

was set along a tax lot line it had the effect of splitting a legal parcel of land. The two separate tax lots only exist because the property is split between two separate map pages (section boundaries). If the boundary was left in this location the property would be split by the UGB, leaving approximately 20 acres out. The property is zoned EFU and the minimum parcel size for EFU land is 80 acres. In order to avoid this split, while still maintaining the appropriate number of acres in the recommendation, map number 381W03 tax lot 300 was moved into the recommendation and nearby map number 371W34, tax lots 4900 and 4901 were removed.

AMMENDMENT SUMMARY

	Number of Acres
Total Expansion Proposal	3,795
Developed or Unbuildable Land	398
Prescott Park and Chrissy Park	1,877
Land for Future Development (Residential + Employment)	1,520
Residential Land Amount	884
Low-Density Residential (UR)	783
Medium-Density Residential (UM)	18
High-Density Residential (UH)	83
Employment Land Amount	636
Service Commercial (SC)	222
Commercial (CM)	317
General Industrial (GI)	90
Heavy Industrial (HI)	7

RECOMMENDED ACTION

Based on the findings and conclusions that all the approval criteria are met, move to recommend approval of the UGB expansion to the City Council per the staff memo dated June 4, 2015, including Exhibits A & B.

EXHIBITS

- Exhibit A: Planning Commission's recommendation for Urban Growth Boundary expansion
- Exhibit B: Findings

Proposed Urban Growth Boundary Amendment

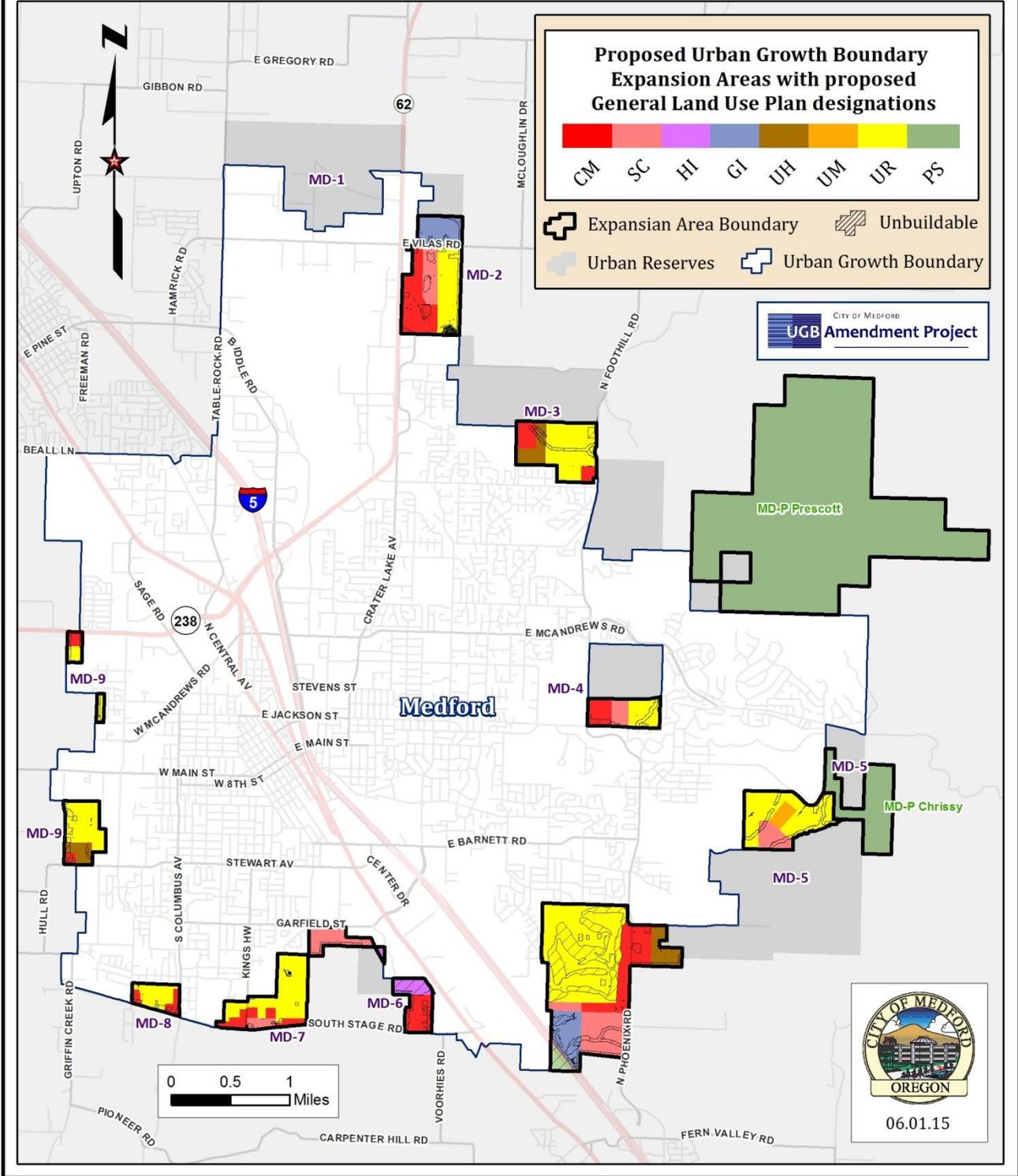
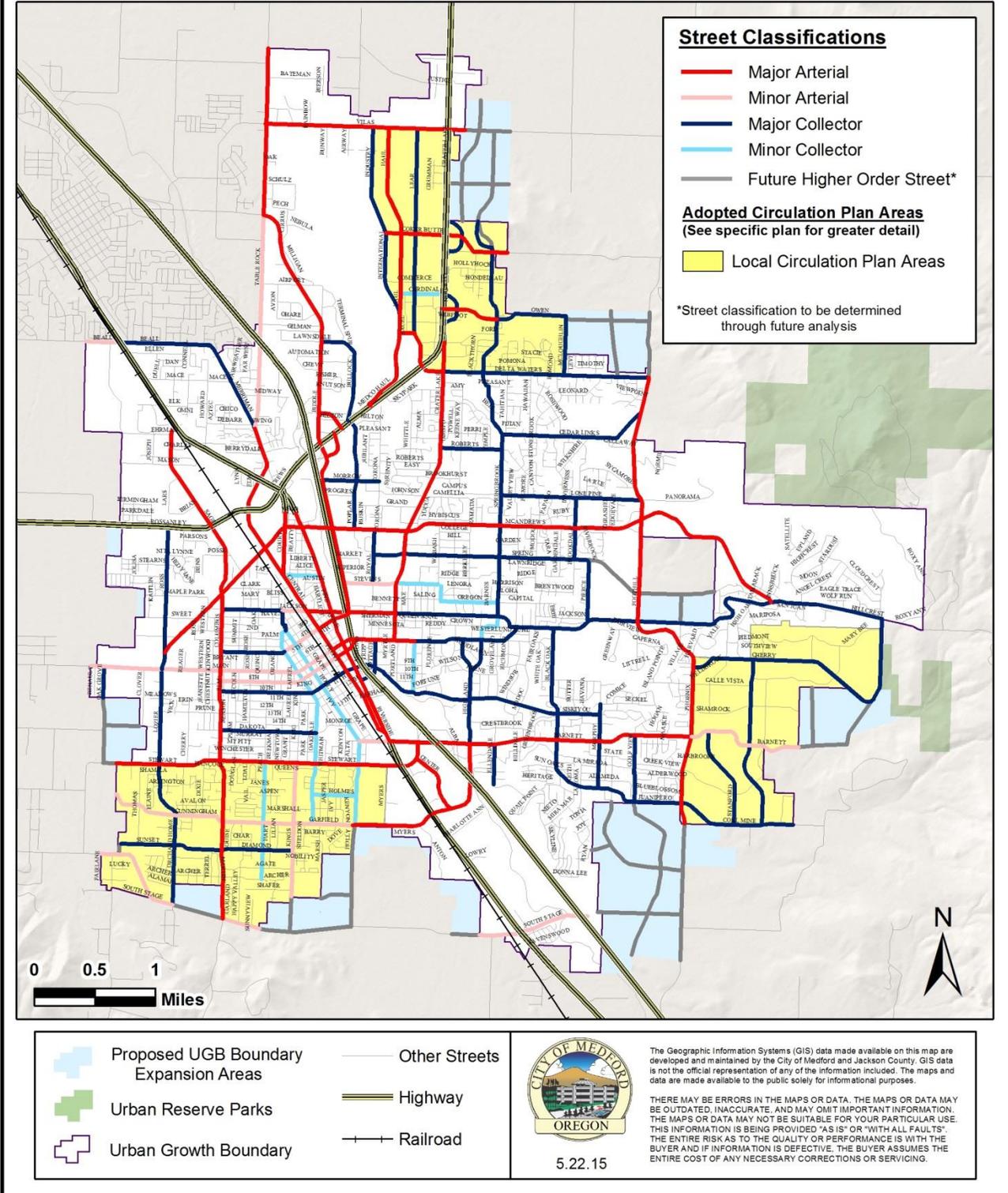


Figure 1-2: Medford Street Functional Classification Plan



Proposed Text Changes

The following text sections will be changed through the proposed UGB amendment. Proposed additions shown in **Bold** and proposed deletions shown in ~~Strikethrough~~.

URBANIZATION ELEMENT

1. URBAN GROWTH BOUNDARY

The Medford Urban Growth Boundary (UGB) includes land within the city and selected land surrounding the city that is committed to/planned for future city growth, the development of which is likely to require the extension of urban services. Land around the city within the UGB is called the unincorporated urbanizable area in this element. The Medford UGB was last amended in ~~1990~~**2015** through a cooperative process between the City of Medford and Jackson County. It is officially delineated on the Jackson County and City of Medford Comprehensive Plan and zoning maps.

The Medford UGB was established to comply with the statutory requirement for Urban Growth Boundaries around urbanized areas to identify and separate urbanizable land from rural land.

2. ANNEXATION

The transfer of urbanizable land under county jurisdiction to city jurisdiction is called annexation. Chapter 222 of the Oregon Revised Statutes governs annexation in Oregon. According to state law, land may be annexed to a city only if it is within the Urban Growth Boundary, and is contiguous to the city limits. Generally, a majority of the registered voters and/or property owners within the area to be annexed must agree to the annexation, except in cases where the area is surrounded by land already under city jurisdiction.

2.1 Annexation Policies

The following are the policies of the City of Medford with respect to annexation:

2.1.7. Annexation of Property Added to the Urban Growth Boundary in 2015

The City Council must find that the following conditions are met in order to approve an annexation of land that was added to the Urban Growth Boundary in 2015:

- 1. A revised Transportation System Plan (TSP), which includes the area to be annexed, has been adopted by the City;**

2. **A Local Wetlands Inventory (LWI), which includes the area to be annexed, has been adopted by the City;**
3. **For the area to be annexed, all Goal 5 resources, including riparian corridors, historic structures/properties, deer and elk habitat, wetlands, and scenic views have been identified and protected in accordance with Goal 5; and**
4. **A urbanization plan has been submitted, and adopted into the Neighborhood Element, for the area to be annexed which demonstrates compliance with the Regional Plan by showing the following details:**
 - a. **Compliance with the minimum residential density required by Regional Plan Element item 4.1.5. The urbanization plan must demonstrate how the planned residential development will meet the minimum density requirement of 6.6 units per gross acre assuming all areas within the development will build out to the minimum allowed densities. The following are acceptable methods for meeting the density standard:**
 - i. **Committing areas to higher density zones within a General Land Use Plan (GLUP) designation. For example, an area within the UR GLUP designation could be designated as SFR-10 (Single Family Residential – 10 units per acre) which would insure a minimum density of 6 units per acre; and/or**
 - ii. **Requesting residential GLUP map changes—from a lower density designation to a higher-density designation—as part of the master plan approval process. This will allow for additional areas for medium-density and high-density development within the areas added to the UGB. Although this process may cause slight deviation from the Housing Element it is necessary to ensure success in meeting the Regional plan obligations.**
 - b. **Compliance with the requirements of Regional Plan Element item 4.1.6. for mixed-use/pedestrian-friendly development.**
 - c. **Compliance with the land use distribution requirements of Regional Plan Element item 4.1.8.(b).**

APPENDIX 1—URBAN GROWTH MANAGEMENT AGREEMENT

This agreement was mutually adopted in 1993 by Jackson County (Ord. no. 93-31) and the City Medford (Ord. no. 7183 (1992); minor text correction via Ord. no. 7502 (1993)).

The following policies guide the administration of the Medford Urban Growth Boundary:

1. **An Urban Growth Boundary adopted herein, or hereinafter amended, for the Medford area will establish the limits of urban growth to the year ~~2010~~2029.**

GENERAL LAND USE PLAN (GLUP) ELEMENT

GLUP MAP DESIGNATIONS

The GLUP Map has ~~13~~¹² different land use designations **that are applied to all land within the Urban Growth Boundary (UGB). The GLUP map also identifies the Urban Reserves, which will not have GLUP designations applied to them until they are included in the UGB. These designations are defined** as ~~listed~~ below. Permitted land uses, as well as the development standards associated with each zoning district noted, are listed in "Article III" of the *Land Development Code*. The City's SFR-00 (Single-Family Residential – one dwelling unit per existing lot) zone is permitted in all GLUP Map designations because it is considered a holding zone for parcels that are being converted from County to City zoning. These parcels are not eligible for development to urban density or intensity until facility adequacy has been determined through the zone change process. It is the City's intent to have these parcels converted to zoning that is consistent with the following GLUP Map designations as soon as a property owner can show that urban facilities are adequate or will be made adequate to serve the uses permitted by the proposed urban zoning.

13. *Urban Growth Boundary* The City of Medford and Jackson County have established an Urban Growth Boundary (UGB), which delineates Medford's urban and urbanizable areas. Following the ~~1990~~²⁰¹⁵ UGB amendment there was a total of ~~17,889~~^{21,684} acres (~~27.95~~^{33.88} square miles) within the UGB including that land within the City. The UGB is site specific. Since the GLUP Map does not indicate lot lines, the UGB is also specified on the City of Medford Zoning Map, a map having lot lines, so that the location of specific parcels inside or outside of the UGB can be determined.
14. *Urban Reserve* **The Urban Reserve was created through the Regional Problem Solving (RPS) process and adopted into the Comprehensive Plan in the Regional Plan Element in 2012. The method of establishing an urban reserve is defined in state law (see ORS 195.137-145). The urban reserve areas are the first priority supply of land when the City considers expanding its UGB. The urban reserve areas are meant to provide a 50-year land supply for the City.**

FINDINGS

Authority: This action is a Class “A” legislative Comprehensive Plan Amendment. The Planning Commission is authorized to recommend, and the City Council to approve, amendments to the Comprehensive Plan under Medford Municipal Code, sections 10.102, 10.110, 10.111, 10.122, 10.164, and 10.180.

Review Criteria: Medford Municipal Code §10.184(1) refers to the Urbanization Element of the Comprehensive Plan for Urban Growth Boundary Amendments. This Urban Growth Boundary Amendment consists of two parts: the map amendments and the text amendments. Since both portions are parts of the combined Urban Growth Boundary Amendment the following findings will apply to both the map changes (boundary adjustment/GLUP map/Street Functional Classification Map) and the text amendments (Comprehensive Plan text).

APPROVAL CRITERIA COMPLIANCE

Approval criteria for Urban Growth Boundary Amendments found in Section 1.2.3 (Approval Criteria) of the Urbanization Element of the Comprehensive Plan

1.2.3 Approval Criteria

The City will base its decision for both major and minor amendments on:

- a. The standards and criteria in Goal 14¹, OAR 660, Division 24, and other applicable State Goals, Statutes, and Rules.*
- b. Compliance with Medford Comprehensive Plan policies and development code procedures.*
- c. Compliance with Jackson County’s development ordinance standards for urban growth boundary amendment. Many of the findings made to satisfy subparagraph (a), preceding, will also satisfy this criterion.*
- d. Consistency with pertinent terms and requirements of the current Urban Growth Management Agreement between the City and Jackson County.*

¹ Goal 14 identifies two components for amending a UGB: Land Need and Boundary Location. It also provides details on what should be considered for each of the two components. Goal 14 is divided into its two parts in the Findings below with the specific language from the goal provided in italics.

* * * * *

Urban Growth Boundary amendment approval criteria from Urbanization Element, Section 1.2.3

Criterion a. The standards and criteria in Goal 14, OAR 660, Division 24, and other applicable State Goals, Statutes, and Rules.

Goal 14 – 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, a 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 land needs cannot reasonably be accommodated on land already inside the urban growth boundary.

Findings

The process of determining Medford’s land need for the next 20 years started with the adoption of the Population Element in 2007. This study looked at the forecasted population growth in Medford through 2040. The next step was the Buildable Lands Inventory (BLI), adopted in 2008, consistent with OAR 660-024-0050 and ORS 197.186 and 197.296. This study identified the number of acres, in total and by type, available for development within the City’s current UGB. The BLI showed that there are approximately 2,592 gross residential acres² and approximately 1,078 gross employment acres³ available for development within Medford’s UGB. See Appendix A for more information regarding land supply.

The next step was the Economic Element, adopted in 2008, which considered the projected population growth, along with economic trends, to determine the overall need for employment land over the 20-year planning period. The study concluded that an additional 708 gross acres were needed to meet the demand for employment land. However, as shown in Appendix B, this does not properly account for the excess supply of industrial land available within the existing UGB. When properly calculated (see Appendix B) the need for employment land increases to 765 gross acres.

² From Housing Element *Table 30*

³ From Economic Element *Figure 28*

The next step was the Housing Element, adopted in 2010, which considered the projected population growth, along with housing trends, to determine the overall need for residential land over the 20-year planning period. The study concluded that an additional 996 gross acres⁴ were needed to meet the demand for housing and public and semi-public uses.

The Housing Element also projected future needs for public and semi-public uses. OAR 660-024-0040 (10) allows for a “safe harbor” net-to-gross factor of 25% for streets and roads, parks and school facilities. Rather than use the safe harbor amount the Housing Element calculates the net-to-gross factor for streets based on observations of the existing residential areas in the city. According to page 57 of the Housing Element “...the forecast shows land need in net acres. Net acres is the amount of land needed for housing, not including public infrastructure (e.g. roads). Gross acres is the estimated amount of land needed for housing inclusive of public infrastructure. The net-to-gross factor allows for conversion between net acres to gross acres. The net-to-gross factor is highest (23%) for single-family detached dwellings, decreasing to 10% for multi-unit projects.” Parks and schools were not considered in the net-to-gross factor, but rather, were included in the Other Residential Land Needs portion of the Housing Element, which concluded that 153 acres of park land and 20 acres of school land were needed in the UGB expansion area (see *Table 1.1*). The Other Residential Land Needs section of the Housing Element examines existing conditions for public and semi-public land to forecast future need for this land type.

According to the Housing Element:

Lands needed for public operations and facilities include lands for city facilities, schools, substations, and other public facilities. Land needs were estimated using acres per 1,000 persons for all lands of these types. Lands needed for parks and open space estimates use a parkland standard of 4.3 acres per 1,000 persons based on the level of service standard established in the Medford Leisure Services Plan Update (2006). This update includes land needed for neighborhood and community parks, which usually locate in residential plan designations. It does not include land needed for natural open space and greenways, which may also be located in residential plan designations (Housing Element, Page 62).

⁴ From Housing Element *Table 41*

Table 1.1. Public and Semi-public Land Need (Housing Element Table 40)

Type of Use	Existing Acres	Acres / 1000 Persons	Assumed Need (Ac/1000 Persons)	Estimated Need per 1000 Persons 2009-2034	Planned Unbuilt Supply in Existing UGB
City	113	1.5	1.5	64	
City Parks	527	6.8	4.3	153	19
County	36	0.5	0.5	17	
State	47	0.6	0.6	22	
Federal	26	0.3	0.3	12	
Other public agency	43	0.6	0.6	20	
Schools	265	3.4	0.6	20	26
Church	159	2.1	2.1	73	
Fraternal	96	1.2	1.2	44	
Private Parks/Recreation					-43.7
Total	1,313	17.0	11.6	425	1.3
Net Needed for UGB					426

A letter was submitted into the record by Greg Holmes of 1000 Friends of Oregon⁵, dated March 3, 2015, that challenges some of the City’s land need assumptions. Of the various charges of land excess in the 1000 Friends letter, the City finds that unbuildable lands and the land need for rights-of-way, parks, and schools were correctly calculated. However, the City agrees that the private park land need was erroneously included, and that the government land need was double-counted; respectively, 18 acres and 135 acres should be removed.⁶

In addition to the standard urban reserve areas the Regional Plan Element identifies two large regional park areas, MD-P Prescott and MD-P Chrissy, which contain Prescott Park and Chrissy Park, respectively. These areas are City-owned wildland parks totaling 1,877 acres. Inclusion as urban reserve was intended to serve as a mechanism to eventually incorporate this City property into the City boundary to allow the City to have jurisdiction of the parks. The two MD-P areas were not considered areas for future urban growth because of their classification as parkland. There is no residential, commercial, or industrial development planned for the MD-P acres. They present a tremendous recreational and open space asset to the City and the region, in addition to creating a buffer between the city and rural lands to the north and east. However, due to their location along the eastern periphery of the city and very steep topography, these lands satisfy little of the localized open space needs throughout the city and do not meet land needs for traditional urban parkland.

⁵ See March 12, 2015 Planning Commission packet, pp. 353–367.

⁶ See May 6, 2015 staff memorandum titled “Evaluation of excessive land need arguments”

Through the studies adopted into the respective elements of the Comprehensive Plan, the City of Medford demonstrated a deficit in the supply of land within its existing UGB, for all types of uses, over the next 20 years. ORS 197.296 subsection (6) recommends addressing the need by expanding the urban growth boundary, by increasing the developable capacity of the urban area, or by a combination of the two. Urban Growth Boundary Amendment (UGBA) Phase 1 (ISA GLUP Amendment) sought to change the General Land Use Plan designation of land in the existing urban area for the purpose of increasing its development capacity in order to accommodate some of the City's projected need for residential and employment land. See Appendix C for more information regarding UGBA Phase 1's effect on land supply. UGBA Phase 1 resulted in more efficient use within the UGB in the following ways:

- It took surplus industrial land (land in excess of the need for the next 20 years) and converted it to commercial land. This resulted in the accommodation of a larger portion of the employment need within the existing UGB;
- The conversion of industrial to commercial also helped to increase the likelihood of both commercial and industrial development over the next 20 years by placing these uses in more appropriate locations. There is strong development pressure for commercial uses on the industrial land nearer the center of the city, near major transportation routes. This pressure makes the land less likely to develop with industrial use. The swapping of land types places commercial designations on tracts of land nearer the center of the city while allowing the City to designate more land near the outside of the urban area, and still near major transportation routes, for industrial development;
- The City was able to shift some of the residential density called for in the Housing Element, and required by the Regional Plan, to the inside of the urban area. By shifting density inward the City is providing for a more efficient use of land and of public infrastructure;
- While UGBA Phase 1 resulted in a 58-acre conversion of land from residential to employment GLUP designations, the total residential land need only increased by 36 acres;
- The conversion of some residential land to employment land decreased the overall land need due to the fact that some of this land was not identified as meeting any portion of the future residential land need because it was classified as developed for residential. Because this land is expected to redevelop with commercial uses it is now being counted toward meeting a portion of the employment land need; and
- The shifting of density inward allows for a more efficient use of land within the city now, rather than relying on redevelopment to higher densities in the future. This also helps to provide opportunities for increased densities in the UGB expansion area because a larger percentage of the forecasted population over the next 20 years can be accommodated within the existing boundary. This could result in a slower expansion into the newly added areas, which would allow for policy changes in the future should the market shift toward higher density development. The density shift also helps to meet the obligations of the Regional Transportation Plan.

UGBA Phase 1 resulted in a decreased land need for the City. Before these intensification measures, a total of 1,761 gross acres were needed outside of the existing UGB. After UGBA Phase 1, a total of 1,669 gross acres are needed, a reduction of 92 acres. After the necessary removal of 153 acres from the public and semi-public land, based on challenges received (see page 4), the total is decreased to 1,516 acres.

In 2012 the City, together with 5 other cities in the valley, adopted a Regional Plan for accommodating a doubling of the region’s population. Regional Plan Element 4.1.5 requires a minimum density of 6.6 units per gross acre for all newly annexed areas for the years 2010 through 2035. The aggregate average density of the residential land need, determined by the Housing Element (see Appendix B, *Table 3.2*), was 6.9 units per gross acre (see *Table 1.2* below). Some of this density was then shifted into the existing UGB through UGBA Phase 1. This density shift resulted in an increased need for UR (Urban Low-Density Residential) and a decreased need for UM (Urban Medium-Density Residential) and UH (Urban High-Density Residential) in the expanded UGB. While this density shift helped to accomplish a number of positive benefits it also makes meeting the minimum density requirement of the Regional Plan more difficult. With the revised ratios of residential land types in the UGB expansion area the average densities for each of the residential land types alone will not result in a density of 6.6 units per acre or above.

Table 1.2. Average Density from Housing Element (See Appendix B)

	Acres	Density	Total DU
UR	465	4.8	2,233
UM	39	12.8	498
UH	66	18.1	1,185
Total	570		3,916
Density	6.9 dwelling units/acre		

The Housing Element (2010) provides an accurate representation of the City’s housing need over the next 20 years. The Regional Plan (2012) imposes a density standard that is in excess of the density supported by the Housing Element now that the efficiency measures of UGBA Phase 1 are completed. In addition, the Regional Plan requires a density of 7.6 units per gross acre for all newly added areas for the years 2036 to 2050. In order to reconcile the two the City will require an urbanization plan to be submitted, showing compliance with the Regional Plan obligations for density and land use distribution, prior to annexation for any of the land added through this UGB amendment process. Acceptable methods for meeting the density standards will include:

- Committing areas to higher-density zones within a General Land Use Plan (GLUP) designation. For example, an area within the UR GLUP designation could be designated as SFR-10 (Single-Family Residential – 10 units per acre) which would insure a minimum density of 6 units per acre. By establishing “pre-zoning” within the established GLUP

designations the residential density for the area can be moved higher than the minimum, or even average, density that the GLUP could accomplish; and/or

- Requesting GLUP map changes as part of the urbanization plan approval process. This will allow for additional areas for medium-density and high-density development within the areas added to the UGB. This technique will allow for more flexibility in meeting the density obligations of the Regional Plan without imposing a housing mix that is not consistent with the Housing Element. This will allow for flexibility in housing types as the market shifts toward higher-density housing while also setting the stage for the future density standard of 7.6 units per gross acre required by the Regional Plan. This approach will also help to address the affordable housing need identified in the Housing Element. By adding additional high-density housing throughout the UGB (in the existing UGB through the SALs and in the newly added areas by allowing for GLUP changes to higher density), the City is providing for more high-density housing, which is needed to provide more affordable housing within Medford, a need identified in the Housing Element but not subsequently addressed.

These required urbanization plans are expected to build on the conceptual plans required by the Regional Plan that also formed the basis of the GLUP designations for the areas added to the UGB.

Conclusions

UGBA Phase 1 (the SALs) converted surplus industrial land to commercial land which allowed for more of Medford's need for employment land to be accommodated within its existing UGB. The conversion also resulted in the increased likelihood of a larger amount of Medford's employment land need being met within the existing UGB by more appropriately locating both commercial and industrial land. While these adopted efficiency measures helped to address a portion of the City's employment land need, an additional 637 gross acres of employment land outside of the existing UGB are needed. The employment land portion of the proposed UGB expansion, shown in Table 1.3 below, will allow the City to meet its identified need for employment land.

The Housing Element provides for an adequate land supply at a realistic housing mix for the planning horizon. In addition to land for housing, the Element accounts for land needed for streets and other utilities, and for public and semi-public uses, which usually occur on residentially zoned properties. The residential density requirements of the Regional Plan were added to the Comprehensive Plan after the adoption of the Housing Element and the two do not agree. By requiring urbanization plans for all of the areas being added to the UGB prior to annexation, the City can reconcile the Housing Element with the Regional Plan and can insure that the residential density standards are being met. The required urbanization plans must demonstrate compliance with the minimum density standards and with the land use distributions required by the Regional Plan.

Goal 10 requires that “plans shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type, and density.” By allowing for some residential areas to be up-GLUPed (from a lower-density residential GLUP to a higher-density residential GLUP) the City is providing for more flexibility of housing types in the UGB expansion areas while also helping to increase the supply of higher-density housing, which is needed to meet the demand for low-income housing in the City.

The Other Residential Land Needs of the Residential Element identified a need for 153 gross acres of additional parkland for neighborhood and community parks, outside of the existing UGB. The Regional Plan Element also includes two large wildland park areas that are owned by the City. These areas, Chrissy and Prescott parks, are intended to provide for both recreational and open space opportunities for the City and for the region. While both help to meet the recreational needs for the City these are two different land types (neighborhood and community park vs. regional/wildland park and open space) that provide two discreet types of uses for the City.

After adopting the efficiency measures from UGBA Phase 1 the City needs 1,032 gross acres of land outside of the existing UGB to meet its needs for residential and public and semi-public land. With the changes to the Public and Semi-Public land need (18 acres for erroneously counting private open space and 135 acres for the double counting government uses) this total is changed from 426 acres to 273 acres, which reduces the residential land need from 1,032 gross acres to 879 gross acres. The public and semi-public land was allocated to the three residential land types based on the percentage of dwelling units needed for each type and will be removed in the same way to adjust for the revised land need. The residential land portion of the proposed UGB expansion, shown in table 1.4 below, will allow the City to meet its identified need for these land types.

Table 1.3. Employment Land Need in Gross Acres

Plan Designation	Need	Plan Description
SC	222	Service Commercial: office, services, medical
GI & HI	97	General & Heavy Industrial: manufacturing
<u>CM</u>	<u>318</u>	Commercial: retail, services
Total Employment	637	

Table 1.4. Residential Land Need in Gross Acres

Plan Designation	Need	Plan Description
UR	778	Low-density Residential, 4–10 units/acre
UM	17	Medium-density Residential, 10–15 units/acre
<u>UH</u>	<u>84</u>	High-density Residential, 15–30 units/acre
Total Residential	879	

Goal 14 – 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;*

Findings

Per ORS 197.298, once a City has demonstrated a need to expand its UGB, the first priority of land for inclusion is land designated as urban reserve. No other type of lower priority land should be considered for inclusion unless the land need exceeds the supply of land within the urban reserve. In this case, Medford’s urban reserve provides for a roughly 50-year supply of land. The land the City has available to select from is all first priority land. All of this land has been identified for future urbanization and the work of determining suitability was done in the creation of the urban reserve, consistent with ORS 195.137-145.

The City has an identified land need of 1,516 acres and an urban reserve of 4,488 acres (excluding the two wildland park areas) from which to choose. While the 4,488 acres includes both buildable and non-buildable acres, the total far exceeds the 1,516 buildable acres needed for the 20-year planning period. In order to determine where the City could most efficiently meet its land needs for the next 20 years a “coarse filter” was used. The coarse filter, which considered proximity and parcel size as indicators of efficiency for development, helped to refine the area of consideration prior to completing a capacity analysis (to determine the number of buildable acres) and comparing urban reserve areas on a more detailed level.

One of the best indicators for suitability for the first 20-year supply is proximity. Basic principles of urban planning dictate that growth will occur from the center out in order to avoid “leap-frog” development which leads to inefficient use of land and difficult and costly extensions of infrastructure. The results of the proximity analysis are shown on *Map 5.1* in Appendix D.

The next criterion used in the coarse filter portion of the analysis is parcelization. Staff mapped parcel size in order to determine the amount of parcelization in each of the urban reserve areas. The results of the parcel size analysis are shown on *Map 5.2* in Appendix D. The City is obligated to provide a 20-year supply of land for residential and economic development but is not allowed to offer anything more than a 20-year supply. Because of this obligation, and this constraint, it is imperative that the City select land that is available for development over the next 20 years. The development of larger tracts of land tends to have a higher return on investment than the development/redevelopment of smaller tracts of land. In addition, the land use structure in Oregon has created a premium on rural residential acreage near the city limits. Because “rural” living close to town is both desirable to many, and is getting harder to come by, people who own these properties have little incentive to develop the properties to urban density standards. Once urban development extends to, and encroaches upon, these smaller parcels, the land becomes more developable both because it makes greater economic

sense (utilities more readily available, and higher land value/larger demand) and because the property loses its rural feel.

The results of the coarse filter are shown on *Map 6.1* in Appendix E. A brief discussion of why certain portions of the urban reserve were eliminated through the coarse filter process is provided below.

The middle portion of MD-1 and the southeast corner of MD-5 were eliminated from further consideration because they scored poorly on both proximity and parcelization. The remainder of MD-1, the north portion of MD-2, the northeast corner of MD-3, MD-3 east of Foothill Rd, and all of MD-6, MD-7, MD-8, and MD-9 had marginal composite scores for proximity and parcelization. With the exception of a portion of MD-6, the urban reserve areas on the west side of interstate 5 (MD-6, MD-7, MD-8, & MD-9) were retained for further consideration in order to maintain a balance of ESAs around the existing UGB. The balanced distribution around the existing UGB was considered important for a number of factors, including:

- Distribution around the UGB worked as an additional filter in the selection of parcels near existing development. Since urban development extends to, or near, the existing UGB in most places, selecting a group of parcels spread out around the UGB to the fullest extent possible places these parcels closer to existing urban development. Selecting parcels all within large groups (all of MD-5 for example) would have the effect of including parcels that are further away from existing development.
- The selection of land distributed around the entire UGB adds diversity to the supply of land. This adds choice in development type, price point, and so on.
- Distributing parcels around the existing UGB helps to spread the burden of providing services to new development. Placing all new development in a smaller number of areas would have the effect of overburdening the systems for water, sewer, transportation, etc. By providing for a larger geographic distribution for future development the City can allow for the increased demand on the existing systems to be distributed throughout the systems.

