate channel area) and allows new development within the floodplain but outside the floodway, provided that structures be flood-proofed or elevated at least one foot above the base (100-year) flood elevation.

There is an overlap between Goal 7 natural hazards, Goal 6 water quality and Goal 5 natural resource areas when determining the appropriate level of protection for LSW and the A-2 Channel riparian corridor. Allowing development in the floodplain is costly and involves some risk and therefore could have adverse economic, social, and environmental consequences. The adverse ESEE consequences of allowing urban development in hazardous areas with significant water resources are compounded by the possibility of damage to life and property.

Figure 6 Significant Water Resources: Potential Results of the Clear Lake No Local Protection Program shows the 100-year floodplain in relation to LSW, other wetlands and the A-2 Channel riparian corridor. The floodplain corresponds generally with the two major drainageways in the UGB Expansion Area: the A-2 Channel and a drainage ditch that begins at Highway 99W, crosses the central employment area diagonally (northeast to southwest) and flows under Clear Lake Road (north of the Bethel School District site) before leaving the UGB Expansion Area.

ESEE Consequences

The No Local Protection Program relies on existing floodplain regulations to manage flooding impacts in combination with:

(a) application of the /WQ overlay zone to the two major drainage channels in the UGB Expansion Area, including the significant A-2 Channel riparian corridor;
(b) the DSL/USACE wetland fill and removal review processes that apply to LSW and non-significant wetlands alike;
(c) the requirement that all new development comply with Eugene Stormwater Management Manual standards; and
(d) the policy commitment to complete an area-wide stormwater master plan for the entire UGB Expansion Area prior to annexation to the City.

The decision not to apply the Water Resources (/WR) overlay zone to significant water resources is based primarily on the relatively low quality of LSW and the A-2 Channel riparian corridor in the UGB Expansion Area, the need to provide space for meeting large site development requirements, requirement to use the limited and highly constrained (by wetlands and floodplains) land supply within UGB Expansion Area efficiently.
The environmental consequences of the Limit (apply the /WR overlay zone) Program are neutral to positive, because the water quality and hydrological control functions of existing LSW and non-significant wetlands in the UGB Expansion Area will be incorporated into an area-wide stormwater master plan and new development must meet the demanding water quality and storage requirements of the Eugene Stormwater Management Manual. As shown on Figure 6 Significant Goal 5 Water Resources: Potential Results of the Clear Lake No Local Protection Program, Winterbrook estimates that most of the LSW coverage area will be avoided as a result of the DSL/USACE review process, and some on-site wetland mitigation is likely to occur within the UGB Expansion Area. Wetland banking will mitigate for the loss of other wetland functions (e.g., limited fish and wildlife habitat) provided by relatively low quality wetlands.

The No Local Protection Program allows for private and public land uses and activities that have positive social and economic consequences for landowners and the public. City floodplain regulations will ensure that construction within the floodplain can safely occur with limited risk consistent with FEMA programs.

And, as documented in the Goal 8, 9, 11 and 12 discussions in this report, the siting requirements of the potentially intensive park uses (athletic fields, large buildings) in the community park, targeted employment opportunities, planned school facilities and planned streets and public facilities require the flexible regulatory approach proposed in the No Local Protection Program. As shown on Figure 7 Potential Water Resources Management Plan, some LSW and non-significant wetlands must filled and removed in order to provide large, flat sites (as shown on Figure 8) that are reasonably necessary for planned urban uses. Because floodplain management regulations allows for certain private and public uses and activities within hazard areas, subject to engineering and locational standards, adverse social and economic consequences are reduced without compromising public safety.

Goal 7 Conclusion
The No Local Protection Program is implemented by EC 9.6705 flood management standards, in combination with other measures designed to maintain water quality and storage capacity, and to avoid, minimize, and mitigate for the loss of the functions of LSW and the A-2 Channel riparian corridor. At the same time, the No Local Protection Program provides the flexibility necessary to provide space for needed employment opportunities, parks, schools, streets and public utilities that is not available under the Prohibit (full protection) or Limit (/WR overlay) options.

Goal 8 Parks and Recreation
Goal 8 requires local governments to plan for the park and recreational needs of their community. This Goal is related to the Goal 14 requirement to provide land to meet the “livability” needs of the community. Goal 8 (in relevant part) reads as follows:

To satisfy the recreational needs of the citizens of the state and visitors * * * RECREATION PLANNING The requirements for meeting such needs, now and in the future, shall be planned for by governmental agencies having responsibility for recreation areas, facilities and opportunities: (1) in coordination with private enterprise; (2) in appropriate proportions; and (3) in such quantity, quality and locations as is consistent with the availability of the resources to meet such requirements.

Relation to Goal 8
The City approved Eugene’s Parks, Recreation and Open Space Comprehensive Plan (PROS Comprehensive Plan) in 2004. The Introduction to this plan (pp. 1-8) recognizes the importance of an accessible park system that meets community needs by providing recreational opportunities and protecting natural resources.
The comprehensive planning process, initiated in the summer of 2002, identifies future needs for parks, open space, and recreation programs and services. These needs are based on the results of public outreach to thousands of Eugene residents through meetings with neighborhood organizations, representatives of various interest groups, youth, seniors, adults, people with disabilities, and cultural minorities. Based on the identified needs, the PROS Comprehensive Plan proposes dozens of strategies for the future to improve parks, provide recreation opportunities, and protect natural resource values.

In 2006, the Parks and Open Space Division prepared the PROS Project and Priority Plan to implement the policies and recommendations of the PROS Comprehensive Plan and to serve as the basis for a $20 million parks and recreation bond measures (Measure 20-110). Table 1 of the PROS Project and Priority Plan specifically identifies land acquisition and community park improvements at the community park to serve the Bethel-Danebo area. Measure 20-110 passed in 2007 and natural area (non-urban) park improvements have been made with bond funds.

The community park is a largely undeveloped 222-acre property that includes ponds, a trail system and natural areas. The community park could have active recreational facilities (e.g., athletic fields and courts), as well as passive recreational uses – that require large, flat development areas.

Volunteers have been working with the Eugene Parks and Recreation Division to restore natural features in the park by planting native trees and softening steep slopes leading to the ponds which also pose a safety hazard. The PROS Comprehensive Plan calls for enhancing the environmental quality of the A-2 Channel riparian corridor by reconstructing the A-2 Channel to meander (rather than run in a straight line), reducing channel bank grades, and planting native vegetation.

As shown on Figure 3 Clear Lake Wetlands, Stream Corridors and Locally Significant Wetlands (LSW), the Clear Lake LWI describes and maps three significant resource sites and substantial floodplain area within the park property:

- The A-2 Channel runs from east to west through the existing ponds near the southern border of the park. The A-2 Channel riparian corridor covers about 22 acres and is largely confined within the A-2 Channel floodplain.
- W-14 meanders through the western portion of the park property and covers approximately 24 acres of the park. The western “arms” of this elongated wetland are within the 100-year floodplain.
- W-16 is located near the northern edge of the park property and covers 1.71 acres. This LSW will be impacted by a proposed local street.

Social and Economic Consequences of the Prohibit (Full Protection) Option

Social Consequences

For the last 40 years, the Metro Plan has recognized the importance of its riparian corridors and wetlands to the quality of life of area residents. The region’s riparian corridors and wetlands are important to the quality of its urban fabric; they define residential neighborhoods and form the backdrop for commercial and industrial developments. Potential social benefits resulting from full protection of LSWs and the A-2 Channel are related to aesthetic and scenic values, public health, recreational and educational values, public safety and welfare, screening and buffering from incompatible land uses, and noise attenuation.

However, in the community park, these social benefits are currently marginal due to the degraded condition of LSW (farming is currently taking place over LSW in the park). Existing benefits are more pronounced in the A-2 Channel due to the presence of some vegetation and the neighboring residential neighborhoods.
Aesthetic and Scenic Values

Generally, Eugene’s wetlands and riparian corridors are integral to community identity and create a sense of place; they shape and define individual neighborhoods within the City. The City’s riparian corridors and vegetated wetlands convey a distinctive character and aesthetic value to the neighboring Bethel neighborhoods and to the quality of life of its residents. These resources enhance the appearance of the built environment and, in the case of the A-2 Channel, serve as local landmarks, distinguishing a neighborhood or place. However, the aesthetic and scenic value of LSW in the park is minimal because they currently lack tree cover. The A-2 Channel has riparian vegetation along its banks which separates residential neighborhoods and potentially more land-extensive park uses such as athletic fields in the community park.

Stress Reduction and Health Benefits

Vegetation associated with some LSW and the A-2 Channel has some physical and psychological health benefits. Vegetation (especially trees) improves air quality and removes pollutants such as nitrogen dioxide, carbon monoxide, sulfur dioxide, ozone, and airborne particulates. They purify the air and remove pollutants which can save money in health care and associated costs (American Forests 2001). While improving air quality and reducing related respiratory illnesses, riparian vegetation can also reduce stress for people who live or work close to them. However, the full protection option would simply maintain existing vegetative cover in degraded LSW and along the A-2 Channel; it would not necessarily include several of the elements proposed in the No Local Protection Program that mitigate for impacts from fill and removal, encourage voluntary restoration and enhancement, or integration of wetlands as “green infrastructure” into an area-wide stormwater management program.

Recreational and Educational Values

The region’s extensive system of public parks and open space is integrally linked to water resources. The centerpiece of the community park is the ponds (originally barrow pits) that provide a quiet, relaxing and scenic environment. Vegetation (especially trees) contributes to the recreational experience by bringing aesthetic, scenic, and natural qualities to the settings people select for outdoor leisure. Riparian and wetland vegetation can offer an immediate connection to nature within an urban area, both in parks, schools and employment areas. This can be especially important to children or people with limited mobility who otherwise have little contact with nature.

16 Vegetated areas have been credited with reducing aggression and violence in cities and encouraging positive social behavior. Crime reduction can be a major benefit of trees planted in urban neighborhoods (Sullivan and Kuo 1996). Researchers also found that children who could see trees and nature from their windows were better able to concentrate and to control impulsive behavior. In general, trees afforded a place for neighbors to meet and get to know each other – a place where friendships developed into a network of support for the residential community. In a study of recuperation rates after surgery, Ulrich (1984) found that patients recovering from surgery recovered more quickly and needed fewer painkillers if they had a view of trees from their hospital bed. Therapists are now using trees and other plants to help people with physical and mental problems.

