

City of Madras and Jefferson County

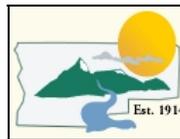
Urban Reserve Area (URA) Report

Prepared for:

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Executive Summary

This report presents a recommendation to legislators of the City of Madras and Jefferson County to adopt an Urban Reserve Area (URA) outside the existing Madras Urban Growth Boundary. The recommended URA is shown at the end of this Executive Summary in Figure ES-1.

The recommended URA is the product of a cooperative planning process by the city, county, citizens, and special interest groups in the Madras area. The following criteria, summarized here, played a significant role in shaping the recommendation.

- Urban reserve areas should conform to state rules to the maximum extent possible to ensure against legal challenges and to protect high-value farm land near the city.
- Urban reserve areas that bear the lowest public cost for urban infrastructure, especially streets, highways, and sewer systems, should be favored over areas that are more expensive to service.
- Urban reserves should support long standing adopted city policies for urban expansion and form.
- Urban reserves should include the maximum allowable management area – enough for a 30-year land supply - to reduce the cost to add land to the Madras UGB in the future and to provide land owners greater certainty about the future development potential of their property.
- Urban reserves should including enough land to meet future housing and employment needs as well as other urban land uses based on the land use planning assumptions contained in the Madras Urbanization Study, adopted by the city in October, 2007 with the intent that it guide long range planning for Madras.

The following sequence was followed in developing this recommendation:

1. A consulting team, lead by Angelo Planning Group, was hired by the city to analyze land use options and help develop the recommendation – February, 2007.
2. A Technical Advisory Committee (TAC) was formed including legal, land use, civil engineering, and administrative experts to work with the consulting team - March, 2007.
3. A Project Advisory Committee (PAC) was formed with representation from various political and community interests to advise the consulting team and direct the recommendation decision process – March, 2007.
4. The TAC and PAC meet twice to analyze possible study areas and develop criteria for screening properties deemed most suitable for inclusion in an urban reserve – April-May 2007.
5. The consultant team conducts technical studies that assess URA suitability using PAC approved criteria; TAC members monitor and discuss progress – June-August 2007.

6. The PAC approves a preliminary URA recommendation at a day-long meeting and refers the recommendation to the public for review – September 2007.
7. A newsletter is sent out, two public meetings are held, and local elected officials meet in a joint work session to discuss the preliminary recommendation – October, 2007.
8. The PAC meets a final time to review public comments and makes a final recommendation to legislators – November, 2007.
9. The consulting team prepares a final report for the PAC – December, 2007.

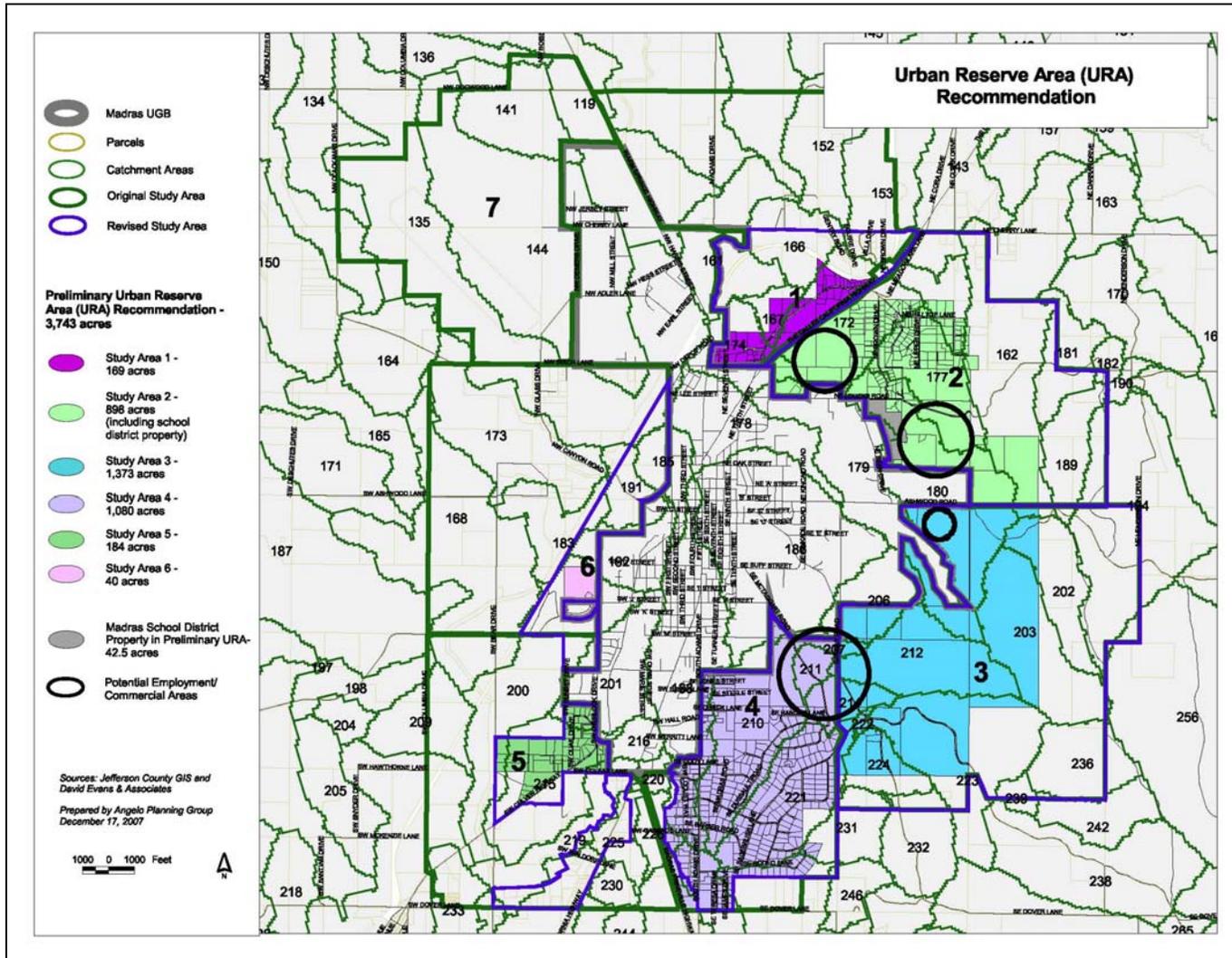
In addition to the URA recommendation, this report includes draft comprehensive land use plan policies and a recommended county overlay zone. These policy and code recommendations, if approved, would:

- Establish that land in urban reserves has highest priority for coming into the Madras urban growth boundary (UGB);
- Establish procedures for how land may be brought from urban reserve areas into the Madras UGB;
- Establish procedures for how land use planning is completed when land that is brought from urban reserve areas into the Madras UGB; and
- Establish special land use regulations in Jefferson County for all land in urban reserve areas.

The recommendations also address several unfinished planning steps, including:

- Form a separate planning and advisory process to complete planning for the city's long range heavy industrial land needs, which was not fully addressed in the process;
- Amend the County Transportation System Plan to recognize future urban road corridors in urban reserve areas and related code amendments that preserve these corridors from encroachment by interim rural development;
- Work cooperatively to develop a future Madras Urban Area concept to help decision makers and property owners plan appropriately for future urban uses in urban reserve areas;
- Take steps to amend the existing Madras/Jefferson County urban growth management agreement (UGMA) to include formal procedures for jointly managing land uses and land use decisions affecting land in urban reserve areas; and
- Study whether or not there is a need to amend city or county land use and development codes to implement the recommended policy framework that guides the conversion of land from urban reserve status to urbanizable status.

Figure ES-1. Final URA Recommendation



1. Background

The City of Madras and Jefferson County have experienced rapid growth and development. In 2005, the City contracted with ECONorthwest, Inc. to prepare an Urbanization Study that examined:

- the 20 and 50 year population and employment forecast for the Madras urban area;
- 20 and 50 year forecast of the amount of land needed to support the forecast growth in population and employment;
- an analysis of available undeveloped land and redevelopment potential for partly developed land in the existing Madras urban growth boundary (UGB);
- 20 and 50 year land need assessment taking into account the available inventory of urbanizable land.

The study concluded that the city's existing UGB was approaching the 20-year supply threshold for residential land. It also concluded that the city would need to expand their UGB significantly over the next 30 years in order to maintain a 20-year supply of developable land in the UGB. A summary of the major conclusion of the study is presented in Chapter 2 of this report.

On the basis of that study, the City contracted with Angelo Planning Group (APG) in February of 2007 to analyze the feasibility of establishing an urban reserve area (URA) on the city's perimeter that would define Madras's direction of growth for the next 50 years and include enough land to meet growth needs for that planning horizon. The APG analysis followed guidelines for urban reserve areas set forth in OAR 660-0021 (see Technical Appendix A). The method used to determine the feasibility and location of an URA is presented in chapters 3 and 4 of this report.

The ECONorthwest study and APG's land use analysis for the URA was underwritten with support from Madras Land Development Corporation (MLDC) in fulfillment of an MLDC obligation to the City of Madras to help prepare technical studies that establish the city's long term land use planning needs. The APG analysis was directed and overseen by two advisory committees. The Madras URA Technical Advisory Committee (TAC) provided land use, engineering, and legal support and review of the analysis methods and conclusions. TAC members conducted telephone conference meetings every other week while the analysis was being conducted to discuss analysis methods, interim results, and how to present results to stakeholders and interested citizens. The Madras URA Public Advisory Committee (PAC) provided input on technical analysis assumptions, interpretation of land use rule requirements, and approval of analysis methods, decision criteria, and conclusions. The PAC met four times during the analysis and took a direct role interpreting the analysis results and helping to select properties in the recommended URA. TAC and PAC members are listed on the title page of the report. The PAC formally endorses the recommendations set forth in this report in Chapters 4, 5, and 6.

2. Land Need Analysis

As explained in the Background section, the *Madras Urbanization Study* provides the data and findings on which the Urban Reserve Areas (URAs) are based. The study includes population and employment growth projections for the next 20 and 50 years and the amount of land needed for housing and employment sites given these projections. It also assessed the current supply of buildable land within the City’s existing Urban Growth Boundary (UGB). The following is a summary of the study, its growth projections, and estimates of land and site needs.