The east portion of MD-1 was retained for further consideration because of its proximity to the existing Highway 62 route and the future Highway 62 route. The west portion of MD-1, the northeast corner of MD-2, the northeast corner of MD-3, and MD-3 east of Foothill Rd were eliminated from consideration because they all have marginal composite scores for proximity and parcelization and they do not serve to improve the transportation system by providing connections for highways or higher-order streets.

Conclusions

The City only considered first-priority land (land within the urban reserve) for inclusion per ORS 197.298. Since there is more than enough land within the urban reserve to meet the land need over the next 20 years, no lower priority land was considered for inclusion. The City needed to

select land to meet the need for the next 20 years from the available 50-year supply within the urban reserve. The purpose of the coarse filter was to select land that could most efficiently accommodate the City's identified land need. Proximity and parcelization were used as indicators of efficiency for development. Proximity helps to indicate current and short-term pressure for development as well as efficiency for the extension of services. Parcelization is also an indicator of both availability for development and the ability to develop an area in an efficient, coordinated way.

2. *Orderly and economic provision of public facilities and services;*

Findings

The External Study Areas (ESAs) were made up of the properties that passed through the coarse filter. Since the "efficient accommodation of identified land needs" is set as the first priority, any area that did not meet the measure for efficiency (the coarse filter) was eliminated from further consideration prior to further study on the ESAs. Once the ESAs were identified a capacity analysis was conducted (*Map 6.2*, Appendix E) similar to the Buildable Lands Inventory following the procedures of OAR 660-024-0050 and ORS 197.186 and 197.296 in determining buildable lands. Additional data were then collected for the ESAs regarding the serviceability for water, sewer, and transportation. This was done to measure the ability to provide public facilities and services in an orderly and economic fashion. Maps of the additional scoring results can be found in Appendix F and the scoring memos provided by the service providers are attached as Appendix G.

In the case of transportation there are major system improvements needed regardless of where the boundary is expanded. Some areas had a greater negative effect on the system than others based on existing infrastructure, network connections, and traffic patterns. Further explanation of how the transportation scoring memo from Kittelson and Associates was applied to the transportation scoring map (*Map 7.1*, Appendix F) can be found in the record as Exhibit D of the April 6, 2015 Planning Commission study session agenda.

The scoring for water serviceability came from staff at the Medford Water Commission. The scoring memo they provided was very thorough and detailed and made for easy conversion to Planning staff's scoring map (*Map 7.2*, Appendix F). There were two requests to change the water scoring map received by Planning after the map was made public at the October 2014 open house. The Medford Water Commission reviewed the requests and ultimately decided that the scores that were provided originally were consistent with the scoring methodology used for all of the ESAs and that those scores appropriately represented the comparative ease/difficulty of providing service based on current conditions. Their response to those requests is included with the scoring memos in Appendix G.

The scoring of sewer serviceability was a little different because there are two service providers within the Urban Reserve. The comments received initially from the two providers were very different, which made comparative scoring difficult. Planning staff took those comments and attempted to rank all of the ESAs (both City and RVS service areas) based on those comments alone. Once Planning staff had a map done a meeting was held with the representatives from the City and RVS who provided the initial comments.

Planning staff and the representatives from both sewer service providers discussed the draft scoring map and found that Planning's scoring was off in many areas. In general RVS viewed all areas within the ESAs as either easy or relatively easy to serve. Even the need for additional pump stations was viewed as a minor part of the standard operations of the district. Conversely, the City of Medford sewer system is in need of major system upgrades that for the most part are not currently funded. Any additional demand on the system, regardless of where it is placed within the ESAs, will require additional investment to improve downstream capacity. Some areas were worse than others and so they were ranked from poor to moderate based on input from the City sewer representative. Both sewer representatives were satisfied with the new map (*Map 7.3, Appendix F*) before the meeting was over. The information obtained from the two services providers is the most accurate, up-to-date information available for our analysis. The ability for the two providers to discuss their system operations and needs in the same room provided the comparative analysis across both systems in all portions of the ESAs.

Policy differences between the two service providers were used in the analysis and helped to determine scores for the whole area. The willingness to use pump stations to provide service to an area is a good example in policy differences: RVS is much more willing to use pump stations in its system than the City of Medford is.

The results of the scoring for all five factors—proximity, parcelization, water, sewer, and transportation—were used to guide the decision on where to expand the City's UGB. In addition to the scoring of the properties for the five factors, the City also had to consider the obligations of the Regional Plan Element. The Regional Plan requires the City to collaborate with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies to produce a conceptual land use plan for the area proposed to be added to the UGB. The conceptual land use plan must be used to demonstrate how the City is meeting targets for density, land use distribution, transportation infrastructure, and mixed-use/pedestrian-friendly areas. The City's conceptual plans for the urban reserve are provided as Appendix H. The scored properties were not ranked on a parcel-by-parcel basis, but rather, areas were selected based on their scores for the five factors and based on the area's ability to meet Regional Plan obligations. The mix of land uses in the area was an important consideration regarding the orderly and economic provision of public facilities and services.

Originally staff had recommended the inclusion of all of MD-4 and another large section of MD-3 based on the identified land need from the Comprehensive Plan. Once it was determined that

175 acres needed to be removed from the land need, staff was tasked with creating alternative recommendations for the revised land need. All of the acreage to be removed had to come from the residential land types, primarily from the lower-density residential supply. With the exception of a few areas that have been designated exclusively for employment uses, most of the proposed UGB expansion areas include a mix of uses. There is a need for large amounts of employment land designations because the City adopted the “high growth” scenario in its Economic Element. It was a challenge to find suitable locations for all of the employment land within the UGB expansion areas and that challenge was amplified by the revised land need. Non-regional commercial development needs nearby residential development to be viable. The removal of approximately 175 acres of residential land needed to be done in a way that did not leave commercial land in areas that are not likely to be used.

In developing the three alternatives, staff considered all areas included in the original recommendation. The portions of MD-2 included in the recommendation were not removed in any of the alternatives because MD-2 provides for the kinds of regional commercial development that can serve, and be supported by, users outside of the immediate area. This is due in large part to MD-2’s location along Highway 62.

The future South Valley Employment Center (identified in the Regional Problem Solving process) is contained within the portions of MD-5 originally recommended for inclusion. This area is needed for future economic development in the city and in the region. The South Valley Employment Center is a great fit for a large portion of the identified employment land need. The inclusion of the lower-density residential property to the north of the South Valley Employment Center provides connections between the employment area and existing urban development to the north. The lower-density residential area contains the approximately 120 acre Centennial Golf Club. The golf course is counted as unbuildable and does not count against the City’s supply of developable residential land. The portions of MD-5 east of North Phoenix Road and south of Coal Mine Road help to provide for a portion of the employment land need while also providing for high and medium-density residential development adjacent to a future elementary school. For those reasons, no portion of the originally recommended MD-5 was recommended for removal.

Staff also considered removing areas along the southwest fringe, ultimately deciding against it for the following reasons. These areas, MD-7, MD-8, and MD-9, are well suited to provide the kinds of mixed-use/walkable neighborhoods required by the Regional Plan and to help provide needed affordable housing. The relatively close proximity of these areas to the city core, the fact that much of this area is relatively flat, and the existing network of gridded streets increase the likelihood of well integrated mixed-use/walkable neighborhoods developing in these locations. The Housing Element identified a large need for affordable housing but it did not identify a solution for meeting the need. These portions of the urban reserve can help to meet the need for affordable housing by providing land with relatively low development costs. These

areas are fairly flat, they are well connected to existing development, and they score well on serviceability for water, sewer, and transportation compared to other areas.

At their May 14, 2015 meeting the Planning Commission chose staff's Alternative 1, to remove a portion of MD-4, and staff's Alternative 2, to remove a portion of MD-3 from staff's original recommendation⁷ in order to account for the revised land need and to allow for the inclusion of a portion of MD-5. This portion of MD-5, generally located south of Cherry Lane, north of Barnett Road, and east of the existing UGB, was not included in staff's recommendation because it did not score as well on the orderly and economic provision of public facilities and services as some of the other portions of the urban reserve. As will be discussed in detail below, the Planning Commission determined that the comparative environmental, social, economic, and energy (ESEE) consequences between this particular portion of MD-5 and the applicable portions of MD-4 and MD-3 were strongly enough in favor of MD-5 to offset its lower relative score for public facilities and services.

Conclusions

By using the scores of the five factors, and considering an area's ability to meet the City's projected need by GLUP designation, and the Regional Plan obligations, rather than comparing properties on a parcel-by-parcel basis, the City proposes to expand its UGB in a way that will provide for the orderly and economic provision of public facilities and services.

Alternative recommendations regarding where to remove 175 acres of land from staff's original recommendation were formulated based on the need to appropriately distribute employment and residential land types. The orderly and economic provision of public facilities and services depends, in part, on the orderly development of lands included in the UGB. If commercial land is placed in a location where commercial development is not expected to be viable, then that land cannot reasonably be expected to develop.

In choosing to include a portion of MD-5 that did not score as well as some other portions of the urban reserve for the orderly and economic provision of public facilities and services—because the comparative environmental, social, economic, and energy (ESEE) consequences for that portion of MD-5 offset its lower relative score for public facilities and services—the Planning Commission recognized the need to balance all of the boundary locational factors in determining the final location of the UGB.

3. Comparative environmental, social, economic, and energy (ESEE) consequences;

Findings—Environmental

⁷ See May 5, 2015 staff memorandum regarding the UGB Amendment Project, for the May 14, 2015 Planning Commission meeting, for more information about staff's Alternatives 1-3

One of the components of the coarse filter was proximity. Selecting parcels closer to the existing UGB not only helps to maximize the efficiency of public infrastructure, it helps the environment by reducing motor vehicle trips⁸. A more compact urban area with mixed-use neighborhoods⁹ helps to promote the development and use of transit¹⁰. Density and distance both play key roles in developing and maintaining public transit options¹¹. A more compact urban area with mixed-use neighborhoods also provides greater opportunities to invest in facilities for pedestrians and bicyclists, while at the same time making walking and biking more viable transportation options. The more compact urban area with mixed-use neighborhoods helps to reduce the amount of pollution caused by motor vehicle traffic by reducing the number of motor vehicle miles traveled; both by providing alternative modes of transportation and by reducing the distance traveled between home, work, shopping, recreation, and so forth.

The selecting of parcels close in to the existing UGB also allows for the continued rural use of the properties nearer the edge of the urban reserve. Unused properties in the outer fringe of the urban reserve also help to benefit the City and the environment by acting as a buffer between urban uses and rural uses and/or natural areas. In contrast, selecting properties nearer the outside edge of the urban reserve would have the effect of disrupting the use of those properties and of the properties closer to the existing UGB. By reducing the impact on the urban reserve areas not being proposed for inclusion, the City is limiting the amount of displacement of rural uses in the urban reserve, thus minimizing the impact on lands outside of it.

The City has regulations in place to guide the development and/or protection of environmentally sensitive areas such as steep slopes and riparian corridors. These rules will be extended to areas added to the UGB once annexed to the City. The City must also adopt a revised Local Wetland Inventory (LWI) for the areas added to the UGB through this proposal. The LWI will identify wetlands and determine which have local significance. A wetland protection ordinance will then be adopted to protect locally significant wetlands from development. This work will be completed once the final boundary of the UGB is determined. The LWI and wetland protection regulations must both be adopted prior to the annexation of any of the areas added to the UGB through this amendment.

Conclusions—Environmental

Environmental impacts were a key consideration during the adoption of the urban reserve. Now that the urban reserve is in place and the City must select its future UGB from the urban

⁸ For reference on pollution from automobiles see «http://www.ucsusa.org/clean_vehicles/why-clean-cars/air-pollution-and-health/cars-trucks-air-pollution.html#.Vld3NNpOWUk»

⁹ The Regional Plan requires the development of mixed-use/pedestrian-friendly areas.

¹⁰ For reference on the benefits of mixed-use development see «<http://www.mrsc.org/subjects/planning/mixeduse.aspx>»

¹¹ For reference on the benefits of transit see «<http://www.usnews.com/news/articles/2011/02/11/public-transportation-key-to-transforming-communities>»

reserve areas, the biggest environmental consideration is proximity. All of the urban reserve area will be added to the UGB and made available for urbanization eventually, but relative environmental impacts must be considered when determining which properties to include in the UGB at this time. The urbanization of any of this area will have some effect on the environment but the magnitude of the effect has been minimized by selecting parcels near the existing UGB. The environmental protection provisions in the City Code will be extended to the areas added to the UGB when annexed. Both the LWI and wetland protection regulations for these newly added areas must be adopted prior to the annexation of any of the areas.

Findings—Energy

The Regional Plan requires the development of mixed-use/pedestrian-friendly areas. This type of development encourages the use of travel modes other than driving, leading to a reduction in vehicle miles travelled. One of the components of the coarse filter was proximity. Selecting parcels closer to the existing UGB not only helps to maximize the efficiency of public infrastructure, it has the effect of reducing energy use by reducing motor vehicle trips. A more compact urban area, with mixed-use neighborhoods, helps to promote the development and use of transit. Density and distance both play key roles in developing and maintaining public transit options. A more compact urban area with mixed-use neighborhoods also provides greater opportunities to invest in facilities for pedestrians and bicyclists, while at the same time making walking and biking more viable transportation options. The more compact urban area with mixed-use neighborhoods help to reduce energy consumption by reducing the number of motor vehicle miles traveled, both by providing alternative modes of transportation and by reducing the distance traveled between home, work, shopping, recreation, and so forth.

The process of selecting where to expand the UGB included a consideration regarding where anticipated higher-order streets could be connected to other planned and existing higher-order streets based on areas added to the UGB. This process helped to identify where the inclusion of areas currently in the urban reserve could help to provide key urban services to properties currently within the UGB. Some areas, such as portions of MD-2, MD-3, and MD-5, provide the ability to connect higher-order streets and to create a grid pattern of streets that will help to spread traffic within the existing UGB in those areas. This distribution of traffic will help to relieve congestion on existing traffic infrastructure. Therefore these areas have a positive energy consequence through their inclusion in the UGB because of their ability to reduce congestion within the existing UGB.

The inclusion of a portion of MD-5 south of Cherry Lane, north of Barnett Road, and east of the current UGB was done in part to help facilitate the extension of the Larson Creek multi-use trail from North Phoenix Road, through current and future development, and into Chrissy and Prescott Parks. This property was also included, in part, because it plays a role in connecting portions of the existing UGB to sewer service and because it plays a role in connecting Barnett Rd to Cherry Lane.

The availability of a dedicated multi-use path in the southeast portion of the urban area will help to reduce local trips in that area. Since the path will also tie into a larger network of trails, including the Larson Creek trail from North Phoenix Road to Bear Creek, and the Bear Creek Greenway trail, it will also allow for regional traffic via bicycle for those interested in traveling a greater distance by bike.

While all portions of the UGB and existing city limit can be served with sewer without the addition of lands to the UGB, the inclusion of this portion of MD-5 will allow for the best routing of sewer service in the area. This best route will have the benefit of eliminating the need for lift stations and will provide the lowest life-cycle cost for the sewer system in the area. The elimination of a lift station reduces the energy use in operating the sewer system and using the lowest-cost, longest-lasting alternative in extending the sewer facilities will also help to conserve energy.

This portion of MD-5 also plays a vital role in connecting Barnett Road to Cherry Lane. This connection will provide a more direct route from residential areas along Hillcrest Road and employment centers along Barnett Road. This same connection will also provide a more direct route from those residential areas to freeway access, northbound at the Highland interchange and southbound at the Fern Valley interchange. This street connection helps to reduce the number of miles traveled by providing a more direct route. It also reduces energy consumption by reducing congestion and by providing additional route choices.

Conclusions—Energy

When considering where to expand the UGB, mixed-use development and proximity have the greatest impact on the use and/or conservation of energy. The fact that the needed houses and jobs would be efficiently contained in the current urban area and in areas close to the existing UGB would have generally positive energy consequences due to the increased possibility of non-motorized travel modes between trip generators and decreasing overall “vehicle miles travelled” (VMT). Reid Ewing, a transportation planning researcher and professor at the University of Utah, “looked at all the available evidence and concluded that sprawling communities that require car trips to meet most daily needs exhibit 20–40% higher VMT than more compact, mixed-used, and walkable neighborhoods.”¹² And as noted in an online edition of “The Atlantic” magazine¹³:

We [the US] continue to lead advanced economies in per-capita carbon emissions, 28 percent of which come from transportation. But even if the crunchy granola argument isn't good enough to make you see the benefits of public transit, consider that trains, trams, buses, and the like reduces traffic

¹² Excerpt from website «<http://streetswiki.wikispaces.com/Vehicle+Miles+Traveled>» (retrieved 2013-11-20), summarizing information from Ewing's book titled *Growing Cooler: The Evidence on Urban Development and Climate Change*. Chicago: Urban Land Institute, 2007.

¹³ Excerpted from «<http://www.theatlantic.com/business/archive/2013/11/the-case-against-cars-in-1-utterly-entrancing-gif/281615/>» (retrieved 2013-11-20)

congestion, which is good for the life satisfaction of everybody behind the wheel, since science shows long commutes make us unhappy.¹⁴

The inclusion of a portion of MD-5 south of Cherry Lane, north of Barnett Road, and east of the current UGB will help facilitate the extension of the Larson Creek multi-use trail from North Phoenix Road, through current and future development, and into Chrissy and Prescott Parks; connect portions of the existing UGB to sewer service along the lowest life-cycle cost route; and provide a route to connect Barnett Road to Cherry Lane. All of which will have positive impacts on energy use.

Findings—Economic

The City of Medford, as all cities in Oregon, continues to have a goal of providing land to accommodate its 20-year land need for housing and employment, as required under Oregon Revised Statute (ORS) 197.296. The City of Medford's current UGB was adopted in 1990 and was expected to last through 2010. As demonstrated throughout this document, the City does not currently have a 20-year land supply and needs to meet the projected demand for employment and residential land over the 20-year planning period. ORS 197.296(6) recommends addressing the need by expanding the urban growth boundary, by increasing the developable capacity of the urban area, or by a combination of the two. UGBA Phase 1 sought to increase the development capacity of land within the existing UGB in order to accommodate some of the City's projected need for residential and employment land. This phase, UGBA Phase 2 (External Study Area (ESA) Boundary Amendment), seeks to amend the City's UGB and make more land available for urban development.

UGBA Phase 1 had a number of positive effects on the developable capacity within the existing UGB. One of which, the conversion of industrial land to commercial land, helped to increase the likelihood of both commercial and industrial development over the next 20 years by placing these uses in more appropriate locations. There is strong development pressure on the industrial land in the city core, near major transportation routes, to be used for commercial uses. This pressure makes the land less likely to develop with industrial use. The swapping of land types places commercial designations on appropriate tracts of land within the city core while allowing the City to designate more land near the outside of the urban area, but still near major transportation routes, for industrial development. In choosing where to expand its UGB, the City of Medford considered the suitability of employment land for each of the employment types. For example, large tracts of General Industrial, Service Commercial, and Commercial land were selected between North Phoenix Road and Interstate 5, near the future overpass and connection with South Stage Road to the west. This area is planned for a future employment center for the City and for the region. In other cases smaller tracts of employment land were

¹⁴ For reference to commuting studies see «<http://www.economist.com/blogs/gulliver/2011/06/perils-commuting>»

designated in residential areas in order to promote the development of mixed-use neighborhoods.

In addition to appropriately locating land types, the proposed UGB expansion will also have the effect of increasing the availability of all types of urban land. The increased supply of land should have the effect of spurring economic development and improving the local economy by reducing the cost of land. However, this will only be the case if the urbanizable land is held by a large enough number of owners to promote competition and protect against monopoly and price-fixing¹⁵. Parcel size was one of the components of the coarse filter. It was used as an indicator of parcelization which was used to compare the relative availability of the land within the urban reserve for development. While it is important for the City to select land that is available for development, the selection of only large parcels of land would have the effect of concentrating the supply of land among a relatively small number of owners. By selecting some of the smaller parcels, primarily on the west side of Interstate 5, the City is effectively distributing the supply of developable land to a greater number of property owners.

The City also selected parcels distributed around the existing UGB for inclusion in the UGB expansion area. This was done in part to help provide variety in the locations and types of land available for development and to help distribute the impact of additional development throughout infrastructure systems.

The inclusion of a portion of MD-5 south of Cherry Lane, north of Barnett Road, and east of the current UGB was done in part because it plays a role in connecting portions of the existing UGB to sewer service. While all portions of the UGB and existing city limit can be served with sewer without the addition of lands to the UGB, the inclusion of this portion of MD-5 will allow for the best routing of sewer service in the area. This best route will have the benefit of eliminating the need for lift stations and will provide the lowest life-cycle cost for the sewer system in the area. Both have positive economic impacts.

Conclusions—Economic

UGBA Phase 1 had the effect of more appropriately locating employment land. Through careful consideration of the available land within the urban reserve, and the land need by employment type, the City has selected land to efficiently meet the employment need over the 20-year period.

The increased availability of all types of urbanizable land should have a positive effect on the local economy by decreasing the cost of developable land. This can only occur if the land is held by a large enough number of owners to promote competition. By selecting a mix of both large and small parcels the City will provide an adequate supply of developable land while helping to distribute the supply to a greater number of property owners.

¹⁵ For reference on the effects of monopoly on the supply and demand curve see
«<http://www.cliffsnotes.com/more-subjects/economics/monopoly/demand-in-a-monopolistic-market>»

Findings—Social

The wide-ranging factors that influence the social effect of the proposal will be discussed individually. There is some overlap between the social factors and the environmental, energy, and economic factors because many of the things that influence those scores—proximity, mixed-use development, and availability of developable land—also influence the social effect of the proposal.

Traffic: One of the components of the coarse filter was proximity. Selecting parcels closer to the existing UGB not only helps to maximize the efficiency of public infrastructure, it has the social benefit of reducing motor vehicle trips. A more compact urban area, with mixed-use neighborhoods, helps to promote both the development and use of transit. Density and distance both play key roles in developing and maintaining public transit options. A more compact urban area also provides greater opportunities to invest in facilities for pedestrians and bicyclists, while at the same time making walking and biking more viable transportation options. The more compact urban area helps to reduce the amount of motor vehicle traffic by reducing the number of motor vehicle miles traveled; both by providing alternative modes of transportation and by reducing the distance traveled between home, work, shopping, recreation, etc.

The inclusion of a portion of MD-5 south of Cherry Lane, north of Barnett Road, and east of the current UGB was done in part to help facilitate the extension of the Larson Creek multi-use trail from North Phoenix Road, through current and future development, and into Chrissy and Prescott Parks. This property was also included, in part, because it plays a role in connecting Barnett Road to Cherry Lane.

The availability of a dedicated multi-use path in the southeast portion of the urban area will help to reduce local trips in that area. Since the path will also tie into a larger network of trails, including the Larson Creek trail from North Phoenix Road to Bear Creek, and the Bear Creek Greenway trail, it will also allow for regional traffic via bicycle for those interested in traveling a greater distance by bike.

This portion of MD-5 also plays a role in connecting Barnett Road to Cherry Lane. This connection will provide a more direct route from residential areas along Hillcrest Road and employment centers along Barnett Road. This same connection will also provide a more direct route from those residential areas to freeway access, northbound at the south Medford interchange and southbound at the Fern Valley interchange. This street connection helps to reduce traffic congestion by providing a more direct route for some travelers and by providing additional route choices.

Land Availability: In addition to appropriately locating land types the proposed UGB expansion will also have the effect of increasing the availability of all types of urban land.

The increased supply of land should have the effect of spurring economic development and improving the local economy by reducing the cost of land. However, this will only be the case if the urbanizable land is held by a large enough number of owners to promote competition and protect against monopoly and price-fixing. Parcel size was one of the components of the coarse filter. It was used as an indicator of parcelization which was used to compare the relative availability of the land within the urban reserve for development. While it is important for the City to select land that is available for development the selection of only large parcels of land would have the effect of concentrating the supply among a relatively small number of owners. By selecting some of the smaller parcels, primarily west of Interstate 5, the City is effectively distributing the supply of developable land to a greater number of property owners.

Relative Cost of Development: The finding for the “Orderly and economic provision of public facilities and services,” above are pertinent here as well. Since the cost of development is oftentimes passed on to the consumer through increased costs, and to the general population through increased service rates and increased taxes, selecting properties with the lowest relative cost of development has a positive social effect.

The External Study Areas (ESAs) were made up of the properties that passed through the coarse filter. Since the “efficient accommodation of identified land needs” is set as the first priority, any area that did not meet the measure for efficiency (the coarse filter) was eliminated from further consideration prior to further study on the ESAs. Once the ESAs were identified a capacity analysis was conducted. Additional data were then collected for the ESAs regarding the serviceability for water, sewer, and transportation. This was done to measure the ability to provide public facilities and services in an orderly and economical fashion.

The results of the scoring for all five factors—proximity, parcelization, water, sewer, and transportation—were used to guide the decision on where to expand the City’s UGB. In addition to the scoring of the properties for the five factors the City also had to consider the obligations of the Regional Plan Element, adopted in 2012. The Regional Plan requires the City to collaborate with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies to produce a conceptual land use plan for the area proposed to be added to the UGB. The conceptual land use plan must be used to demonstrate how the City is meeting targets for density, land use distribution, transportation infrastructure, and mixed-use/pedestrian-friendly areas. The scored properties were not ranked on a parcel-by-parcel basis, but rather, areas were selected based on their scores for the five factors and based on the area’s ability to meet Regional Plan obligations. The mix of land uses in the area was an important consideration regarding the orderly and economic provision of public facilities and services.

The City also selected parcels distributed around the existing UGB for inclusion in the UGB expansion area. This was done in part to help provide variety in the locations and types of land available for development and to help distribute the impact of additional development throughout infrastructure systems.

Planned Neighborhoods: Rather than provide for individual land types on segregated portions of the urban reserve, most of the areas selected provide for an integrated mix of uses. By selecting areas that are conceptually planned for a variety of uses the City is not only meeting the Regional Plan requirement for mixed-use/pedestrian-friendly neighborhoods, but is also setting the stage for a type of neighborhood development that helps to improve public health and community cohesiveness.¹⁶

The inclusion of a portion of MD-5 south of Cherry Lane, north of Barnett Road, and east of the current UGB was done in part to help facilitate the continued development of the Southeast Plan. The Southeast Plan has been in stages of development since the 1990s. The plan is for a large mixed-use development east of North Phoenix Road, generally centered on Barnett Road. The inclusion of this particular portion of MD-5 helps to facilitate parts of the Southeast Plan, including a planned school, a planned park, and a planned trail connection. This property will also help to provide additional residential development in the area of the Southeast Plan, which will help to support planned commercial development in the area.

Compatibility: By requiring urbanization plans for each area prior to annexation the City will have the opportunity to consider the compatibility of the development with existing uses and other planned uses in the vicinity. The urbanization plans will also insure that the residential density and other requirements of the Regional Plan are met.

Conclusions—Social

The social consequences of the selected boundary location are positive relative to other boundary location alternatives. The selected boundary location helps to minimize the effect that increased development will have on transportation by helping to promote the reduction of vehicle miles traveled. The selected boundary location has a positive effect on land availability by increasing the supply of all urbanizable land types and by selecting land that is both available for development and held by a large enough number of property owners to promote competition in the market. The selected boundary location was selected in large part due to its relative cost of development compared to the alternatives. The selected boundary location and the selected land-use distributions help to promote mixed-use/pedestrian-friendly neighborhoods, which have a number of social benefits. Compatibility between development

¹⁶ For reference on the benefits of mixed-use development see «<http://www.wri.org/blog/2014/07/people-oriented-cities-mixed-use-development-creates-social-and-economic-benefits>»

on these newly added areas and existing uses will be considered during the urbanization plan process, prior to annexation.

Conclusions—overall

On balance the environmental, social, economic, and energy (ESEE) consequences of the selected boundary are positive compared to other alternatives. The biggest factors in having a favorable ESEE are proximity to the existing UGB and a large enough distribution of ownership to promote competition in the market for urbanizable land. The City has selected land from its urban reserve that is both close to the existing UGB (and existing development) and comprised of a large enough number of parcels to help promote competition in the market for urbanizable land.

4. Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

Findings

Selecting parcels close in to the existing UGB allows for the continued rural use of the properties nearer the outer edge of the urban reserve. The lower-intensity use of properties in the outer fringe can act as a buffer between urban uses and farm and forest uses outside of the UGB.

Regional Plan Element, 4.1.10 requires the use of agricultural buffers to separate urban uses from agricultural uses. The City adopted code that applies to land added to the UGB from the Urban Reserve. (City Code Section 10.802, Urban–Agricultural Conflict in Urban Reserve, August 16, 2012).

Conclusions

By selecting parcels near the existing UGB for inclusion into the UGB, the City is leaving properties on the outer edge of the Urban Reserve to act as a buffer between urban uses and agricultural and forest activities occurring on land outside of the UGB. Furthermore, Municipal Code Section 10.802 requires conflict mitigation (including buffers) between urban uses and agricultural uses.

Boundary Location Summary Findings and Conclusions

The City of Medford has used each of the four boundary locational factors in determining the future boundary location. Each of these factors had to be weighed and balanced against each of the others and the proposed boundary amendment as a whole scored well on each of these factors. An alternatives analysis was not completed on a parcel-by-parcel basis but rather the reasons for how and why areas were selected (or eliminated) through each of the steps/processes (coarse filter, serviceability, ESEE) has been provided. This process of selecting

certain areas over others through each of the steps is the City's alternatives analysis. An alternatives analysis was not completed on a parcel-by-parcel basis for the following reasons: 1) the tax lots (parcels) involved are of vastly different size, 2) the number of possible alternatives to compare is prohibitively large, 3) the properties have been planned for a number of different uses, and 4) there is value in analyzing the recommendation as a whole using the boundary location factors.

Tax lots could not be objectively compared, one against another, because the tax lots vary greatly in size. How can a 5-acre tax lot be objectively weighed against a 100-acre tax lot? The only way to fairly compare the two would be to either break the larger tax lot into smaller pieces or to combine a number of smaller tax lots into a larger aggregate. Not only would this exercise require the planners to choose where to split tax lots and/or which tax lots to combine, it would also alter a part of the what defines each of these tax lots, their size and parcelization characteristics. Because of these challenges, when comparing boundary location alternatives, rather than compare different tax lots areas (all of MD-8, portions of MD-5, etc.) were compared. This not only helped to balance the size of the areas compared, it also helped in comparing characteristics that could not be compared on a parcel-by-parcel basis. These characteristics included the mix of conceptual plan uses, the coordination of transportation infrastructure, and parcelization.

The use of larger sections of the urban reserve to compare against each other also helped to reduce the number of alternatives to compare. Still, a detailed comparison of each of these subareas against each of the others, for each of the boundary locational factors, was prohibitive in its magnitude. This kind of system would have required the City to devise a weighted ranking system for each of the criteria. These ranked scores for each of the areas would then be totaled and areas would be selected based on scores, with the highest score being selected first and then moving down the list until the land need was met. But how do you compare a property planned for industrial use against one planned for residential? The planned use of the property has some value in determining which properties to select, but how do you determine the comparative value for property use designation? This kind of rigid system would likely miss nuances about how different areas interact with each other in a system. For example, this kind of ranking would not have considered the necessary mix of land types needed.

This kind of reductionist approach would limit the City's ability to consider the boundary location decision as a whole. After all, this is one cohesive proposal, determining where future urban development will occur around the city by selecting lands from a larger set made up entirely of "first priority land". The only way to insure that the proposal is balanced is to look at it in its entirety and compare it against the boundary locational factors as one piece.

Urban Growth Boundary amendment approval criteria from Urbanization Element, Section 1.2.3

Criterion a. continued: The standards and criteria in Goal 14, OAR 660, Division 24, and other applicable State Goals, Statutes, and Rules.

OAR 660

Oregon Administrative Rule (OAR) 660 is directed at the work of the Department of Land Conservation and Development (DLCD) and contains Rules for how to implement the applicable Statutes relating to the mission of DLCD. There are several sections of OAR 660 which apply to the adoption of individual Comprehensive Plan Elements. Each Comprehensive Plan Element being relied upon to support this UGB amendment (e.g., the Economic Element) was found to be consistent with all applicable portions of OAR 660 at the time of their adoption. Rather than repeat those findings here those findings are included in the record, and findings, for this proposed UGB amendment, through reference.

The proposed amendment's compliance with applicable portions of OAR 660 has been discussed, in large part, in the proceeding text. Any applicable portions of OAR 660, not already discussed, will be discussed below.

Division 24

Division 24 deals with Urban Growth Boundaries. Most of the applicable portions of Division 24 have already been covered in the Goal 14 findings above. These include: Population Forecasts; Land Need; Land Inventory and Response to Deficiency; and Boundary Location Alternatives Analysis. The following portions of OAR 660-024-0020 (Adoption or Amendment of a UGB) also apply and will be discussed as indicated:

- (1) All statewide goals and related administrative rules are applicable when establishing or amending a UGB, except as follows:
 - (b) Goals 3 and 4 are not applicable; {This is covered under Goal 3 and Goal 4 below}
 - (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; {This is covered under Goal 5 below}
 - (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; {This is covered under Goal 12 below}

Urban Growth Boundary amendment approval criteria from Urbanization Element, Section 1.2.3

Criterion a. continued: **The standards and criteria in Goal 14, OAR 660, Division 24, and other applicable State Goals, Statutes, and Rules.**

Other applicable State Goals, Statutes, and Rules

Goal 1—Citizen Involvement

Findings

Goal 1 requires the City to have a citizen involvement program that sets the procedures by which affected citizens will be involved in the land use decision process. Goal 1 requires provision of the opportunity to review proposed amendments prior to a public hearing, and recommendations must be retained and receive a response from policy-makers. The rationale used to reach land use decisions must be available in the written record. The City of Medford has an established citizen-involvement program consistent with Goal 1 that includes review of proposed Comprehensive Plan amendments by the Planning Commission and City Council. Affected agencies and departments are also invited to review and comment on such proposals, and hearing notices are published in the local newspaper, and posted on the site. This process has been adhered to in this proposed amendment.