17 Notably, the ponds (old barrow pits) are not considered significant Goal 5 resources according to DSL rules, despite their attractive appearance and recent tree-planting efforts by neighbors.

18 People appreciate the value that vegetated areas add to the recreational experience: a survey of park users found a strong preference for a mostly wooded recreational site versus a grassy but sparsely treed site (Dwyer et al.1989). Wildlife viewing has increased steadily since 1980, when a nationwide survey of wildlife-related recreation found that 55 percent of respondents interact with wildlife near their homes by watching, feeding, photographing, or painting them (Shaw et al. 1985). In Seattle, a survey found that 90 percent of park-users reported that the presence of wildlife enhanced their recreational experience of the park (Dick and Hendee 1986).
Screening and Buffering
Riparian vegetation can act as an edge between different land uses, creating visual buffers, for example, between industry and schools. This vegetation can also help to establish community character and can help unify developments or neighborhoods, just as they can be used to separate developments from one another and create buffers. At a smaller scale, vegetation can screen unattractive areas and objects, and can serve to soften and buffer structures and parking lots. However, the buffering effect of LSW in the Clear Lake UGB Expansion Area is minimal because wetlands generally are not located on the boundaries of incompatible land uses; for example, LSW do not provide much separation between the community park and adjacent industrial areas. In contrast to LSW, the A-2 Channel riparian area effectively separates the community park from nearby residential areas.

Noise Attenuation
Noise in urban areas can reach unhealthy levels; some construction processes, for example, can produce noise exceeding 100 decibels, which is considered high intensity noise that can be very damaging, even in very short durations. Two LSW are within the airport noise contour (W-3 and W-14), although any noise attenuation value from vegetation in these wetlands on airport noise is marginal. Vegetation can form a barrier that partially deadens the sound from traffic (especially Highway 99W, and Clear Lake, Airport and Green Hill Road), manufacturing processes, construction activities, and noise from outdoor athletic activities. Thus, vegetation associated with some LSW and the A-2 Channel could reduce sound in the Community Park that might otherwise reach nearby residential neighborhoods by reflecting and absorbing its energy.¹⁹

Social Costs (Adverse Social Consequences)
Prohibiting conflicting uses (full protection of natural resource areas) in an urban context has counter-balancing social costs. Adverse social consequences associated with the full protection option include:

- **Social Equity** – Full protection could limit accessibility to natural park features which would exacerbate existing social equity problems.
- **Public Parks** – Full protection of LSW and the A-2 Channel would prohibit planned active and passive recreational uses and activities. Such uses and activities have enormous social value for area residents and for the community as a whole, as proclaimed in Envision Eugene. (See Goal 8 ESEE discussion.)
- **Efficient Use of Scarce Public Resources** – Eugene city government has a fiduciary responsibility to use public monies wisely. The full protection option would substantially increase the costs of providing public infrastructure to serve the Community Park and to provide direct access for the community as a whole and for the Bethel neighborhood. (See Goal 11 and 12 ESEE discussions.)

Full protection of wetlands and riparian areas within the park can have other social costs. One such social issue relates to safety and defensible space. Vegetation associated with LSW and the A-2 Channel can provide places for criminals to hide and can be a safety concern for local communities. The community park will be closed in the evening and park designers can incorporate defensible space principles into the design for future park projects.

¹⁹ For example, a 100-foot-wide tree buffer has been shown to be capable of reducing noise levels by 6 to 8 dBa (Leonard and Parr 1970). Trees also can mask some noise with the sound of their rustling leaves and wind through the branches (Harris 1992). Significant Vegetation can absorb more high frequency than low frequency noise, an added benefit since higher frequencies are most distressing to people (Miller 1997).
ESEE Consequences of the Prohibit and Limit (application of WR/ overlay) Option
Permitted community park uses such as athletic fields require large, flat sites. Park development also relies on planned streets and public facilities. The Prohibit option would not allow park, utility or transportation facilities to be constructed over LSW or the A-2 Channel. This would have positive environmental consequences but extremely negative social consequences.

The Limit option would apply the WR/ overlay to the community park, which would provide an additional level of water resource protection that (a) allows public facilities and services under prescribed conditions but (b) would not allow intensive park uses within the boundaries of significant water resources and their respective conservation setback areas.

Thus, protection of relatively low quality wetlands in the Community Park could limit the flexibility required to allow for future park development. As shown on Figure 7 Potential Water Resources Management Plan, some LSW and non-significant wetlands may need to be filled and removed in order to provide large, flat sites that are reasonably necessary for planned urban uses. City staff has reviewed potential economic impacts affecting public and private property owners and developers, and the community’s ability to meet long-term employment, park and school needs while minimizing the relatively small size of the expanded UGB area.

This resulted in the recommendation not to apply the /WR (Water Resources) overlay to LSW and the A-2 Channel within the Clear Lake UGB Expansion Area. This overlay district lacks the flexibility necessary to create the large, flat development areas required by public and private users in this area.

ESEE Consequences of No Local Protection Program for the Community Park
The No Local Protection Program would apply the /WQ overlay zone to the floodplain associated with the A-2 Channel. Consistent with the policy direction set forth in the PROS Comprehensive Plan, the A-2 Channel riparian corridor will be restored and enhanced as the park develops. The No Local Protection Program also relies on DSL/USACE programs to avoid, minimize and mitigate potential impacts from planned employment, school, park and public facility development in the Clear Lake UGB Expansion Area.

Finally, the No Local Protection Program will be augmented by volunteer efforts to restore natural features; the positive effect of voluntary restoration efforts is evident in the summary of park activities found in the Introduction to this report. Working with the Division of Parks and Open Space, volunteers have been effective in planting native trees and removing invasive plant species. As LSW are restored and/or incorporated into an area-wide drainage master plan, the environmental consequences are likely to be positive.

The PROS Comprehensive Plan’s policy commitment to protect natural resources in park design supports a balance between planned park development and environmental conservation. The No Local Protection Program provides the flexibility to fill and remove wetlands as necessary to allow planned streets and trails (and possibly to make room for active recreational facilities like athletic fields and sports courts). As shown on Figure 7 Potential Water Resources Management Plan, the area between the narrow western arms of W-14 is surrounded by floodplain, and potentially could serve as an on-site wetland mitigation area.

The economic and social consequences of the No Local Protection Program will be positive. Passive and active recreational facilities will be constructed in suitable areas of the site; restoration of natural features will enhance park users’ experience of nature that is accessible to neighborhoods. The availability of active recreational users will be of great social value to the neighborhood. By allowing some flexibility to adjust the boundaries of relatively low-quality LSW, the costs of park design and construction will be reduced.
Goal 8 Conclusion
The **No Local Protection Program** will likely have positive social and economic consequences when compared with the full protection and limited protection alternatives, and when compared with existing conditions. The A-2 Channel will be protected by the /WQ overlay zone and the **PROS Comprehensive Plan** includes plans for environmental enhancement. There is sufficient room on the 228-acre park site for both active recreational facilities (that require large, flat development areas) and for restoration of LSW and the A-2 Channel (especially those within the 100-year floodplain). There is even the potential for on-site wetland mitigation in the floodplain area between the two western arms of W-14. The No Local Protection Program avoids inflexible aspects of the Prohibit (full protection) and Limit (WR/ overlay zone) options, while relying on the WQ/ overlay, volunteer efforts and DSL/USACE regulations to ensure that the water quality and flood storage values of water resources in the Clear Lake UGB Expansion area are maintained and enhanced.

Goal 9 Economic Development
Goal 9 requires (among other things) that Eugene prepare an “economic opportunities analysis” (EOA) that documents long-term employment needs and the characteristics of sites necessary to meet identified needs.

*To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon’s citizens.*

Comprehensive plans and policies shall contribute to a stable and healthy economy in all regions of the state.

1. Include an analysis of the community’s economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends;
2. Contain policies concerning the economic development opportunities in the community;
3. Provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies;
4. Limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with proposed uses.

ESEE Relationship to Goal 9
The Goal 9 portion of the ESEE Analysis applies to land that is designated for employment (Light-Medium Industrial and Campus Industrial) uses on the proposed amendments to the Metro Plan Map. The primary concern is that Eugene must maintain an adequate supply of suitable sites to meet economic development objectives as called for in the *Eugene EOA*. Notably, Goal 9 requires that the City provide “suitable” employment sites within its UGB to meet long-term employment needs. The need to add industrial sites in the Clear Lake UGB Expansion Area creates conflicts with the wetlands that are found throughout the planned employment area.

Conflicts between Goal 9 and Goal 5 resources often are difficult to resolve because industrial buildings typically have a single story and require large parking lots and maneuvering areas. Unlike residential areas, density transfer often is not a viable option. Eugene’s planned large-site industrial land base is concentrated in the UGB Expansion Area near the airport. These areas are interwoven with hydric soils and both locally-significant and non-significant wetlands. Full and partial protection of wetlands directly conflicts with full utilization of the northern portion of the UGB Expansion Area for employment purposes.

The EOA specifies site characteristics that are reasonably necessary to attract targeted employment opportunities to the community; Goal 5 requires that the economic, social, environmental, and energy
(ESEE) consequences of three decision options be considered prior to adoption of a formal natural resource protection program. This ESEE Analysis looks at the consequences of three types of Goal 5 programs for UGB Expansion Area: full resource protection, no local resource protection and limited resource protection.

The Eugene EOA
The basis for determining economic consequences of various resource protection options is the Eugene EOA – which in turn incorporates the values set forth in Envision Eugene by implementing the first of seven “pillars”: Provide ample economic opportunities for all community members.

As called for in the Goal 9 rule, the Eugene EOA determines Eugene’s employment land demand for the 2012 to 2032 period.20 The Eugene EOA (Section 6.2) identifies site needs or characteristics of clusters of “targeted industries”:

- **Site size/minimum acreage.** Sites for manufacturing firms range in size from 10 acres up to more than 100 acres for large-scale industrial firms.
- **Land ownership.** Sites with two or fewer owners are necessary to reduce the cost and uncertainty of land assembly.
- **Proximity/access to a major automotive route.** Manufacturers seek sites that located on arterial or major collector streets with good access to an interstate highway (or equivalent).
- **Topography/no or little slope.** Eugene considers a slope exceeding 5% to be a development constraint for purposes of identifying possible land for industrial employment.
- **Floodplain.** Eugene considers land located in the Special Flood Hazard Areas (SFHA) as a development constraint for purposes of identifying possible land for industrial employment.
- **Compatible surrounding land uses.** Manufacturers reject sites located in areas where a manufacturing operation will be incompatible with surrounding uses (established or planned).