The population that the URA should accommodate is indicated in official forecasts adopted by the City. The projected employment to be accommodated is based on state “Safe Harbor” rules that allows the City to assume employment growth will occur at the same rate as population growth (OAR 660-024-0040(8)(a)(B)). Table 2-1 presents growth estimates for population and employment, ratio of population to employment, and average annual growth rates. Current population and employment are expected to at least quadruple in the next 50 years.

Table 2-1. Population and Employment Forecasts from *Madras Urbanization Study*, 2007-2027 and 2007-2057

Year	Total Emp	Pop	Pop/Emp
2007	5,418	6,013	1.1
2027	11,939	13,451	1.1
2057	25,787	28,725	1.1
Change 2007-2027			
Number	6,521	7,437	1.1
Percent	120%	124%	
AAGR	4.0%	4.1%	
Change 2007-2057			
Number	20,368	22,711	1.1
Percent	376%	378%	
AAGR	3.2%	3.2%	

Source: ECONorthwest

A. Housing

Population projections were used as inputs for the Oregon Housing and Community Services (HCS) Housing Needs Model that was run for Madras to estimate the type and amount of housing needed in the next 50 years. The distribution of the estimated residential need is 61% single-family, 7% manufactured (mobile home), and 32% multiple family (7% condo/townhomes and 25% multi-family). The forecast results in average residential densities of 6.3 dwelling units per net acre and 4.7 dwelling units per gross acre in 2057.

Housing densities used in the model were based on a combination of factors including existing densities in Madras, which average 3 units/acre for single-family lots, an analysis of housing trends, average densities in comparable master planned communities, and

some policy direction from the City. The number of units and acres needed are presented in Table 2-2 below.

Table 2-2. Housing Forecast from *Madras Urbanization Study Addendum*, 2007-2027 and 2007-2057

Housing Type	New DU	Percent	Density (DU/net res ac)	Net Res. Acres	Net to Gross Factor	Gross Res. Acres	Density (DU/gross res ac)
Needed Units, 2007-2027							
Single-family types							
Single-family detached	1,791	61%	4.8	373.1	25%	497.5	3.6
Manufactured	206	7%	5.5	37.4	25%	49.8	4.1
Condo/Townhomes	206	7%	9.0	22.8	15%	26.9	7.7
Subtotal	2,202	75%	5.4	410.5		574.2	3.8
Multi-family							
Multifamily	734	25%	14.0	52.4	15%	61.7	11.9
Subtotal	734	25%	14.0	52.4		61.7	11.9
Total	2,936	100%	6.3	462.9		635.8	4.6
Needed Units, 2007-2057							
Single-family types							
Single-family detached	5,516	61%	4.8	1,149.1	25%	1,532.1	3.6
Manufactured	633	7%	5.5	115.1	20%	143.8	4.4
Condo/Townhomes	633	7%	9.0	70.3	15%	82.7	7.7
Subtotal	6,781	75%	5.4	1,334.5		1,758.7	3.9
Multi-family							
Multifamily	2,260	25%	14.0	161.5	10%	179.4	12.6
Subtotal	2,260	25%	14.0	161.5		179.4	12.6
Total	9,042	100%	6.3	1,495.9		1,938.1	4.7

Source: ECONorthwest

Note: Gross acres calculated by dividing net acres by (1-net to gross factor).

B. Employment and Other Land Uses

The Madras Urbanization Study examined the amount of land needed and the size of sites needed for projected employment growth. Table 2-3 present findings about land needs according to land use, and Table 2-4 findings about the kind of sites needed. About 550 acres of employment land need for the next 50 years will be for sites two acres and less.

Table 2-3. Employment Land Needed from *Madras Urbanization Study*, 2007-2027 and 2007-2057

Land Use Type	Gross Ac Needed	
	2007-2027	2007-2057
Retail Commercial	50.2	158.2
Office Commercial	92.9	293.7
Industrial	251.4	749.9
Public	116.1	396.5
Total	510.7	1,598.3

Source: ECONorthwest

Table 2-4. Site Needs of Projected Employment from *Madras Urbanization Study*, 2007-2027 and 2007-2057

Size of Firm	Est. # of Establish.	Est. Emp	Est. Acres Needed	Sites Needed	Avg. Site Size
2007-2027					
>100	6	2,942	230	6-10	20-50 ac
50-99	8	573	45	6-10	5-20 ac
25-49	25	716	56	18-24	2-5 ac
10-24	88	1,267	99	60-100	1-2 ac
1-9	323	1,022	80	200-300	<1 ac
Total	453	6,521	511		
2007-2057					
>100	21	9,190	721	15-25	20-50 ac
50-99	26	1,791	141	15-25	5-20 ac
25-49	79	2,237	176	40-60	2-5 ac
10-24	273	3,957	311	150-250	1-2 ac
1-9	1,010	3,193	251	250-500	<1 ac
Total	1,414	20,368	1,598		

Source: Estimates by ECONorthwest

C. Land Supply and Need

There are about 3,849 acres within the existing Madras UGB. Of this, almost 1,200 acres were determined to be buildable commercial, industrial, and residential land. This acreage represents a combination of public, vacant, and partially vacant lots without legal and natural constraints such as floodways, floodplains, steep slopes, and easements.