The Planning Department conducted an open house (October 28, 2014) to receive comments about the scoring methods used for inclusion in the expansion from property owners within the urban reserve. For the public hearing process staff sent hearing notification to all property owners within the urban reserve. Staff prepared press releases and provided information on the City's website. Finally, this proposal will have been considered by the Planning Commission and the City Council during televised public hearings.

Conclusions

By following a supplemented notification and comment procedure, the City provided better-than-adequate opportunities for citizen input.

Goal 2—Land Use Planning

Findings

The City has a land use planning process and policy framework in the form of a Comprehensive Plan and development regulations in Chapter 10 of the Municipal Code. These are the bases for decisions and actions. The process for amending the UGB and all Comprehensive Plan elements was found to be consistent with all State requirements at the time of their adoption.

Conclusions

There is an adequate factual basis for the proposed changes and the adopted process has been followed for this UGB amendment.

Goal 3— Not applicable per OAR 660-024-0020(1)(b).

Goal 4— Not applicable per OAR 660-024-0020(1)(b).

Goal 5—Natural Resources, Scenic & Historic Areas, and Open Spaces

Findings

The City has regulations in place to guide the development and/or protection of environmentally sensitive areas such as steep slopes and riparian corridors. These rules will be extended to areas added to the UGB once annexed to the City. The City must also adopt a revised Local Wetland Inventory (LWI) for the areas added to the UGB through this proposal. The LWI will identify wetlands and determine which have local significance. A wetland protection ordinance will then be adopted to protect locally significant wetlands from development. This work will be completed once the final boundary of the UGB is determined. The LWI and wetland protection regulations must both be adopted prior to the annexation of any of the areas added to the UGB through this amendment. The City's historic inventory must also be amended to include the areas added through this amendment.

Some of the easternmost portions of the urban reserve are within a deer and elk habitat area. The Oregon Department of Fish and Wildlife would prefer that this area remain in its natural condition and if development does occur within this area it must have special standards used to protect this habitat. With the exception of Prescott and Chrissy parks, which allow for very limited development, none of the adopted proposal extends the UGB into the deer and elk habitat area.

According to OAR 660-024-0020 (Adoption or Amendment of a UGB) "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." This means that Goal 5 compliance is only under review for the areas added to the boundary. Goal 5 compliance has already been demonstrated for the existing boundary. ORS 197.250 [Compliance with Goals Required] requires that "...all comprehensive plans and land use regulations adopted by local government to carry out those comprehensive plans... shall be in compliance with the goals within one year after the date those goals are approved by the Land Conservation and Development Commission." The City shall demonstrate full compliance with Goal 5 within one year of the adoption of the revised UGB through the extension of existing development codes to areas added to the UGB, through the adoption of a wetland protection ordinance for locally significant wetlands within the newly added areas, and through the inclusion of these newly added areas in the City's historic inventory.

Conclusions

The City will demonstrate compliance with all portions of Goal 5 within one year of the adoption of the proposed amendment and prior to annexation per OAR 660-024-0024 and per the revised Urban Growth Management Agreement.

Goal 6—Air, Water, and Land Resources Quality

Findings

One of the components of the coarse filter was proximity. Selecting parcels closer to the existing UGB not only helps to maximize the efficiency of public infrastructure, it helps the environment by reducing motor vehicle trips. A more compact urban area with mixed-use neighborhoods helps to promote the development and use of transit. Density and distance both play key roles in developing and maintaining public transit options. A more compact urban area also provides greater opportunities to invest in facilities for pedestrians and bicyclists, while at the same time making walking and biking more viable transportation options. The more compact urban area helps to reduce the amount of pollution caused by motor vehicle traffic by reducing the number of motor vehicle miles traveled; both by providing alternative modes of transportation and by reducing the distance traveled between home, work, shopping, recreation, and so forth.

Selecting parcels close in to the existing UGB also allows for the continued rural use of the properties nearer the outer edge of the urban reserve. Unused properties in the outer fringe of the urban reserve also benefits the City and the environment by acting as a buffer between urban uses and rural uses and/or natural areas. In contrast, selecting properties nearer the outside edge of the urban reserve would have the effect of disrupting the use of those properties and of the properties closer to the existing UGB. By reducing the impact on the urban reserve areas not being proposed for inclusion the City is limiting the amount of displacement of rural uses in the urban reserve, thus minimizing the impact on lands outside of the urban reserve.

Many of the Goal 5 findings, above, also apply to the findings here under Goal 6.

Conclusions

Environmental impacts, including air, water, and land resources quality, were key considerations during the adoption of the urban reserve. Now that the urban reserve is in place, and the City must select its future UGB from the urban reserve areas, the biggest environmental consideration is proximity. All of the urban reserve area will be added to the UGB and made available for urbanization eventually, but relative environmental impacts must be considered when determining which properties to include in the UGB at this time. The urbanization of any of this area will have some effect on the environment but the magnitude of the effect has been minimized by selecting parcels near the existing UGB. The environmental protection provisions in the Municipal Code will be extended to the areas added to the UGB

when annexed. Both the LWI and wetland protection ordinance for these newly added areas must be adopted prior to the annexation of any of the areas.

Goal 7—Areas Subject to Natural Hazards

Findings

Slopes: The City of Medford has existing hillside regulations, Municipal Code Sections 10.929–10.933, that regulate the development of property with slopes in excess of 15 percent. These procedural requirements are meant to decrease soil erosion and protect public safety. This code section will apply to any and all areas with slopes exceeding 15% added to the UGB through this amendment once annexed to the City. Areas exceeding 25% slope were classified as unbuildable in the capacity analysis.

Fire: The risk of wildfire in and around Medford often rises to extreme levels during the summer months. The City of Medford has Fire, Building, and Development codes in place to help to mitigate the risk of wildfire in the city. One such provision is Municipal Code Section 7.022, which prohibits the use of fireworks within the hazardous wildfire areas as defined by Jackson County.

Flood: The Municipal Code allows development within flood plains provided that buildings meet certain construction standards designed to minimize damage from floods. City policies and codes do not have locational standards with respect to flood plains, but there is a recommendation in the Environmental Element that states “Development and redevelopment should be highly scrutinized when located in floodplains.”

Conclusions

When considering where to expand its UGB the City is limited to the areas within the urban reserve. All Statewide Planning Goals, including Goal 7, were considered as part of the selection of the urban reserve. The City has development standards in place to mitigate the risk of natural hazards from flood, fire, and steep slopes. These standards will be extended to applicable areas when annexed to the City.

Goal 8—Recreation Needs

Findings

The Other Residential Land Needs section of the Housing Element examines existing conditions for public and semi-public land to forecast future need for this land type.

According to the Housing Element:

Lands needed for public operations and facilities include lands for city facilities, schools, substations, and other public facilities. Land needs were estimated using acres per 1,000 persons for all lands of these types. Lands needed for parks and open space estimates use a parkland standard of 4.3 acres per 1,000 persons based on the level of service standard established in the Medford Leisure Services Plan

Update (2006). This update includes land needed for neighborhood and community parks, which usually locate in residential plan designations. It does not include land needed for natural open space and greenways, which may also be located in residential plan designations.

The resulting land need for community and neighborhood parks is shown in *Table 1.5*.

Table 1.5. City Park Need (adapted from Housing Element Table 40)

Type of Use	Existing Acres	Existing Acres / 1000 Persons	Assumed Need (Ac/1000 Persons)	Estimated Need per 1000 Persons 2009-2029
City Parks	527	6.8	4.3	153

In addition to the standard urban reserve areas the Regional Plan Element identifies two large regional park areas, Prescott Park and Chrissy Park. These areas are City-owned wildland parks totaling 1,877 acres. Inclusion as urban reserve was intended to serve as a mechanism to eventually incorporate this City property into the City boundary. The two MD-P areas were not considered areas for future urban growth because of their classification as parkland. There is no residential, commercial, or industrial development planned for the MD-P acres. They present a tremendous recreational and open space asset to the City and the region, in addition to creating a buffer between the city and rural lands to the north and east. However, due to their location along the eastern periphery of the city and steep topography, these lands satisfy little of the localized open space needs throughout the city and do not meet land needs for traditional urban parkland.

Another regional recreation use already in existence is Centennial Golf Club. If the Manor-owned land surrounding it is brought in, then its inclusion is unavoidable. Its function as a regional asset will be unaffected by inclusion. The golf course has been counted as unbuildable by staff so far because the property owners intend to obtain an open space assessment for the land (ORS 197.186). Although the land has been classified as unbuildable in order to remain consistent with ORS 197.186 it might more appropriately be viewed as developed. The open space assessment helps to insure that the land will remain a golf course and as a golf course the land is already developed and meeting that regional need. The land will have no more ability to meet an identified land need for the City as a golf course within the boundary than it does outside of the boundary.

Conclusions

The Other Residential Land Needs of the Housing Element identified a need for 153 gross acres of additional parkland for neighborhood and community parks, outside of the existing UGB. The Regional Plan Element also includes two large wildland park areas that are owned by the City. These areas, Chrissy and Prescott parks, are intended to provide both a recreational and open space resource for the City and for the region. While both help to meet the recreational needs

for the City these are two different land types (neighborhood and community park vs. regional/wildland park and open space) that provide two discreet types of uses for the City. The proposed UGB expansion will include an adequate supply of land determined to be needed by the Leisure Services Plan to accommodate a 20-year population.

Goal 9—Economic Development

Findings

Goal 9 factors were thoroughly addressed in the adoption and acknowledgement of the Economic Element of the Comprehensive Plan. Because the Economic Element has been deemed consistent with Goal 9, and it is being relied upon to determine the City's employment land need, detailed findings under Goal 9 are not necessary for this proposed boundary amendment. However, some discussion regarding Goal 9 compliance is provided below as a reference to the information from the Economic Element that was used in this amendment process. Much of this text is repeated from other sections of this document where it is more appropriately considered.

The process of determining Medford's land need for the next 20 years started with the adoption of the Population Element in 2007. This study looked at the forecasted population growth in Medford through 2040. The next step was the Buildable Lands Inventory (BLI), adopted in 2008, consistent with OAR 660-024-0050 and ORS 197.186 and 197.296. This study identified the number of acres, in total, and by type, available for development within the City's current UGB. The BLI showed that there are approximately 1,078 employment acres available for development within Medford's UGB. The next step was the Economic Element, adopted in 2008, which considered the projected population growth, along with economic trends, to determine the overall need for employment land over the 20-year planning period. The study concluded that an additional 708 gross acres were needed to meet the demand for employment land. However, as shown in the Appendix C, this does not properly account for the excess supply of industrial land available within the existing boundary. When properly calculated (see Appendix C) the need for employment land increases to 765 gross acres.

Through these studies the City of Medford demonstrated a deficit in the supply of employment land within its existing UGB over the next 20 years. ORS 197.296 subsection (6) recommends addressing the need by expanding the urban growth boundary, by increasing the developable capacity of the urban area, or by a combination of the two. Urban Growth Boundary Amendment (UGBA) Phase 1 (ISA GLUP Amendment) sought to change the General Land Use Plan map designation of land in the existing urban area for the purpose of increasing its development capacity in order to accommodate some of the City's projected need for residential and employment land. UGBA Phase 1 resulted in more efficient use within the UGB in the following ways:

- It took surplus industrial land (land in excess of the need for the next 20 years) and converted it to commercial land. This resulted in the accommodation of a larger portion of the employment need within the existing UGB.
- The conversion of industrial to commercial also helped to increase the likelihood of both commercial and industrial development over the next 20 years by placing these uses in more appropriate locations. There is heavy development pressure for commercial uses on the industrial land in the city core near major transportation routes. This pressure makes the land less likely to develop with industrial use. The swapping of land types places commercial designations on tracts of land within the city core while allowing the City to designate more land near the outside of the urban area for industrial development.
- While 58 acres of land was converted from residential to employment GLUP designations the total residential land need only increased by 36 acres. This is due to the fact that some of this land was not identified as meeting any portion of the future residential land need but it is now being counted toward meeting the employment land need. This land was identified as developed for residential but is expected to redevelop as commercial.

UGBA Phase 1 resulted in a decrease in the amount of land needed outside the current UGB. Before these efficiency measures, a total of 765 acres were needed outside of the existing UGB for employment purposes. After UGBA Phase 1, that number was reduced to 637 acres.

Conclusions

UGBA Phase 1 converted surplus industrial land to commercial land which allowed for more of Medford's need for employment land to be accommodated within its existing UGB. The conversion also resulted in the increased likelihood of a larger amount of Medford's employment land need being met within the existing UGB by more appropriately locating both commercial and industrial land. UGBA Phase 1 also reduced the overall land need for the City by converting some residential land that was not identified as meeting any portion of the future residential land need to employment land that is now counted toward meeting the employment land need. While 58 acres of land was converted from residential to employment GLUP map designations the total residential land need only increased by 36 acres. These adopted efficiency measures helped to address a portion of the City's employment land need, but an additional 637 gross acres of employment land outside of the existing UGB are needed. The proposed UGB expansion will allow the City to meet its identified need for employment land.

Goal 10—Housing

Findings

Goal 10 factors were thoroughly addressed in the adoption of the Housing Element of the Comprehensive Plan. Because the Housing Element has been deemed consistent with Goal 10, and it is being relied upon to determine the City's employment land need, detailed findings under Goal 10 are not necessary for this proposed boundary amendment. However, some

discussion regarding Goal 10 compliance is provided below as a reference to the information from the Housing Element that was used in this amendment process. Much of this text is repeated from other sections of this document where it is more appropriately considered.

In 2012 the City, together with 5 other cities in the valley, adopted a Regional Plan for accommodating a doubling of the region's population. Regional Plan Element 4.1.5 requires a minimum density of 6.6 units per gross acre for all newly annexed areas for the years 2010 through 2035. The aggregate average density of the residential land need, determined by the Housing Element, was 6.9 units per gross acre (see *Table 1.2 under Land Need*). Some of this density was then shifted into the existing UGB through UGBA Phase 1. This density shift resulted in an increased need for low-density residential and a decreased need for medium-density and high-density residential outside of the existing boundary. While this density shift helped to accomplish a number of positive benefits it also makes meeting the minimum density requirement of the Regional Plan more difficult. With the revised ratios of residential land types in the UGB expansion area, the average densities for each of the residential land types alone will not result in a density of 6.6 units per gross acre or above.

The Housing Element (2010) provides an accurate representation of the City's housing need over the next 20 years. The Regional Plan imposes a density standard that is in excess of the density supported by the Housing Element now that the intensification measures from UGBA Phase 1 are completed. The Regional Plan also requires a density of 7.6 units per gross acre for all newly added areas for the years 2036 to 2050. In order to meet the density obligations of the Regional Plan the City will require an urbanization plan to be submitted, showing compliance with the Regional Plan obligations for density and land use distribution, prior to annexation of any of the land added through this UGB amendment process. Acceptable methods for meeting the density standards will include:

- Committing areas to higher density zones within a General Land Use Plan (GLUP) designation. For example, an area within the UR GLUP designation could be designated as SFR-10 (Single Family Residential – 10 units per acre) which would insure a minimum density of 6 units per acre. By establishing “pre-zoning” within the established GLUP designations the residential density for the area can be moved higher than the minimum, or even average, density that the GLUP would accomplish.
- Requesting GLUP map changes as part of the urbanization plan approval process. This will allow for additional areas for medium-density and high-density development within the areas added to the UGB. This technique would allow for more flexibility in meeting the density obligations of the Regional Plan without imposing a housing mix that is not consistent with the Housing Element. This would allow for flexibility in housing types as the market shifts toward higher-density housing while also setting the stage for the future density standard of 7.6 units per acre required by the Regional Plan. This approach will also help to address the affordable housing need identified in the Housing Element. By adding additional high-density housing throughout the UGB (in the existing UGB through Phase 1

and in the newly added areas by allowing for GLUP changes to higher-density), the City is enabling more high-density housing, which is needed to provide more affordable housing within Medford.

Goal 10 requires that “plans shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type, and density.” By allowing some residential areas to request higher density GLUP map designations the City is providing for more flexibility of housing types in the UGB expansion areas.

In addition to forecasting future residential land needs, the Housing Element also determined the amount of land needed for future public and semi-public uses. OAR 660-024-0040 (10) allows for a “safe harbor” net-to-gross factor of 25% for streets and roads, parks and school facilities. A letter was submitted into the record by Greg Holmes of 1000 Friends of Oregon, dated March 3, 2015, that challenges some of the City’s residential land need assumptions. Rather than use the safe harbor amount the Housing Element calculates the net-to-gross factor for streets based on observation of the existing residential areas in the city. According to the last paragraph on page 57 of the Housing Element “... the forecast shows land need in net acres. Net acres is the amount of land needed for housing, not including public infrastructure (e.g. roads). Gross acres is the estimated amount of land needed for housing inclusive of public infrastructure. The net-to-gross factor allows for conversion between net acres to gross acres. The net-to-gross factor is highest (23%) for single-family detached dwellings, decreasing to 10% for multi-unit projects.” Parks and schools were not considered in the net-to-gross factor, but rather, were included in the Public and Semi-public Land Needs portion of the Housing Element, which concluded that 153 acres of park land and 20 acres of school land was needed in the UGB expansion area.

The Other Residential Land Needs section of the Housing Element examines existing conditions for public and semi-public land to forecast future need for this land type.

According to the Housing Element:

Lands needed for public operations and facilities include lands for city facilities, schools, substations, and other public facilities. Land needs were estimated using acres per 1,000 persons for all lands of these types. Lands needed for parks and open space estimates use a parkland standard of 4.3 acres per 1,000 persons based on the level of service standard established in the Medford Leisure Services Plan Update (2006). This update includes land needed for neighborhood and community parks, which usually locate in residential plan designations. It does not include land needed for natural open space and greenways, which may also be located in residential plan designations.

See *Table 1.1*.

Conclusions

The Housing Element provides for an adequate land supply at a realistic housing mix for the planning horizon. In addition to land for housing, the Housing Element also accounts for land needed to provide for streets and other utilities, and for public and semi-public uses, which usually occur on residentially zoned properties. The residential density requirements of the Regional Plan were added to the Comprehensive Plan after the adoption of the Housing Element. By requiring urbanization plans for all of the areas being added to the UGB prior to annexation, the City can insure that the residential density standards are being met. The required urbanization plans must demonstrate compliance with the minimum density standards and with the land use distributions required by the Regional Plan Element. By allowing some residential areas to change their GLUP map designation to higher densities the City is providing more flexibility of housing types in the UGB expansion areas. In response to the various charges in the 1000 Friends letter, the City finds that unbuildable lands and the land need for rights-of-way, parks, and schools were correctly calculated. However, the City agrees that the private park land need was erroneously included, and that the government land need was double-counted; respectively, 18 acres and 135 acres were removed following the Planning Commission hearing.

Goal 11—Public Facilities and Services

Findings

The External Study Areas (ESAs) were made up of the properties that passed through the coarse filter. Additional data were collected for the ESAs regarding the serviceability for water, sewer, and transportation (Appendix F). This was done to measure the ability to provide public facilities and services in an orderly and economic fashion. The scoring memos provided by the service providers are attached as Appendix G.

For more thorough findings addressing Goal 11 please see those under Goal 14 locational factor, *“Orderly and economic provision of public facilities and services.”* As the same findings apply, they will not be repeated here.

Conclusions

By using the scores of the five factors, and considering an area’s ability to meet Regional plan obligations rather than comparing properties on a parcel-by-parcel basis, the City is able to expand its UGB in a way that will provide for the orderly and economic provision of public facilities and services.

Goal 12—Transportation

Findings

Land added to the UGB through this amendment will remain under the jurisdiction of Jackson County (Urban Growth Management Agreement will apply) and will retain its current County

zoning until it is annexed to the City. Prior to the annexation of any of the land added to the UGB through this amendment, a revised Transportation System Plan (TSP), which includes the areas added through this amendment, must be adopted. The revised TSP will address transportation needs throughout the entire revised UGB. Areas within the UGB but outside the City Limit must go through the annexation and the zone change process before they are assigned a standard city zone and made available for urban-level development. The City, as a criterion for zone change, requires a demonstration of facilities adequacy for transportation prior to approving any zone change that would allow for urban development. OAR 660-024-0020(d) states:

“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.”

Since all land added through this amendment will retain the zoning that was assigned prior to inclusion in the boundary, the transportation planning rule does not apply to this amendment. Transportation system needs and transportation system adequacy will be addressed both prior to annexation and through the zone change process.

Work is well underway to complete a revised TSP for the city which will include a comprehensive overhaul of the existing TSP. Work on the TSP cannot be completed until the location of the revised boundary is known.

Conclusions

The City will require that a revised Transportation System Plan (TSP), which includes the areas added to the UGB through this amendment, be adopted prior to the annexation of any of the newly added land. The revised TSP will address transportation needs throughout the entire revised UGB.

Goal 13—Energy Conservation

Findings—Energy

The Regional Plan requires the development of mixed-use/pedestrian-friendly areas. This type of development encourages the use of travel modes other than driving, leading to a reduction in vehicle miles travelled. One of the components of the coarse filter was proximity. Selecting parcels closer to the existing UGB not only helps to maximize the efficiency of public infrastructure, it has the effect of reducing energy use by reducing motor vehicle trips. A more compact urban area, with mixed-use neighborhoods, helps to promote the development and use of transit. Density and distance both play key roles in developing and maintaining public transit options. A more compact urban area also provides greater opportunities to invest in

facilities for pedestrians and bicyclists, while at the same time making walking and biking more viable transportation options. The more compact urban area helps to reduce energy consumption by reducing the number of motor vehicle miles traveled; both by providing alternative modes of transportation and by reducing the distance traveled between home, work, shopping, recreation, and so forth.

Conclusions—Energy

When considering where to expand the UGB, mixed-use development and proximity have the greatest impact on the use and/or conservation of energy. The fact that the needed houses and jobs would be efficiently contained in the current urban area and in areas close to the existing UGB would have generally positive energy consequences due to the increased possibility of non-motorized travel modes between trip generators and decreasing overall vehicle miles travelled.

Goal 14—Urbanization

Findings

Refer to findings under Land Need and Boundary Location under Goal 14, starting on page 22 above.

Conclusions

The proposed UGB expansion area meets the requirements of all Goal 14 factors.

Goals 15–19 do not apply to Medford.

Urban Growth Boundary amendment approval criteria from Urbanization Element Section 1.2.3

Criterion a. continued: **The standards and criteria in Goal 14, OAR 660, Division 24, and other applicable State Goals, Statutes, and Rules.**

Other applicable Statutes, and Rules

There are numerous Statutes, and Rules that apply to the adoption of individual Comprehensive Plan elements. Each Comprehensive Plan element being relied upon to support this UGB amendment was found to be consistent with all applicable Statutes, and Rules at the time of their adoption. Those findings are included in the record and findings for this proposed UGB amendment, by reference.

The State Goals, as they apply to the proposed amendment, have been discussed in detail above. The State Statutes and Rules that apply directly to the proposed UGB amendment deal either with determining land need or determining boundary location, both of which have been discussed in detail above (see “Land Need” and “Boundary Location” sections).

* * * * *

Urban Growth Boundary amendment approval criteria from Urbanization Element Section 1.2.3

Criterion b. Compliance with Medford Comprehensive Plan policies and development code procedures.

City of Medford Comprehensive Plan Conclusions, Goals, Policies, and Implementation Strategies:

Findings

The following Comprehensive Plan Goals, Policies, and Implementation Strategies support the inclusion of Prescott Park and Chrissy Park in the City's UGB:

Physical Characteristics

Policy 2-A: The City of Medford shall acknowledge Prescott Park (Roxy Ann Peak) as the City's premier open space and viewshed, and recognize its value as Medford's most significant scenic view, currently and historically.

Implementation 2-A(1): Investigate inclusion of Prescott Park in Medford's Urban Growth Boundary and City limits in order to enhance public safety and the feeling of ownership by city residents, protect its natural resources, preserve and enhance convenient public access, protect the public from fire hazards, and help in establishing a network of open space corridors with recreational trails.

Implementation 2-A(2): Identify lands surrounding Prescott Park that are critical to ensuring long term protection and meeting open space/viewshed goals and policies, for acquisition or other types of public management. Seek funding sources.

Implementation 2-A(3): Consider methods to address the interface between Prescott Park and adjacent development to assure compatibility, such as a buffering program, enhanced review of City and County development applications within a specified area surrounding Prescott Park, and joint policies or an "Area of Mutual Planning Concern" with Jackson County.

Policy 2-B: The City of Medford shall strive to preserve and protect the visual amenities offered by the foothills.

Parks, Recreation, and Leisure Services

Policy 2-C: The City of Medford shall give special consideration to Prescott Park in order to protect this dynamic natural and recreational resource and most significant scenic view for the enjoyment of present and future generations.

Implementation 2-C (3): Pursue inclusion of Prescott Park in the Medford Urban Growth Boundary for eventual inclusion within the City of Medford.

Implementation 2-C (4): Increase access and public enjoyment of Prescott Park by developing appropriate facilities to enhance appreciation of natural resources, the outdoors, and Medford's unique environment. Until included within the Medford Urban Growth Boundary, improvements within Prescott Park must comply with Jackson County land use regulations, as well as state rules and statutes, which may limit the extent of improvements on land outside of UGBs.

Solid Waste Management

Policy 1-E: The City of Medford shall assure that appropriate measures are taken to secure compatibility between the development and use of the Dry Creek Landfill and Prescott Park.

The following Comprehensive Plan Goals, Policies, and Implementation Strategies support a compact urban area with mixed-use neighborhoods:

Natural Resources—Air Quality

Implementation 3-A(3): Implement strategies from sources such as the Medford Transportation System Plan, the State Implementation Plans (SIPs) and the Oregon Transportation Planning Rule (TPR) that reduce emissions or improve air quality, such as increasing the use of alternative modes of transportation and use of alternative motor vehicle fuels, such as compressed natural gas and electricity, and propose amendments to the Medford Land Development Code for consideration by the City Council where necessary to assure compliance with such plans or rules.

Policy 3-B: The City of Medford shall continue to require a well-connected circulation system and promote other techniques that foster alternative modes of transportation, such as pedestrian oriented mixed-use development and a linked bicycle transportation system.

Health Services

Policy 1-A: The City of Medford shall strive to provide transportation, utilities, and other public facilities and services needed to support health care facilities within the Urban Growth Boundary, consistent with the health care facilities' growth requirements.

Natural resources

Policy 9-A: The City of Medford shall target public investments to reinforce a compact urban form.

Policy 9-B: The City of Medford shall strive to protect significant resource lands, including agricultural land, from urban expansion.

Natural Resources—Energy

Policy 10-A: The City of Medford shall plan and approve growth and development with consideration to energy efficient patterns of development, utilizing existing capital infrastructure whenever possible, and incorporating compact and urban centered growth concepts.

Implementation 10-A(1): Ensure that the extension of urban services is consistent with policies contained in the "Public Facilities Element" of the Medford Comprehensive Plan regarding energy efficiency.

The following Comprehensive Plan Goals, Policies, and Implementation Strategies support the use of adopted Population, Economic, Housing, and Buildable Lands Elements to determine land need:

Population Element

Policy 1: The City of Medford shall cooperate with other government agencies and the private sector to provide land and urban services sufficient to accommodate projected population growth in the UGB.

Policy 2: The City of Medford shall use the population forecast adopted in the Population Element of the Medford Comprehensive Plan as the basis for developing land use planning policy (Official population projection: 112,624 for the year 2027, and 133,397 for the year 2040.)

Economic Element

Employment Land Demand and Supply

1. *This analysis indicates that additional land in the UGB is required to satisfy the City's land needs over the planning horizon.*
2. *The City of Medford has selected the High Employment Growth Scenario under which the City is projected to need 1,644 net buildable acres over the 20-year planning horizon and 2,055 gross buildable acres, consisting of needed acres in the following categories:*
 - a. *504 net buildable acres of Office Commercial*
 - b. *589 net buildable acres of Industrial*
 - c. *609 net buildable acres of Retail Commercial*
 - d. *38 net buildable acres of Overnight Lodging*
 - e. *315 net buildable acres of Specialized Uses*

The City has a supply of 900 acres of vacant employment land and an additional 178 net acres is expected to be available in the existing UGB to meet new demand through redevelopment. Based upon the adopted High Growth Scenario, the City of Medford has a deficit of 566 net buildable acres which equals 708 gross acres of employment land.

Economic Opportunities

Policy 1-5: The City of Medford shall assure that adequate commercial and industrial lands are available to accommodate the types and amount of economic development needed to support the anticipated growth in employment in the City of Medford and the region.

Implementation 1-5(b): Reduce projected deficits in employment lands by changing GLUP Map designations within the existing Urban Growth Boundary.

Implementation 1-5(c): Assist in the identification of sites for businesses that have unique site requirements.

Implementation 1-5(d): Ensure that demand projections for medium and large Commercial, Industrial and Office sites are captured in aggregate land demand projections during GLUP map amendments and/or UGB expansions.

Policy 1-7: The City of Medford will rely upon its High Employment Growth Scenario in the City's Economic Element twenty-year Employment Projections, Land Demand Projections, and Site Demand Projections when planning its employment land base.

Housing Element

6. *Medford will need 1,890 net residential acres, or 2,383 gross residential acres, to accommodate new housing between 2009 and 2029. Not all of this can be accommodated within the current urban growth boundary. Therefore, Medford has a deficit of 996 gross acres in the following designations:*

Implementation 1-A: When considering changes to the Medford Comprehensive Plan or Land Development Code, base such changes on the Housing Element adopted on December 2, 2010, particularly:

Housing Need Projection in Table 31

Forecast of Needed Housing Units in Table 37

Buildable Land Needed for New Dwelling Units in Table 39

Residential Land Deficit by Plan Designation in Table 41

Implementation 5-A: Maintain an inventory of areas suitable for preservation as open space.

Compliance with applicable Goals and Policies of the Regional Plan Element are discussed below:

Regional Plan Element – Implementation Measure

7. *Conceptual Transportation Plans. Conceptual Transportation Plans shall be prepared early enough in the planning and development cycle that the identified regionally significant transportation corridors within each of the URs can be protected as cost-effectively as possible by available strategies and funding. A Conceptual Transportation Plan for an urban reserve or appropriate portion of an urban reserve shall be prepared by the City in collaboration with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies, and shall be adopted by Jackson County and the respective city prior to or in conjunction with a UGB amendment within that UR.*

a. *Transportation Infrastructure. The Conceptual Transportation Plan shall identify a general network of regionally significant arterials under local jurisdiction, transit corridors, bike and pedestrian paths, and associated projects to provide mobility throughout the Region (including intracity and intercity, if applicable).*

The City has prepared a conceptual transportation plan for all of the urban reserve areas around the city. The plan identifies regionally significant transportation corridors and was developed in collaboration with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies. The Medford Street Functional Classification Plan Map will be amended to include the higher-order streets within the UGB expansion area.

Regional Plan Element – Implementation Measure

8. Conceptual Land Use Plans. A proposal for a UGB Amendment into a designated UR shall include a Conceptual Land Use Plan prepared by the City in collaboration with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies for the area proposed to be added to the UGB as follows:

a. Target Residential Density. The Conceptual Land Use Plan shall provide sufficient information to demonstrate how the residential densities of Section 4.1.5 above will be met at full build-out of the area added through the UGB amendment.

b. Land Use Distribution. The Conceptual Land Use Plan shall indicate how the proposal is consistent with the general distribution of land uses in the Regional Plan, especially where a specific set of land uses were part of the rationale for designating land which was determined by the Resource Lands Review Committee to be commercial agricultural land as part of an urban reserve, which applies to the following URs: CP-1B, CP-1C, CP-4D, CP-6A, CP-2B, MD-4, MD-6, MD-7mid, MD-7n, PH-2, TA-2, TA-4.

c. Transportation Infrastructure. The Conceptual Land Use Plan shall include the transportation infrastructure required in Section 4.1.7 above.

d. Mixed Use/Pedestrian Friendly Areas. The Conceptual Land Use Plan shall provide sufficient information to demonstrate how the commitments of Section 4.1.6 above will be met at full build-out of the area added through the UGB amendment.

The City has prepared conceptual land use plans for all areas within the urban reserve in collaboration with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies. The plans show land use distributions, transportation infrastructure, and mixed-use/pedestrian-friendly areas. In addition to these conceptual plans, the City will require all areas to have urbanization plans prior to annexation. The required urbanization plan shall show compliance with the target residential density, more detailed land use distributions, more detailed information regarding transportation infrastructure, and fully demonstrate compliance with the requirement for mixed-use/pedestrian-friendly areas.

Regional Plan Element – Implementation Measure

9. Conditions. The following conditions apply to specific Urban Reserve areas:

a. MD-6. Prior to incorporation into the Urban Growth Boundary, a property line adjustment or land division shall be completed for Tax Lots 38-1W-05-2600 and 38-1W-06-100 so that the tax lot lines coincide with the proposed Urban Growth Boundary.

Tax Lots 38-1W-05-2600 and 38-1W-06-100 are not included in the UGB expansion area.

Regional Plan Element – Implementation Measure

13. Urban Growth Boundary Amendment. Pursuant to ORS 197.298 and Oregon Administrative Rule 660-021-0060, URs designated in the Regional Plan are the first priority lands used for a UGB amendment by participating cities.

a. Land outside of a city's UR shall not be added to a UGB unless the general use intended for that land cannot be accommodated on any of the city's UR land or UGB land.