The Eugene EOA (p. 129) identifies the types of industrial and other employment that are desired (as documented in Envision Eugene) by the community and are expected to locate in the expansion area:

Eugene’s target industries, described in section 5.2.1, range from a variety of types of manufacturing, professional services, and services for residents and visitors to the Eugene-Springfield region. Eugene’s current inventory of employment land (shown on the BLI) is well suited for some of these target industries, but not for others. This section describes the minimum site needs for the target industries that are not served by Eugene’s current inventory of employment land or are intended to be served through efficiency measures. These un-served target industries are primarily manufacturing employers located independently or in business parks/flex space.

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20 Quoting from the Introduction to the Eugene EOA:

This document presents an EOA for the City of Eugene consistent with the requirements of statewide planning Goal 9, the Goal 9 administrative rules (OAR 660 Division 9) and the court decisions that have interpreted them. Goal 9 describes the EOA as “an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends” and states that “a principal determinant in planning for major industrial and commercial developments should be the comparative advantage of the region within which the developments would be located.”

Goal 9 requires the City to state its objectives for economic development (OAR 660-009-0020(1)(a)) and to identify the characteristics of sites needed to accommodate those reasonably expected industrial and other employment uses to implement the economic development objectives (OAR 660-009-0025(1)) over the 20-year planning period.
Clean Technology and Renewable Energy. Support the development of an industry cluster in renewable energy and clean technology.

The Envision Eugene Comprehensive Plan includes policies to ensure that employment sites in the UGB Expansion Area are used for targeted employment opportunities:

Industrial Siting and Compatibility OAR: 660-015-0000(9) 4. Limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with proposed uses.

- 3.19 Industrial land preservation. Protect and retain the West Eugene and Highway 99 Industrial Corridors as industrial land, particularly parcels with access to rail infrastructure. Foster opportunities for a variety of heavy industrial development in existing heavy industrial areas.

- 3.24 Environmental justice and compatibility. To promote compatibility between industrial lands and adjacent areas, apply and maintain land use regulations to avoid the siting of new heavy industrial uses in areas that already accommodate a disproportionate amount of such uses or near residentially designated lands, schools, day care centers, and community recreational facilities such as athletic fields, pools and playgrounds; or, mitigate typical associated impacts when adjacency cannot be avoided.

The Eugene EOA (p. 121) concludes that:

It is reasonable to assume that, if Eugene had a larger base of vacant, suitable industrial sites, Eugene would attract a share of the businesses considering locating or expanding in Western Oregon and the Southern Willamette Valley. The City’s economic development policies (see Section 2.3) support development of target industries (including those that require sites larger than 10 acres) and development of the necessary land base.

Table 8 below (Table 36 in the Eugene EOA) summarizes the results of this analysis:

<table>
<thead>
<tr>
<th>Site size (Suitable Acres)</th>
<th>Site sufficiency</th>
<th>Average site size (suitable acres)</th>
<th>Average Suitable Gross Acres Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 acres</td>
<td>(4)</td>
<td>15</td>
<td>(60)</td>
</tr>
<tr>
<td>20 to 50 acres</td>
<td>(2)</td>
<td>35</td>
<td>(70)</td>
</tr>
<tr>
<td>50 to 75 acres</td>
<td>(3)</td>
<td>63</td>
<td>(189)</td>
</tr>
<tr>
<td>75 acres and larger</td>
<td>(2)</td>
<td>88</td>
<td>(176)</td>
</tr>
<tr>
<td>Total</td>
<td>(11)</td>
<td>(495)</td>
<td></td>
</tr>
</tbody>
</table>

Source: ECONorthwest

The land deficit was calculated by multiplying the site deficit by the average site size in Table 36. For sites 10 to 20 acres, there is a deficit of 4 sites at an average size of 15 acres (4 sites times 15 acre sites equals a 60 acre deficit). Thus, ECONorthwest estimates that from 380-605 acres (assuming a 100-acre ceiling for sites of 75 acres and larger) are needed for to meet large-site employment needs. After a thorough analysis of UGB expansion area alternatives (see discussion under Goal 14), the City determined that the Clear Lake UGB Expansion Area has the site characteristics necessary to accommodate target employment opportunities, and best met applicable Goal 14 locational factors. Figure 8 shows one possible way that the site needs identified in Table 8 can reasonably be met, consistent with DSL and USACE wetland fill and removal requirements.

The analysis below recognizes that UGB Expansion Area is highly constrained by wetlands, floodplains and drainage ways and that Goal 14 requires the efficient use of land added to the Eugene UGB. The
analysis considers the economic and social consequences of three Goal 5 program options: **Prohibit** conflicting uses (full Goal 5 protection); **Limit** conflicting uses (apply the WR/ overlay to significant water resources); and **Allow** conflicting uses (no additional Goal 5 protection with reliance on existing water quality and floodplain regulations and DSL/USACE review of wetland fill and removal permits).

**Economic and Social Consequences of the Prohibit (Full Protection) and Limited (WR/ Overlay) Options**

As noted in the Goal 5 discussion of environmental consequences, the Prohibit (full protection) option and the Limit (apply the WR/ overlay) would have positive environmental consequences for LSW and the A-2 Channel riparian corridor because both the boundaries of the water resources and their respective conservation setback areas would be protected. As documented in the *Clear Lake LWI*, the severity of these adverse environmental consequences is mitigated by the relatively low quality of LSWs in the UGB Expansion Area and by the role that DSL/USACE would play in mitigating adverse impacts from wetland fill and removal.

**Economic Consequences**

*Figure 7 Potential Water Resources Management Plan* (shown under the Goal 6 discussion) shows proposed employment sites (with a white background) within the UGB Expansion Area in relation to wetlands (LSW and non-LSW), the A-2 Channel riparian corridor, the 100-year floodplain and open water areas.21 *Figure 8* shows how water resources (aka “development constraints” from an economic development perspective) are interwoven throughout the planned employment area. It also shows how portions of wetlands could potentially be removed to make room for large industrial sites and logical areas for on-site mitigation. **It is clear from this map that providing sites that are suitable for large-scale employment would be impossible without filling and removing wetlands on the property. Both the full and limited protection options prohibit industrial and commercial development on LSW and their respective resource conservation setback areas.**

Because wetlands are braided through designated employment land, the economic benefits relating to full and limited protection of water resources are more than offset by the loss of otherwise suitable industrial sites and corresponding loss of job opportunities. (See discussion under the Allow option below.) For this reason, full protection of LWI in planned Campus and Light-Medium Industrial areas and application of the WR/ overlay (limited protection) would conflict with the City’s ability to provide suitable employment sites necessary to carry out EOA objectives. Failure to meet economic development objectives is inconsistent with Goal 9 and a critical pillar in *Envision Eugene* and would have adverse economic and social consequences for the community as a whole and for the Bethel-Danebo community in particular.

In conclusion, the full and limited protection options would mean that no development could occur within significant water resource areas or their setback areas, although the limited protection (WR overlay) option would allow public facilities and roads to be constructed across wetlands were no reasonable alternative exists. These options would severely restrict the City’s ability to attract major new employers (or to relocate existing firms within the UGB) and would severely limit areas where new office and industrial development could occur. Without UGB expansion to accommodate large-site needs, Eugene could become noncompliant with Statewide Planning Goal 9 (Economic Development). Job

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21 Practically speaking, employment sites are constrained by both LSW and non-significant wetlands. Both DSL and USACE regulate both types of resources. Any prospective developer of lands with either type of wetlands would be wise to determine the buildable area of any property in the UGB Expansion Area before purchasing or applying for development permits.
growth in Eugene would be greatly impaired. For all of these reasons, full resource and limited resource protection in areas planned for large-site employment is not a realistic public policy option.

Social Consequences
For the last 30 years, the Metro Plan has recognized the importance of its riparian corridors and wetlands to the quality of life of area residents. The region’s riparian corridors and wetlands are important to the quality of its urban fabric; they define residential neighborhoods and form the backdrop for commercial and industrial developments. Potential social benefits resulting from full and limited protection of LSWs in planned employment areas are related to: aesthetic and scenic values; public health; public safety and welfare; screening and buffering from incompatible uses; and noise attenuation. However, as noted below, in the UGB Expansion Area these social benefits are marginal due to the degraded condition of LSW. And, if employment cannot occur in much of the UGB Expansion Area due to wetland and floodplain constraints, the social values associated with limited protection and enhancement of wetlands adjacent to employment sites (see below) would not come to pass.

Aesthetic and Scenic Values
Generally, Eugene’s wetlands and riparian corridors are integral to community identity and create a sense of place; they shape and define individual neighborhoods within the City. The City’s vegetated wetlands convey a distinctive character and aesthetic value to employment areas and to the quality of life of those who work in them. They can enhance the appearance of the built environment and in some cases serve as local landmarks. However, the aesthetic and scenic value of LSW (in their existing condition) in the planned employment area is minimal, except for W-3 and W-5, which have small pockets of vegetated (Ash) cover.22

Stress Reduction and Health Benefits
Vegetation associated with some LSW could have physical and psychological health benefits. Vegetation (especially trees) improves air quality and removes pollutants such as nitrogen dioxide, carbon monoxide, sulfur dioxide, ozone, and airborne particulates. They purify the air and remove pollutants which can save money in health care and associated costs (American Forests 2001). While improving air quality and reducing related respiratory illnesses, riparian vegetation can also reduce stress for people who live or work close to them.23

However, the full and limited protection options would simply maintain existing vegetative cover in degraded LSW and along the A-2 Channel (since development of large employment sites would be largely precluded); it would not include all of the elements proposed in the No Local Protection Program that mitigate for impacts from fill and removal, encourage voluntary restoration and enhancement, and integrate wetlands as “green infrastructure” into an area-wide stormwater management program.

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22 Research has shown that the public appreciates the connection between riparian vegetation and the aesthetic quality of their communities. In one study, the majority of residents reported damage to trees as the single greatest loss sustained by their communities in the aftermath of a major storm that caused widespread damage to homes and property (Hull 1992).