Given the inventory of land inside the existing UGB, the City can accommodate a significant portion of its land needs for the next 20 years. However, over the next 50 years, the City will need over 3,000 additional acres for residential and employment purposes, which is presented in Table 5. (Note: in the comparison of land supply and demand in Table 2-5, the commercial category combines land needs listed as “retail commercial”, “office commercial”, and “public” in Table 2-3.)

Table 2-5. Land Supply and Demand in the Madras UGB from *Madras Urbanization Study Addendum, 2007-2027 and 2007-2057*

Plan Designation	Land Demand		Supply	Surplus (deficit)	
	2007-2027	2007-2057	2007	2007-2027	2007-2057
Residential					
R-1	451.9	1,355.7	398.1	(53.8)	(957.6)
R-2	46.1	138.2	23.5	(22.5)	(114.6)
R-3	148.0	444.0	242.8	94.8	(201.2)
RR5	0.0	0.0	32.7	32.7	32.7
RR10	0.0	0.0	47.5	47.5	47.5
RL	0.0	0.0	38.7	38.7	38.7
Public/Semi-public uses on res land	358.3	770.7	0.0	(358.3)	(770.7)
Subtotal (Residential)	1,004.2	2,708.6	783.3	(220.9)	(1,925.3)
Commercial (Retail & Services)					
C-1	230.6	758.1	80.2	(150.4)	(677.9)
NC	28.6	90.4	4.9	(23.7)	(85.4)
CC	0	0	32.6	32.6	32.6
Subtotal Commercial	259.2	848.5	117.7	(141.5)	(730.8)
Industrial					
I	251.4	749.9	296.9	45.5	(452.9)

Source: ECONorthwest

3. Selection Criteria and Evaluation Process

The final URA recommendation was developed through the following screening and evaluation steps.

1. An initial Urban Reserve Study Area (URSA) was formed by generally drawing a one-mile buffer around Madras' existing UGB – March 2007.
2. The Project Advisory Committee (PAC) used state criteria to review the original URSA and reduce it – May 2007.
3. Public facility (e.g. water, sewer, and schools) and transportation analyses were conducted for the remaining URSA – June to September 2007.
4. A preliminary URA recommendation (dated October 31, 2007) was formed based on state criteria and results of the facility analyses.
5. The preliminary URA recommendation was presented to the PAC, the public, and the Madras City Council and Jefferson County Commission – November 2007.
6. The preliminary URA recommendation was revised according to committee, public, and public official feedback while remaining consistent with state standards and public facilities/transportation analysis results – December 2007.
7. An analysis of the housing and employment productivity of this revised preliminary URA recommendation was conducted and further minor revisions were made in order to yield a final URA recommendation that generally accommodates the amount of land needed for housing and employment over the next 50 years – January 2008.

Issue papers discussing screening and evaluation were prepared for the project and are included in this report as Technical Appendices I-O.

A. Selection Criteria

Developing the URA recommendation has followed state standards for determining URAs. State standards for URAs are established in Oregon Administrative Rule 660 Division 21 (OAR 660-021) (Technical Appendix A). Because the intent of URAs is to identify land most suitable for including in a UGB, the same criteria used to establish priority land for UGBs are used to evaluate URAs. The criteria in OAR 660-021-030 (3) (a)-(c) are based primarily on soil types and productivity.

- 1st priority – non-resource and exception land that is adjacent to UGB, or resource land that is not federally designated as high-value or unique or recognized under Goal 8 and that is adjacent to the UGB and surrounded by non-resource or exception land;
- 2nd priority – “marginal” lands according to ORS 197.247; and
- 3rd priority – farm or forest land (land with poorer soils being higher priority).

There are no marginal lands as defined by state law in Jefferson County, so only the first and last of these criteria apply. The rule also includes an exception to these criteria for

land that is lower priority but “reasonably” able to provide public services/utilities. This means that lower priority land may be designated URA before higher priority land when a reasonable argument can be made for providing public services or when lower priority land must be included in order to reach higher priority land. For example, in a sewerage drainage basin, lower priority land that is closer to the existing UGB may be designated URA in order to reach higher priority land that is farther away in the same drainage basin.

Public Facilities

Because of the importance of public facilities in identifying urban reserves and in justifying exceptions to the criteria in OAR 660-021, evaluations of public services should be made as objectively as possible. Specific criteria related to public facilities that are proposed for evaluating the Madras URSA, in order of importance, are as follows:

- **Sewer Serviceability** – The cost to treat sewage is considered to be the same for all study areas, so treatment will not be used in the evaluation. Study areas that can convey flow to the City’s new sewage treatment plant via gravity will be considered more favorably than areas that require sewage to be pumped. Study areas that require existing sewer lines to be expanded will be assessed the full cost for such upgrades. The city’s old treatment plant is at capacity and no expansion is expected at that facility. Diversion of existing flow to the old plant, which would free up treatment capacity for undeveloped land, will be considered only when such diversions are consistent with adopted master plans.
- **Transportation** – Study areas whose projected transportation impact carries the lowest mitigation cost will be viewed more favorably than areas with higher mitigation costs. Indirect impacts to existing facilities also will be considered in the analysis. The evaluation will consider impacts to higher-order state, county, and city transportation facilities. Study areas that impact higher-order road classifications, especially state highways, will be considered less favorable than areas that impact local transportation facilities. The analysis will assess land use impacts on a like-for-like basis. For example, areas suitable for industrial uses will not be compared against areas suitable for residential use. Transit serviceability is not a significant factor in Madras because all areas can be served equally well with the types of public transportation services envisioned in the planning period.
- **Water Service** – Madras is blessed with an abundant water supply and development of that supply affects all study areas equally. Likewise, water storage is not a significant factor for selecting urban reserve areas because all study areas can be served from existing pressure zones and DVWD has enough land at existing storage sites to meet this need. Preference, therefore, should go to study areas with lower marginal costs for transmitting potable water supply.
- **Airports** – Madras has adequate land designated for airport use. There is a “clear zone” designated around the airport to allow for safe and efficient airport operations and to protect surrounding uses. Given the height and use constraints posed by this zone, development in the airport area is limited to the existing planned uses.

- **Schools** – Study areas that have land that is owned by the school district or is secured through a binding agreement with the school district will be considered more favorable than areas where the district must acquire school sites.
- **Parks** – Land that is suitable for parks and is already owned by a park provider will be considered more favorable than areas where park sites must be acquired.
- **Other Critical Public Service Facilities** – These include facilities such as sewer ponds or lagoons. Study areas that include land that is already identified or dedicated to these purposes will be considered more favorably in developing the URA recommendation.

B. Evaluation Process

The evaluation process used to form the URA recommendation can be described step-by-step. The public involvement elements of the process are addressed in more detail in Technical Appendix H.

1. *An initial Urban Reserve Study Area (URSA) was formed by generally drawing a one-mile buffer around Madras' existing UGB.*

The original URSA was drafted by drawing a one-mile buffer around the existing Madras UGB. Parcels within or partly with that line, and exception land adjacent to it, were included in the study area. Land already within the City of Metolius UGB was excluded from the study area. The original URSA included about 13,000 acres and was divided into seven sub-areas of about 1,800 acres each. That was more than four times more land than was estimated as needed over the next 50 years in the *Madras Urbanization Study* (about 3,110 acres). See Figures 3-1 and 3-2 for maps of the original URSA.

2. *The Project Advisory Committee (PAC) used state criteria to review the original URSA and reduce it.*

The PAC met on May 2 and May 24, 2007, to evaluate the original URSA. They reviewed data layers for soil classification and high-value crop lands provided by Jefferson County Geographic Information System (GIS) in order to identify properties with the lowest priority for inclusion in the URA according to state criteria. In addition, land in Study Area 7, which comprises the Madras Airport and nearby industrial properties, was excluded from further analysis because of aviation regulations and sewer capacity limitations.

The revised URSA (Figure 3-3) included non-resource “exception” land and land zoned Exclusive Farm Use (EFU) but is not high-value crop land or has a USGS soil class rating of 6 or higher. The availability of irrigation was considered in the analysis. The revised URSA included about 7,000 acres, or about twice as much land as is needed to meet the 50-year urban reserve need identified in the *Madras Urbanization Study*.

3. *Public facility analyses were conducted for the remaining URSA.*

Subconsultants were contracted to analyze the sanitary sewer, water, and transportation impacts of developing land in the revised URSA. There was a general land use scenario and set of development conditions assumed for these analyses. (See Figure 3-4 and Technical Appendix F, Development Assumptions and Constraints.) The following are summaries of their findings, with an additional general analysis of school sites. The complete public facility analyses are included in this report as Technical Appendices D and E.

Sanitary Sewer – Sewer service was analyzed for relative cost, service efficiency, and functional sequencing compared to other parts of the URSA. The geographic unit for analyzing sewer service was by drainage or catchment basins, which are shown in Figure 3-4. The analysis concluded that urban expansion would be most efficient if it proceeded from areas in close proximity to the new South Wastewater Treatment Plant (SWWTP) first and gradually moving outward, favoring a gravity collection system. The table entitled “Catchment Area Rank by Proximity to Existing and Projected Water & Sewer Utilities” in Technical Appendix E (Municipal Services Analysis) ranks the catchment areas and the top 16 of these areas total about 3,000 acres, shown in Table 3-1.

Table 3-1. Top 16 Ranked Catchment Areas by Proximity to Existing and Projected Water and Sewer Facilities

Rank	Urban Reserve Study Area	Catchment Area	Total Water & Sewer Cost (\$)	Est. W&S Cost Per Dwelling (\$/Dwelling)	Acres	Cumulative Acres
1	3&4	206	\$1,851,703.43	\$6,626.25	79.9	79.9
2	4	186	\$369,773.57	\$21,657.22	9.2	89.0
3	3&4	207	\$450,292.95	\$87.76	24.9	113.9
4	4	211	\$443,506.24	\$3,307.93	47.7	161.6
5	3&4	212	\$2,988,069.84	\$3,912.71	331.1	492.7
6	4	210	\$3,267,331.67	\$3,040.51	394.7	887.4
7	3&4	214	\$1,092,184.86	\$4,850.10	91.3	978.7
8	2&3	179	\$1,814,116.83	\$4,432.24	112.9	1,091.6
9	6	178	\$56,204.75	\$11,958.46	1.3	1,092.9
10	4	188	\$1,214,899.57	\$6,685.08	116.4	1,209.3
11	3	222	\$508,559.14	\$75,751.56	9.2	1,218.4
12	2&3	180	\$3,604,877.32	\$20,283.31	444.7	1,663.1
13	3	223	\$2,428,041.88	\$2,619.04	441.9	2,105.1
14	3&4	221	\$1,637,851.29	\$2,482.39	346.3	2,451.4
15	3	224	\$1,084,335.27	\$4,959.42	124.4	2,575.8
16	3	203	\$3,715,292.27	\$3,062.68	388.6	2,964.3