Only land within the City's urban reserve is being considered for inclusion in the UGB.

Regional Plan Element – Implementation Measure

17. Parkland. For the purposes of UGB amendments, the amount and type of park land included shall be consistent with the requirements of OAR 660-024-0040 or the park land need shown in the acknowledged plans.

OAR 660-024-0040 (10) allows for a safe harbor net-to-gross factor of 25% for streets and roads, parks and school facilities. Rather than use the safe harbor amount the Housing Element calculates the net-to-gross factor for streets based on observation of the existing residential areas in the city. According to the Housing Element "... the forecast shows land need in net acres. Net acres is the amount of land needed for housing, not including public infrastructure (e.g. roads). Gross acres is the estimated amount of land needed for housing inclusive of public infrastructure. The net to gross factor allows for conversion between net acres to gross acres. The net to gross factor is highest (23%) for single-family detached dwellings, decreasing to 10% for multi-unit projects." Parks and schools were not considered in the net-to-gross factor, but rather, were included in the Other Residential Land Needs portion of the Housing Element, which concluded that 153 acres of park land and 20 acres of school land were needed in the UGB expansion area.

The Other Residential Land Needs section of the Housing Element examines existing conditions for public and semi-public land to forecast future need for this land type.

According to the Housing Element:

Lands needed for public operations and facilities include lands for city facilities, schools, substations, and other public facilities. Land needs were estimated using acres per 1,000 persons for all lands of these types. Lands needed for parks and open space estimates use a parkland standard of 4.3 acres per 1,000 persons based on the level of service standard established in the Medford Leisure Services Plan Update (2006). This update includes land needed for neighborhood and community

parcs, which usually locate in residential plan designations. It does not include land needed for natural open space and greenways, which may also be located in residential plan designations.

See Table 1.1.

A letter was submitted into the record by Greg Holmes of 1000 Friends of Oregon, dated March 3, 2015, that challenges some of the City's land need assumptions. Of the various charges of land excess in the 1000 Friends letter, the City finds that unbuildable lands and the land need for rights-of-way, parks, and schools were correctly calculated. However, the City agrees that the private park land need was erroneously included, and that the government land need was double-counted; respectively, 18 acres and 135 acres should be removed.

In addition to the standard urban reserve areas the Regional Plan Element identifies two large regional park areas, MD-P Prescott and MD-P Chrissy, which contain Prescott Park and Chrissy Park, respectively. These areas are City-owned wildland parks totaling 1,877 acres. Inclusion as urban reserve was intended to serve as a mechanism to eventually incorporate this City property into the City boundary. The two MD-P areas were not considered areas for future urban growth because of their classification as parkland. There is no residential, commercial, or industrial development planned for the MD-P acres. They present a tremendous recreational and open space asset to the City and the region, in addition to creating a buffer between the city and rural lands to the north and east. However, due to their location along the eastern periphery of the city and very steep topography, these lands satisfy little of the localized open space needs throughout the city and do not meet land needs for traditional urban parkland.

Regional Plan Element – Implementation Measure

18. Slopes. Future urban growth boundary amendments will be required to utilize the definition of buildable land as those lands with a slope of less than 25 percent, or as consistent with OAR 660-008-0005(2) and other local and state requirements.

The capacity analysis that was completed for the ESAs only classified sloped land as unbuildable for those areas where the slopes exceeded 25 percent.

Regional Plan Element – Implementation Measure

20. Future Coordination with the RVCOG. The participating jurisdictions shall collaborate with the Rogue Valley Council of Governments on future regional planning that assists the participating jurisdictions in complying with the Regional Plan performance indicators. This includes cooperation in a region-wide conceptual planning process if funding is secured.

The City of Medford has continued to collaborate with the Rogue Valley Council of Governments and other participating jurisdictions since the adoption of the Regional Plan. The City will coordinate the adoption of urbanization plans for each of the areas added to the UGB through this amendment. The City will also continue to collaborate with the Rogue Valley

Council of Governments on future regional planning that assists the participating jurisdictions in complying with the Regional Plan performance indicators.

Conclusions for Criterion b.

There are several Comprehensive Plan Conclusions, Goals, and Policies that support the inclusion of Prescott and Chrissy Park into the UGB. The proposed boundary location will bring both of this City owned areas into the UGB. There are also several Comprehensive Plan Conclusions, Goals, and Policies that support a compact urban area with mixed-use neighborhoods. The efficiency measure of UGBA Phase 1 helped with both of these goals. The proposed boundary location was selected in large part because of its proximity to the existing UGB and to existing development. Areas that presented better opportunities for mixed-use development were given priority over lands that would provide for a lesser mix of uses.

The Comprehensive Plan Conclusions, Goals, and Policies support the use of adopted Population, Economic, Housing, and Buildable Lands Elements in determining land need. These adopted elements were used without modification to determine the land need for the City. In other cases the information from the elements had to be interpreted and applied in order to determine the number of acres needed in each of the GLUP categories. At other times conflicts between these adopted elements and the Regional Plan had to be reasoned through and the resulting boundary amendment is the result of balancing the existing elements to the degree possible.

The City will require areas added through this amendment to have urbanization plans prior to annexation. The required urbanization plan must show compliance with the target residential density, more detailed land use distributions, more detailed information regarding transportation infrastructure, and fully demonstrate compliance with the requirement for mixed use/pedestrian friendly areas. The remaining Regional Plan requirements have been addressed through the proposed amendment at this time.

The proposed UGB amendment and boundary location are consistent with the policies of the Comprehensive Plan.

* * * * *

Urban Growth Boundary amendment approval criteria from Urbanization Element, Section 1.2.3

Criterion c. Compliance with Jackson County’s development ordinance standards for urban growth boundary amendment. Many of the findings made to satisfy subparagraph (a), preceding, will also satisfy this criterion.

Per the Jackson County Land Development Ordinance (LDO) a Type 4 Permit application will be submitted to Jackson County for the proposed urban growth boundary amendment. The proposed amendment will follow the application process of LDO Section 3.7.3(E) for UGB Amendment, which requires a legislative hearing and County Planning Commission recommendation to the Board of Commissioners.

Jackson County LDO Section 3.7.3(E) — Standards for Amending an Adopted Urban Growth Boundary, Urban Reserve Area, Urban Fringe, or Buffer Area

In addition to the requirements contained in joint Urban Growth Boundary agreements and Urban Reserve agreements, all proposed boundary and area amendments must comply with applicable State Law, Statewide Planning Goals, the County Comprehensive Plan and any Regional Problem Solving documents adopted by the County.

Findings

Findings of compliance with applicable State Law, Statewide Planning Goals, and Regional Problem Solving Documents were made under criteria a. and b. above.

Urban Growth Boundary agreements:

*Urbanization Element of the City of Medford Comprehensive Plan
Appendix 1. Urban Growth Management Agreement*

Compliance with the requirements contained in the joint Urban Growth Boundary agreements and Urban Reserve agreements and with the County Comprehensive Plan will be discussed below. Not all sections of the agreements apply to the proposed boundary amendment. Only applicable portions will be repeated and discussed.

3.e. If the city and county have mutually approved, and the city has adopted, conversion plan regulations for the orderly conversion of property from county to city jurisdiction, the county will require that applications for subdivisions, partitions, or other land divisions within the UGB be consistent with the city’s Comprehensive Plan. Once developed, the mutually agreed upon conversion plan shall be the paramount document, until incorporation occurs.

[and]

6. The city, county and affected agencies shall coordinate the expansion and development of all urban facilities and services within the urbanizable area.

Findings

The City has prepared conceptual land use and transportation plans for all areas within the urban reserve in collaboration with the Rogue Valley Metropolitan Planning Organization, applicable irrigation districts, Jackson County, and other affected agencies. The plans show land use distributions, transportation infrastructure, and mixed-use/pedestrian-friendly areas. The plans will be adopted by the City of Medford and by Jackson County in conjunction with this UGB amendment.

In addition to these conceptual plans, the City will require all areas to have urbanization plans prior to annexation. The required urbanization plan shall show compliance with the target residential density, more detailed land use distributions, more detailed information regarding transportation infrastructure, and fully demonstrate compliance with the requirement for mixed-use/pedestrian-friendly areas.

The required urbanization plans will be adopted into the Neighborhood Element of the Comprehensive Plan and will provide a greater level of specificity than the GLUP map regarding future land use in the areas added to the UGB.

9. Long-range transportation and air quality planning for the urbanizable area shall be a joint city/county process coordinated with all affected agencies.

The City is in the process of updating its Transportation System Plan (TSP). The revised TSP will include all portions of the UGB, including areas added through this amendment. The TSP will be produced in coordination with Jackson County and must be adopted prior to the annexation of any of the areas added to the UGB through this amendment. The Medford Street Functional Classification Plan Map will be amended to include the higher-order streets within the UGB expansion area (see *Map 5.3*).

11. Proposed land use changes immediately inside the UGB shall be considered in light of their impact on, and compatibility with, existing agricultural and other rural uses outside the UGB. To the extent that it is consistent with state land use law, proposed land use changes outside the UGB shall be considered in light of their impact on, and compatibility with, existing urban uses within the UGB.

12. The city and county acknowledge the importance of permanently protecting agricultural land outside the UGB zoned EFU, and acknowledge that both jurisdictions maintain, and will continue to maintain, policies regarding the buffering of said lands. Urban development will be allowed to occur on land adjacent to land zoned EFU when the controlling jurisdiction determines that such development will be compatible with the adjacent farm use. Buffering

shall occur on the urbanizable land adjacent to the UGB. The amount and type of buffering required will be considered in light of the urban growth and development policies of the city, and circumstances particular to the agricultural land. The controlling jurisdiction will request and give standing to the non-controlling jurisdiction for recommendations concerning buffering of urban development proposals adjacent to lands zoned EFU.

Findings

The selecting of parcels close in to the existing UGB allows for the continued rural use of the properties nearer the edge of the urban reserve. The lower-intensity use of properties in the outer fringe of the urban reserve can act as a buffer between urban uses and farm and forest uses outside of the UGB.

The performance indicator of Regional Plan Element 4.1.10 requires the use of agricultural buffers to separate urban uses from agricultural uses. The City adopted City Code Section 10.802, Urban–Agricultural Conflict in Urban Reserve on August 16, 2012. This section applies to land in the urban growth boundary that is added from the urban reserve shown in the Regional Plan.

13. All UGB amendments shall include adjacent street and other transportation rights-of-way.

Findings

The City proposes to include adjacent street and other transportation rights-of-way in its UGB amendment. The City previously committed to this in the URMA, and expects the County to require similar language in the new UGMA.

Urban Reserve agreements:

*Regional Plan Element of the City of Medford Comprehensive Plan
Appendix C. Urban Reserve Management Agreement*

5.E(i) County Roads. ...When City's UGB is expanded into the UR (Urban Reserve), County will require (e.g., through a condition of approval of UGB amendment) that City assume jurisdiction over the county roads within the proposed UGB at the time of annexation into the City regardless of the design standard used to construct the road(s) and regardless of when and how the road(s) became county roads...

...When a proposed UGB amendment will result in a significant impact to a county road(s) already within the City's limits, or existing UGB, such that the proposed amendment depends on said county road(s) for proper traffic circulation, then a nexus is found to exist between the proposed UGB expansion and said county road(s). Where such a nexus exists, the county may require, as a condition of approval, the transfer of all, or portions of, said county road(s) within the existing UGB or City's limits at the time of annexation, regardless of the design standards to which the road is constructed.

Findings

The City is in the process of updating its Transportation System Plan (TSP). The revised TSP will include all portions of the UGB, including areas added through this amendment. The TSP will be produced in coordination with Jackson County and must be adopted prior to the annexation of any of the areas added to the UGB through this amendment.

The City has prepared conceptual land use and transportation plans for all areas within the urban reserve in collaboration with the Rogue Valley Metropolitan planning Organization, applicable irrigation districts, Jackson County, and other affected agencies. The plans show land use distributions, transportation infrastructure, and mixed-use/pedestrian-friendly areas. The plans will be adopted by the City of Medford and by Jackson County in conjunction with this UGB amendment. In addition to these conceptual plans, the City will require all areas to have urbanization plans prior to annexation. The required urbanization plan shall show compliance with the target residential density, more detailed land use distributions, more detailed information regarding transportation infrastructure, and fully demonstrate compliance with the requirement for mixed use/pedestrian friendly areas.

The required urbanization plans will be adopted into the Neighborhood Element of the Comprehensive Plan and will provide a greater level of specificity than the GLUP map regarding future land use in the areas added to the UGB.

The revised TSP will help to identify areas where the proposed UGB amendment will result in a significant impact to a county road(s) already within the City's limits or existing UGB. The required urbanization plan will further identify proposed uses of these areas added to the UGB which will allow for better traffic modeling prior to annexation and zoning. The transfer of all, or portions, of such county road(s) could be adopted as a condition of annexation for these properties.

5.H Service Expansion Plans. As the future provider of water, sewer, parks and recreation, road maintenance and improvement, and stormwater management services in the UR, City shall prepare and update service expansion plans and these plans shall be consistent with the UGBMA between City and County. These plans provide a basis for the extension of services within the UGB and shall be referred to County for comment.

Findings

ORS 197.250 [Compliance with Goals Required] requires that "...all comprehensive plans and land use regulations adopted by local government to carry out those comprehensive plans and all plans, programs, rules or regulations affecting land use adopted by a state agency or special district shall be in compliance with the goals within one year after the date those goals are approved by the Land Conservation and Development Commission." The City shall demonstrate full compliance with all Goals, including Goal 8: Recreation Needs; Goal 11: Public Facilities and

Services; and Goal 12: Transportation, soon after the adoption of the revised UGB. All City plans for parks, transportation, stormwater, and other services will be amended to include the areas added to the UGB. All such plans will be coordinated with the County.

County Comprehensive Plan

Findings

Areas added to the UGB through this amendment will remain under the jurisdiction of the County until they are annexed to the City. The UGMA will apply to these areas along with the County's Comprehensive Plan and applicable portions of the County's LDO. Once an area is annexed to the City the City's Comprehensive Plan and Land Development Code will apply. There are several portions of the County's LDO, which deal with special areas of consideration (listed below), that will apply to some of the areas added to the UGB through this amendment. These protections are consistent with the Statewide Goals, and the City has similar protections in place.

Section 7.1.1(B) ASC 82-2 Bear Creek Greenway

Section 7.1.1(C) ASC 90-1 Deer and Elk Habitat

Section 7.1.1(F) ASC 90-4 Historic Resources

Section 7.1.1(G) ASC 90-6 Archaeological Sites

Section 7.1.1(K) ASC 90-10 Ecologically or Scientifically Significant Natural Areas

Section 7.4.3 Urban Fringe

Section 7.4.3(F) Setbacks from Resource Lands and Reduction Requests

Section 8.6 Stream Corridors

Conclusions for Criterion c.

Jackson County's development ordinance requires a finding that UGB amendments are consistent with the requirements contained in joint Urban Growth Boundary agreements and Urban Reserve agreements, and that all proposed boundary and area amendments comply with applicable State Law, Statewide Planning Goals, the County Comprehensive Plan and any Regional Plan documents adopted by the County. Compliance with applicable State Law, Statewide Planning Goals, and Regional Plan documents has been discussed in the findings for criteria a. and b. above.

The proposed UGB amendment has also been shown to be consistent with the Urban Growth Management Agreement, the Urban Reserve Management Agreement, and the County's Comprehensive Plan. By showing compliance with these and applicable State Law, the City has demonstrated compliance with Jackson County's development ordinance standards for urban growth boundary amendment.

* * * * *

Urban Growth Boundary amendment approval criteria from Urbanization Element Section 1.2.3

Criterion d. Consistency with pertinent terms and requirements of the current Urban Growth Management Agreement between the City and Jackson County.

Findings

Consistency with pertinent terms and requirements of the current Urban Growth Management Agreement between the City and Jackson County is discussed under Urban Growth Boundary agreements and Urban Reserve agreements in the findings for criterion c. above.

Conclusions

See conclusions for criterion c. above.

APPENDIX A. Available Land

The purpose of the Buildable Lands Inventory (BLI), completed by the City in 2008, was to inventory the number and location of acres available for development within the existing UGB by individual land type.

Residential

The Buildable Lands Inventory concluded that residential land was available within the existing UGB in the following amounts: Urban [Low-Density] Residential (UR) = 2,385 acres, Urban Medium-Density Residential (UM) = 49 acres, and Urban High-Density Residential (UH) = 158 acres.

Table 2.1. Residential Land Supply (adapted from Housing Element Table 30)

Plan Designation	Supply (acres)	Plan Description
UR	2,385	Low-density Residential, 4–10 units/acre
Vacant	1,703	
Partially Vacant	419	
Redevelopable	263	
UM	49	Medium-density Residential, 10–15 units/acre
Vacant	35	
Partially Vacant	6	
Redevelopable	8	
UH	158	High-density Residential, 15–30 units/acre
Vacant	132	
Partially Vacant	14	
Redevelopable	13	
Total Residential	2,592	

The supply of residential land was changed through UGBA Phase 1. In many cases low-density residential land was converted to either medium-density or high-density. In other instances residential land was converted to employment land. The end result was a more efficient use of land within the existing UGB which resulted in a need of 92 fewer acres outside of the existing UGB. The resulting residential land supply after UGBA Phase 1 is shown below in *Table 2.2*.

Table 2.2. Residential Land Supply after UGBA Phase 1

Plan Designation	Supply (acres)	Plan Description
UR	2,215	Low-density Residential, 4–10 units/acre
Vacant	1,669	
Partially Vacant	371	
Redevelopable	174	

Appendix A: Available Land

UM	121	Medium-density Residential, 10–15 units/acre
Vacant	43	
Partially Vacant	30	
Redevelopable	48	
UH	215	High-density Residential, 15–30 units/acre
Vacant	138	
Partially Vacant	28	
Redevelopable	49	
Total Residential	2,550	

Employment

The Buildable Lands Inventory concluded that employment land was available within the existing UGB in the following amounts: Service Commercial (SC) = 172 acres, Industrial (GI & HI) = 641 acres, and Commercial (CM) = 265 acres.

Table 2.3. Employment Land Supply (adapted from Economic Element Figure 28)

Plan Designation	Supply	Plan Description
SC	172	Service Commercial: office, services, medical
GI & HI	641	General & Heavy Industrial: manufacturing
CM	265	Commercial: retail, services
Total Employment	1,078	

The supply of employment land was changed through UGBA Phase 1. In several cases industrial land was converted to commercial and in other instances residential land was converted to commercial. The end result was a more efficient use of land within the existing UGB which resulted in a need of 92 fewer acres outside of the existing UGB. The resulting employment land supply after UGBA Phase 1 is shown below in *Table 2.4*.

Table 2.4. Employment Land Supply after UGBA Phase 1

Plan Designation	Supply	Plan Description
SC	174	Service Commercial: office, services, medical
GI & HI	519	General & Heavy Industrial: manufacturing
CM	443	Commercial: retail, services
Total Employment	1,136	

APPENDIX B. Land Need

Residential

The City adopted the Housing Element of the Comprehensive Plan in December 2010. The Housing Element built on the conclusions of the Population Element (adopted November 2007) and the Buildable Lands Inventory (adopted in February 2008). Over the 20-year period from 2009 to 2029 a total of 15,050 new dwelling units are needed in Medford. The available supply of residential land within the UGB is expected to accommodate 11,424 of those dwelling units leaving a need for 3,626 dwelling units to be provided for outside of the existing UGB. Of the dwelling units needed outside of the existing UGB, 2,233 are needed in UR, 498 are needed in UM, and 894 are needed in UH. To accommodate the needed dwelling units outside of the existing UGB 553 gross acres are needed using the following needed (gross) density factors: 4.8 dwelling units per acre for UR, 12.8 dwelling units per acre for UM, and 18.1 dwelling units per acre for UH. *Table 3.1* summarizes the residential land need.

Table 3.1. Residential Land Need (adapted from Housing Element Table 39)

GLUP Designation	Dwelling Units Needed¹⁷	Dwelling Unit Capacity	Dwelling Unit Deficit	Expected Density (Gross)	Needed Buildable Acres (Gross)
UR	10,036	7,803	2,233	4.8	465
UM	993	495	498	12.8	39
UH	3,329	2,435	894	18.1	49
Total					553

Group Quarters, such as dorms, jails, social service facilities, and nursing homes, are typically built in high-density and commercial zones. The Housing Element estimates that of the increased population over the 20-year period, 2%, or 712 people will be housed in group quarters. Since these facilities are typically built in high-density and commercial zones the UH density of 18.1 dwelling units per acre was used, along with the average household size, to calculate a need of 16 acres of land for group quarters. This land was then allocated to the UH land demand bringing the total need for UH up to 66 acres and the total residential land need up to 570 acres.

¹⁷ In the Housing Element a portion of the dwelling unit need and the dwelling unit supply was shown to exist on commercial acreage. The portion of the residential need existing on commercial land was not used to calculate density or the number of acres needed to meet the housing demand, because the residential component on commercial land was assumed to exist in addition to a commercial use on that property.

Table 3.2. Acres for Group Quarters (adapted from Housing Element page 27 and Table 41)

	Group Quarters	Needed Acres
UR	0	465
UM	0	39
UH	16	66
Total		570

The Housing Element also included a calculation for needed public and semi-public land. These uses include parks, schools, churches, and fraternal lodges. The study concluded that there are roughly 17 acres of public and semi-public land for every 1,000 people in the existing UGB. The study assumed a need of 11.6 acres of public and semi-public land for every 1,000 people added to the population of Medford. Given the projected population increase of 35,591 people a total of 426 acres is needed for public and semi-public uses over the 20-year planning period. This land was allocated to the three residential land types based on the percentage of dwelling units needed for each type. The inclusion of the public and semi-public land need is summarized in *Table 3.3*.

Table 3.3. Public and Semi-Public Lands (adapted from Housing Element Tables 40 & 41)

	Public and Semi-Public	Total Acres Needed
UR	298	763
UM	29	68
UH	99	164
Total	426	996

When the supply of residential land was changed through UGBA Phase 1 (see *Tables 2.1* and *2.2*) the amount of land needed in each of the residential GLUP designations was also changed. With more of the high-density and medium-density need being met within the existing UGB, fewer acres of each of those land types need to be added. Conversely, since some of the low-density residential land supply has been displaced from within the existing UGB, a greater amount must now be added through the UGB amendment process. While UGBA Phase 1 resulted in a 58-acre conversion of land from residential to employment GLUP designations the total residential land need only increased by 36 acres. This is due to the fact that some of this land was not identified as meeting any portion of the future residential land need (because it was classified as developed) but it is now being counted toward meeting the employment land need (because it is expected to redevelop as commercial). *Table 3.4* shows the amount of residential land needed both before and after UGBA Phase 1.

Table 3.4. Residential Land Need before and after UGBA Phase 1

	Needed Acres Before Phase 1	Needed Acres After Phase 1
UR	763	885
UM	68	27
UH	164	120
Total	996	1,032

Employment

The City adopted the Economic Element of the Comprehensive Plan in December 2008. The Economic Element built on the conclusions of the Population Element (adopted November 2007) and the Buildable Lands Element (adopted in February 2008). Over the 20-year period from 2008 to 2028 a total of 1,645 acres of employment land is needed in Medford. The Economic Element did not use the General Land Use Plan (GLUP) designations used by the City to classify employment land by type, but rather specifies the need for Office Commercial, Industrial, and Retail Commercial land. The Retail Commercial need can only be met in the Commercial (CM) GLUP designation because retail is only permitted within zoning districts allowed in CM. The Industrial need will be met in the General Industrial (GI) and the Heavy Industrial (HI) GLUP designations. The Office Commercial need will be met in both the CM and Service Commercial (SC) GLUP designations, which both allow for offices within their respective zoning types. Because the SC GLUP is intended to provide primarily for employment/office uses, such as business offices and medical offices, both the medium-size and large-size office site need is assigned to the SC GLUP designation. The small-size office site need is expected to be met by fill-in development, mixed with other commercial uses. This type of development is most appropriately accommodated within the zoning types permitted in the CM GLUP designation and is assigned to CM for land need.

In addition to the standard employment land categories the Economic Element identified a need for 284 “Other” acres, comprises 31 acres for overnight lodging and 253 acres for specialized uses. Since the “Other” acres need to be put into a city land use designation, and since the Economic Element did not do so, it is necessary to distribute those acres. Since about 9/10 of the “Other” category is described as “campus-type development,” and since that type of development would only be a permitted use in the Industrial and the Service Commercial designations, a two-way partition (126 acres each) into those is appropriate. The other 31 net acres in the “Other” category are for overnight lodging; which are typically permitted in the CM designation.

Table 3.5. Conversion of Economic Element Designation to GLUP Designation (adapted from Economic Element Figure 28)

Use Type	Demand in Net Acres	Allocate Overnight and Specialized	Total Demand in Net Acres	GLUP Need in Net Acres
Office Commercial	404	126	530	SC = 352
Industrial	471	126	597	GI & HI = 597
Retail Commercial	488	31	519	CM = 697
City Residents	248			
Region/Tourists	240			
Overnight Lodging	31			
Specialized Uses	253			
Total	1,645		1,645	1,645

When we compare the supply of employment land, 1,078 acres (see *Table 2.3*), against the total demand, 1,645 acres (see *Table 3.5*), we see a deficit of 567 acres over the 20-year period. The Economic Element adds 25% to net acres to convert to gross acres, as recommended in DLCD Goal 9 guidebook, to account for streets and other infrastructure needs. The total employment land need is 709 acres when converted to gross acres.

However, this comparison of the overall supply of employment land against the overall demand does not provide an accurate representation of the employment land need for the City. When we compare the land need against the supply of land by employment GLUP type, we see that there is a 44-acre surplus of industrial land within the existing UGB over the 20-year period (*Table 3.6*). Since this surplus (if left in the industrial GLUP designations) does not help to meet the commercial land need, the actual need for employment land is 612 net acres, which converts to 765 gross acres. This is the true employment land need for the 20-year period.

Table 3.6. Employment Land Need in Net Acres

	Supply	Demand	Deficit (surplus)	Deficit for Land Need
SC	172	352	180	180
GI & HI	641	597	(44)	0
CM	265	697	432	432
Total				612

Table 3.6 shows that there is a surplus supply of industrial land within the existing UGB over the 20-year period. In accordance with ORS 197.296 subsection (6) the City undertook UGBA Phase 1 to increase the developable capacity of the urban area. This was done primarily by converting surplus industrial land to commercial land. It was also done by converting some residential land that was not identified as meeting any of the future residential land need to employment land that is now meeting some of the identified employment land need. Unlike with the residential land need, which increased by 36 acres

based on the 58-acre change from residential to employment, the employment land need decreased by 58 acres based on those conversions.

As shown in *Table 3.7*, UGBA Phase 1 resulted in the addition of approximately two acres of SC land, bringing the total supply to 174 acres, and decreasing the deficit to 177 acres. UGBA Phase 1 added approximately 178 acres to the CM land, bringing the total supply to 443 acres, and decreasing the deficit to 254 acres. UGBA Phase 1 converted approximately 122 acres of GI & HI land, bringing the supply of land down to 519 acres, and changing the 44-acre surplus of land to a 77-acre deficit. By increasing the developable capacity of employment lands within the existing UGB, as recommended by ORS 197.296 subsection (6), the City reduced its overall need for employment land from 765 gross acres to 637 gross acres, a difference of 128 gross acres.

Table 3.7. Employment Land Need after UGBA Phase 1 (net acres)

	Supply Before Phase 1	Supply After Phase 1	Demand	Deficit
SC	172	174	352	177
GI & HI	641	519	597	78
CM	265	443	697	254
Total				509

The number of net acres needed is then converted to gross acres in order to account for roads and other infrastructure resulting in a total employment land need of 637 gross acres.

Table 3.8. Net-to-Gross Conversion of Employment Land Need after UGBA Phase 1

	Deficit in Net Acres	Deficit in Gross Acres
SC	177	222
GI & HI	78	97
CM	254	318
Total		637

APPENDIX C. UGBA Phase 1 Effect on Land Supply

Urban Growth Boundary Amendment (UGBA) Phase 1 (ISA GLUP Amendment) sought to change the General Land Use Plan (GLUP) designation of land in the existing urban area for the purpose of increasing its development capacity in order to accommodate some of the City's projected need for residential and employment land. The outcome of UGBA Phase 1 was the Selected Amendment Locations (SALs). This changed the land supply and need totals.

The Housing Element categorizes available residential land into three categories: Vacant, Partially Vacant, and Redevelopable. A capacity analysis was completed for the properties included in UGBA Phase 1 and the number of developable acres was determined for each of those properties. For residential land types these acres were also classified as Redevelopable, Partially Redevelopable, or Vacant based on the analysis from the Housing Element. Table 4.1 provides a tabulation of the gains and losses in each of the three categories, for each of the three residential GLUP types, from UGBA Phase 1. The available land supply from the Housing Element was changed based on these numbers in order to account for UGBA Phase 1's effect on the residential land supply.

Table 4.2 shows the effect of UGBA Phase 1 on all GLUP designations. The supply of employment GLUP types from the Economic Element were changed based on these numbers.