23 Vegetated areas have been credited with reducing aggression and violence in cities and encouraging positive social behavior. Crime reduction can be a major benefit of trees planted in urban neighborhoods (Sullivan and Kuo 1996). Visual contact with nature can also improve office worker productivity and job satisfaction, which has important health implications. Office workers with a view of trees and greenery reported better overall health, and had a significantly lower incidence of illness (Kaplan and Kaplan 1989).
Screening and Buffering
Riparian vegetation can act as an edge between different land uses, creating visual buffers, for example, between industry and schools. This vegetation can also help to establish community character and can help unify developments, just as they can be used to separate developments from one another and create buffers. At a smaller scale, vegetation can screen unattractive areas and objects, and can serve to soften and buffer structures and parking lots.

However, the buffering effect of LSW on employment lands in the UGB Expansion Area is minimal because wetlands generally are not located on the boundaries of incompatible land uses; for example, LSW generally do not separate the school or park sites from adjacent industrial areas. However, as shown on Figures 6-8, if buildable areas were created to make room for large development sites, remaining LSW (and other retained wetlands) could be enhanced to better separate buildable industrial areas, and riparian vegetation could be used to create privacy for individual firms and serve as amenities for employees.

Noise Attenuation
Noise in urban areas can reach unhealthy levels; some construction processes, for example, can produce noise exceeding 100 decibels, which is considered high intensity noise that can be very damaging, even in very short durations. Three LSW are within the planned employment area are also within the airport noise contour (W-3, W-5 and W-8); although any noise attenuation value from vegetation in these wetlands on airport noise is marginal. Vegetation can form a barrier that partially deadens the sound from traffic (especially Highway 99W, and Clear Lake, Airport and Green Hill Road), manufacturing processes, construction activities, and noise from outdoor athletic activities. Thus, vegetation associated with some LSW could marginally reduce sound directly by reflecting and absorbing its energy.24

Social Costs (Adverse Social Consequences)
On the other hand, there are social costs associated with full and limited protection of LSW in employment areas. Adverse social consequences associated with the full protection option include:

- **Social Equity** – Full and limited protection could restrict the availability of future jobs in the Clear Lake employment area, which could reduce income in less affluent neighborhoods near the UGB Expansion Area. (See “Environmental Justice Issue Briefing,” July 2014.)
- **Employment Opportunities** – In the UGB Expansion Area, full protection of locally significant wetlands would substantially decrease the supply of development-ready industrial sites necessary for basic employment opportunities. Loss of such jobs would have adverse social consequences for the broader community.
- **Efficient Use of Scarce Public Resources** – Eugene city government has a fiduciary responsibility to use public monies wisely and a commitment to reduce unnecessary development costs for future employers. The full and limited protection option would substantially increase the costs of providing public and private infrastructure to serve planned development and therefore would have adverse long-term social consequences for existing and future community residents. The limited protection options would allow streets and public facilities to be provided to the area, but the likelihood of their serving large employment sites that are currently covered by LSW is very low. Maintaining continued confidence in the ability of City and County elected officials to

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24 For example, a 100-foot-wide tree buffer has been shown to be capable of reducing noise levels by 6 to 8 dBA (Leonard and Parr 1970). Trees also can mask some noise with the sound of their rustling leaves and wind through the branches (Harris 1992). Significant vegetation can absorb more high frequency than low frequency noise, an added benefit since higher frequencies are most distressing to people (Miller 1997).
effectively balance competing objectives is also a governance issue: the community’s long-term ability to work together to solve environmental, social, economic and energy problems depends in significant part on the confidence that the citizenry places in local elected officials.

- **Premature Loss of Rural Open Space and Farm Land** – Inefficient use of land within the Eugene urban growth boundary (UGB) will result in premature conversion of farm and forest land to urban uses to meet urban growth needs. Both the full and limited protection options would protect LSW and their resource conservation setback areas – which would not allow large employment sites to be developed, reducing land use efficiency. There are economic and social benefits for Eugene area residents associated with maintaining such rural lands that support Lane County’s productive agricultural economy.

Full and limited protection of wetland and riparian vegetation in large-site employment areas can have other social costs. Airport safety could be compromised if open water areas of existing wetlands attract water fowl. Another social issue relates to safety and defensible space. Vegetation associated with LSW can provide places for people to hide and can be a safety concern for local communities. In the UGB Expansion Area, however, forested areas with dense understory vegetation are uncommon, and are generally located at a distance from residential areas.

**ESEE Consequences of the No Local Protection Program for Economic Development Objectives**

The City’s Goal 14 analysis shows the Clear Lake area to be the best option for meeting large-site employment needs identified in the EOA. The City has determined (as a result of extensive public and agency involvement and interagency coordination) that the benefits of providing employment sites on flat, relatively serviceable land in the Clear Lake Road area outweigh the loss of relatively low quality wetlands.

To address the negative economic and social consequences of both the full and limited protection options identified in the Goal 5 section of this report, city staff worked with Winterbrook to allow strategic wetland fill and removal to provide large employment sites. However, the No Local Protection Program relies primarily on a combination of (a) local Goal 6 (Water Quality) and Goal 7 (Floodplain Management) programs, (b) DSL and USACE wetland fill and removal regulations, (c) wetland banking, and (d) area-wide stormwater management planning protect portions of LSW within the UGB Expansion Area.

Due to the relatively low quality of wetlands in the UGBP Expansion Area – and conflicts with airport operations and safety – City staff from several departments has concluded that it is inappropriate to encourage restoration of additional wildlife habitat near the Eugene Airport. Therefore, the focus of the No Local Protection Program is on protecting water quality and storage functions of wetlands and drainage channels – rather than protecting the area within existing boundaries of wetlands and conservation setback areas that have been significantly degraded as a result of farming practices.

The No Local Protection Program incorporates most of the environmental, economic and social benefits of all wetlands (not just LSW) of the full and limited protection options (in term of water quality, storm water management, creation of employment opportunities, social equity and maintaining open space near employment sites) without the adverse economic and social consequences of the full and limited protection options.
Feasibility of Fill and Removing Wetland to Provide Large Developable Areas

**Figure 7 Potential Water Resources Management Plan** identifies a possible location of the WQ overlay to protect water quality, planned streets and public facilities, and appropriate areas for on-site wetland mitigation. Approximately 139 acres of wetlands must be filled and removed to provide the development areas shown on Figure 8. **Figure 7** also shows a total of 32 acres of potential on-site mitigation areas to compensate for 21 acres of wetland fill and removal on land designated for employment use. The remaining 118 acres (139-21) of filled wetlands required to implement the Figure 8 scenario would need to be mitigated off-site. At a ratio of 1:1 (the current DSL standard) an estimated 118 acres will need to be banked to provide the 12 employment sites identified in **Figure 8**.

**Figure 8 Concept Plan: Large Employment Area Feasibility** is a non-binding concept plan that shows one way to provide large employment and light-medium industrial areas be provided in the north-central portion of the UGB Expansion Area while protecting (or mitigating for the loss of) most of the locally significant and non-significant wetlands. To assess the practical effect of the No Local Protection Program, Winterbrook Planning worked with City staff to prepare a preliminary concept plan for the Clear Lake UGB Expansion Area to illustrate how wetlands could potentially be partially filled, removed and mitigated to make room for planned employment, park, school, transportation and public facility projects.

**Figure 8 Concept Plan: Large Employment Site Feasibility** shows how about 490 developable acres (near the middle of the 380-605 acre range determined to be needed by the EOA) could be created, by filling and removing portions of wetlands consistent with state and federal regulations. The acreage numbers shown on the Figure 8 are linked to 12 potential employment sites, recognizing that developable areas could be combined or re-arranged in a number of configurations to meet the site needs identified in the Eugene EOA. Winterbrook has provided our best estimate of areas that DSL and the USACE potentially could approve as a result of a series of future individual fill and removal applications. The sites and acreage numbers shown on the concept plan are based on property lines (i.e., tax lots) and the boundaries of constrained areas, and assume that not more than two tax lots will be combined to create any of the 12 employment sites shown on Figure 8.

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25 How future DSL and USACE staff will review individual fill and removal applications is uncertain. It is assumed that land values in the airport area will eventually justify the relatively high development costs resulting from extension of public streets and facilities to serve the area and the presence of wetlands and floodplain constraints. An informal review by Associate Planner Zach Galloway shows I-2 industrial land “for sale” prices within the UGB ranging from $41K to $141K per acre, with an average of $88K. Land prices outside the UGB near the airport were for sale at much lower prices ranging from $16K to $27K per acre. Possible reasons why land values are much lower on land outside the UGB include the lack of full urban services, the unplanned nature of industrial development, and the presence of wetlands on county land near the airport.

26 Appendix A is a memorandum prepared by Anita Smyth, Professional Wetland Scientist, which provides the rationale for wetland potential fill and mitigation options. Ms. Smyth qualifies her analysis as follows:

27 The reason for the two tax lot limitation is explained in the EOA, p. 131:

Sites with two or fewer owners are necessary to reduce the cost and uncertainty of land assembly. Developing an industrial building on a site on two or more tax lots requires negotiating land assembly. Land assembly is difficult and often costly for a number of reasons. People own land for a variety of reasons, such as the desire to develop the land, keep the land undeveloped, or sell the land for a profit. Getting landowners to sell land can be difficult, especially if the ownership is legally disputed, as is the case with some inheritances. If a landowner is a willing seller, they may have an unrealistic expectation of their land’s value, in the context of comparable land values. In addition, one parcel of land may have multiple owners, compounding the issues described above. Developers attempting land acquisition often have difficulty assembling a site at a cost that makes development economically viable. When assembling land, developers often find that owners of key sites are not willing sellers, have unrealistic expectations of the value of their land, or cannot get agreement among multiple owners to sell the land. As a result, developers of industrial buildings typically choose to develop sites with one or two owners.
Figure 8 Concept Plan: Large Employment Site Feasibility
Recognizing these uncertainties, based on our professional judgment, we believe that the end result will likely be similar to the results shown on Figure 8 (in terms of identifying large, suitable development sites). To provide at least 11 large employment sites required by the EOA (or the 12 sites identified on Figure 8), streets and public facilities must be extended to serve planned industrial sites, property lines will likely be adjusted, and extensive coordination will need to occur between private property owners and public agencies. At the end of the day, the market for industrial sites will be the primary driver in determining where and how industrial development occurs on large sites within the Clear Lake UGB Expansion Area.

Finally, Figure 8 does not represent a city recommendation to protect certain wetlands; rather it graphically represents a scenario showing how wetlands could be filled and removed to provide suitable up to 12 suitable sites for planned employment opportunities. As noted above, the concept feasibility plan suggests some on-site mitigation areas, which could prove less expensive than off-site mitigation in some instances. However, based on observed mitigation success rates, DSL increasingly recommends off-site mitigation in a wetland bank – at an estimated cost of at least $56,000 per acre (totaling about $6.6 million for an estimated 118 filled acres in 2014 dollars); this does not include the costs of wetland fill and removal, on-site mitigation, and compliance with Eugene’s stormwater management requirements.