Source: David Evans & Associates

All URSAAs are considered serviceable but areas in which sewage must flow first to pump stations and conveyed to the new SWWTP were considered lower priority because of higher energy and operating costs. This includes most catchment basins in URSAAs 1, 5, and 6.

Water – The availability of water supply, cost of water storage, and the cost of water delivery were analyzed for water service. Deschutes Valley Water District (DVWD) was assumed to be the water provider for all parts of the URSA, and according to data from DVWD, there would be no supply constraint for urban development in the URSA. It was also found that the whole URSA could be supplied with water at adequate pressure and with adequate storage to meet peak demand, assuming storage is expanded at existing locations or new storage is built at select tie-in points in the urban area. Significant expansion of the District’s distribution system would be necessary to serve urban demand in every URSA. It was concluded that while the cost to serve some URSA is less than others, the marginal cost differences between the URSA were not significant.

Transportation – Transportation impacts were evaluated according to estimated trip generation, trip on the state highway system, conceptual internal roadway costs, and the number and mitigating nature of planned infrastructure projects. Generally, Study Areas 5 and 6 ranked highly because of their small size and Study Areas 3 and 4 because of the limited impact on state facilities and planned transportation improvements in those areas. However, some exception land in Study Area 5 has access restrictions to US 97. Study Area 6 is relatively isolated from the rest of the URSA and development there will have impacts on a future state truck-bypass facility. Study Areas 1 and 2 were found to have relatively few local circulation options and significant impacts on state highways US 26 and US 97.

Schools – School site acquisition costs were presumed to be the same throughout the URSA unless the school district already owned sites or had a binding commitment of land from a property owner for a future school site. There are two sites that the Madras School District either already owns or has received a commitment to dedicate the land for school use: the Loucks Road Property, 67 acres that the district owns, 42 acres of which are in Study Area 2; and the Yarrow School Site, a 20-acre site in Study Area included in the Yarrow master plan that the developer will dedicate this land to the district once that part of the plan is developed. In addition, there is currently capacity at Westside Elementary School. However, it is expected that infill and build-out of the existing Madras UGB on the west side will demand the school’s remaining capacity. The district does not own any additional land on the west side and hesitates to consider land west of the future truck by-pass because of the difficulty of getting school children across that roadway. A general school facilities analysis is provided in this report as Technical Appendix G.

4. A preliminary URA recommendation (dated October 31, 2007) was formed based on state criteria and results of the facility analyses.

At its October 22, 2007 meeting, the PAC reviewed the public facility analysis findings and drew a preliminary URA recommendation on poster-size maps using the revised URSA as a starting point. The committee eliminated land from the revised URSA that was either EFU or was outside the three-tiered priority system for sewer service. The preliminary URA boundary primarily consisted of lot lines, but included

catchment basin boundaries in Study Areas 2 and 3 where lots are large and feature significantly different serviceability over the span of one lot.

The preliminary URA recommendation (dated October 31, 2007) included 4,120 acres (Figure 3-5). URAs are not required to identify intended future land uses when they are adopted. However, in order to assess whether or not enough suitable land for planned land uses, such as employment – heavy industrial in particular – is included in the URA, the consultant team developed assumptions for future land uses in the preliminary URA. Given development assumptions and constraints discussed in Technical Appendix F, housing and employment productivity of the preliminary URA recommendation was estimated. That analysis showed the preliminary recommendation would provide land for about 10,200 housing units, approximately 1,200 units more than projected as needed for the next 50 years in the *Madras Urbanization Study*. (See Table 3-2, Employment and Housing Productivity of URA Recommendations.)

For employment uses, the preliminary URA recommendation included approximately 300 acres of potential employment (commercial and light industrial) land based on general site characteristics. These characteristics include large lot size, minimal slope, and proximity to potential residential neighborhoods that permit the land to function efficiently as service centers for land inside the UGB and URA. Assuming a need of 180-200 acres for commercial development, about 100 acres would be left for light industrial purposes. The overall need for industrial land over the next 50 years, however, is 450 acres which leaves a deficit about 350 acres of industrial land in the preliminary URA.

5. The preliminary URA recommendation was presented to the public and the Madras City Council and Jefferson County Commission.