Table 4.1. UGBA Phase 1 Effect on Residential Land Supply by Availability Type in Acres (adapted from Ordinance no. 2014-154, Exhibit A, SAL Capacity Analysis)

RED=Redevelopable, VAC=Vacant, and PDR=Partially Redevelopable

	UR RED Gain	UR VAC Gain	UR PDR Gain
Total	215a-ur 0.1		
	0.1		

	UH RED Gain	UH VAC Gain	UH PDR Gain
Total	215c-uh 3.8	510b-uh 6.2	630a-uh 0.1
	510b-uh 0.2	510b-uh 0.4	630a-uh 2
	510b-uh 0.2	640b-uh 0.6	630a-uh 0.8
	540b-uh 19.4	640b-uh 1.8	630a-uh 1.4
	540b-uh 0.3	640b-uh 0.3	640b-uh 4.8
	630a-uh 1.2	670b-uh 2.9	640b-uh 0.7
	640b-uh 0.3		640b-uh 1.7
	640b-uh 0.3		640b-uh 0.9
	640b-uh 0.4		670b-uh 1.2
	640b-uh 0.5		670b-uh 1.1
	640b-uh 4.2		
	670b-uh 0.2		
	718a-uh 5.3		
	36.3	12.2	14.7

	UM RED Gain	UM VAC Gain	UM PDR Gain
Total	540b-um 10.1	213a-um 2.6	212a-um 1
	540b-um 10.8	213b-um 4.1	212a-um 1.5
	540b-um 0.2	630b-um 1.1	212b-um 4.5
	630b-um 1.4	630b-um 0.6	540d-um 1.5
	630b-um 0.6		630b-um 1.1
	630b-um 0.3		630b-um 1.6
	630b-um 1		630b-um 0.3
	630b-um 1		630b-um 0.9
	630b-um 1.3		630b-um 0.8
	630b-um 0.3		630b-um 1.2
	630b-um 0.4		630b-um 1
	630b-um 0.3		630b-um 1
	670a-um 1.1		640a-um 2.2
	930a-um 4.8		640a-um 4.8
	930c-um 6.6		
	40.2	8.4	23.4

Appendix C: UGBA Phase 1 Effect on Land Supply

	UH RED Loss	UH VAC Loss	UH PDR Loss
	740a-cm 0.4	320a-cm 3.8 960a-sc 0.7 960a-sc 1.6	
Total	0.4	6.1	

	UR RED Loss	UR VAC Loss	UR PDR Loss
	510b-uh 0.2	213a-um 2.6	212a-um 1
	510b-uh 0.2	213b-um 4.1	212a-um 1.5
	540b-um 10.1	510b-uh 6.2	212b-um 4.5
	540b-um 10.8	510b-uh 0.4	540d-um 1.5
	540b-um 0.2	630b-um 1.1	630a-uh 0.1
	540b-uh 19.4	630b-um 0.6	630a-uh 2
	540b-uh 0.3	640b-uh 0.6	630a-uh 0.8
	630b-um 0.3	640b-uh 1.8	630a-uh 1.4
	630a-uh 1.2	640b-uh 0.3	630b-um 1.1
	630b-um 1.4	670b-uh 2.9	630b-um 1.6
	630b-um 0.6	510a-cm 11.1	630b-um 0.9
	630b-um 0.3	718b-cm 1.8	630b-um 0.8
	630b-um 1	718b-cm 0.5	630b-um 1.2
	630b-um 1		630b-um 1
	630b-um 1.3		630b-um 1
	630b-um 0.3		640a-um 2.2
	630b-um 0.4		640a-um 4.8
	630b-um 0.3		640b-uh 4.8
	640b-uh 0.3		640b-uh 0.7
	640b-uh 0.3		640b-uh 1.7
	640b-uh 0.4		640b-uh 0.9
	640b-uh 0.5		670b-uh 1.2
	640b-uh 4.2		670b-uh 1.1
	670a-um 1.1		217a-cm 2.7
	670b-uh 0.2		217b-cm 1.5
	718a-uh 5.3		640c-cm 1.7
	930a-um 4.8		640c-cm 1.1
	930c-um 6.6		718b-cm 2.3
	680a-cm 1.2		
	680a-cm 0.3		
	930b-cm 9.1		
	930d-cm 4.3		
	930d-cm 1.3		
Total	89.2	34	47.1

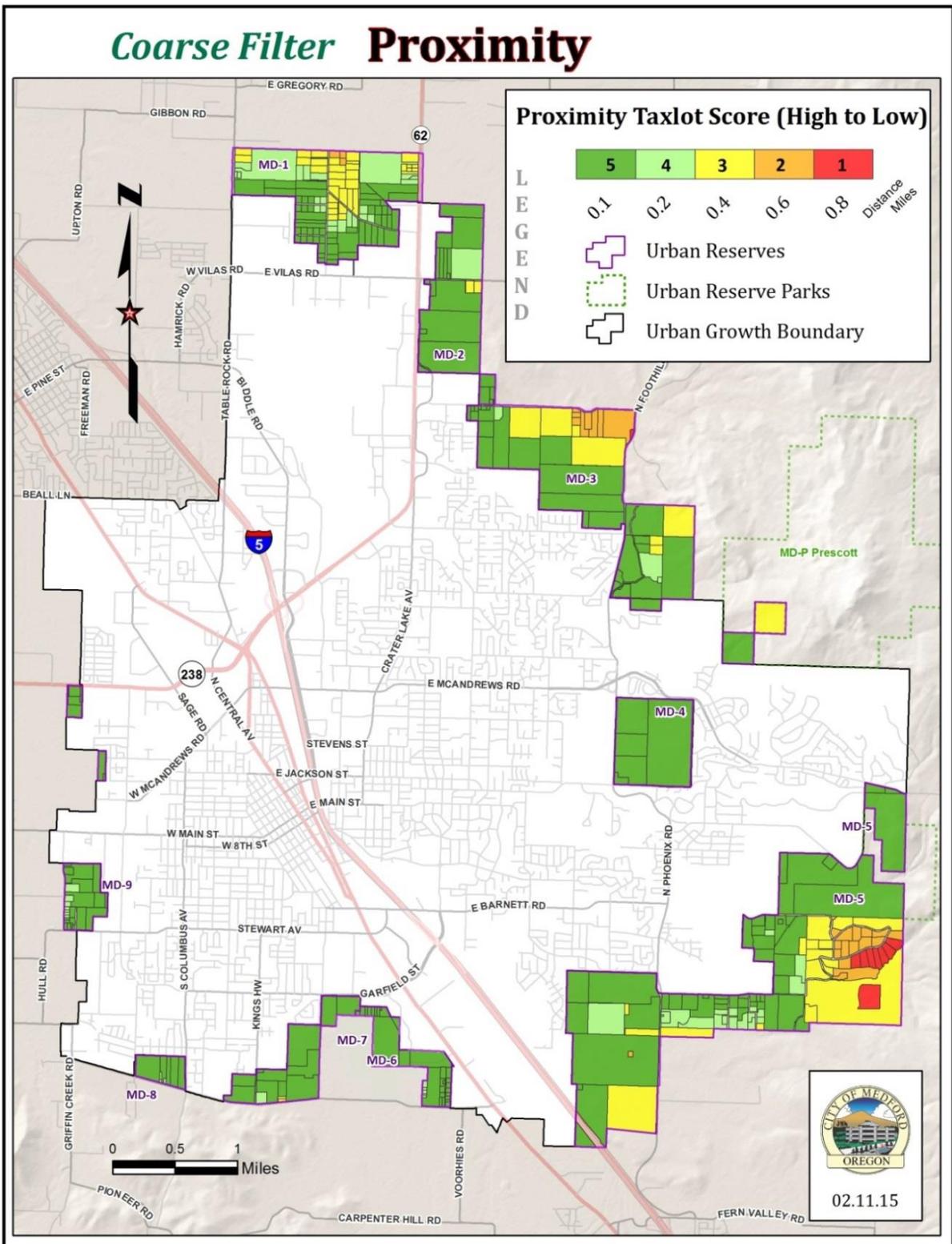
Table 4.2. UGBA Phase 1 Effect on Land Need by GLUP Designation in Acres (adapted from Ordinance no. 2014-154, Exhibit A, SAL Capacity Analysis)

GLUP	Addition (acres) to Supply by GLUP per Individual SAL					Subtraction (acres) to Supply by GLUP per Individual SAL			
	CM	UM	UH	UR	SC	UR	GI	HI	UH
140a-cm 77.6	212a-um 5.2	215c-uh 3.8	215a-ur 0.1	960a-sc 2.4	212a-um 5.2	214a-cm 6.3	140a-cm 77.6	320a-cm 3.8	
214a-cm 6.3	212b-um 4.5	250a-uh 3.1			212b-um 4.5	215a-ur 0.1	750a-cm 0	740a-cm 0.4	
215b-cm 22.3	213a-um 6.7	510b-uh 7.1			213a-um 6.7	215b-cm 22.3	760a-cm 0	960a-sc 2.4	
216a-cm 4.2	540b-um 21.1	540c-uh 19.7			217a-cm 4.2	215c-uh 3.8			
217a-cm 12	540d-um 1.5	630a-uh 5.6			250a-uh 3.1	216a-cm 4.2			
320a-cm 3.8	630b-um 16.5	640b-uh 18.3			510a-cm 27.1	217a-cm 7.8			
510a-cm 27.1	640a-um 7.7	670b-uh 6			510b-uh 7.1				
540a-cm 0.2	670a-um 1.1	718a-uh 5.3			540a-cm 0.2				
640c-cm 3	730a-um 0				540b-um 21.1				
680a-cm 1.5	930a-um 4.8				540c-uh 19.7				
718b-cm 4.6	930c-um 6.6				540d-um 1.5				
740a-cm 0.4					630a-uh 5.6				
750a-cm 0					630b-um 16.5				
760a-cm 0					640a-um 7.7				
930b-cm 9.1					640b-uh 18.3				
930d-cm 4.3					630c-cm 3				
940a-cm 1.3					670a-um 1.1				
970a-cm 0					670b-uh 6				
					680a-cm 1.5				
					718a-uh 5.3				
					718b-cm 4.6				
					730a-um 0				
					930b-cm 9.1				
					930c-um 6.6				
					930d-cm 4.3				
					940a-cm 1.3				
					970a-cm 0				
					930a-um 4.8				
Total Gain (Loss)	177.7	75.7	68.9	0.1	2.4	(196.1)	(44.5)	(77.6)	(6.6)
GLUP	CM	UM	UH	SC	GI	HI	UR		
Net Gain (Loss) by GLUP	177.7	75.7	62.3	2.4	(44.5)	(77.6)	(196)		

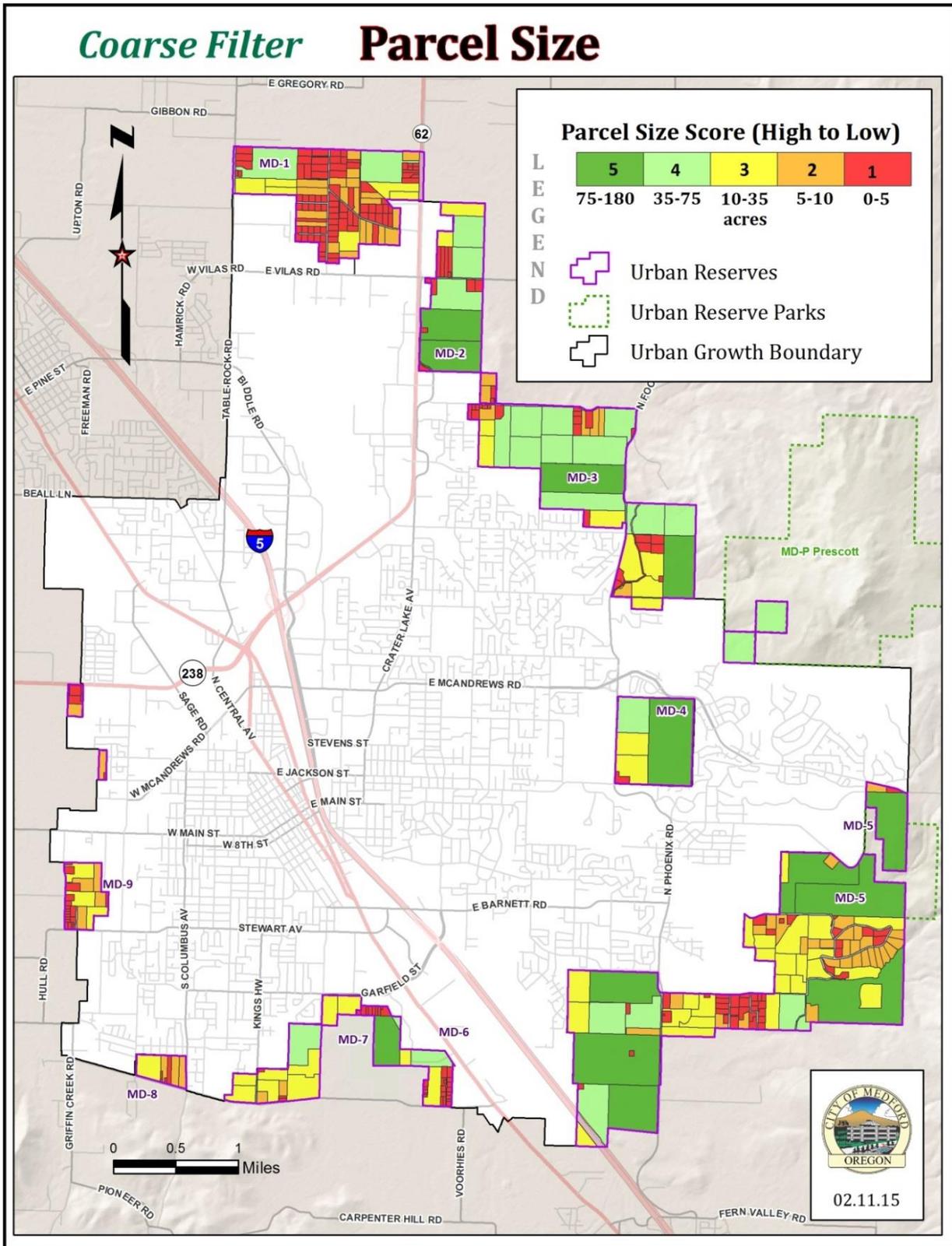
Appendix D: Coarse Filter Maps

APPENDIX D. Coarse Filter Maps

Map 5.1. Proximity

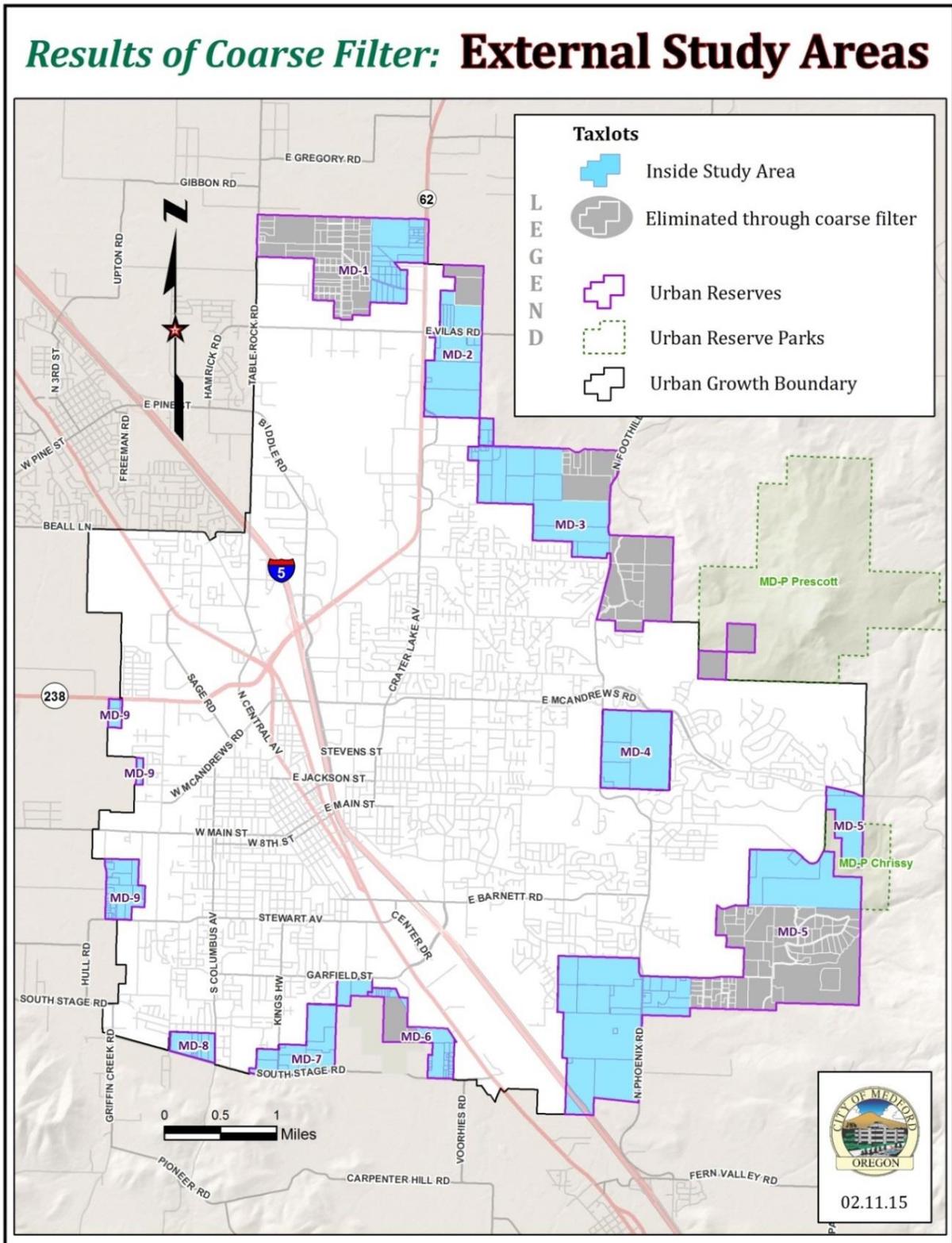


Map 5.2. Parcel Size

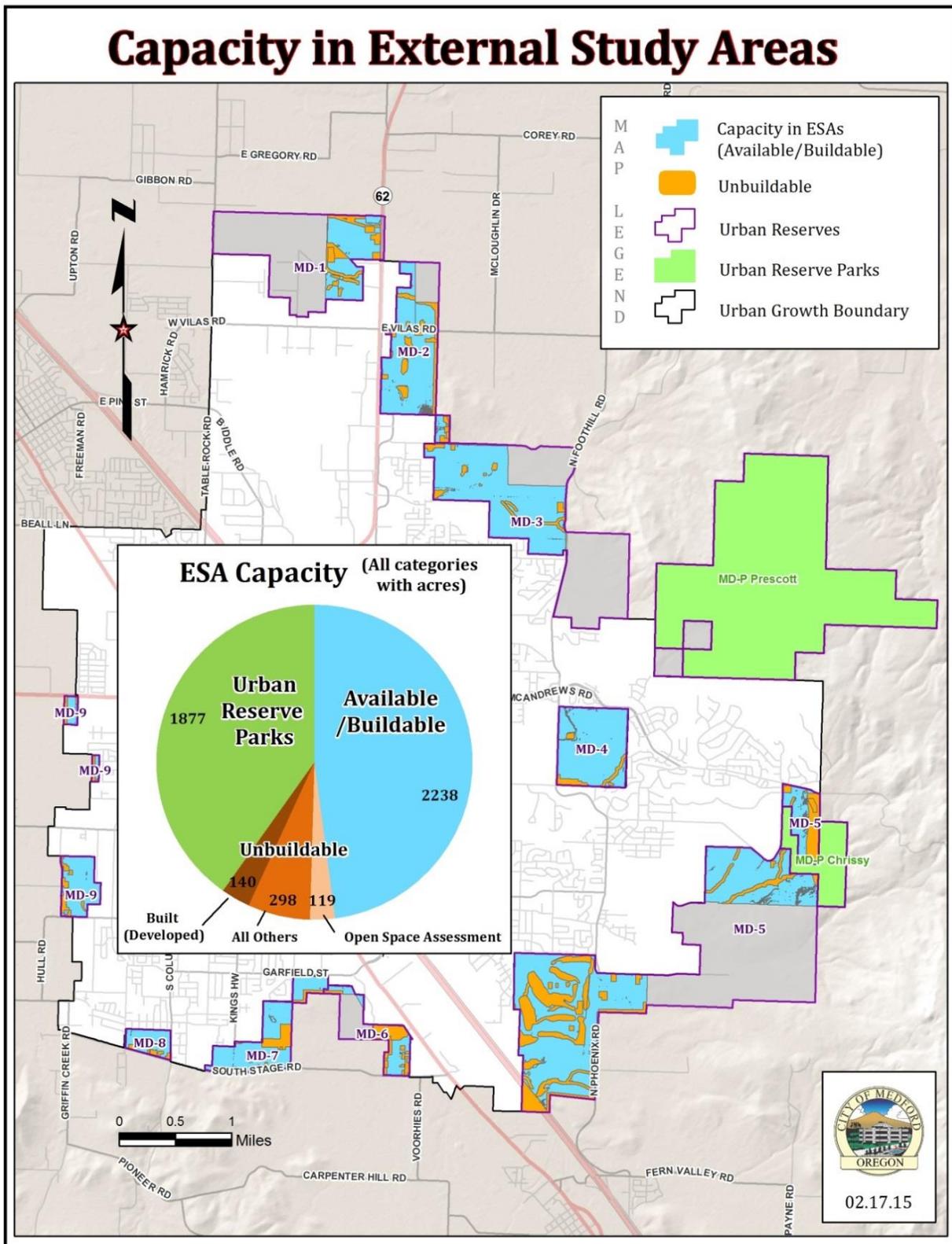


APPENDIX E. External Study Area (ESA) and Capacity in ESA maps

Map 6.1. External Study Areas (ESAs)

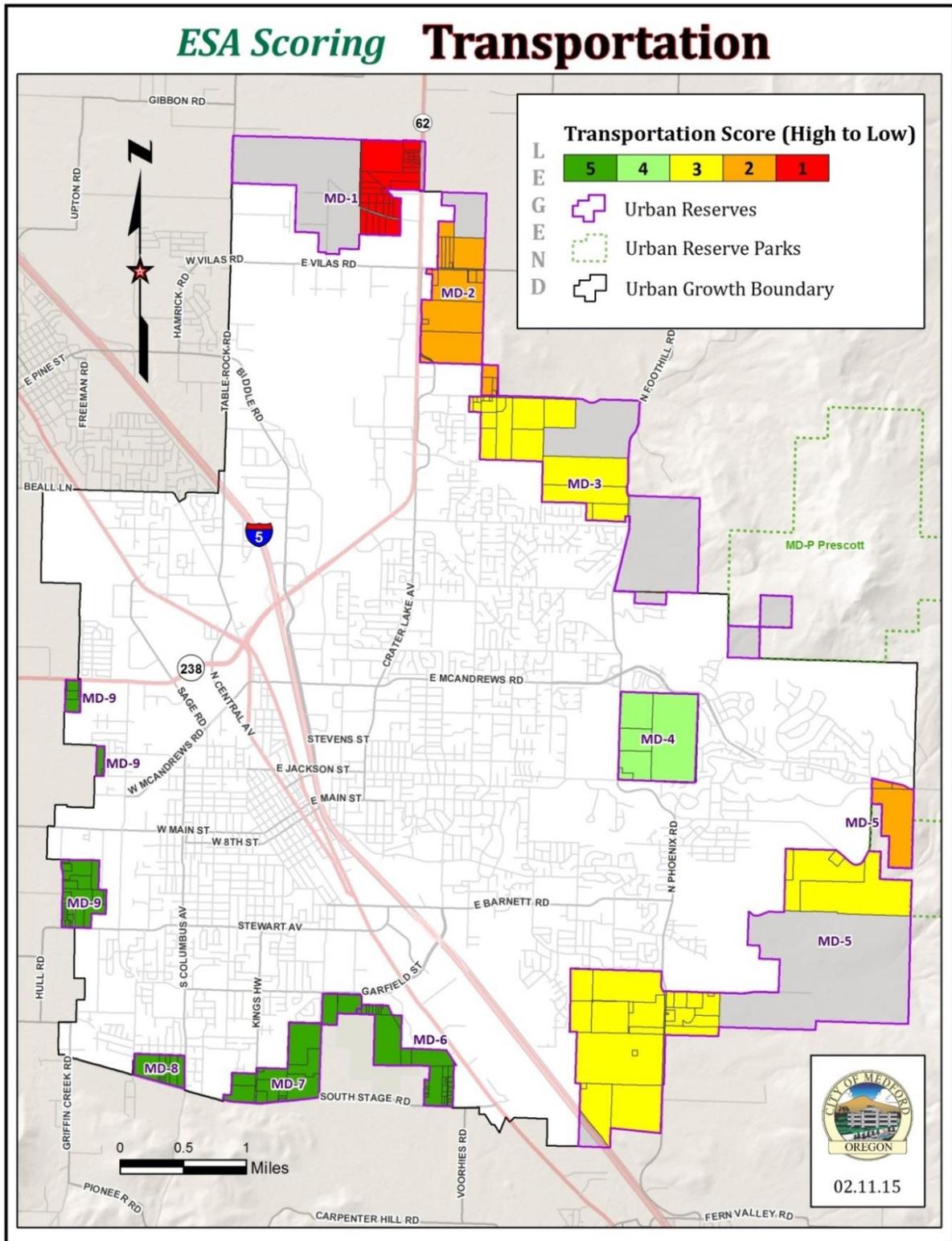


Map 6.2. Capacity Analysis Results for ESAs



APPENDIX F. Additional Scoring maps

Map 7.1. Transportation



Map 7.2. Water

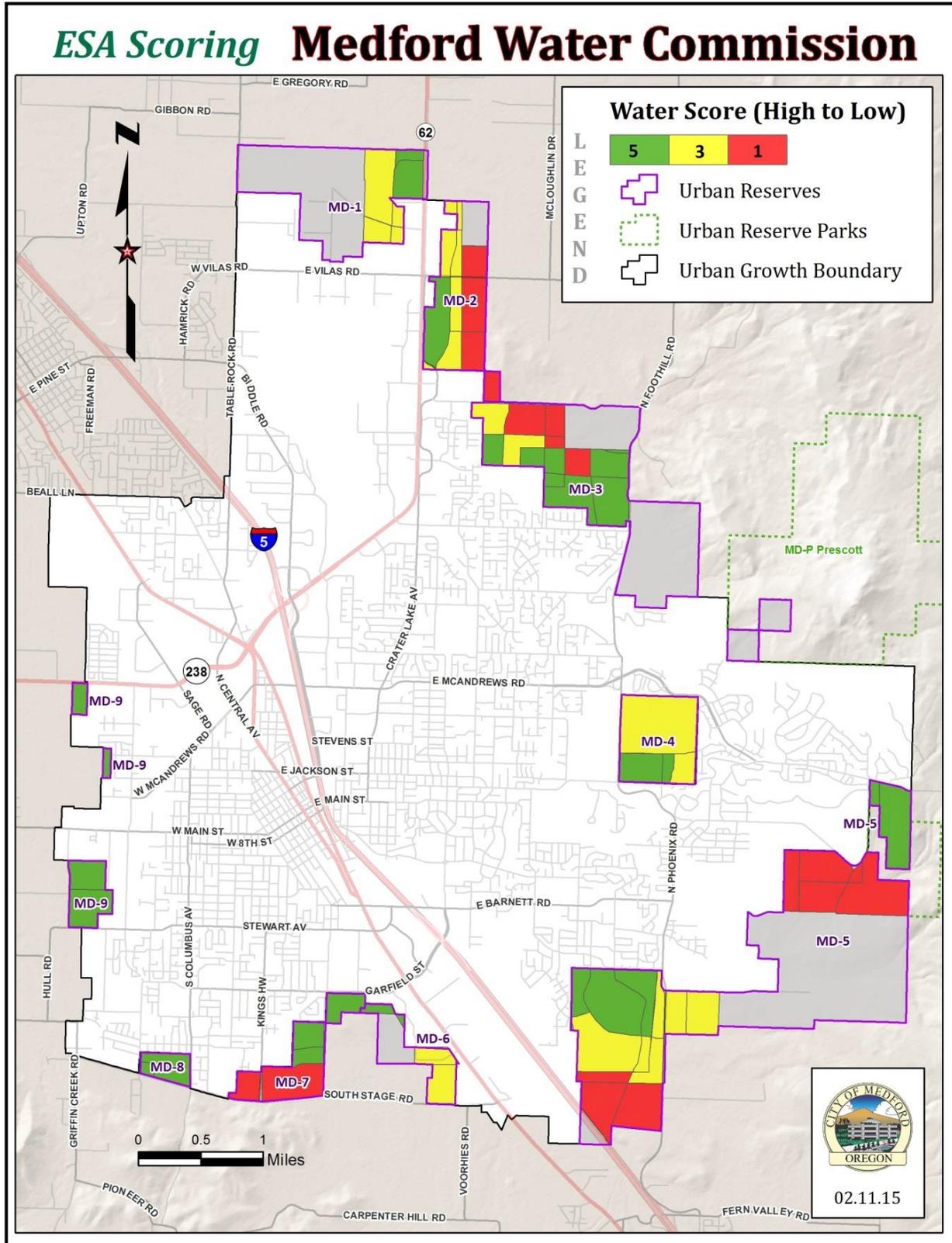


EXHIBIT G. Infrastructure Scoring Memos



DRAFT Technical Memorandum #8: UGB Expansion Alternatives: Qualitative Comparison of Scenarios

Date: June 26, 2013 **Project #:** 10771
To: Alex Georgevitch, City of Medford
From: Joe Bessman, Julia Kuhn, and Matt Kittelson
Project: City of Medford TSP/UGB Amendment
Subject: Interim Year 2028 Updated Planning Horizon Analysis

This memo compares the City of Medford Urban Growth Boundary (UGB) expansion options (also referred to as External Study Areas, or ESA's) and their impact on the transportation network. Details on the development of these options are summarized in Technical Memorandum #7.

QUALITATIVE EVALUATION CRITERIA

Five qualitative review criteria were used to compare the UGB scenarios, including:

- Generalized infrastructure needed to support each scenario – does the scenario require new arterial/collector streets, or widening of existing roads?
- Generalized effect on congestion on existing roadways within the UGB – does the scenario contribute to already congested corridors in Medford?
- Safety impacts – Are there known safety issues that could be affected by the scenario, or could new safety issues be potentially created?
- Connectivity Issues – Do the existing roadways provide ample connectivity to serve the area, or would other connections be needed?
- Infrastructure costs – relative to the other options, what would it cost to provide the needed transportation facilities?

UGB EXPANSION OPTIONS

City staff developed four UGB expansion scenarios for review (as discussed in Technical Memorandum #7). All four scenarios include the same number of future jobs and households, with variation between scenarios in consideration of buildable lands, zoning, and in the baseline scenario consideration of accommodating all growth external to the existing UGB. Exhibits 1 through 4 illustrate the location of the four scenarios; additional details of each are described below.

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Technical Memorandum 8: UGB Expansion Alternatives: Qualitative Comparison of Scenarios

June 2013

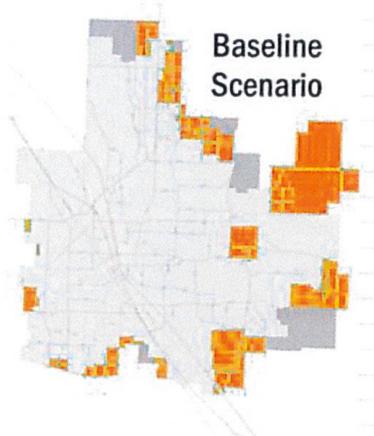


Exhibit 1. Baseline scenario assumes all Medford growth occurs outside of the current UGB with no internal upzoning.

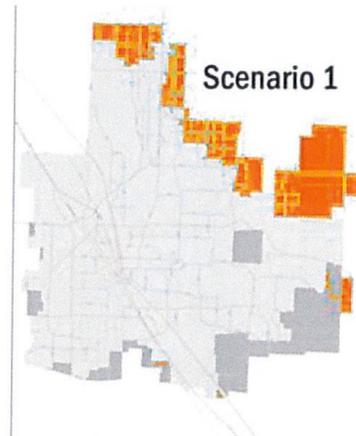


Exhibit 2. Includes internal upzoning and expansion of the UGB to the northeast.

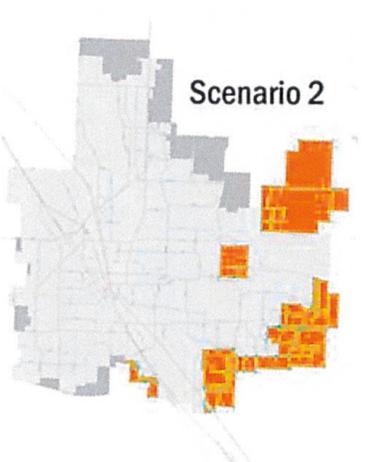


Exhibit 3. Includes internal upzoning and expansion of the UGB to the southeast and in limited portions of the southwest.

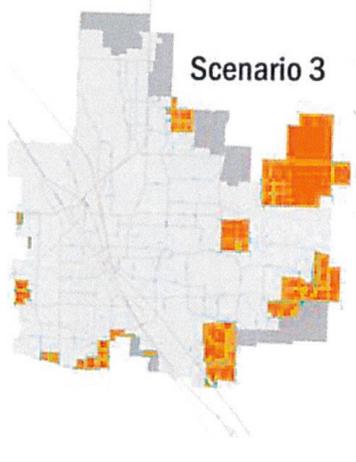
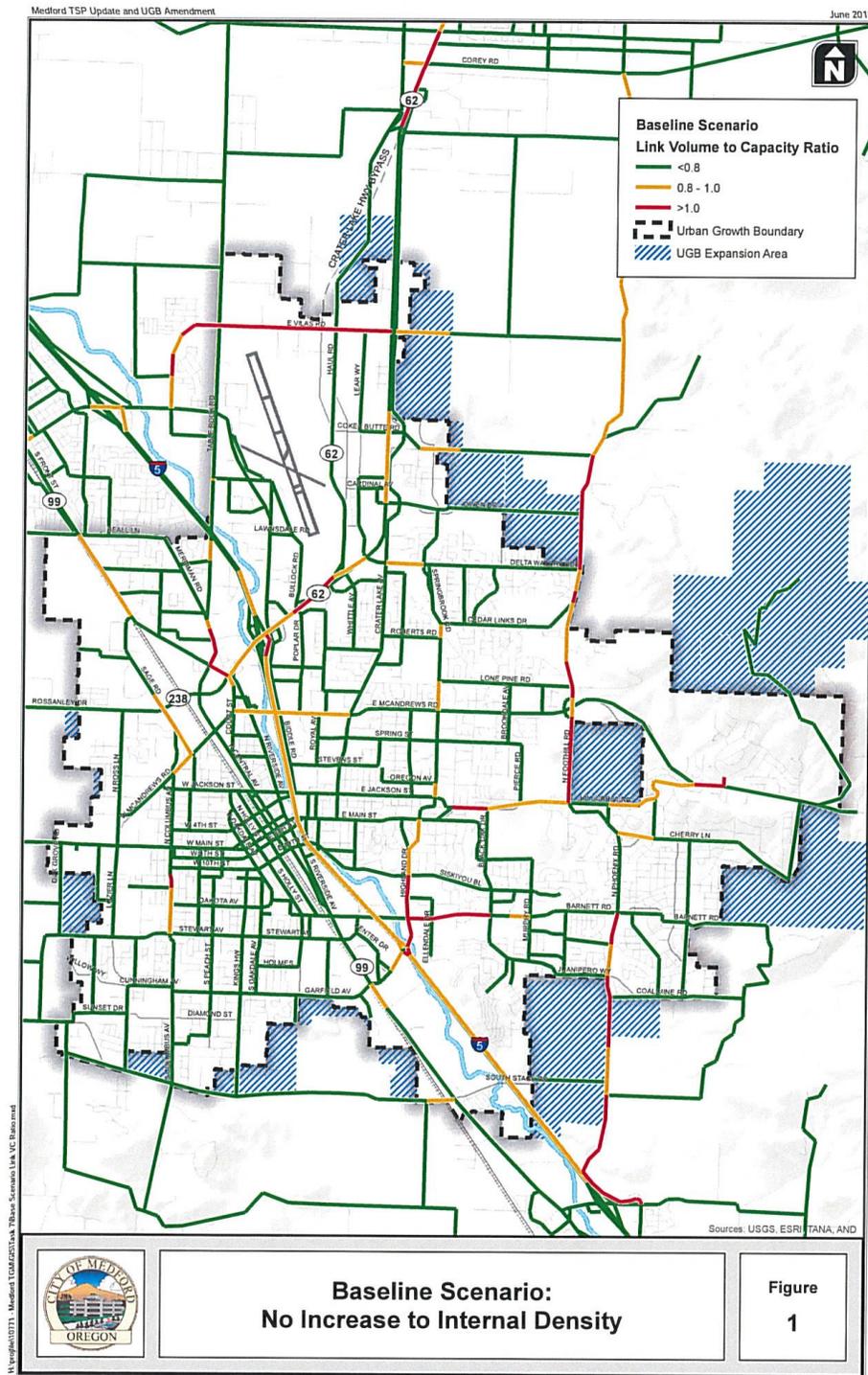


Exhibit 4. Includes internal upzoning and expansion of the UGB to the east and limited portions in the southwest.

Baseline Scenario

A summary of the key attributes of the Baseline Scenario is provided below. In general, growth is spread throughout several UGB expansion areas primarily on the northern and eastern sides of the city. In addition, this scenario does not rely on increased densities within the existing UGB. This is the most land intensive scenario being evaluated. For relative comparison purposes, Figure 1 illustrates the projected roadway segment congestion with this scenario.