Goal 9 Conclusion
The augmented No Local Protection Program, when compared with the full protection and limited protection options, provides a feasible way to provide the large employment sites called for in the EOA while protecting most of the LSW and other wetlands identified in the Clear Lake LWI. Figure 8 Concept Plan: Large Employment Site Feasibility shows one scenario where 490 acres of suitable employment land (12 large sites) could be provided through the wetland fill and removal process administered by DSL and USACE.

Goal 11 Public Facilities and Services
Goal 11 reads in relevant part as follows:

To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. Urban and rural development shall be guided and supported by types and levels of urban and rural public facilities and services appropriate for, but limited to, the needs and requirements of the urban, urbanizable, and rural areas to be served. A provision for key facilities shall be included in each plan. Cities or counties shall develop and adopt a public facility plan for areas within an urban growth boundary … A Timely, Orderly, and Efficient Arrangement – refers to a system or plan that coordinates the type, locations and delivery of public facilities and services in a manner that best supports the existing and proposed land uses.

Public facilities and services include sanitary sewer, domestic water, stormwater management, municipal government, schools, police, fire, electrical, and communication facilities. Park and recreational facilities and transportation facilities are addressed respectively under Goal 8 and Goal 12.

ESEE Relationship to Goal 11
Public facilities and services provide the supportive framework necessary for urban development, and the provision of such facilities through the annexation process is the primary growth management tool. Public facilities and services often conflict with the full protection of significant Goal 5 resource areas. Construction of public facilities and services usually requires vegetation removal and grading and often results in construction of impervious surface area. As urban development occurs, an urban level of public facilities and services is required. Urban public facilities often must pass through significant resource areas to serve developable land. Although facilities like sanitary sewer, water, electrical, and
communication lines often are found in public street rights-of-way, sanitary sewer and stormwater management facilities function most efficiently under gravity-flow conditions and benefit from location in or adjacent to natural drainageways. School buildings, athletic fields, parking areas, and recreational structures conflict with Goal 5 resources in a manner similar to industrial or commercial uses.

Bethel School District Site
The Bethel School District property includes about 74 acres. The District estimates that approximately 25 developable acres will be needed to construct a new elementary school. In order to accommodate those 25 suitable acres, 54 gross acres (three of the five District-owned tax lots, the minimum number of tax lots to assemble a 25 acre minimum buildable site) are proposed to be brought into the UGB at this time, of which 33 acres are considered developable.

Figure 3 Clear Lake Wetlands, Stream Corridors and Locally Significant Wetlands (LSW) shows that the only LSW located on the school property is W-14; the western two “arms” of W-14 occupy the southern portion of the school site. However, the area around these “arms” is within the 100-year floodplain, making development of the southern portion of the school site impractical. The area north of the floodplain has portions of two non-significant wetlands (W-10 and W-11) which are small and potentially could be filled if necessary for future development.

ESEE Consequences for the Bethel School Site
The Prohibit (full protection) option would not allow for new school or athletic field development or for the extension of streets and utilities to serve the school development on buildable land. Thus, the social and economic consequences of the Prohibit conflicting use option would be negative.

The Limit option (applying the WR/ overlay to wetlands on school property) would allow for extension of sewer, water, drainage and transportation facilities necessary to serve school development. The District has indicated its preference to conserve the western arms of W-14 for educational and wetland mitigation purposes, which would have positive social and environmental consequences. Since there is sufficient buildable land to accommodate planned elementary (and possibly middle school) development on District property, the ESEE consequences of applying the WR/ overlay to District property would generally be positive.

The Allow option (with DSL/USACE approval) would allow school construction (including parking, playgrounds and buildings) over portions of the W-14 and the floodplain that surrounds it. However, since the District does not need or intend to build over LSW, potential adverse environmental and social consequences are unlikely to occur. The primary benefit of the No Local Protection Program is to reduce regulatory review costs that may occur if the WR/ overlay were applied to school property; this can be viewed as having marginal economic and social consequences for the District.

Figure 7 Potential Water Resources Management Plan shows the floodplain area associated with the western arms of W-14 as a potential wetland mitigation site that could be of educational value to students at the future elementary school, as well as mitigating for the loss of LSW that could result from the planned Terry Street extension. Restoring and enhancing wetland and floodplain areas would have positive environmental and social consequences for students, the Bethel School District and nearby residents, and can occur under either the Limit or Allow options.

Other Public Facilities
At a minimum, the following public facilities would be needed to serve the UGB Expansion Area:

- Upgrade EWEB water line, as appropriate, and construct additional water lines in street rights-of-way;
• Construct wastewater collection facilities (Clear Lake Road and Terry Street) and pump station at topographic divide;
• Utilize existing and construct some new electrical facilities; and
• Utilize wetland system where feasible for storm water storage and treatment (i.e., green infrastructure concept).

As shown on Table 3, planned utility extension outside of street rights-of-way would affect W-3 (sewer pump station) and could affect other wetlands as more detailed public facilities plans are prepared. As noted throughout this report, significant water resources, drainageways within the 100-year floodplain, and non-significant wetlands will be incorporated into an area-wide stormwater management plan that addresses both the water quality and storage functions of wetlands and drainage channels that are braided throughout the UGB Expansion Area.

Environmental Consequences
The environmental consequences of the Prohibit, Limit and Allow programs are discussed in detail in the Goal 5 section of this ESEE Analysis. In summary,

- The **Prohibit** (full protection) option would have mostly positive environmental consequences because vegetation removal, grading, and construction of hard surfaces associated with public facilities would not be permitted. The positive environmental consequences of fully protecting all significant Goal 5 resource areas is discussed in the Goal 5 section of this chapter. However, as noted in the Goal 5 discussion, significant water resources in the UGB Expansion Area have been degraded over the years by ongoing commercial agricultural activities; wetlands have been drained and channelized to make farm land more productive.

- The **Limit** (apply WR/overlay) would allow planned public facilities and services to be constructed through or under natural resource sites if no reasonable alternatives are available, subject to an alternatives analysis and mitigation prior to construction of public facilities through LSW and the A-2 Corridor. Considering the relatively low quality of LSW in the UGB Expansion Area, limiting (rather than prohibiting) conflicting public facilities uses would have marginally adverse environmental consequences.

- In Eugene’s case, the **Allow Program** (no additional Goal 5 protection) includes application of the WQ/overlay, an area-wide stormwater management planning requirement, voluntary wetland and riparian enhancement programs, wetland banking and DSL/USACE avoid/minimize and mitigate review requirements. Because of these auxiliary local programs and state/federal regulatory requirements, the Allow Program would maintain and enhance the water quality and storage values identified in the Clear Lake LWI.

For the school site, all three options have positive environmental consequences. However, the Prohibit option would prevent the construction of public utilities and transportation facilities necessary to serve the school site. Since the District plans to preserve LSW for their educational value, fill and removal of wetlands to allow for school-related construction is unlikely.

Economic and Social Consequences
Eugene’s growth management program depends primarily on ensuring that the full range of public facilities and services is available to support urban development. This program would have substantial social and economic benefits to Eugene citizens and businesses. The growth management program helps to ensure an adequate supply of serviced industrial and public lands (with associated job opportunities). The growth management program also ensures that services are available to nearby residential areas, as well as accessible schools, potable water, and adequate sanitation. By managing the direction and timing of growth, the public costs of providing public facilities and services are reduced.
The **Prohibit** (full protection) option would make Eugene’s growth management program extremely difficult to achieve. This option would mean that no public facilities construction or maintenance could occur within fully protected significant water resource areas. They could not cross the A-2 Channel or LSW that are interwoven through the UGB Expansion Area. Since significant water resource areas comprise a substantial portion of the land within the UGB Expansion Area, avoiding such areas would preclude the efficient provision of public facilities and services that are necessary to support planned urban development. The economic and social costs to the public resulting from a different form of “leap-frog” development would be extremely high.

For example, sanitary sewer and water services would be required to be routed around water resource areas, regardless of public or private expense. This option could severely restrict future development patterns, both public and private, utilities (and associated easements and rights-of-way) could not be extended through water resource areas. Eugene’s quality-of-life and its appeal as a place to locate business would suffer substantially.

In conclusion, Eugene’s public facilities are important community assets and are necessary to serve planned urban development. Fully protecting all significant water resource areas would unnecessarily restrict urban growth and urban design options. Conversely, allowing unrestricted development of the sites could mean the loss or degradation of many of the economic benefits described previously.

The full protection option would have at least one significant but frequently overlooked economic benefit. LSW and the A-2 Channel riparian corridor provide substantial stormwater management benefits because they intercept or detain rainfall and reduce stormwater runoff. Riparian vegetation reduces runoff translating into substantial “ecosystem management” value. (American Forests 2001) Unrestricted removal of trees and riparian vegetation to develop public facilities and schools could reduce the City’s “green” stormwater infrastructure, necessitating the construction of extensive new facilities to address the increased storm flows from planned urban development. However, as noted in the Goal 5 environmental consequences discussion above and reiterated below, these benefits can derive from the Allow and Limit options as well.

The **Allow Program** (no additional Goal 5 regulations) are designed to fully integrate water resources (floodplains, drainage channels and wetlands (whether locally-significant or not)) into an area-wide stormwater quality management plan. This program option does not focus on “protecting” the area within the boundaries of LSW and the A-2 Channel riparian corridor per se; rather, incorporates these relatively low-quality water resources as “green infrastructure” that would maintain and improve the quality of stormwater runoff and retain stormwater runoff on-site and within existing and constructed wetlands to manage its volume.

**Figure 7 Potential Water Resources Management Plan** shows a scenario in which key wetland areas are retained, some wetlands are filled and removed, and new wetland mitigation areas are created. Figure 7 also shows where the floodplains of the Clear Lake Channel north of Clear Lake Road and the A-2 Channel are protected with the /WQ overlay zone to ensure protection and restoration of their water quality and conveyance functions.