Notes from the public forum held November 6, 2007 and the joint work session of the City Council and County Commission held November 20, 2007 are included as attachments to Technical Appendix H, Public Involvement and Comments. At the public forum, many property owners in rural subdivisions in the preliminary URA did not approve of being included in the URA. Similarly, Council and Commission members asked whether the rural subdivisions could be excluded from the URA because of inefficient development potential and serviceability. The Council and Commission also inquired about the possibility of reconsidering land in the airport area (Study Area 7) for inclusion in the URA exclusively for industrial uses.

To estimate the effect of the rural subdivision exception land on the size of the URA and the housing productivity, this land was removed from the preliminary URA recommendation as an experiment. The results of this are shown in the map dated November 16, 2007 (Figure 3-6) and the spreadsheet in Table 3-2.

However, exception land is given the highest priority for inclusion in a URA according to state rules, and although the preliminary URA recommendation was

revised following the public meeting and joint work session, the exception land was retained in the recommendation. The changes made to the preliminary URA recommendation dealt with reducing the surplus of land in the recommendation, which could accommodate about 1,200 housing units more than needed according to the *Madras Urbanization Study*. To resolve this, the consultant team recommended removing about 300 acres from the preliminary recommendation. The adjustment excluded two EFU parcels on the eastern edge of Study Area 2 and, using Grizzly Road as a boundary, excluded range land south of the road in Study Area 3. The revised URA recommendation is attached to this report as Figure 3-7 (dated November 30, 2007).

6. *The preliminary URA recommendation was reviewed in light of public and public official feedback and revised consistent with state standards and public facilities analysis results.*

At its December 3, 2007 meeting, the PAC upheld its previous position to follow state rules for including exception land as the first priority lands in the URA despite questions to this approach raised by the public and local officials. The PAC recommended that policies be adopted in the Madras Comprehensive Plan that establish a process for bringing land from the URA into the UGB. The policies, which are consistent with existing city policy, would require master planning for urban services (water, sewer, roads, schools, etc.) and proposed urban zoning that addresses identified land needs. This would ensure that properties whose existing development pattern does not lend itself to urban conversion would be unlikely to come into the UGB before properties more suitable to urban conversion.

After reviewing the revised preliminary URA recommendation map (Figure 3-7), the PAC found pointed out that land south of Grizzly Road that was removed from the recommendation, in catchment basins 223 and 224, rated higher for sewer serviceability than land in southeast Study Area 3 that was included in the recommendation (Technical Appendix E). So land south of Grizzly Road was added back into the recommendation in exchange for land at the eastern edge of the Study Area 3. The PAC also recommended that the URA boundary not rely on estimated catchment basin boundaries and instead follow either tax-lot lines, roads, or quarter section lines (i.e. lines that can be more easily defined in a boundary description).

There was significant discussion about whether or not to address needed industrial land, especially land reserved for large scale heavy industrial uses, in the URA. The PAC considered land within the airport plan area, but Federal Aviation Administration (FAA) regulations prohibit the City from selling parcels in the Airport Management (AM) zone, even if for compatible industrial uses. Leasing might work for small scale projects, like the ones in the business park, but not for large projects. Land east of the airport across US 26 was considered but found lacking because it is zoned EFU and does not have rail access. Land south of the airport AM zone was considered to have significant transportation constraints and to conflict with existing open space uses. The PAC also discussed options for rezoning land inside the City's

existing UGB for industrial uses and land on the western edge of the UGB near the rail road. These options were thought to have the strongest potential for meeting long-term industrial land needs. However, the PAC decided they did not have enough information at had to make a recommendation on how to meet the 50-year industrial land need so they decided to leave the issue unresolved, with the understanding that there is enough land inside the current UGB to meet projected needs for the next 20 years. The PAC recommends that a separate industrial land needs evaluation be initiated between the City, County, and regional economic interests to address this issue.

7. Final revisions were made to the revised preliminary URA recommendation following the PAC meeting and the housing and employment productivity of the URA recommendation was updated. A final URA recommendation was produced that generally accommodates the amount of land needed for housing and employment over the next 50 years.

At its December 3 meeting, the PAC had directed the consultant team to make any necessary adjustments using the state criteria, sewer serviceability, and tax-lot and quarter section lines to produce the final boundary. Those revisions involved minor adjustments in Study Areas 2 and 3 on land designated as range land that can be served with gravity sewers.

Following these last revisions, housing productivity was recalculated (Table 3-2) and the final URA recommendation map was created, dated December 17, 2007 (Figure 4-1). The final URA recommendation generally includes enough land to meet forecast housing, commercial employment, and some light industrial land needs. The recommendation provides for about 170 units less than the housing target, but it is reasonable to expect that minor increases in densities and the potential for future mixed-use developments can make up this need. At the margin, the 170-unit “shortage” represents less than 2% of the forecast housing need (9,042 units).

4. URA Recommendation

The previous section of this report describes the selection criteria and evaluation process used in forming the final recommendation. The URA recommendation is designed to include enough land for general housing and employment projections for the next 50 years. The Madras Urbanization Study estimated the following housing and employment needs for the next 50 years.

- 9,042 housing units;
- 730 acres of commercial land (550 acres in sites 2 acres and smaller and 180 acres in sites larger than 2 acres); and
- 450 acres of industrial land.