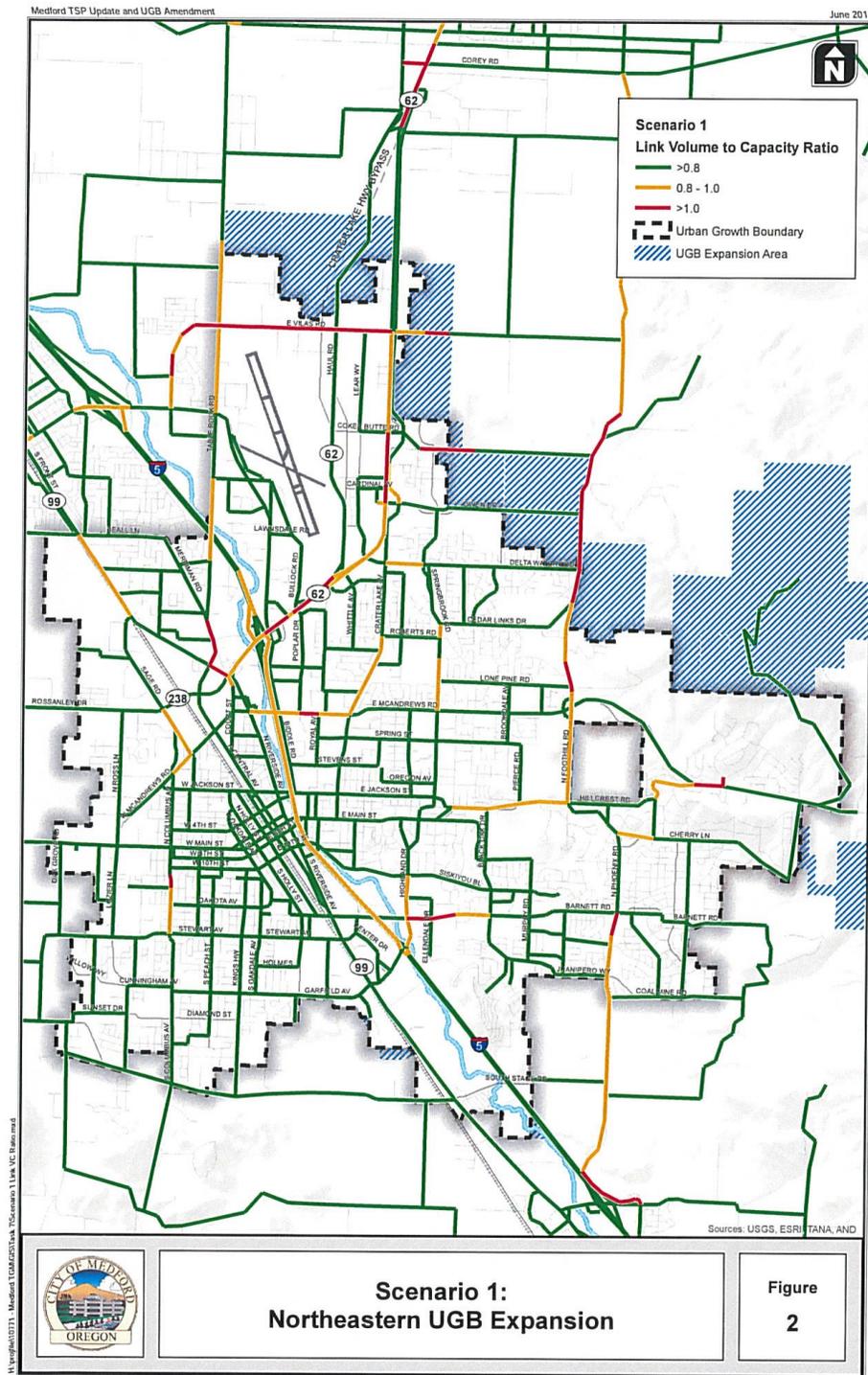
Scenario Description	Supports 2038 growth without upzoning internal UGB lands; requires the most land (4,719 acres) to accommodate projected growth.
Amount of Growth	4,719 total acres of UGB Expansion (most land) <ul style="list-style-type: none"> • 1,908 acres of residential land • 896 acres commercial land • 29 acres industrial land • 1,886 acres open space
Infrastructure Needed to Support Development	With growth outside the UGB occurring in various areas rather than a more concentrated geographic location, a number of new collector and arterial roadways would be needed to connect the various locations into the city's existing street system. In particular, a well-connected collector system that supports access to/from Foothill Road, Vilas Road, Coker Butte Road, and Phoenix Road will be needed. These areas tend to have topographical issues that will need to be considered in the development of an effective street system for multimodal travel needs. Given the levels of congestion on the existing arterials, consideration also needs to be given to providing reasonable access to Highway 62 and I-5 from the expansion areas.
General Effect on Congestion	This scenario relies on access to a number of existing arterials that experience congestion today, such as: <ul style="list-style-type: none"> • OR 62 – Crater Lake Highway • Vilas Road • Phoenix – Foothill Road • Hillcrest Road • I-5 • Barnett Road
General Effect on Safety	Today, sections of Foothill-Phoenix and Hillcrest Road are narrow and windy with limited facilities for pedestrian and bicycle travel near the UGB. Improvements to these facilities would be needed to provide for multimodal travel. In addition, added travel would occur along the Crater Lake Highway and at existing I-5 interchanges, which have documented safety issues today.
General Effect on Connectivity	New connections would largely be needed in various areas to support the arterial system on the east side of the City. Today, very few streets exist in the UGB areas to support additional growth, primarily due to topography issues.
Generalized Costs	Relative Cost: \$\$\$ (Highest of all Scenarios due to geographic scope of needed infrastructure)



Scenario 1: Northeastern UGB Expansion

A summary of the key attributes of Scenario #1 is provided below. In general, growth is concentrated to the east of the Crater Lake Highway and north of Hillcrest Road. In addition, this scenario relies on increased densities within the existing UGB. This is the least land intensive scenario being evaluated, requiring 20 percent fewer acres of expansion than the Baseline Scenario. Figure 2 illustrates the potential roadway segment congestion associated with this scenario.

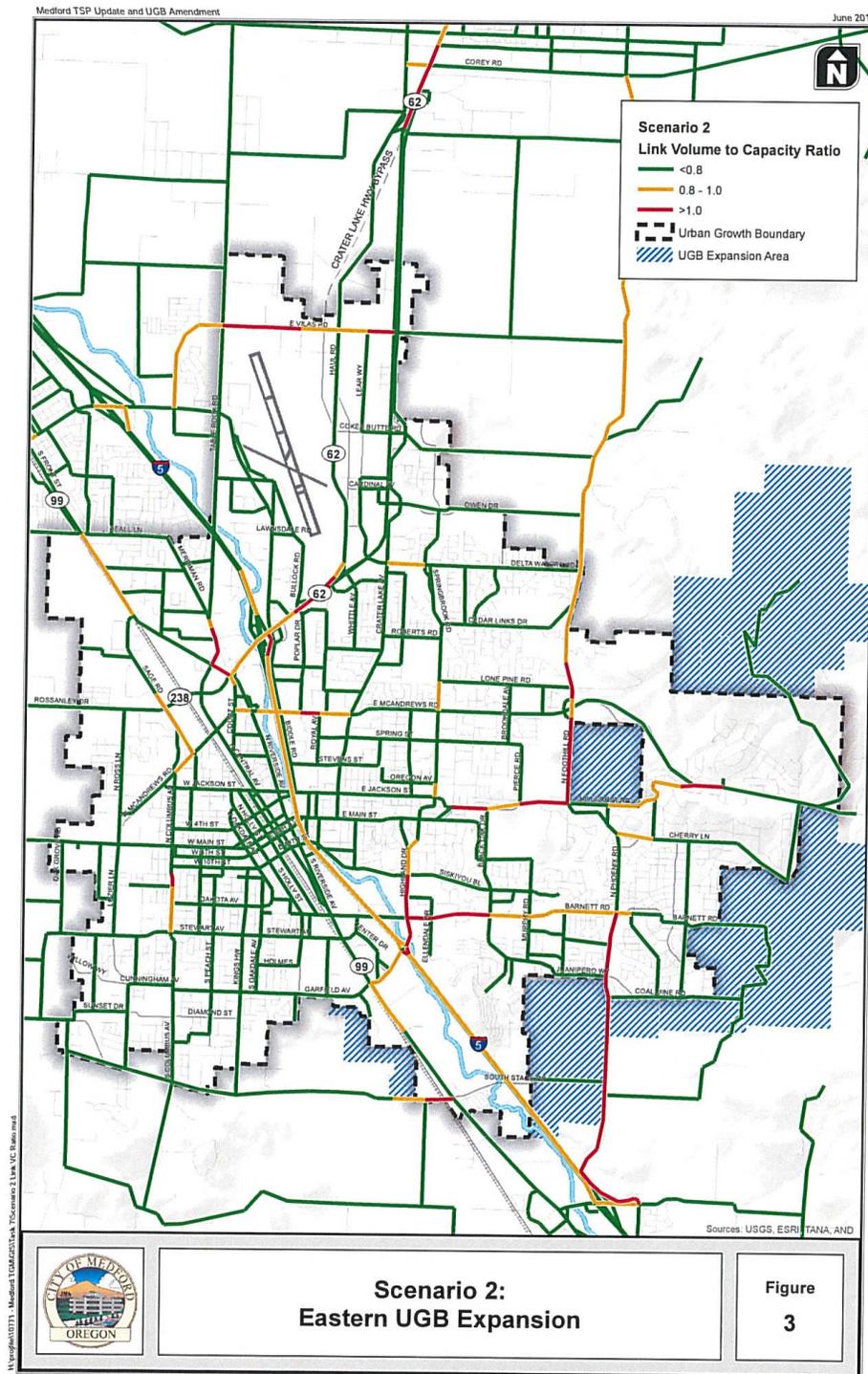
Scenario Description	Expansion of the UGB to the north and northeast; requires the least total land of all scenarios.
Amount of Growth	3,814 total acres of UGB Expansion (Least land-intensive) <ul style="list-style-type: none"> • 1,081 acres of residential land • 423 acres of commercial land • 424 acres industrial land • 1,886 acres open space
Infrastructure Needed to Support Development	High reliance on the Crater Lake Highway and Foothill Road would necessitate improvements to these facilities. A new north-south arterial may also be needed. Further, an extensive local collector street system to support the Foothill Road, Crater Lake Highway, Coker Butte Road and Delta Waters Road corridors will be needed to serve expansion in this area.
General Effect on Congestion	This scenario will place additional pressures on the congested arterial system in the northeast area of the city, such as the Crater Lake Highway, Vilas Road, Foothill Road, Coker Butte Road, as well as the intersection of key roadways with the Crater Lake Highway. The ability to expand these facilities or add new roadways in built areas will be very challenging due to existing land use and topographic constraints.
General Effect on Safety	Today, sections of Foothill Road are narrow and windy with limited facilities for pedestrian and bicycle travel near the UGB. Improvements would be needed to provide for multimodal travel. In addition, additional demand will be placed on Crater lake Highway and the collectors and arterials that intersect it; this highway and its intersections have documented safety issues today.
General Effect on Connectivity	The arterial and collector system in northeast Medford is very limited today. A well connected grid network of streets will be needed to support growth in this area. In addition, new north-south routes would be needed to provide a parallel system of roadways to the Crater Lake Highway. Options to provide this connectivity will be limited by the airport, Bear Creek, and the existing topography.
Generalized Costs of Infrastructure	Providing a well-connected grid system in the northeastern area of the City would be costly due to topographic and land use constraints. Relative Cost: \$\$ (likely higher than Scenarios 2 and 3 but lower than the Baseline)



Scenario 2: Eastern UGB Expansion

A summary of the key attributes of Scenario #2 is provided below. This scenario focuses growth in areas southeast of the UGB as well as northeast of Hillcrest Road/Foothill Road. Like Scenario 1, this scenario relies on increased densities within the existing UGB and requires 15 percent fewer expansion acres than the Baseline Scenario. Figure 3 illustrates the projected levels of congestion associated with this scenario.

Description	Expansion of the UGB largely to the southeast and east.
Amount of Growth	4,035 total acres of UGB expansion (15 percent lower than the Baseline Scenario) <ul style="list-style-type: none"> • 1,664 acres residential land • 395 acres commercial land • 89 acres industrial land • 1,886 acres open space
Infrastructure Needed to Support Development	This scenario places higher demands on the Phoenix Road, Foothill Road, Hillcrest Road and Barnett Road corridors than other scenarios considered. The Foothill-Phoenix Road corridor would likely require widening. In addition, a well-connected roadway system that supports South Stage, Foothill, Hillcrest and Barnett is needed.
General Effect on Congestion	Congestion on the State system is generally reduced compared to other scenarios. Higher levels of congestion are expected on the arterials in the southeast part of the city. The ability to make improvements to these arterials is somewhat limited by the existing built environment. However, in general, the increased demands occur on facilities with more capacity for future development than the Baseline and Scenario 1.
General Effect on Safety	The areas within the city with documented safety issues are less impacted by this scenario than some of the other scenarios being considered. Multimodal improvements to the Foothill Road-Phoenix Road corridor will be needed; as discussed previously, sections of this corridor are narrow and windy with limited facilities for pedestrian and bicycle travel near the UGB.
General Effect on Connectivity	A well connected grid network of streets will be needed to support growth in this area that provides connections to the Foothill Road-Phoenix Road, Barnett Road, South Stage, and Hillcrest Road corridors. In addition, a new north-south route to support Foothill Road-Phoenix Road corridor may be helpful.
Generalized Costs of Infrastructure	The transportation infrastructure needed to support growth in a more concentrated area of the city with more capacity than other areas results in lower infrastructure costs in general. Relative Cost: \$ (Lowest, Similar to Scenario 3)



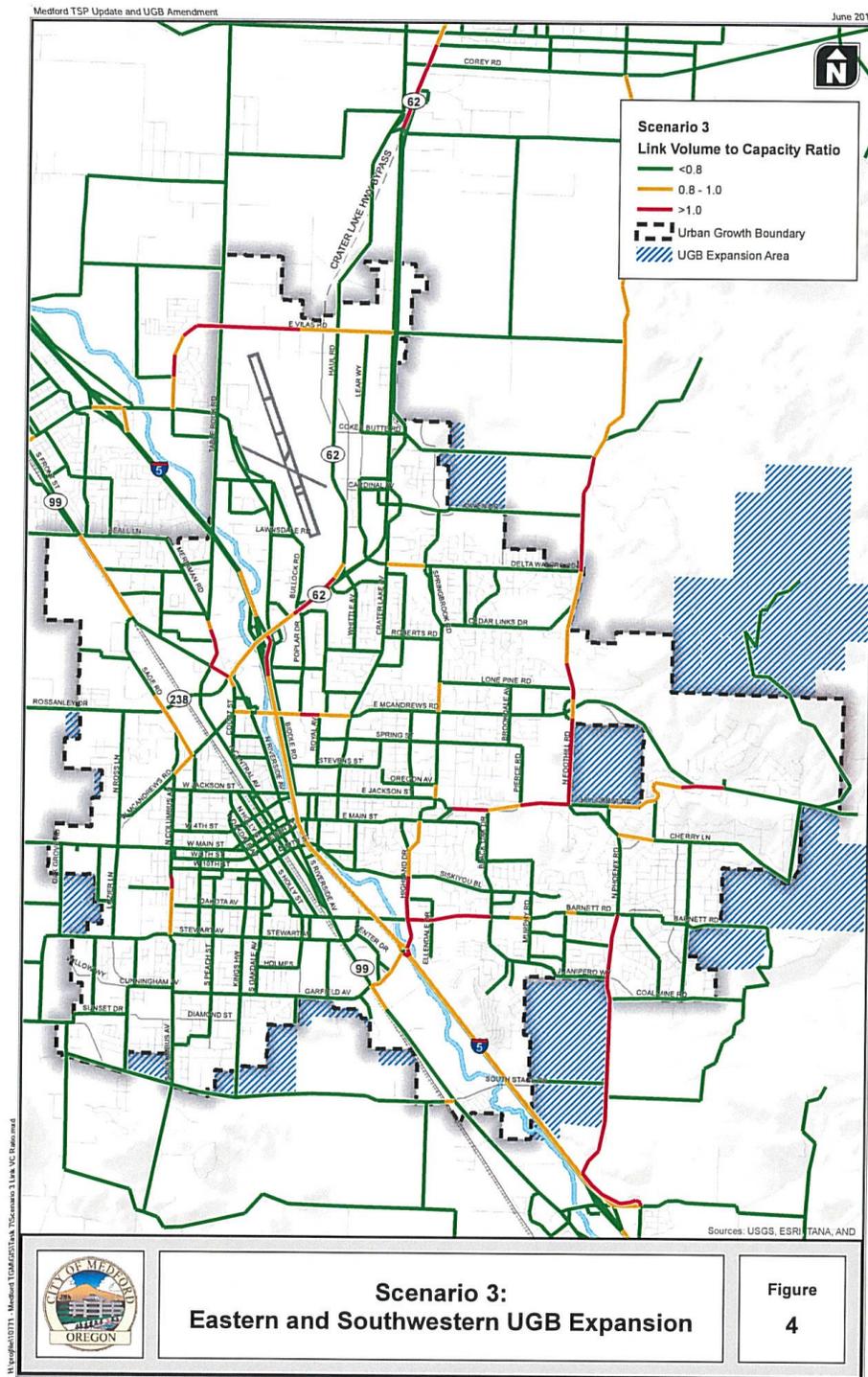
Technical Memorandum 8: UGB Expansion Alternatives: Qualitative Comparison of Scenarios

June 2013

Scenario 3: Eastern and Southwestern UGB Expansion

The key aspects of Scenario #3 are summarized below. This scenario concentrates growth in areas similar to Scenario 2, although with fewer lands expected in the southeast. Like Scenarios 1 and 2, this scenario relies on increased densities in the existing UGB and requires 20 percent fewer lands than the Baseline scenario. Figure 4 illustrates the projected levels of congested associated with this scenario.

Description	Expansion of the UGB to the east and portions of the southwest UGB.
Amount of Growth	3,846 Total Acres of UGB Expansion (20 percent less than Baseline) <ul style="list-style-type: none"> • 1,520 acres of residential land • 411 acres of commercial land • 29 acres industrial land • 1,886 acres open space
Infrastructure Needed to Support Development	This scenario places higher demands on Foothill Road, Hillcrest Road, and Phoenix Road (although to a lesser extent than Scenario #2). Like Scenario #2, these existing roadways may need improvement to serve multimodal needs. Further a well-connected grid network that supports these existing facilities would be needed.
General Effect on Congestion	This scenario has similar impacts as Scenario 2 although lower impacts are provided to the Barnett Road corridor.
General Effect on Safety	Like Scenario 2, the areas impacted are not those with extensive documented safety issues. In addition, multimodal improvements will be needed especially near the UGB.
General Effect on Connectivity	Like Scenario #2, a well-connected grid network of streets will be needed to support growth in this area with connections to the Foothill Road-Phoenix Road, and Hillcrest Road corridors. In addition, a new north-south route to support Foothill Road-Phoenix Road corridor may be helpful.
Generalized Costs of Infrastructure	Like Scenario #2, the infrastructure needs associated with this scenario area less significant than other scenarios considered. Relative Cost: \$ (Similar costs to Scenario 2)



SUMMARY OF SCENARIOS

Comparison of the scenarios noted several improvement needs that would be required regardless of the UGB scenario pursued. These are outlined below:

- Need to improve the Phoenix – Foothill connection as high levels of congestion are anticipated. This would likely require a five-lane cross-section from the
- Congestion noted along all northern crossings of I-5: Vilas Road, Crater Lake Highway, and McAndrews Road.
- Moderate to high levels of congestion at and surrounding the I-5 interchanges.
- Columbus Avenue congestion between Stewart and Main Street

Differentiating characteristics between scenarios are summarized below.

- The Baseline Scenario (all growth external to the existing UGB without upzoning internal lands) would be the most costly scenario to support. The additional lands required on the City's periphery place a high reliance on the arterial network both in the southeastern and northern portions of the City.
- Scenarios 2 and 3 provide the lowest costs relative to the other scenarios as improvements are limited to the southeast portion of the City. The improvements in this area would benefit all of the scenarios assessed, and would be implementable given the largely unbuilt areas surrounding these corridors.
- Scenarios 2 and 3 reduce congestion on I-5 and OR 62, where improvements will be very costly or infeasible.
- Southwestern growth in Scenario 3 presents no additional roadway infrastructure needs as the network in this portion of the City is well established and operating with reserve capacity.

Please let us know if you have any questions or comments regarding this qualitative comparison of UGB scenarios.

CITY OF MEDFORD
Interoffice Memorandum

August 20, 2014

TO: Joe Slaughter

FROM: Roger Thom

SUBJECT: UGB – ESA Sanitary Sewer Study

Public Works has reviewed our sanitary sewer system with consideration to impacts from development under the current proposal for UGB – ESA. Within the ESA, there are three primary areas served by the City; Northeast, 435 acres with ID#'s 3101 to 3103, and 3202 to 3212, Hillcrest/Vista Point, 353 acres with ID#'s 4101, 4102, 4201, 4202, 3213, 3214, Southeast, 379 acres with ID#'s 5101, and 5201 to 5206.

Relatively, cost to upsize the sanitary sewer to accommodate ESA areas is as follows: Northeast is the least expensive, Hillcrest is next, Southeast area is the highest. Southeast area could be looked at in a different way; currently there is approximately 500 acres of land in the UGB that is not serviceable without sewer upsizing. If funding was available to upsize for the current UGB, the incremental cost to accommodate the new Southeast area would be low.

If you need further information or clarification, please contact me.



ROGUE VALLEY SEWER SERVICES

Location: 138 West Vilas Road, Central Point, OR - Mailing Address: P.O. Box 3130, Central Point, OR 7502-0005
 Tel. (541) 664-6300, Fax (541) 664-7171 www.RVSS.us

April 10, 2013

John Adams
 City of Medford Planning
 200 S. Ivy St
 Medford, OR 97501

RE: UGB Sewer Service Availability

John,

The following document is a summary of the availability of sewer to serve the proposed UGB expansion. Please note that estimating the potential cost would not provide an accurate means to evaluate the cost of serving the growth area. A more accurate means to measure the impact is to base the feasibility of utilizing the growth area based on the distance required to provide sewer mainline to serve the growth area. Also, the exact downstream impacts from commercial type uses are difficult to determine due to the variety of system demand from commercial properties.

Please review this summary and feel free to contact me with any questions concerning the availability study.

Sincerely,

Wade Denny, PE Digitally signed by Wade Denny, PE
 DN: cn=Wade Denny, PE, o=Rogue Valley Sewer
 Services, ou=District Engineer, email=wdenny@rvss.us,
 c=US
 Date: 2013.04.10 07:13:33 -0700

Wade Denny, P.E.
 District Engineer

Summary of Sanitary Sewer Availability to ESA

1101: Sewer is available to serve the proposed growth area as follows.

- South half of area can be served by extending 8 inch mainline from existing 8 inch gravity sewer located in Justice Road. The existing 8 inch gravity line flows into a pump station at the corner of Peace and Justice Road. Depending on the type of commercial development, the pump station may need to be upsized to handle the demand.
- North half of area will require a 450' 8 inch mainline from the east.
- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Determining the footage of mainline required will depend on the parcel configuration.

1102-1103: Sewer is available within the proposed growth area from the 8 inch and 10 inch mainlines within the growth areas.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

1106-1105: Sewer is available from the existing 8 inch sewer within Justice Road.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.
- The existing 8 inch gravity line flows into a pump station at the corner of Peace and Justice Road. Depending on the type of commercial development, the pump station may need to be upsized to handle the demand.
- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.

2101: Sewer is available within the proposed growth area.

- Development within this area will require a STEP system to connect to the existing 4 inch pressure line within the growth area.

2102: Sewer is available with the proposed growth area

- Development will require an internal 8 inch mainline extension from the existing mainline located mid growth area.

2103: Sewer is available from a mainline extension of +/- 50' from the 15" sewer main just west of the area in Vilas Road.

- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2104: Sewer is available from a mainline extension of +/-600' from the 15" sewer main just west of the area in Vilas Road.

- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2201: Sewer is available from a mainline extension of +/-1050' from the 15" sewer main just west of the area in Vilas Road.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2105: Sewer is available from a mainline extension of +/-50' from the 15" sewer main just north of the area in Vilas Road.

- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2106: Sewer is available from a mainline extension of +/-750' from the 15" sewer main just west of the area in Vilas Road.

- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2202: Sewer is available from an 8 inch mainline extension of +/-1100' from the 15" sewer main just west of the area in Vilas Road.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2108: Sewer is available from an 8 inch mainline extension of +/-366' from the 10" sewer main just south of the area and located on the east side Crater Lake Hwy.

- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

2203: Sewer is available from an 8 inch mainline extension of +/-1800' from the 10" sewer main southwest of the area and located on the east side Crater Lake Hwy.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

K:\DATA\Agencies\MEDFORD\UGB\ESA\UGB Comments.docx

2107: Sewer is available from an 8 inch mainline extension of +/-450' from the 10" sewer main just south of the area and located on the east side Crater Lake Hwy.

- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

3201: Sewer is available from an 8 inch mainline extension of +/-100' from the 8" sewer main west of the area and located in Coker Butte Road.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

3202: Sewer is available from an 8 inch mainline extension of +/-100' from the 8" sewer main west of the area and located in Coker Butte Road.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

3203: Sewer is available from an 8 inch mainline extension of +/-1150' from the 8" sewer main west of the area and located in Coker Butte Road.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

3205,3206,3101,3204,3207,3102,3103,3208,3211,3209,3210,3212: Service to these areas will require a combination of mainline extensions of varying length and the installation of a minimum of one pump station to be served by RVSS. Some of these areas may be best served by the City.

9201: Service to this area can be obtained by a combination of sewer taps and or mainline extensions from the existing 10 inch mainline in Rossanley Drive.

9202: Sewer is available from existing 8 inch mainline fronting this area in Maple Park Drive and Finley Lane.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

9203: Sewer is available from the existing 18 inch mainline fronting the area in Oak Grove Rd.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

9204: Sewer is available from the existing 18 inch mainline in Oak Grove Rd and the existing 8 inch mainline in Stewart Ave.

- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

7102: Sewer is available from 8 inch sewer mains in S. Stage Rd and Lillian St.

- Internal mainline extensions from one or more of these mains will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.
- Due to the variety of commercial property use, exact downstream impacts are difficult to determine.

7203: Sewer fronts this area at the corners of Kings Hwy. and S Stage Rd, Experiment Station Rd and Kings Hwy, and on Marsh Lane.

- Internal mainline extensions from one or more of these mains will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

7202: Sewer fronts this area at the intersection of Experiment Station Rd and Marsh Ln.

- Internal mainline extensions from one or more of these mains will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

7201: Sewer is available from existing 8 inch mainline stubbed out along the westerly edge of this area.

- Internal mainline extensions from one or more of these mains will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

7101: Sewer is available from the existing 12 inch mainline stubbed out near the intersection of Myers Lane and Garfield Avenue.

- Internal mainline extensions from this main will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

6301: Sewer is available from the existing 18 inch mainline located at this area northeast corner.

- Internal mainline extensions from this main will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.

6302 and 6101: Sewer is currently serving properties within these areas.

- Internal mainline extensions from this main will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.
- Due to the variety of commercial and industrial property uses the exact downstream impacts are difficult to determine.

5106: Sewer service is available from a 15 inch sewer extension of +/- 1000' from the south.

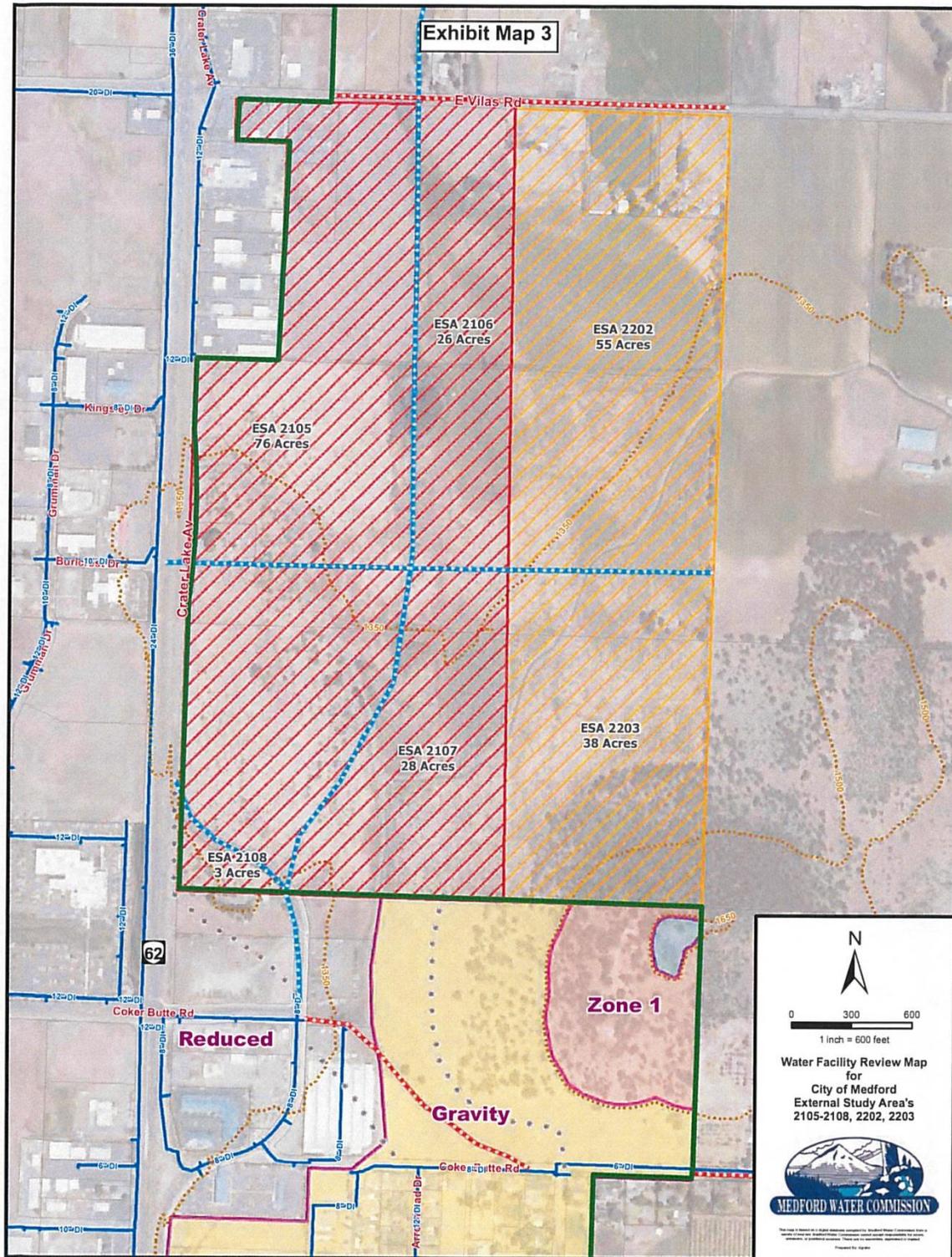
- Internal mainline extensions from this main will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.
- Due to the variety of commercial and industrial property uses the exact downstream impacts are difficult to determine.

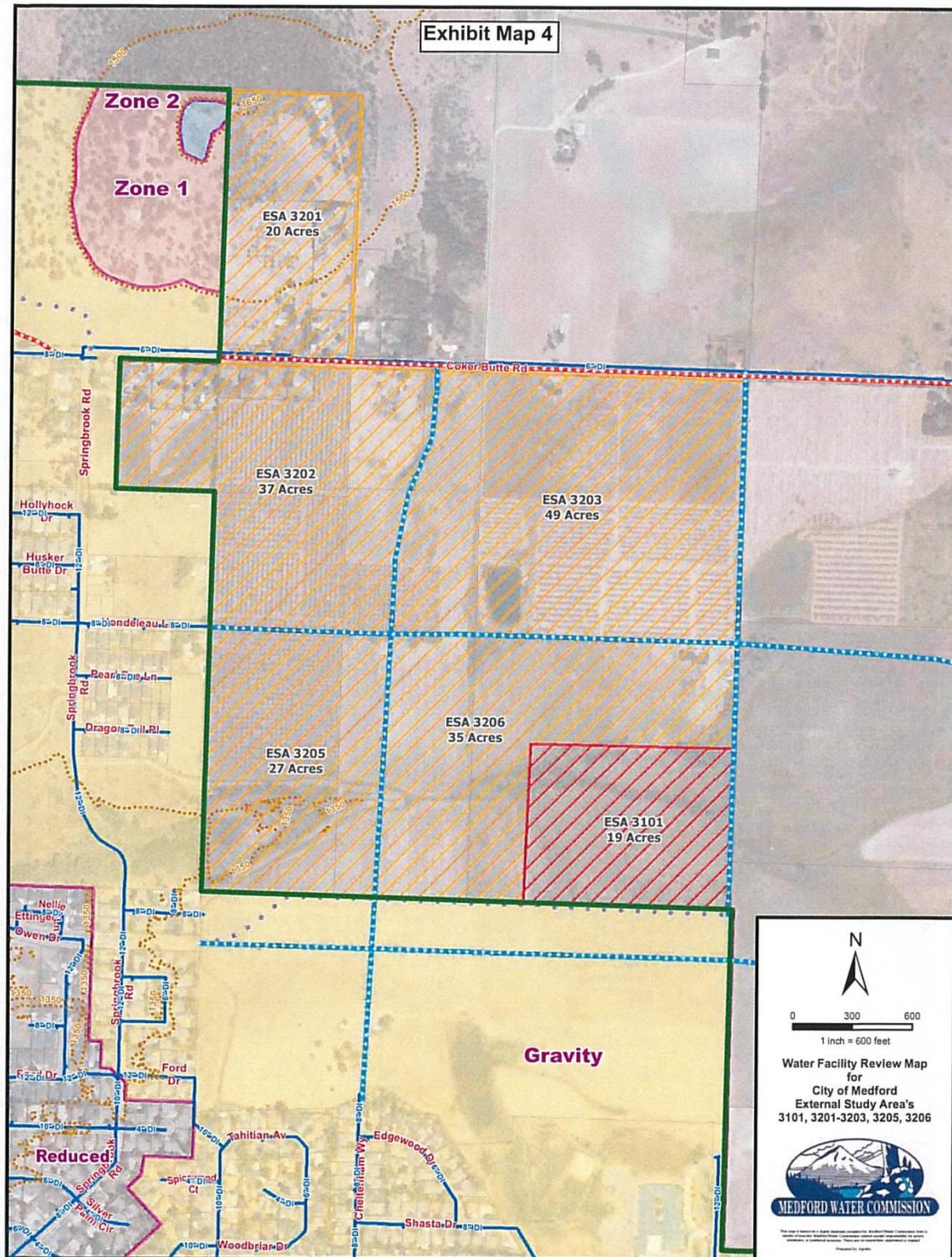
5107: Sewer service is available from a 15 inch sewer extension of +/- 2200' from the south.