Sewer and water pipes are currently located in the Airport Road and Highway 99W rights-of-way making it relatively easy to extend these utilities to serve employment sites. The No Local Protection Program option expressly allows public facilities and services to be constructed through LSW and the A-2 Channel riparian corridor where necessary to provide public facilities and services efficiently to planned urban development. The standards of the **Eugene Stormwater Management Manual** combined with the DSL/USACE fill and removal review process will ensure that environmental impacts from public facility construction are minimized.
The Limit Program (apply the WR/ overlay) option would also allow planned public facilities to be constructed under or through significant water resource sites, subject to an alternatives analysis and mitigation requirements. However, the Limit program option would not allow park, school or employment development to occur within the boundaries of LSW or conservation setback areas. This restriction means that planned urban development would be much less likely to occur, or would occur much less efficiently, which in turn means that the private costs of extending public facilities to serve development sites would be borne by a smaller group of property owners, and that public facilities costs (per developable acre) would be much higher – and probably prohibitively high. Thus the economic and social costs of applying the WR/ overlay to land within the UGB Expansion Area would be highly negative.

Goal 11 Conclusion
The No Local Protection Program ensures that Eugene can continue to provide key public facilities and services necessary to support planned urban growth in a timely and efficient manner. This Goal 11 requirement is underscored by the policies of the Metro Plan, and serves as the cornerstone for managing urban growth within the Eugene UGB. In contrast, the ESEE consequences of allowing public facilities to be constructed to serve land that is unlikely to be developed (Limit option), or of prohibiting public facilities construction and maintenance in all significant water resource areas (Prohibit option), would be extremely negative.

Goal 12 Transportation
Goal 12 reads in relevant part as follows:

To provide and encourage a safe, convenient and economic transportation system. A transportation plan shall (1) consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian; (2) be based upon an inventory of local, regional and state transportation needs; (3) consider the differences in social consequences that would result from utilizing differing combinations of transportation modes; (4) avoid principal reliance upon any one mode of transportation; (5) minimize adverse social, economic and environmental impacts and costs; (6) conserve energy; (7) meet the needs of the transportation disadvantaged by improving transportation services; (8) facilitate the flow of goods and services so as to strengthen the local and regional economy; and (9) conform with local and regional comprehensive land use plans. Each plan shall include a provision for transportation as a key facility.

ESEE Relationship to Goal 12
Goal 12 requires that local governments plan for a multi-modal, interconnected transportation system. Goal 12 reinforces the Goal 5 requirement to consider the ESEE consequences of providing transportation facilities to meet this goal. Eugene has an acknowledged Transportation System Plan (TSP). Amendments to this plan identify pedestrian, bicycle, and vehicle projects, as well as their estimated timing, location, and cost.

The following transportation projects (at least) are planned for the UGB expansion area:

- Extend Terry Street north to serve industrial, park and school properties;
- Extend Theona Drive westward to serve park and industrial properties;
- Widen Clear Lake Road to meet urban standards;
- Make additional local street connections as development necessitates; and
- Construct bicycle / pedestrian facilities along Clear Lake Road (multi-use path), Jesson Drive (shared use path along A-2 Channel), and through the community park (connecting to the Terry Street extension).
Economic and social and environmental consequences related to transportation facilities are considered in this section. The substantial adverse energy consequences of the Prohibit (full resource protection) option are considered in the Goal 13 section that follows.

All transportation facilities conflict to some degree with full protection of significant water resource areas. Like other public facilities and services, transportation facilities and their impacts vary widely – from multi-lane roads to pervious-surfaced pedestrian trails. Local streets necessary to serve development are not necessarily shown on TSP maps, but may also have adverse impacts on significant water resources.

As shown on Table 3 and Figure 8 Concept Plan: Large Employment Site Feasibility, all LSW and the A-2 Channel riparian corridor would be affected by one or more of these planned facilities. Two alternative locations are shown for the Terry Street extension.

- The first alternative would jog to the northeast through (and the western “arms” of W-14) before and heading north to connect with the “panhandle” accessway connecting to Clear Lake Road. Terry Street would then continue north to serve planned industrial land before jogging to the northwest to connect with an existing access parcel in the rural industrial area served by Airport Road. This option would have a greater impact on W-14 and a lesser impact on W-5.
- The second alternative would head straight north along the eastern boundary of the Bethel School District property, across Clear Lake Road and across the floodplain associated with the drainage way north of Clear Lake Road and the western arm of W-5. This option would have a lesser impact on W-14 and a greater impact on W-5.

**ESEE Consequences of Full and Limited Protection Options for Meeting Transportation Needs**

Most of the Goal 11 ESEE Analysis applies equally to planned transportation facilities. The Prohibit (full protection) option would preclude a multi-modal, interconnected transportation system, would decrease pedestrian and bicycle use, and would result in substantial out-of-direction travel. With diminished bicycle and pedestrian accessibility, transportation costs would increase and neighborhoods would become more auto-dependent. Full protection of resources in right-of-way areas could stop planned widening of Eugene streets and planned development of new local and collector streets necessary to serve planned development efficiently. This would make the City and County noncompliant with Goal 12, as their joint Transportation Systems Plan could no longer be implemented.

The Prohibit option would preclude the City from constructing new bicycle lanes through significant natural resource areas as growth occurs. This would have substantial adverse social consequences for existing and future area residents and businesses. As noted in the Goal 13 discussion, the full protection option would increase out-of-direction travel with corresponding loss of productivity and increased energy costs.

The Limit (apply WR/ overlay) would allow for planned transportation facilities to be constructed through water resource areas with subject to local review of alternatives and mitigation requirements. However, the Limit program option would not allow intensive park, school or employment development to occur within the boundaries of the A-2 Corridor, LSW or conservation setback areas. This restriction means that planned urban development would be much less likely to occur, or would occur much less efficiently, which in turn means that the private costs of extending transportation facilities to serve development sites would be borne by a smaller group of property owners, and that public facilities costs (per developable acre) would be much higher – and probably prohibitively high. Thus the economic and social costs of applying the WR/ overlay to land within the UGB Expansion Area would be highly negative.
ESEE Consequences of No Local Protection Program for Meeting Transportation Needs
The No Local Protection Program avoids the adverse economic and social consequences represented by the full and limited protection options by allowing for planned transportation improvements needed to serve planned industrial, school and park development in the UGB Expansion Area – while providing WQ/overlay protection for LSW and the A-2 Channel riparian corridor. Transportation facilities would thus be subject to the standards of the *Eugene Stormwater Management Manual* will ensure that environmental impacts from transportation facility construction are minimized.

The Eugene Transportation System Plan (TSP) has been amended to incorporate planned collector and arterial streets. The TSP will determine which of the two Terry Street extension options best serves planned urban land uses and minimizes adverse environmental impacts to LSW in the UGB Expansion Area.

**Goal 12 Conclusion**
The proposed No Local Protection Program recognizes that importance of providing multi-modal access efficiently to planned park, school and employment uses in the UGB Expansion Area. Potential adverse environmental impacts will be minimized by application of the requirements of the *Eugene Stormwater Management Manual* and through the DSL/USACE fill and removal review process. By allowing for the maintenance and expansion of existing transportation facilities, and the improvement of planned facilities with mitigation, adverse ESEE consequences would be minimized.

**Goal 13 Energy Conservation**
Goal 13 is short and to the point. It reads as follows:

> To conserve energy. Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles.

**ESEE Relationship to Goal 13: Energy Conservation**
One of the four key consequences that must be considered in the Goal 5 ESEE Analysis process is “energy consequences.” Energy conservation is a theme that runs through several of the Statewide Planning Goals. Energy consequences must be explicitly considered under Goal 5 (Natural Resources), Goal 9 (Economy), Goal 12 (Transportation), Goal 13 (Energy Conservation) and Goal 14 (Urbanization). Evaluation of energy consequences is also implied in the notion of “efficient” public facilities planning. This ESEE Analysis consolidates the consideration of energy consequences related to all applicable statewide planning goals in this section.

**Energy Conservation Consequences of Full and Limited Protection Options**
As observed throughout this report, the full resource protection option in an urban context conflicts with key planning principles in both the *Metro Plan* and *Envision Eugene* (especially “Plan for climate change and energy resiliency”), and in several Statewide Planning Goals. This conflict is especially evident with respect to Goal 13, Energy Conservation. The following bulleted list summarizes adverse energy consequences (i.e., increased energy consumption) that would result from implementation of the full resource protection option within the Eugene UGB:

- **Goal 8 (Parks and Recreation).** The full protection option would make it impossible to develop intensive park and recreation facilities or access land-extensive park and recreational facilities in the community park. Even in natural areas, trails, access roads, and parking areas would be prohibited. Without such local facilities, area residents would be forced to travel further to reach community park facilities, with attendant increases in energy consumption. The limited protection option would prohibit intensive recreational facilities in the A-2 riparian corridor, or
within LSW and their respective conservation setback areas. Because LSW are braided through the community park, siting of athletic fields would be more difficult and could result in increased travel for Bethel-Danebo residents would have to drive further to access active recreational opportunities.

- **Goal 9 (Economy).** The full and limited protection options would substantially reduce the supply of industrial and land available for development, with attendant reductions in jobs and services. These reductions would force people to drive further to reach service destinations and employment, and people would be less likely to bike or walk to work, with attendant increases in energy consumption. Truck travel distances to suitable employment sites (where available elsewhere within the UGB) would also increase.

- **Goal 11 (Public Facilities).** The full protection option would require public facilities to be routed around water resource areas, which would increase energy needed to construct and maintain more dispersed public facilities. This option would likely require greater reliance on pump stations because gravity flow sewer would be impossible if all sewer lines needed to be located outside of natural drainage areas. Emergency services would be more expensive to provide, and fire, police, and ambulances would be required to serve a more dispersed area, thus consuming more energy. The effect of this form of “leap-frog” development” would be to substantially increase energy costs associated with the provision of key public facilities and services. The limited protection option would allow for energy efficient provision of sanitary sewer, water and storm drainage facilities to development sites within the UGB Expansion Area, although the likelihood of such development occurring would be substantially reduced as discussed in the Goal 9 section of this ESEE analysis.

- **Goal 12 (Transportation).** As noted in the Goal 12 discussion, the full protection option would make implementation of planned transportation facilities impossible. The Eugene TSP calls for a multi-modal, interconnected systems of streets, pedestrian and bicycle facilities, and transit facilities. If the TSP could not be implemented, people would be more reliant on SOVs, there would a substantial increase in out-of-direction travel, and energy consumption would increase dramatically. The limited protection option would allow for energy efficient provision of sanitary sewer, water and storm drainage facilities to development sites within the UGB Expansion Area, although the likelihood of such development occurring would be substantially reduced as discussed in the Goal 9 section of this ESEE analysis.

- **Goal 13 (Energy Conservation).** The full and limited protection options mean that all significant water resources in the UGB Expansion Area would be preserved or conserved from most types of urban development. Both full and limited protection of significant water resources would have the effect of creating a type of “leap-frog” development, because (under full resource protection) urban services must pass over or around undeveloped resource sites to reach suitable areas further removed from the existing UGB and (under limited protection) large employment sites would be impossible to create in the UGB Expansion Area – forcing such development to more productive and distant agricultural land near the UGB. These effects would have the unintended consequence of substantially increasing energy consumption. All three program options allow wetlands to be used as “green infrastructure”. However, the full and limited program options would mean that large employment sites would be unlikely to develop in the UGB Expansion Area, meaning that ecosystem advantages associated with using wetlands (rather than hard infrastructure) to clean and store runoff from planned urban development would be unlikely to occur.

- **Goal 14 (Urbanization).** Finally, the full and limited protection options would result in a less compact urban form, which would disperse jobs, and parks, and force even more reliance on
single occupancy vehicles (SOVs). Passing over otherwise buildable areas to achieve full resource protection would mean premature expansion of the UGB, and consequent loss of agricultural land to provide produce to urban consumers. The lack of a compact urban form would have direct and adverse impacts on energy consumption.

There are some positive energy consequences associated with the full and limited protection options. Urban areas typically are warmer than rural areas because of the urban “heat island” effect. Buildings, paved areas, sparse tree canopy, and lack of water in an urban area contribute to the higher temperature. In temperate climates, temperatures of urban centers such as Eugene are rising by approximately 0.5°F or more per decade. The presence of substantial tree canopies can have major effects on energy consumption and air quality. Although there are only three forested areas identified within existing LSW in employment areas, trees could be planted as mitigation in wetlands that are restored or enhanced in the future. Reduced energy needs for air conditioning or heating will mean that local power plants are not required to produce as much electricity or gas energy, and this conserves fossil fuels and reduces pollution, including carbon emissions. By providing shade over roads, sidewalks, park and school buildings and parking lots, trees in natural areas reduce the urban heat island effect. Removal of these resources can have significant adverse effects on energy consumption (and costs) and air quality.²⁸

Energy Conservation Consequences of No Local Protection Program

The key features of the No Local Protection Program that ameliorate the excesses of the full protection program on energy consumption and climate change include the following:

- **Goal 8 (Parks and Recreation).** The No Local Protection Program (like the Limit Program) would make it possible to develop and access park and recreational facilities at the community park. In LSW and the A-2 Channel riparian corridor, trails, access roads and parking areas would be allowed with mitigation, thus allowing area residents the opportunity to walk, bicycle, or drive to local park and recreational facilities, with attendant energy savings.

- **Goal 9 (Economy).** The No Local Protection Program would provide large employment sites adjacent to the existing UGB and as called for in the Eugene EOA, thus maintaining employment opportunities near the less affluent Bethel-Danebo area. These changes allow people convenient access to service destinations and employment, thus increasingly the likelihood that people will bike or walk to work, with attendant energy savings.

²⁸ For example, a study of Los Angeles showed that a 1-degree rise in temperature could increase the City’s smog risk by three percent and its energy demand by two percent, adding $25 million in electricity costs in a single year (Wade 2000). Trees can help mitigate the heat island effect, and thereby reduce energy costs, by shading buildings and cooling the air through the evaporative process of transpiration. Trees reflect and absorb solar radiation before it heats the dense building and pavement materials of a home or office. Trees planted to the west of a building can significantly reduce air conditioning costs by blocking the hot afternoon sun during summer. Trees located to the south or east of a building can also provide such benefits, though to a lesser extent. In the winter, riparian vegetation (especially trees) can also help reduce energy costs associated with the heating of buildings. Researchers have found that trees act as windbreaks, reducing wind speed and resulting air infiltration by up to 50 percent (McPherson et al. 2002). This can reduce air infiltration and conductive heat loss from buildings, lowering heating costs. The density of the trees, species and location of tree, type of building, and the local climate determine the amount of wind reduction that occurs. Although both conifers and deciduous trees reduce wind speed, conifers tend to have a greater impact during winter months. Researchers have studied the effect of trees on energy costs in the Willamette Valley. Two 25-foot tall trees located on the west side of an energy efficient home (in Portland) were estimated to have an energy conservation savings of $18 each year for cooling (for the 15% of homes that use air conditioning) and $7 for heating (McPherson et al. 2002). Two trees thus resulted in a combined savings of $25, which represented a 4 percent reduction in annual heating and cooling costs.
• **Goal 11 (Public Facilities).** The No Local Protection Program would allow public facilities to be routed through water resource areas, which would decrease energy otherwise needed to construct and maintain more dispersed public facilities. By integrating wetlands, floodplain areas and drainage channels as “green infrastructure” into an area-wide stormwater master plan, energy costs associated with constructions and maintenance of a “hard” stormwater collection system would be greatly reduced. Emergency services would be less expensive to provide, because fire, police, and ambulances could serve a more concentrated area, thus consuming less energy. The effect of this form of concentrated development would be to substantially decrease energy costs associated with the provision of key public facilities and services.

• **Goal 12 (Transportation).** As noted in the Goal 12 discussion, the No Local Protection Program would facilitate future implementation of TSP goals and policies (the TSP must be amended to include specific transportation projects). The TSP calls for a multi-modal, interconnected systems of streets, pedestrian and bicycle facilities, and transit facilities. If the TSP could not be implemented, people would be more reliant on SOVs, there would a substantial increase in out-of-direction travel, and energy consumption would increase dramatically.

• **Goal 13 (Energy Conservation).** Rather than protecting all significant water resource areas, the No Local Protection Program would not apply Goal 5 land use regulatory protection to marginally significant wetlands. The No Local Protection Program would rely on DSL/USACE to avoid, minimize and mitigate for development impacts on LSW and other wetlands in the UGB Expansion Area. This reduction in protected resource area greatly reduces the “leap-frog” development effect, because urban services no longer need pass over undeveloped natural resource areas to reach buildable areas in the UGB Expansion Area. This reduction – coupled with the ability to construct urban facilities through water resource areas – allows a compact urban form that will result in energy conservation.

• **Goal 14 (Urbanization).** Finally, the No Local Protection Program would result in a more compact urban form, which would concentrate housing, jobs, and parks, and force less reliance on SOVs. By building at urban densities in otherwise buildable areas, the No Local Protection Program achieves a reasonably high level of resource protection while avoiding premature expansion of the UGB and consequent loss of agricultural land. A compact urban form would have direct and positive impacts on energy conservation. The No Local Protection Program also maintains or improves upon the positive energy conservation effects of the full protection option. By protecting, restoring and enhancing vegetation and trees along the A-2 Channel riparian corridor and most LSW that separate large employment sites for one another, and school and park sites from adjacent residential and employment development, there will be a consequent reduction in summer air conditioning and winter heating costs and a reduction in the urban “heat island” effect.

**Goal 13 Conclusion**
By providing limited protection for most LSWs, other wetlands and the A-2 Channel riparian corridor, the No Local Protection Program achieves most of the positive energy consequences of the full protection option while enhancing energy conservation by encouraging a compact urban form and efficient provision of public facilities and services. The No Local Protection Program achieves an appropriate balance between energy and water resource conservation.

**Goal 14 Urbanization**
Goal 14 reads in relevant part as follows:
To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

Urban Growth Boundaries

Urban growth boundaries shall be established and maintained by cities, counties and regional governments to provide land for urban development needs and to identify and separate urban and urbanizable land from rural land.* * *

**Land Need:** Establishment and change of urban growth boundaries shall be based on the following:

(1) Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and

(2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection (2).

In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need. Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.

**Boundary Location:** The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

(1) Efficient accommodation of identified land needs;

(2) Orderly and economic provision of public facilities and services;

(3) Comparative environmental, energy, economic and social consequences; and

(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

**ESEE Relationship to Goal 14**

Goal 14 is designed to ensure a long-term supply of buildable land to meet housing, population and livability (open space) needs. Metro Plan growth management policies are designed to ensure orderly and efficient provision of public facilities and services (as does Goal 11), maximum efficiency of land use within the UGB, provision of sufficient serviced land to maintain a competitive short-term land market, and a geographically-phased land development program.

**UGB Expansion Area**

Based on a series of studies, Eugene has determined that there is a shortage of suitable land for employment, schools and parks within the existing UGB. As documented in the Goal 9 section of this report, Eugene conducted an EOA that identified a need to add 11 large employment sites to the UGB, ranging in size from 10-75+ acres and (choosing the midpoint in the range) comprising about 495 suitable employment acres. The City then applied Goal ORS 197.298 Priorities for urban growth boundary expansion and the four Goal 14 location factors (listed above) to determine where to expand the UGB.

Generally this statute requires the City to, except where special site needs are identified, include parcelized “exception areas” before bringing in farm land; and, if farm land must be included, relatively poor farm land must be included before bringing in relatively good farm land. Based on a thorough Goal 14 alternatives analysis, the City determined that the Clear Lake UGB Expansion Area best meets identified employment land needs.

As noted in the Goal 9 discussion, the Eugene EOA identifies specific site characteristics for targeted employment opportunities (notably large, flat sites near the Airport, with access to Highway 99W, and
separated from residential land uses). These site characteristics cannot be met in exception areas that are highly parcelized and lack large sites.

**Goal 14 Location Factors**
City staff conducted a detailed Goal 14 alternatives analysis that fully considers the four location factors of Goal 14. As noted above, the Clear Lake UGB Expansion Area includes flat land in relatively large parcels near the Airport and with direct access to Highway 99W. Figure 9 shows why Eugene has chosen to provide for its employment land needs on land near the Eugene Airport – primarily to avoid steep slopes to the south and more wetlands and areas in the Special Flood Hazard Area to the west. Springfield borders Eugene to the east. However, as noted repeatedly in the discussion above, the extensive braiding of wetlands in the designated employment area makes “efficient accommodation of identified [employment] land needs” much more difficult to meet. About a third of the 648-acre employment area is constrained by LSW, non-significant wetlands and floodplain areas. Because the wetlands are interwoven through the employment area, substantial fill and removal is required to create serviceable sites large enough to meet the needs identified in the EOA. Winterbrook prepared **Figure 8 Concept Plan: Large Employment Site Feasibility** to show how approximately 490 suitable acres (12 potential sites) could be created by removing both LSW and non-significant wetlands. However, realization of this concept plan (or a similar one) will require DSL/USACE approval of extensive wetland removal – a result that is inherently unpredictable.