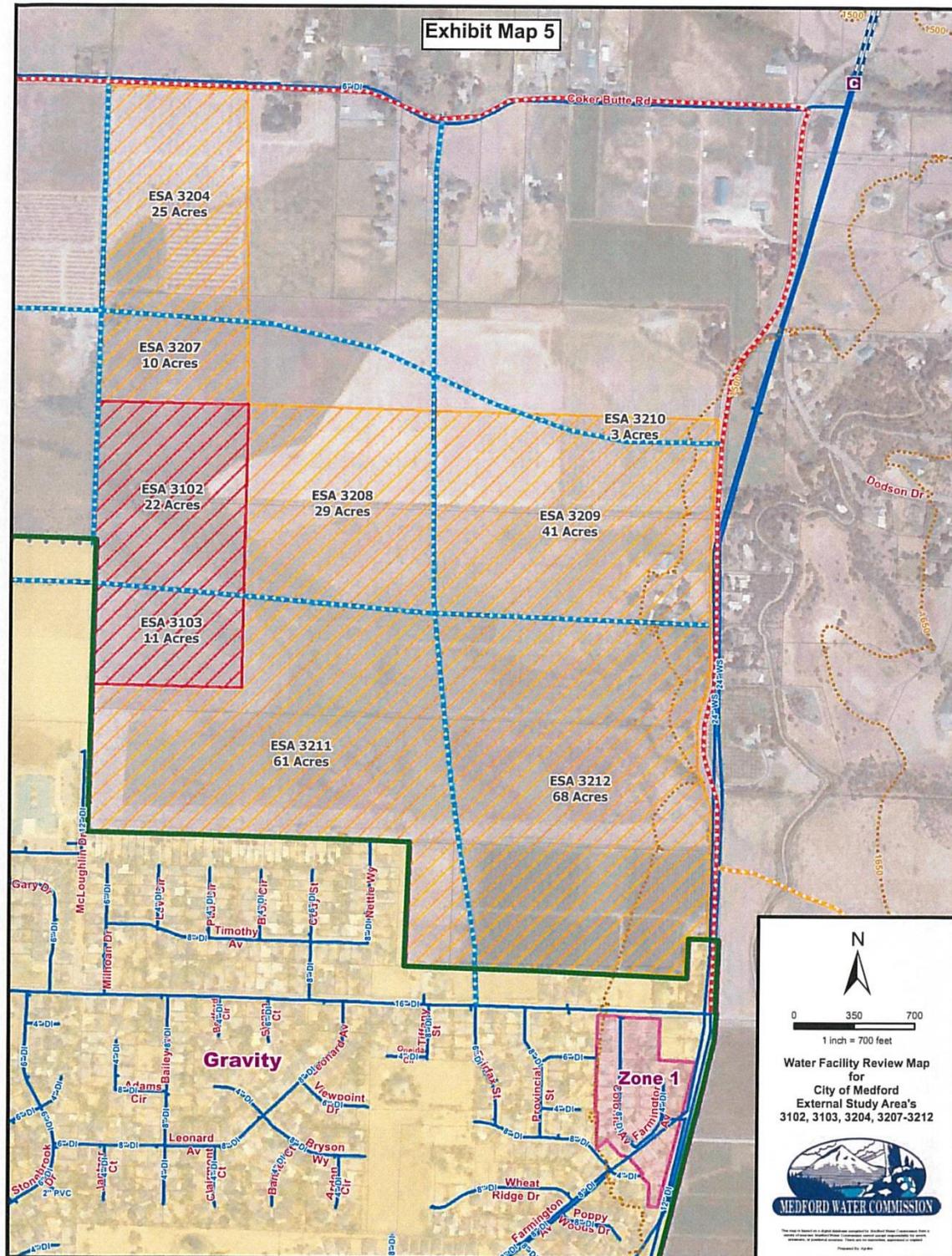
- If sewer is extended to area 5106, the sewer extension would be only about 500 feet.
- Internal mainline extensions will be required to serve the parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.
- Due to the variety of commercial and industrial property uses the exact downstream impacts are difficult to determine.

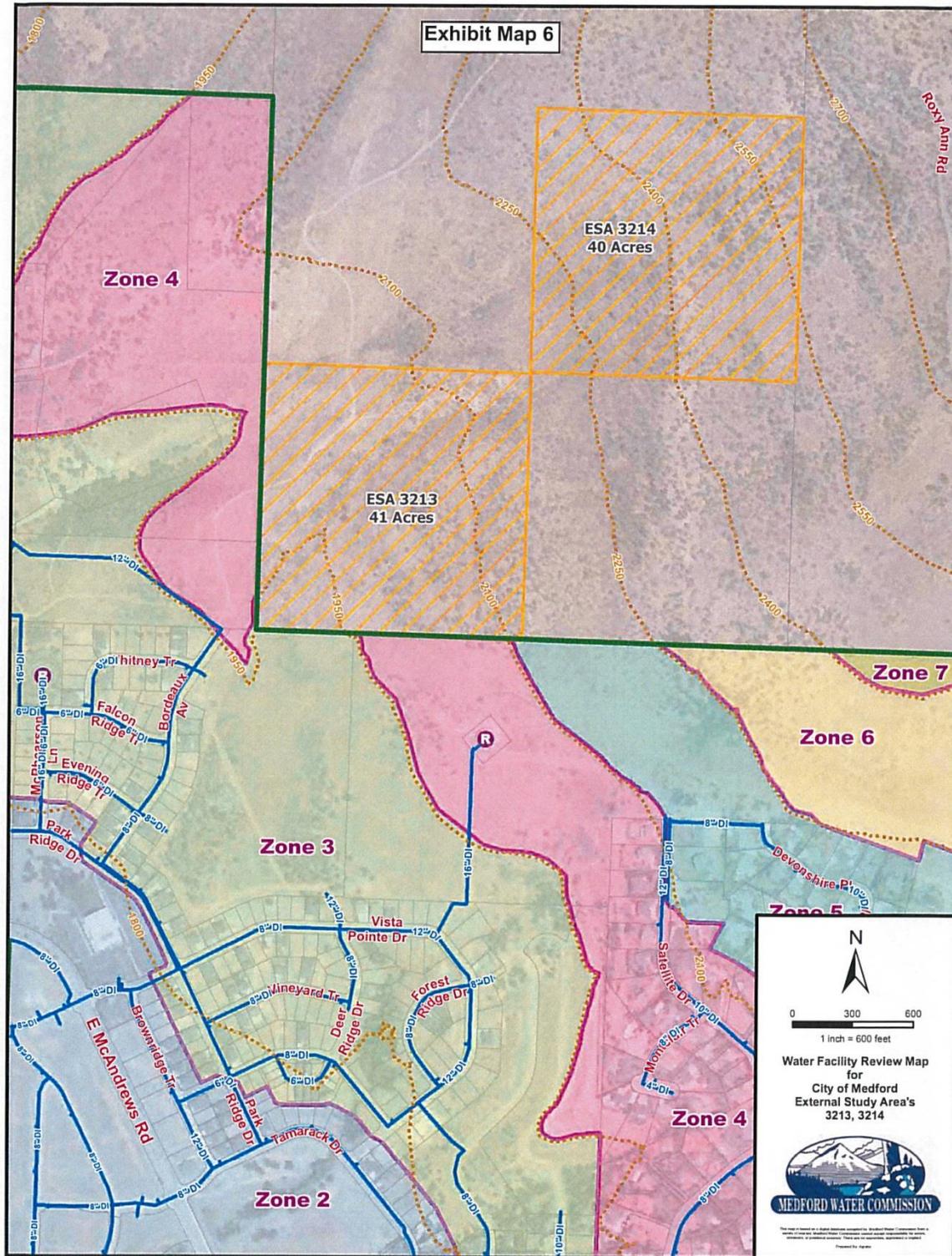
5105, 5104, 5212, 5211, 5209, 5208, 5210, 5102, 5103, and 5207: Sewer is available from a combination of +/- 1500' of 15 inch, 3800' of 12", 1500' of 8" from the south.

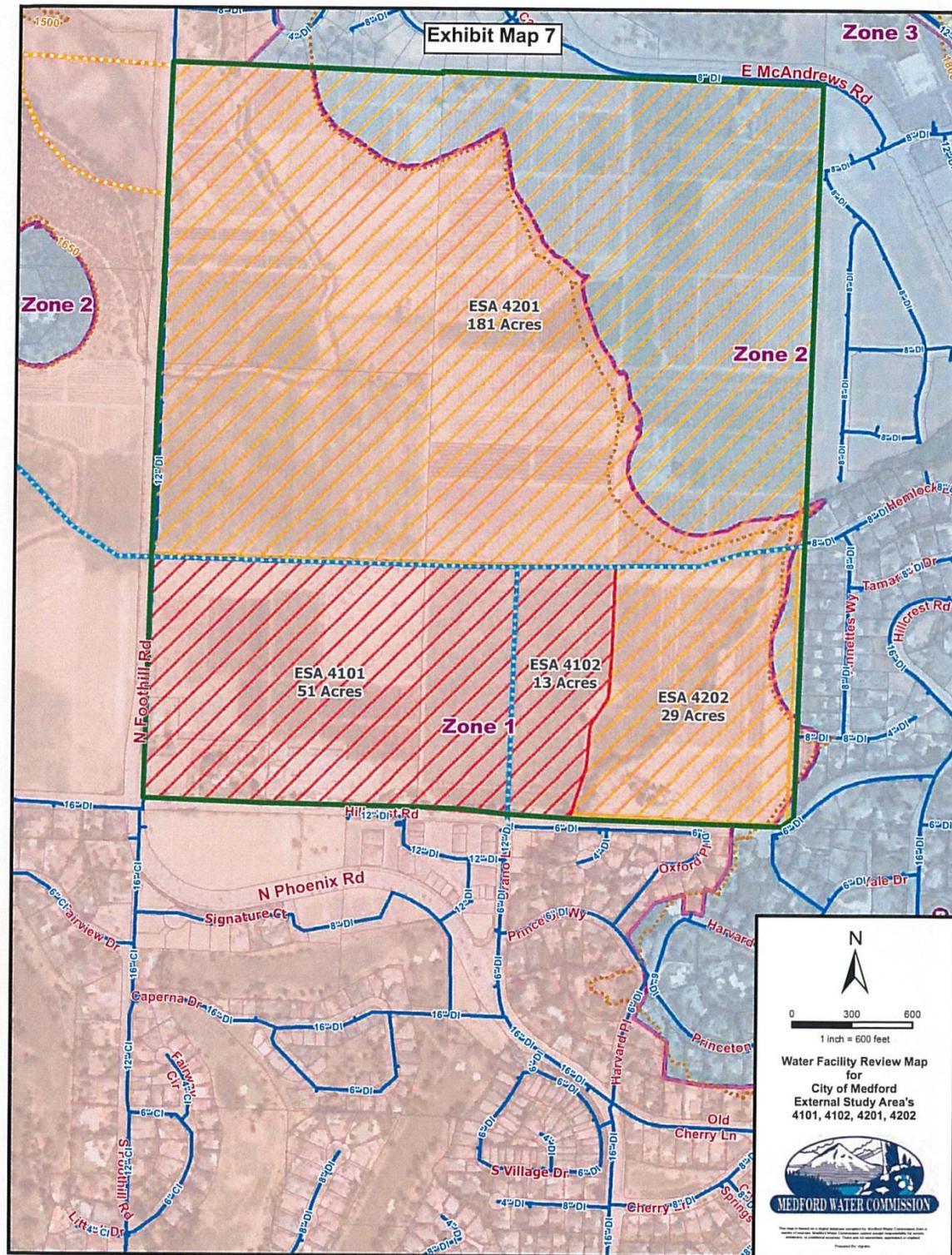
- If sewer is extended to area 5106 or 5107, the above mentioned extension distances will be reduced.
- Internal mainline extensions will be required to serve the internal area parcels. Estimating the footage of mainline required will depend on the parcel configuration, thus an estimate will not be provided.
- Due to the variety of commercial and industrial property uses the exact downstream impacts are difficult to determine.