**Figure 9** shows (next page) that there is a public (not just private) interest in wetland fill and removal to make room for suitable employment sites. These sites are necessary to provide local and regional employment opportunities – which have substantial economic and social benefits for the community.
Comparative ESEE Consequences

The decision to expand into the Clear Lake UGB Expansion Area has some inescapable location factor 4 “environmental, energy, economic and social consequences” consequences:

1. **From an environmental perspective**, the decision to accommodate employment needs on land with lots of braided wetlands means that the environmental functions and values associated with these wetlands will be compromised to some extent. Most jurisdictions chose not to expand their UGBs into wetland areas in part for this reason. As discussed repeatedly elsewhere in this report, the 195 acres of wetlands on employment lands in the UGB expansion area are of relatively low quality — and there is little real distinction between “locally significant” and “non-locally significant” wetlands. As noted repeatedly above, the proposed No Local Protection Program includes stringent provisions to ensure that the water quality and hydrological control functions of these wetlands are maintained through application of the /WQ overlay zone, the...
standards of the *Eugene Stormwater Management Manual* and the requirement that a stormwater master plan be prepared in advance of annexation of UGB Expansion Area land to the City.

2. **From an energy conservation perspective**, bringing areas that are interwoven with wetlands usually does not make sense if flat, well-drained land is available. As noted in the Goal 13 discussion, wetland protection would normally require “leap-frogging” over wetlands to reach more suitable employment areas. In this case, however, the land to the west and north is also wet (or owned by the Eugene Airport), leaving the City little choice but to allow some wetland fill and removal if suitable employment sites are to be provided.

3. **From an economic perspective** bringing in land that is interwoven with wetlands also makes little sense in most situations. The cost of mitigating for wetland fill and removal necessary to meet economic development objectives is estimated at $56,000 per acre or more (2014 dollars). The costs of providing drainage facilities to meet *Eugene Stormwater Management Manual* requirements would be much greater in areas with hydric soils than if the soils were well-drained. The *uncertainty* costs associated with developing over wetlands (regardless of whether they are LSW or non-significant) is high. Again, a reason why Winterbrook prepared Figure 8 was to reduce these uncertainty costs by showing property owners, prospective developers and state/federal agencies that fill of relatively poor quality wetlands is essential to meeting the City’s economic development objectives as expressed in the *Eugene EOA*.

4. **Finally, from a social perspective**, the decision to designate industrial land near the disadvantaged Bethel neighborhood could have adverse social equity consequences. However, as noted in the City’s *Environmental Justice Issues Briefing* for the Clear Lake Road area, the decision to buffer planned employment areas from existing residential areas mitigates this problem significantly. Moreover, it is likely that Bethel-Danebo residents will benefit directly from jobs produced within the UGB Expansion Area – and they certainly will benefit from the planned community park and the elementary/middle school.

**Goal 14 Conclusion**

The City’s choice to meet its employment, park and school needs in the Clear Lake UGB Expansion Area was determined by ORS 197.298 *Priorities for urban growth boundary expansion* which generally requires cities and counties to include land with relatively poor agricultural soils before higher-value agricultural land to meet identified urban growth needs. The Clear Lake employment area also has a number of locational advantages, including proximity to the Eugene Airport, access to Highway 99W and the Beltline, and the availability of large, undeveloped, flat parcels.

However, the UGB Expansion Area is interspersed with wetlands, which creates economic development uncertainty and increases public and private development costs. Therefore, to effectively implement Eugene’s growth management program some wetland fill and removal will be necessary. This ESEE analysis shows that the No Local Protection Program, augmented by local Goal 6 (Water Quality) and Goal 7 (Flood Hazard) regulations and DSL/USACE wetland regulations, provides a reasonable balance between development and wetland conservation in the Clear Lake UGB Expansion Area.
Conclusion and Recommendations
The Goal 5 ESEE Analysis for the Clear Lake Urban Growth Boundary Expansion Area considers the inherent conflicts that arise when urban development is planned for an area with lots of interwoven wetlands and floodplain areas.

After an extensive community and agency involvement program under the broad policy framework set forth in Envision Eugene, the City chose to expand into the UGB Expansion Area to meet its employment, park and school needs primarily because this area has employment site characteristics that are reasonably necessary to support the operations of targeted industries and needed community park and school facilities.

The UGB Expansion Area has approximately 920 acres – about a third of which is publicly-owned (the community park and the Bethel School District property) and needed for park and school development. The remaining 648 acres of privately-owned land is designated for large-site employment use – as called for in the Eugene Economic Opportunities Analysis. According to the Eugene EOA, there is a need for 380-605 suitable (unconstrained) employment acres in 11 sites ranging from 10-75+ acres. However, over a third of this employment land (213 acres) is constrained by wetlands (both significant and non-significant) and floodplains.

Regardless of whether these relatively low-quality wetlands are protected by local zoning, they are also protected to a limited extent by the /WQ overlay zone and the Department of State Lands and US Army Corps of Engineers wetland review process. This means that there is a great deal of uncertainty (as to whether DSL/USACE will permit wetlands can be filled and removed to make room for the large, developable sites called for in the Eugene EOA) and cost (to fill and mitigate for wetlands that removed for development) associated with development in the planned employment area.

To minimize this uncertainty and related development costs, Winterbrook Planning worked with city planning, engineering and parks and open space staff to prepare the draft No Local Protection Program. This program is specifically designed to avoid the lack of flexibility of:

- **Full resource protection** – which in this case would not allow the large employment sites called for in the Eugene EOA, would restrict the City’s and Bethel School District’s ability to plan for the development of active park and school uses, and would prohibit the streets and utilities required to serve these planned land uses; and

- **Limited protection** – which would apply the WR/ (Water Resource Conservation Overlay) to significant water resources, which would prohibit needed employment and public uses within the boundaries of locally significant wetlands and conservation setback areas. As noted throughout this ESEE analysis, the limited protection program would make it impossible to meet the large-site employment needs identified in the Eugene Economic Opportunities Analysis.

Basis for the Recommended No Local Protection Program
Overall, the proposed No Local Protection Program is supported by this ESEE Analysis and is designed to implement and balance the six applicable “pillars” set forth in Envision Eugene by:

- *Providing ample economic opportunities for all community members* by providing at least 11 large employment sites (totaling approximately 490 suitable acres) consistent with the Eugene EOA; while

- *Promoting compact urban development and efficient transportation options* by providing the minimum area necessary to meet and provide access to planned employment, school and park sites as documented in the UGB Alternatives Analysis; while to the extent practicable

- *Protecting, restoring, and enhancing natural resources* by (a) conserving most of the wetlands through the DSL and USACE review process and coordinating with DSL and USACE to mitigate for
wetland functions and values lost through wetland fill and removal; (b) applying the Water Quality (/WQ) overlay to the two major drainageways within the UGB Expansion Area; (c) maintaining opportunities for off-site wetland banking; (d) working with property owners and volunteer efforts to restore and enhance some of the wetland water quality and storage functions on-site; (e) relying on the environmental policies of the Parks, Recreation and Open Space Comprehensive Plan to guide the Division of Parks and Open Space in future designs of the community park; and (f) incorporating wetlands, riparian corridors and floodplains into an area-wide stormwater management plan; while

- **Planning for climate change and energy resiliency** by providing employment, parks and schools adjacent to the existing UGB and near existing neighborhoods and planned transportation facilities and maintaining floodwater capacity; while

- **Protecting, repairing, and enhancing neighborhood livability** by providing employment opportunities, a community park, and schools near the under-served Bethel neighborhood; while

- **Providing for adaptable, flexible and collaborative implementation** through effective master planning (for the Eugene Airport, the community park, and storm drainage based on ecosystem management principles); minimizing local regulatory obstacles and coordinating with state and federal agencies to accomplish the objectives outlined above; and by limiting the creation of new bird habitat areas that could adversely affect aviation safety near the Eugene Airport.

Thus, the proposed No Local Protection Program relies on a combination of zoning, wetland banking, inter-agency coordination and stormwater management planning to protect significant wetland and riparian corridor resources within the UGB Expansion Area. Due to the relatively low quality of wetlands in the UGB Expansion Area – and conflicts with airport operations and safety – city staff from several departments has concluded that it is inappropriate to encourage restoration of wildlife habitat near the Eugene Airport. Therefore, the focus of the No Local Protection Program is on protecting water quality and storage functions of wetlands and drainage channels – rather than protecting the area within existing boundaries of wetlands that have been significantly degraded as a result of farming practices.

**Summary of Recommended No Local Protection (no additional Goal 5 protection) Program**
The combination of low-quality interspersed wetlands, planned large-scale development and the Goal 14 requirement that urban land be used efficiently make it impractical to apply a Goal 5 protection zone (such as the Water Resource (/WR) overlay) to LSW and significant riparian corridors in the UGB Expansion Area. This ESEE analysis also provides support for prospective developers of employment uses on this land.

The recommended No Local Protection Program is effective in providing suitable employment and public sites while protecting the water quality and storage functions of locally significant wetlands because it is augmented by the following measures:

- Apply the /WQ Water Quality overlay to the two major stormwater conveyance channels in the UGB Expansion Area: first to the floodplain north of Clear Lake Road (referred to in this document as the “Clear Lake Channel”) which includes portions of W-5, W-6 and W-7 from the PHS report; and second to the A-2 Channel (referenced as CL-R-1 and CL-R-3 in the Clear Lake LWI). The /WQ Overlay zone is designed to implement Statewide Planning Goals 6 and 7 by improving stormwater water quality, storage capacity, and conveyance. The /WQ overlay also encourages wetland and riparian corridor restoration and enhancement as “green infrastructure” within an area-wide stormwater system.

- Require city approval of an area-wide stormwater master plan that incorporates ecosystem management (i.e., green infrastructure) principles, prior to annexation to the City.
• Coordinate with and rely on state and federal agencies (DSL and USACE) to implement the Clean Water Act by reviewing and providing limited wetland protection in this area.
• Support opportunities for on-site wetland mitigation (as illustrated on the Clear Lake Site Feasibility Concept Plan) and off-site mitigation through wetland banking supported by the City of Eugene.
• Support volunteer wetland and riparian corridor restoration and enhancement efforts.
• Retain the City’s requirement to notify DSL of proposals to develop on properties with known wetlands.