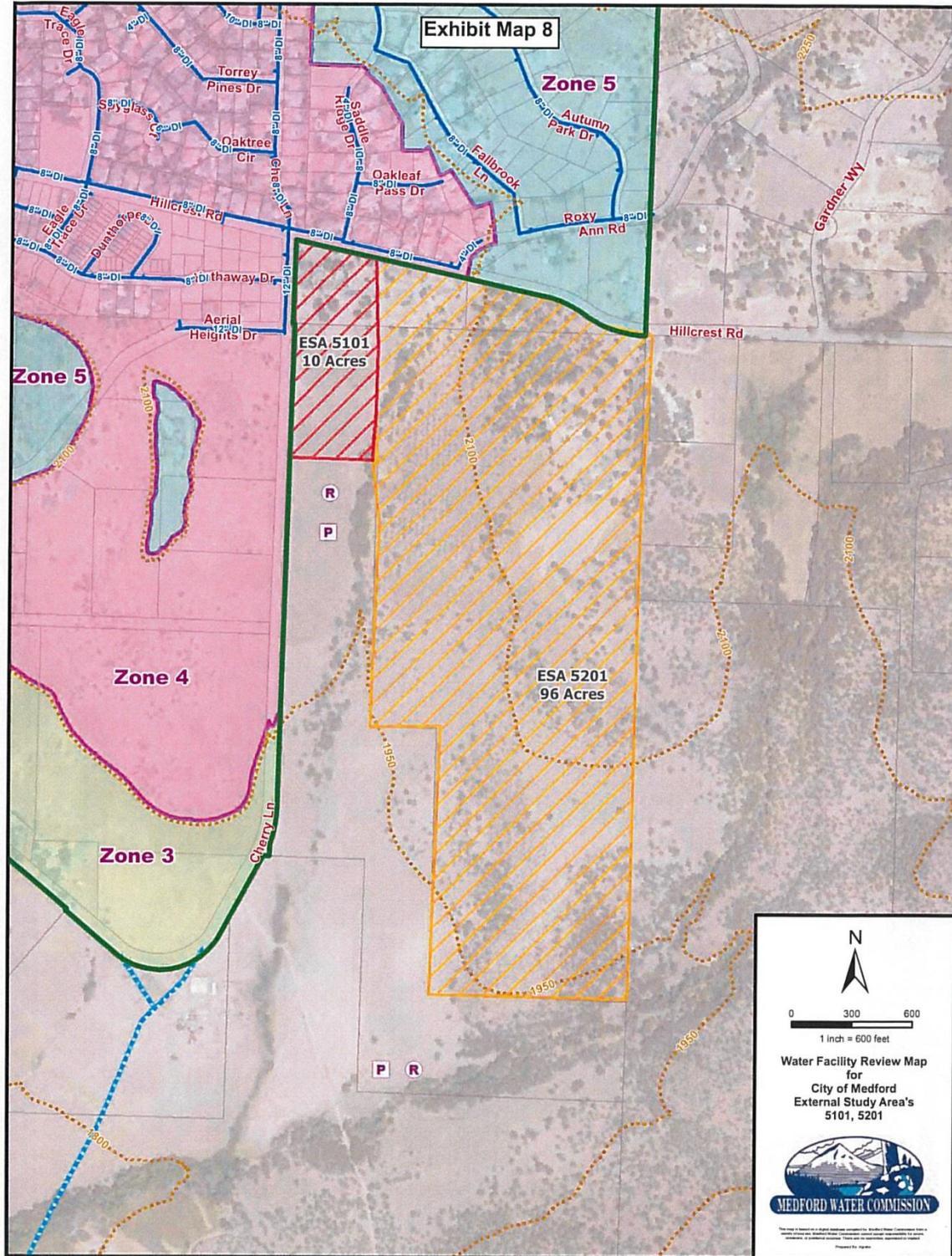


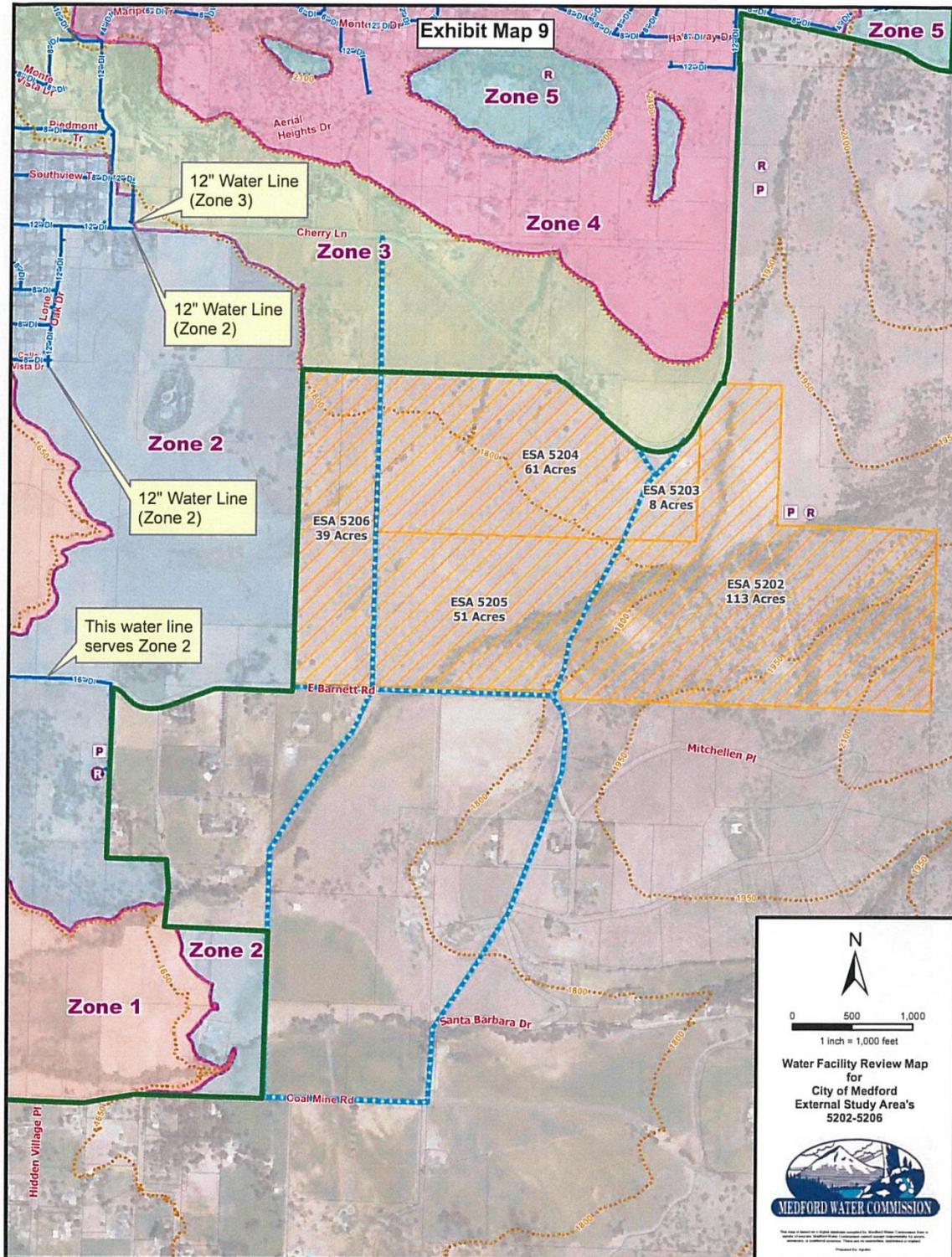


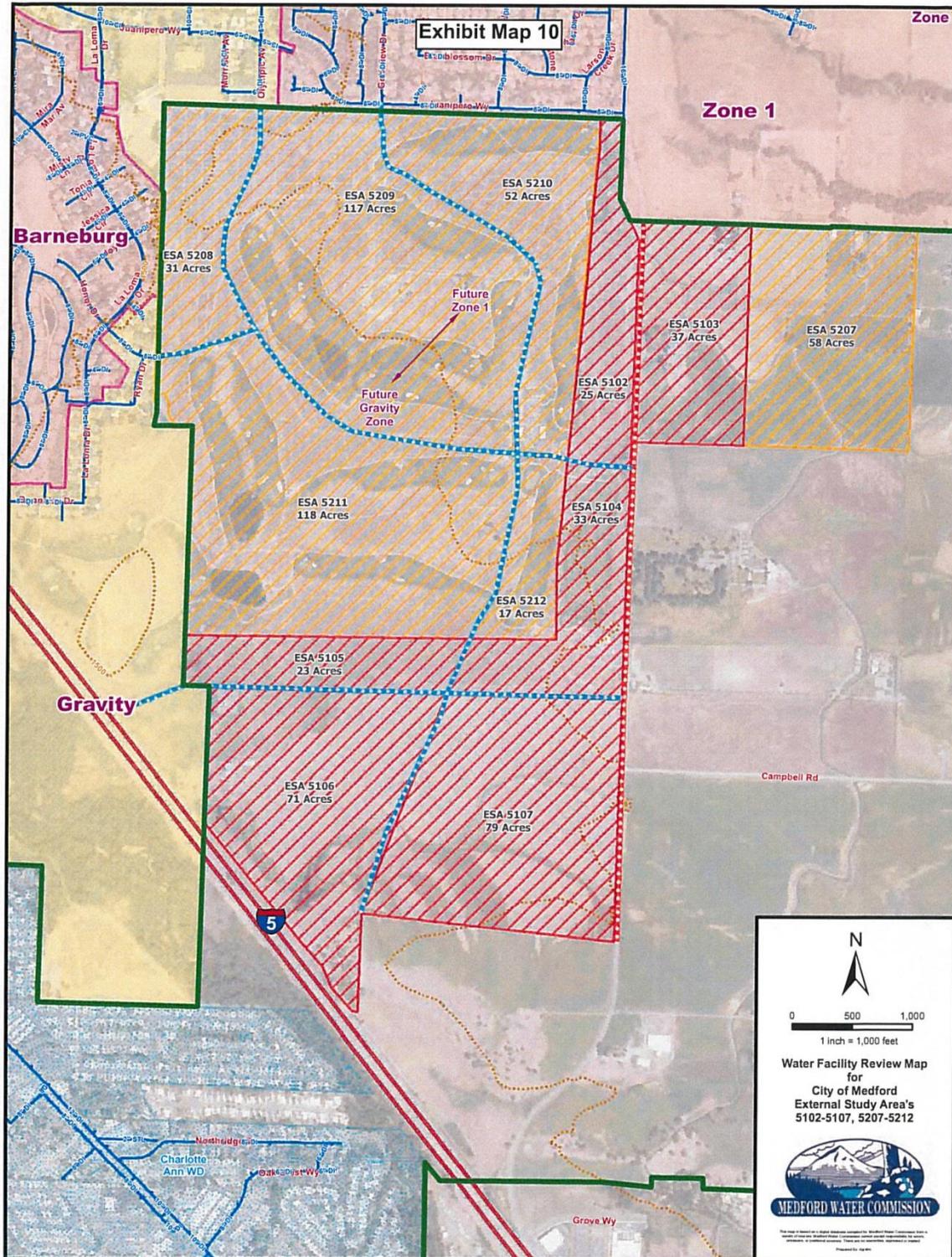


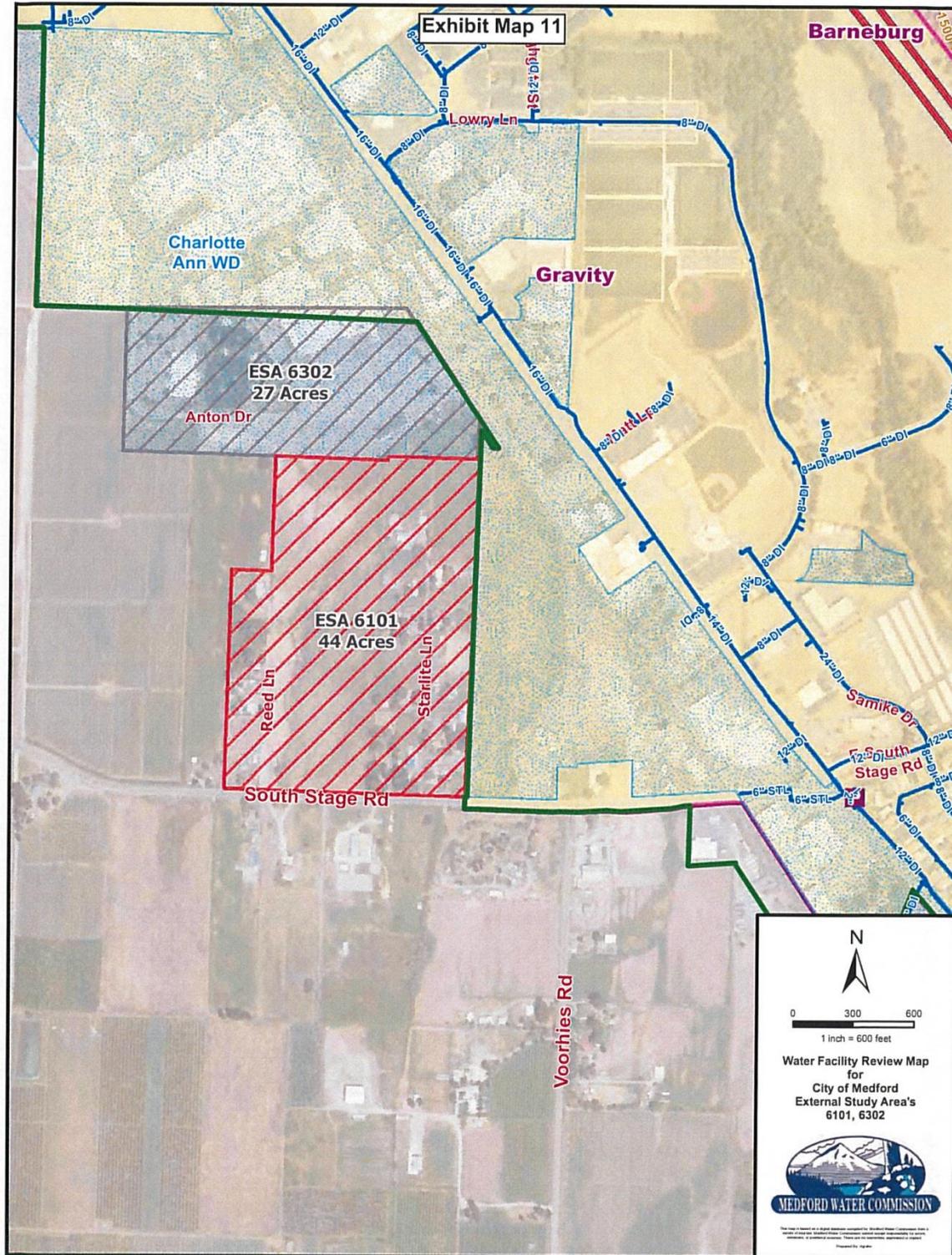


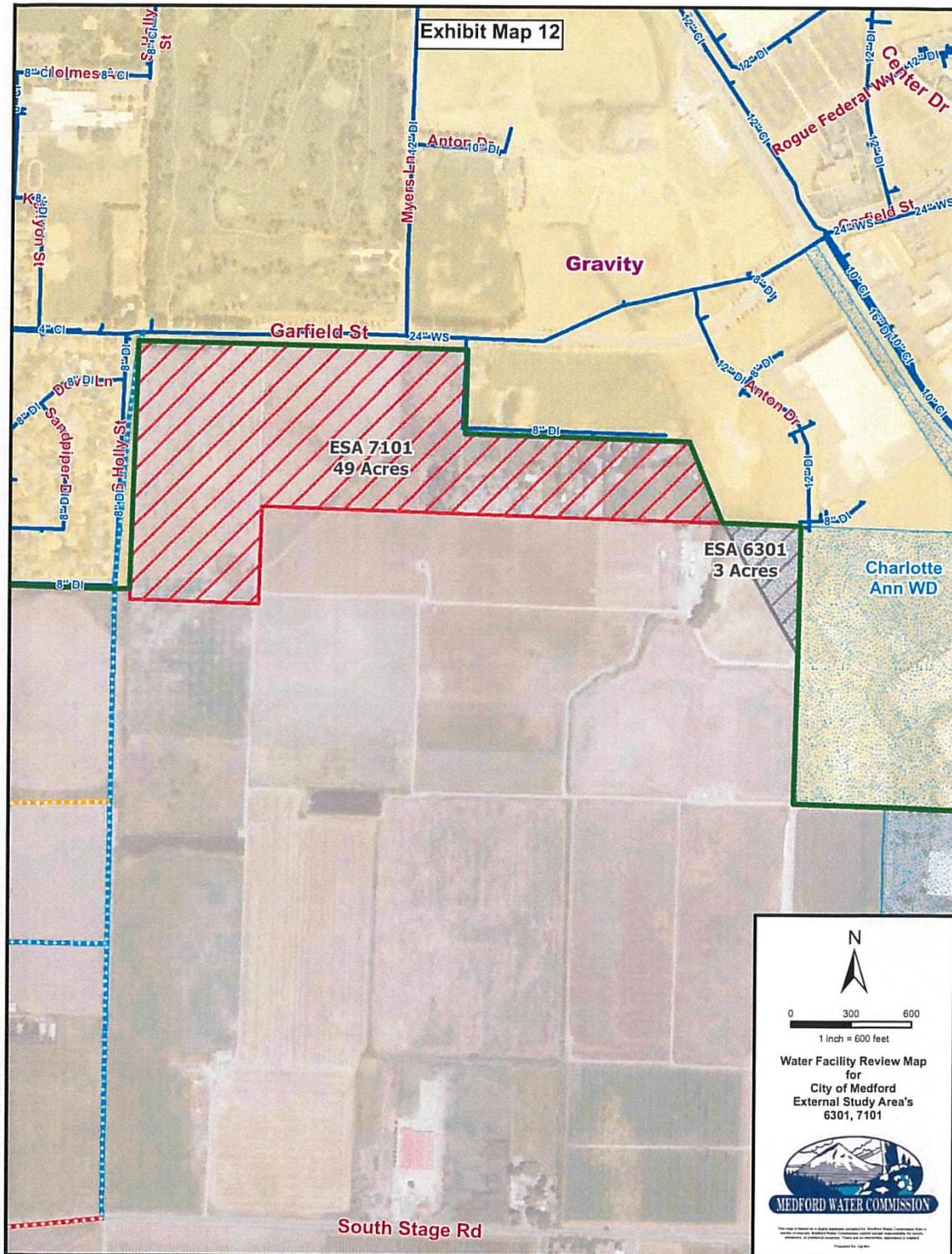


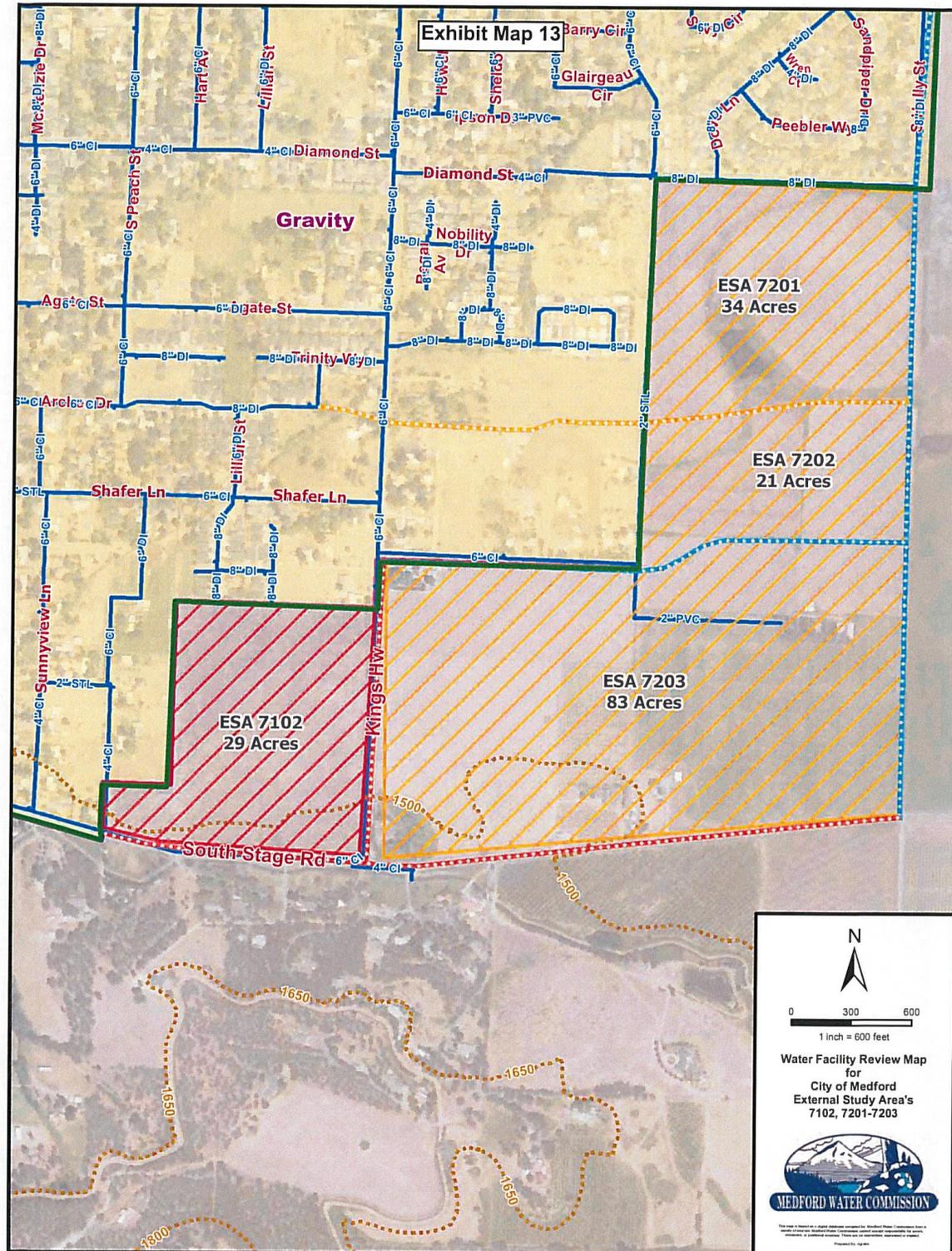


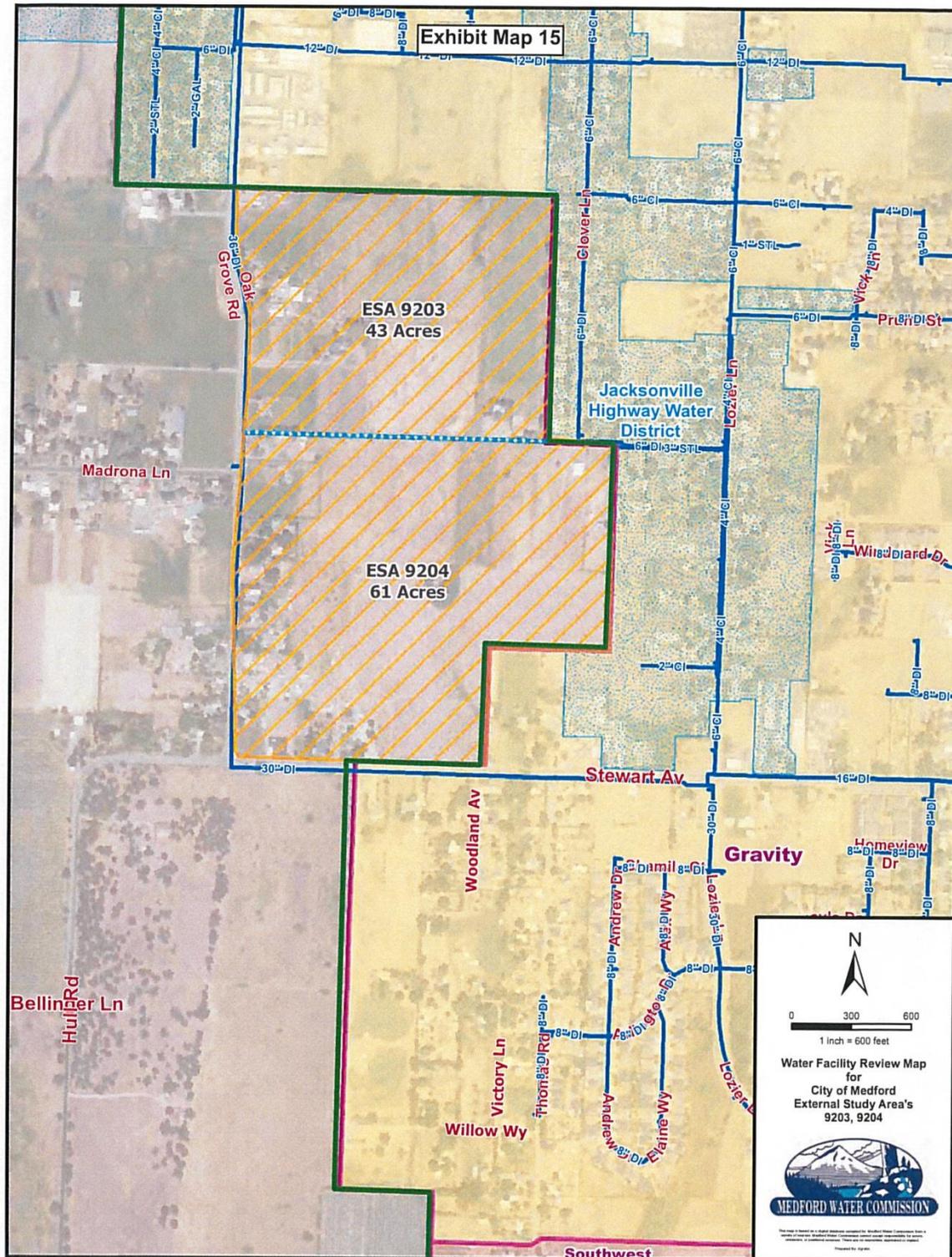


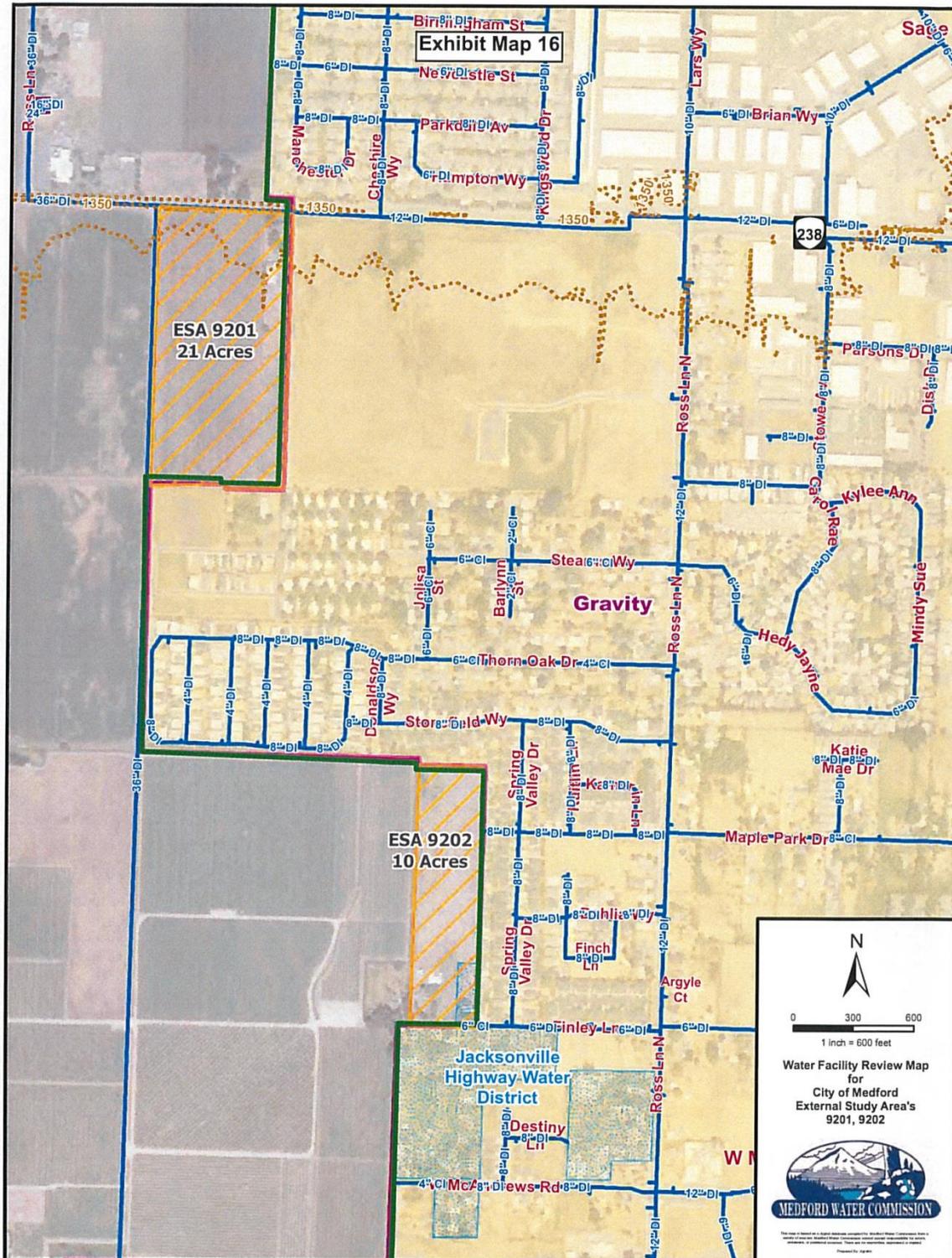












Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

Scoring is based on cost of required improvements made to the domestic water conveyance system.

- (1) High Cost
- (2) Moderate Cost
- (3) Low Cost

Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
1	1101	86.1	0	0	1293	Commercial	ESA 1101 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 36-inch water line along west side of Crater Lake Highway 62 that can serve this area.	2
1	1102	12.9	0	0	194	Commercial	ESA 1102 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 36-inch water line along west side of Crater Lake Highway that can serve this area.	3
1	1103	45.2	0	0	679	Commercial	ESA 1103 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 36-inch water line along west side of Crater Lake Highway 62 that can serve this area.	3
1	1104	24.9	0	0	374	Commercial	ESA 1104 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 36-inch water line along west side of Crater Lake Highway 62 that can serve this area.	2
1	1105	10.4	0	0	156	Commercial	ESA 1105 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 36-inch water line along west side of Crater Lake Highway 62 that can serve this area.	2
1	1106	8.7	0	0	131	Commercial	ESA 1106 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 36-inch water line along west side of Crater Lake Highway 62 that can serve this area.	2
2	2101	6.8	0	0	102	Commercial	ESA 2101 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is an existing 12-inch water line in Crater Lake Avenue at the proposed intersection of Justice Road and Crater Lake Avenue.	2
2	2102	6.2	0	0	94	Commercial	ESA 2102 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is an existing 12-inch water line in Crater Lake Avenue that can serve this area.	2
2	2103	25.7	0	0	386	Commercial	ESA 2103 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is an existing 12-inch water line in Crater Lake Avenue that can serve this area.	2
2	2104	15.4	0	0	231	Commercial	ESA 2104 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is an existing 12-inch water line in Crater Lake Avenue that can serve this area.	2
2	2201	33.7	103	252	0	Residential	ESA 2201 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 12-inch water line in Crater Lake Avenue that can serve this area.	1

MWC Comments and Scoring for ESA_2034_TAZ populating worksheet.xlsx

1 of 9

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

Scoring is based on cost of required improvements made to the domestic water conveyance system.

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- (2) Moderate Cost
- (3) Low Cost

Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
3	2105	76.5	0	0	1149	Commercial	ESA 2105 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a existing 24-inch water line on the west side of Crater Lake Hwy, and a 12-inch water line in Crater Lake Avenue near the middle of this ESA that can serve this area.	3
3	2106	25.8	0	0	387	Commercial	ESA 2106 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a existing 24-inch water line on the west side of Crater Lake Hwy, and there is an existing 12-inch water line in Crater Lake Avenue that can serve this area.	2
3	2107	27.9	0	0	419	Commercial	ESA 2107 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a existing 24-inch water line on the west side of Crater Lake Hwy, and there is an existing 12-inch water line in Crater Lake Avenue that can serve this area.	2
3	2108	2.8	0	0	42	Commercial	ESA 2108 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 24-inch water line on the west side of Crater lake Hwy, and there is an existing 12-inch water line in Crater Lake Avenue approximately 2200-feet north of this ESA that can serve this area.	2
3	2202	54.9	167	409	0	Residential	ESA 2202 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 12-inch water line in Crater Lake Avenue that can serve this area.	1
3	2203	38.2	116	284	0	Residential	ESA 2203 is located in MWC's "Reduced" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 12-inch water line in Crater Lake Avenue that can serve this area. MWC can not serve domestic water to the area above the ground elevation of 1500 feet located in the southeast portion of this ESA.	1
4	3101	18.6	0	0	279	Commercial	ESA 3101 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in McLoughlin Drive that can serve this area.	3
4	3201	20.2	61	149	0	Residential	ESA 3201 is located in both MWC's "Gravity" and "Zone 1" pressure zones. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. The area of land above elevation 1500 feet is required to install a pump station and reservoir sized to serve this area. The existing 6 inch water line in Coker Butte Road is undersized to serve domestic and fire protection water to the proposed ESA. A new 12-inch water line is required to be installed in Coker Butte Road starting from Springbrook Road and extending to the east side of this ESA.	1

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

Scoring is based on cost of required improvements made to the domestic water conveyance system.

- (1) High Cost
- (2) Moderate Cost
- (3) Low Cost

Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
4	3202	36.8	112	274	0	Residential	ESA 3202 is located in both MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. The existing 6-inch water line in Coker Butte Road is undersized to serve domestic and fire protection water to the proposed ESA. A new 12-inch water line is required to be installed in Coker Butte Road starting from Springbrook Road and extending to the east side of this ESA.	2
4	3203	49.2	150	368	0	Residential	ESA 3203 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. The existing 6-inch water line in Coker Butte Road is undersized to serve domestic and fire protection water to the proposed ESA. A new 12-inch water line is required to be installed in Coker Butte Road starting from Springbrook Road and extending to the east side of this ESA.	1
4	3205	26.7	81	198	0	Residential	ESA 3205 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There are 8-inch water lines stubbed for extension in Hondeleau Lane, Sharman Way, and Kingsbury Drive. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	3
4	3206	34.5	105	257	0	Residential	ESA 3206 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 8-inch water line stubbed for extension in Cheltenham Way. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	2
5	3102	21.6	0	0	325	Commercial	ESA 3102 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in McLoughlin Drive that can serve this area.	3
5	3103	11.1	0	0	167	Commercial	ESA 3103 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in McLoughlin Drive that can serve this area.	3
5	3204	25.1	77	189	0	Residential	ESA 3204 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 6-inch water line in Coker Butte Road. The existing 6-inch water line in Coker Butte Road is undersized to serve domestic and fire protection water to the proposed ESA. A new 12-inch water line is required to be installed in Coker Butte Road starting from Springbrook Road and extending to the east side of this ESA.	1

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

Scoring is based on cost of required improvements made to the domestic water conveyance system.

- (1) High Cost
- (2) Moderate Cost
- (3) Low Cost

Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
5	3207	9.9	30	74	0	Residential	ESA 3207 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 6-inch water line in Coker Butte Road, and 12-inch water line in McLoughlin Drive. The existing 6-inch water line in Coker Butte Road is undersized to serve domestic and fire protection water to the proposed ESA. A new 12-inch water line is required to be installed in Coker Butte Road starting from Springbrook Road. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	1
5	3208	28.6	87	213	0	Residential	ESA 3208 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 6-inch water line in Coker Butte Road, a 24-inch water line in or near Foothill Road, and a 16-inch water line in Delta Waters Road at Fairfax Street. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	1
5	3209	41.2	126	309	0	Residential	ESA 3209 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 6-inch water line in Coker Butte Road, a 16-inch water line in Delta Waters Road at Fairfax Street, and a 24-inch water line in or near Foothills Road. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	3
5	3210	2.9	9	22	0	Residential	ESA 3210 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is 24-inch water line in or near Foothills Road. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	3
5	3211	60.7	185	453	0	Residential	ESA 3211 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is 12-inch water line in McLoughlin Drive, and a 8-inch water line in Nettle Way. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	3
5	3212	68.2	208	510	0	Residential	ESA 3212 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is 24-inch water line in or near Foothills Road, and a 16-inch water line in Delta Waters Road at Fairfax Street. New 8-inch water lines are required to be installed in proposed residential streets within this ESA.	3
6	3213	40.5	124	304	0	Residential	ESA 3213 is located in three (3) of MWC's pressure zones; Zones 3, 4 and 5. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There are 8-inch water lines available for Zone 4 and 5 at the north end of Satellite Drive; and a 8-inch water line at the north end of Bordeaux Avenue for Zone 3. New 8-inch water lines are required to be installed in proposed residential streets within this ESA. This ESA will be difficult and expensive to develop due to the steep terrain and the required construction of water reservoirs, pump stations, and extensive water water lines.	1

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

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Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
6	3214	39.9	122	299	0	Residential	ESA 3214 is located in four (4) of MWC's pressure zones; Zones 5, 6, 7 and 8. This ESA is proposed to be zoned Residential. Pressure zones 6, 7 and 8 do not currently exist and will require construction of a pump station and reservoir for each zone, along with property acquisition for each facility site. This ESA will be difficult and extremely expensive to develop due to the steep terrain and the magnitude of required construction of off-site water facilities and water line extensions that need to be constructed to this ESA.	1
7	4101	50.7	0	0	762	Commercial	ESA 4101 is located in both MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in Hillcrest Road to serve this area.	3
7	4102	12.6	0	0	190	Commercial	ESA 4102 is located in both MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in Hillcrest Road approximately 500 feet west of Urano Lane to serve this area.	3
7	4201	181.3	553	1,355	0	Residential	ESA 4201 is located in both MWC's "Zone 1" and "Zone 2" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. For the "Zone 1" pressure zone area there is a 12-inch water line in N. Foothill Road, an 8-inch water line in La Strada Circle, and a 6-inch water line in Hillcrest Road adjacent to this ESA. For the "Zone 2" pressure zone area there is an 8-inch water line in Hemlock Drive, and an 8-inch water line is also located in the East McAndrews Village development along the east side of this ESA.	2
7	4202	28.5	87	213	0	Residential	ESA 4202 is located in both MWC's "Zone 1" and "Zone 2" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 12-inch water line in Hillcrest Road approximately 500 feet west of Urano Lane that would be required to be extended across ESA 4102, then 8-inch water lines can be extended into this ESA.	2
8	5101	9.9	0	0	149	Commercial	ESA 5101 is located in MWC's "Zone 4" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in Cherry Lane, and an 8-inch water line in Hillcrest Road that can serve this area.	3
8	5201	95.8	292	715	0	Residential	ESA 5201 is located in MWC's "Zone 4" and "Zone 5" pressure zones. This ESA is proposed to be zoned Residential. Residential zoning requires installation of 8-inch water lines. There is a 12-inch water line in Cherry Lane that can serve the area of this ESA that lies within "Zone 4" pressure zone. There is 8-inch water line in Roxy Ann Road that can serve this area of this ESA that lies within "Zone 5" pressure zone.	3

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

Scoring is based on cost of required improvements made to the domestic water conveyance system.

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- (2) Moderate Cost
- (3) Low Cost

Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
9	5202	113.4	346	848	0	Residential	ESA 5202 is located in MWC's "Zone 3", "Zone 4, and "Zone 5" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 3" 12-inch water line in Cherry Lane approximately 200-feet east of Mary Bee Lane that can serve this area. This 12-inch water line is required to be extended easterly in Cherry Lane, then 8-inch water lines are required to be extended on-site. There is a "Zone 4" 12-inch water line in Cherry Lane at Aerial Heights Drive. There is a "Zone 5" 8-inch water line in Roxy Ann Road at Fallbrook Lane.	1
9	5203	7.9	24	59	0	Residential	ESA 5203 is located in MWC's "Zone 3" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 12-inch water line in Cherry Lane approximately 200-feet east of Mary Bee Lane that can serve this area. This 12-inch water line is required to be extended easterly in Cherry Lane, then 8-inch water lines are required to be extended on-site.	1
9	5204	61.5	187	458	0	Residential	ESA 5204 is located in both MWC's "Zone 2" and "Zone 3" pressure zones. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 3" 12-inch water line in Cherry Lane approximately 200-feet east of Mary Bee Lane that can serve this area. This "Zone 3" 12-inch water line is required to be extended easterly in Cherry Lane, then 8-inch water lines are required to be extended on-site. There is a "Zone 2" 12-inch water line in Cherry Lane approximately 200-feet east of Mary Bee Lane that can be extended easterly in Cherry Lane, then 8-inch water lines are required to be extended on-site to serve the "Zone 2" area of this ESA.	1
9	5205	51.5	157	385	0	Residential	ESA 5205 is located in MWC's "Zone 2" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 2" 12-inch water line in Cherry Lane approximately 200-feet east of Mary Bee Lane that can be extended easterly in Cherry Lane, then 8-inch water lines are required to be extended on-site to serve the "Zone 2" area of this ESA.	1
9	5206	38.8	118	289	0	Residential	ESA 5206 is located in MWC's "Zone 2" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 2" 12-inch water line in Cherry Lane approximately 200-feet east of Mary Bee Lane that can be extended easterly in Cherry Lane, then 8-inch water lines are required to be extended on-site to serve the "Zone 2" area of this ESA.	1
10	5102	25.1	0	0	377	Commercial	ESA 5102 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is a 16-inch water line in N. Phoenix Road at Juanipero Way that can serve this area. The 16-inch water line is required to be extended southerly in N. Phoenix Road, and 12-inch water lines are required to be extended on-site.	2

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review

By Medford Water Commission

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Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
10	5103	37.4	0	0	562	Commercial	ESA 5103 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is a 16-inch water line in N. Phoenix Road at Juanipero Way that can serve this area. The 16-inch water line is required to be extended southerly in N. Phoenix Road, and 12-inch water lines are required to be extended on-site.	2
10	5104	33.4	0	0	502	Commercial	ESA 5104 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 16-inch water line in N. Phoenix Road at Juanipero Way that can serve this area. The 16-inch water line is required to be extended southerly in N. Phoenix Road, and 12-inch water lines are required to be extended on-site.	2
10	5105	22.7	0	0	342	Commercial	ESA 5105 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in South Stage Road west of Interstate 5 that can serve this area. The 12-inch water line is required to be extended across Interstate 5, and 12-inch water lines are required to be extended on-site.	1
10	5106	71.3	0	0	1071	Commercial	ESA 5106 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 12-inch water line in South Stage Road west of Interstate 5 that can serve this area. The 12-inch water line is required to be extended across Interstate 5, and 12-inch water lines are required to be extended on-site.	1
10	5107	79.4	0	0	1192	Commercial	ESA 5107 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires installation of 12-inch water lines. There is a 16-inch water line in N. Phoenix Road at Juanipero Way that can serve this area. The 16-inch water line is required to be extended southerly in N. Phoenix Road, and 12-inch water lines are required to be extended on-site.	1
10	5207	57.8	176	431	0	Residential	ESA 5207 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 1" 16-inch water line in N. Phoenix Road at Juanipero Way that can be extended southerly in N. Phoenix Road, then 8-inch water lines are required to be extended easterly in Coal Mine Road and then on-site to serve this area of this ESA.	2
10	5208	31.1	95	233	0	Residential	ESA 5208 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Gravity" zone 8-inch water line in Honor Drive, and a 6-inch water line in Olympic Avenue that can serve this area.	3
10	5209	117.3	358	877	0	Residential	ESA 5209 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 1" 8-inch water line in Juanipero Way that can serve this area.	3

Appendix G: Infrastructure Scoring Memos

City of Medford - External Study Areas (ESA) Review
By Medford Water Commission

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- (3) Low Cost

Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
10	5210	51.9	158	387	0	Residential	ESA 5210 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 1" 8-inch water line in Juanipero Way that can serve this area.	3
10	5211	118.3	360	882	0	Residential	ESA 5211 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Gravity" zone 8-inch water line in Honor Drive that can serve this area.	2
10	5212	16.6	51	125	0	Residential	ESA 5212 is located in MWC's "Zone 1" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a "Zone 1" 8-inch water line in Juanipero Way, and there is a "Zone 1" 16-inch water line in N. Phoenix Road at Juanipero Way that can serve this area.	2
11	6101	43.7	0	0	656	Commercial	ESA 6101 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is a "Gravity" zone 16-inch water line along the east side of Hwy 99, and a 14-inch water line along the east side of Hwy 99 at South Stage Road.	2
11	6302	27.5	0	0	413	Industrial	ESA 6302 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is a "Gravity" zone 16-inch water line located on the east side of S. Pacific Hwy 99 to serve this area.	2
12	6301	2.9	0	0	43	Industrial	ESA 6301 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is a "Gravity" zone 12-inch water line located at the southerly end of Anton Drive to serve this area.	3
12	7101	48.8	0	0	733	Commercial	ESA 7101 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There are "Gravity" zone 8-inch water lines in Meyers Lane and S. Holly Street. There is also a "Gravity" zone 24-inch water line in Garfield Avenue to serve this area.	3
13	7102	29.4	0	0	441	Commercial	ESA 7102 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is no 12-inch water lines in this area as this is an established residential area. Garfield Street has a "Gravity" zone 24-inch water line that can serve this area. A 12-inch water line extension (approx. 4700-ft) would be required in Kings Hwy, and on-site 12-inch water lines. Due to low water pressures in the area, this ESA and the surrounding residential area extending up to Diamond Street may be required to be converted from the "Gravity" pressure zone to the "Southwest" pressure zone.	1
13	7201	33.5	102	250	0	Residential	ESA 7201 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 8-inch water line in Sparrow Way and S Holly Street to serve this area.	3

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Exhibit #	ID	Acres	DUs	Population	EMPESA	Proposed Zoning	MWC Evaluation Comments	MWC Score
13	7202	20.9	64	157	0	Residential	ESA 7202 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 8-inch water line in Sparrow Way and 5 Holly Street to serve this area.	3
13	7203	82.8	252	617	0	Residential	ESA 7203 is located in MWC's "Gravity" pressure zone. This ESA is proposed to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 8-inch water line in Sparrow Way to serve this area. Due to low water pressures in the area, this ESA and the surrounding residential area extending up to Diamond Street may be required to be converted from the "Gravity" pressure zone to the "Southwest" pressure zone.	1
14	8101	7.4	0	0	111	Commercial	ESA 8101 is located in MWC's "Southwest" pressure zone. This ESA is to be zoned Commercial. Commercial zoning requires the installation of 12-inch water lines. There is a 12-inch water line in Orchard Home Drive at Alamar Street to serve this area.	3
14	8201	48.2	147	360	0	Residential	ESA 8201 is located in MWC's "Southwest" pressure zone. This ESA is to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 12-inch water line in Orchard Home Drive at Alamar Street, a 12-inch water line in Columbus Avenue, and 8-inch water lines in Terrel Drive and Martin Drive, and 6-inch water lines in Canal Street, Meals Drive, and Milford Drive to serve this area.	3
15	9203	43.2	132	323	0	Residential	ESA 9203 is located in MWC's "Gravity" pressure zone. This ESA is to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 6-inch water line in Clover Lane and Sunset Court, and a 36-inch water line along the west boundary of this ESA that will serve this area.	3
15	9204	61.4	187	458	0	Residential	ESA 9204 is located in MWC's "Gravity" pressure zone. This ESA is to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 6-inch water line in Clover Lane and Sunset Court, and a 30-inch water line along the west and south boundary of this ESA that will serve this area.	3
16	9201	20.8	63	154	0	Residential	ESA 9201 is located in MWC's "Gravity" pressure zone. This ESA is to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 36-inch water along the west side of this property, and a 12-inch water in Hwy 238 to the north of this property that will serve this area.	3
16	9202	9.6	29	71	0	Residential	ESA 9202 is located in MWC's "Gravity" pressure zone. This ESA is to be zoned Residential. Residential zoning requires the installation of 8-inch water lines. There is a 8-inch water in Maple Park Drive, and a 6-inch water in Finley Lane that will serve this area.	3



200 South Ivy Street - Room 177 Medford, Oregon 97501
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www.medfordwater.org

December 5, 2014

Joe Slaughter, AICP
Planner IV, Long Range Planning
City of Medford
Lausmann Annex
200 S. Ivy Street
Medford, OR 97501

Subject: Revise scoring of the ESA's

Dear Joe,

Medford Water Commission (MWC) has received the additional layouts/master plans for ESA areas MD2 and MD7 that were routed to MWC for reevaluating these ESA areas. Initially, MWC was in favor of reevaluating the scoring for these areas, but after internal discussions MWC has decided not to adjust the previously submitted scores for the following reasons.

The current MWC scoring of the ESA areas is based on the following criteria:

- The score of 3 or "green" is based on water facilities directly adjacent to the Urban Reserve area.
- The score of 2 or "yellow" is based on water facilities being one lot/tier further away from the Urban Reserve area than what is listed as a score of 3.
- The score of 1 or "red" is based on water facilities being two lots/tiers further away from the Urban Reserve area than what is listed as a score of 1. Additionally a score of 1 is warranted if reservoirs, pump stations, and water transmission mains are lacking. If the Urban Reserve area is in a non-serviceable area a score of 1 is also assigned.

The recently submitted master plans did not change the existing condition to warrant a change of the existing MWC scoring. The recently submitted master plans are not linked to an approved land development application with approved conditions that bind the master plan to the Urban Reserve areas. If the master plans were submitted for a formal review and approval process, then the overlay of the master plan could potentially change the evaluation of the ESA areas in question.

MWC does agree with the concept of the master plans, and acknowledges that a demonstrated systematic/phased development of the ESA areas in question would enhance the development potential of the areas. However, the lack of a formal approval/adoption of the submitted master plans does not insure the implementation of those master plans. The

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Joe Slaughter, AICP
Planner IV, Long Range Planning
City of Medford
Subject: Revise scoring of the ESA's
December 5, 2014

Page 2 of 2

master plans could potentially change for a multitude of reasons, including market conditions, change of ownership, cost of development, environmental issues, etc.

In conclusion, MWC is reluctant to set the precedent of changing our existing ESA scoring based on submittals of non-binding exhibits. Should the criteria change for any given ESA, MWC would take that data under consideration.

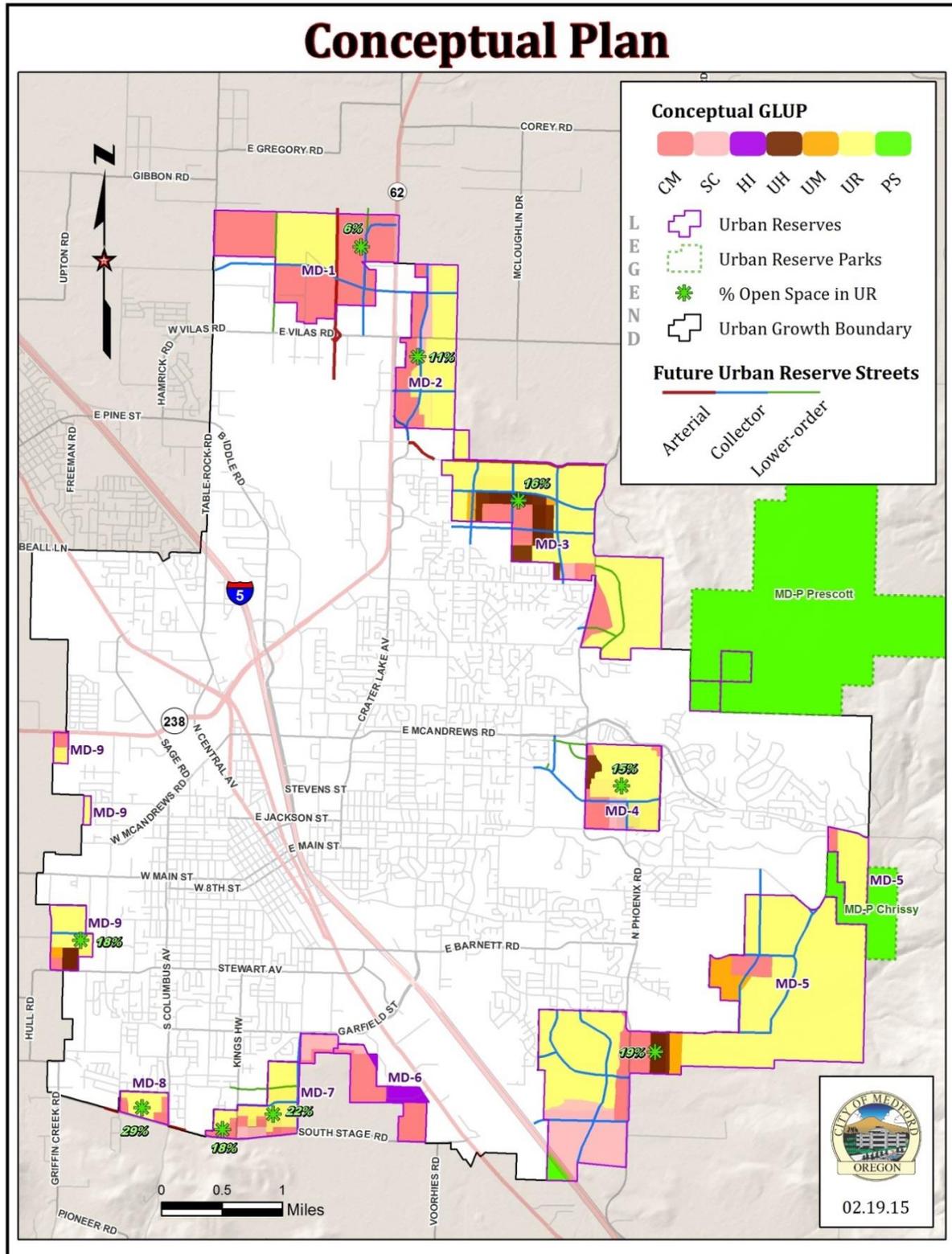
Sincerely,



Eric C. Johnson, P.E.
Principal Engineer
Medford Water Commission

APPENDIX H. Conceptual Plans

Map 8.1. Conceptual Plan for Urban Reserve (Higher-order Streets and Land Use)



Map 8.2. UGB/Urban Reserve Trails Plan (adapted from Leisure Services Plan Figure 6.2)