The final URA recommendation is shown in Figure 4-1 (dated December 17, 2007) and the amount of housing and employment it can approximately accommodate is summarized in Table 3-2. The development assumptions used in calculating the housing and employment productivity are discussed in detail in Technical Appendix F (Development Assumptions and Constraints). The following is a summary of those assumptions and constraints.

- Employment land – land with slopes over 5% and floodways are not suitable for this use
- Residential lots 5 acres and larger –
 - Slopes over 25% and floodways are undevelopable
 - Remaining land develops at 4.5 units/gross acre
- Residential lots less than 5 acres –
 - Develops at 1 unit/gross acre
 - Reduce by existing housing, which was assumed to be 1 unit/lot

As a result, the final URA recommendation includes enough land to accommodate almost all of the target of housing units (8,875 of 9,042 units) and roughly 300 acres of buildable land for employment uses. The land in the URA deemed suitable and buildable for employment uses could meet the need for the approximately 180 acres of retail and office commercial land (in sites larger than 2 acres) and 120 acres of light industrial land. This leaves a need for approximately 330 more acres of industrial land; long-term industrial land needs are discussed in the following section of this report. The remaining approximately 3,150 acres that are included in the URA recommendation are assumed to be for housing and related public and semi-public facilities, including schools, parks, churches, fraternal organizations, and undeveloped open space.

5. Future Planning Steps and Opportunities

With adoption of the Madras URA, the city and county have established future geographic expansion areas for the urban area but additional planning remains before these lands may be urbanized. The additional steps involve completing land use planning for urban reserve land brought into the urban growth boundary in accordance with state law. The city and county also may wish to develop guiding principals for how Madras develops in urban reserve areas so that preferred locations for neighborhood commercial districts, employment districts, open space preservation and other urban form issues are documented to provide guidance to future planning efforts. Finally, the URA recommendation contained herein does not address the city's long term need for large heavy industrial development sites. The following discussion reviews options for addressing these needs.

A. Completing the Urbanization Planning Steps

There are several important issues that the city and county should address regarding how land use planning in urban reserve areas is completed so it may be brought into the Madras UGB. First, the existing Madras Comprehensive Land Use Plan policies should be clarified for how frequently the city will examine the land supply inside the UGB. An analysis is needed periodically to ensure an adequate inventory of developable land is maintained. The city and county may favor that the examination be taken up by public initiative while private parties may wish to be granted the opportunity to examine the available supply. A clear policy would be helpful.

By statute, 20-years is the required supply target for residential lands in UGBs; however many jurisdictions find it impossible to assure year by year compliance with this target because of the time and expense to analyze demand and supply relationships. Moreover, requests to add land to the UGB in small increments by individuals combined with state rules that allow UGB amendments of less than 50 acres to occur without state approval may result in incremental expansion that makes the land inventory difficult. To minimize the time and expense associated with tracking the urbanizable land supply, many cities have elected to examine the land supply issue on a fixed interval, for example once every five years.

A city also may establish limits on UGB annexation requests by private property owners provided plan policies establish clear standards of review. For example, a city and county might adopt a policy that says they will examine the UGB land supply not more than once every five years unless certified population estimates exceed forecast growth rates or by mutual agreement of both jurisdictions. The city and county also may wish to adopt a policy that limits requests for quasi-judicial UGB amendments to less than 50 acres except in years when a comprehensive land supply review is scheduled. Draft policies that address this question are included in this report in Section 5.

Second, the city and county should establish guidance for completing planning on land added to the UGB. Adding land to the UGB in response to a specific need does not

complete the planning process. Land use decisions are needed regarding the type of zoning that will be placed on the land and how transportation, public facility, recreation, natural hazards, open space, historic and natural resources, and other statewide planning goals are addressed. Madras Comprehensive Plan Policy 14.D. says, in effect, that land brought into the UGB should be master planned, but neither the plan or development regulations specify how that should be done.

This required step has been solved using different approaches statewide. In the Portland area, after land is added to the regional UGB, revenue from a local real estate transfer tax is used to prepare “sub area plans”. Metro contracts with planning firms to complete the planning steps so for the most part the work is financed by public initiative, but in a few cases property owners have banded together to prepare their sub-area plan.

Conversely, in Redmond, Oregon completing the urban planning process is largely a private responsibility. After land is added to the UGB, it is placed in an urban holding zone that limits development until an “area plan” is adopted. The area plan completes the urban planning steps. Area plans must cover at least 100 acres to encourage plans with a “neighborhood” scope. Redmond’s area planning guidelines outline the topics that need to be addressed and their review standards. The city prepared two area plans on a demonstration basis to show the level of detail it expects from these plans. This has led property owners to band together and share expenses for developing area plans for new neighborhoods.

The City of Newburg, which has been working with URAs longer than any other jurisdiction in the state, does not have a specific policy framework or codified procedure for completing the planning process. For the most part, the City takes on this role. Part of their process includes planning for the URA when long range plans are updated. For example, the city updated their TSP in 2003 and they included all the URA land in the TSP. Now, when processing a UGB amendment request, they use the TSP to inform applicants about needed transportation improvements. The city used this same approach with sewer and water plan updates and with some natural resource planning, including wetland and waterway inventories. For other Goal 5 resources, Newberg requires each applicant to inventory significant resources on their property and then uses their Goal 5 program to protect those sites. This approach has the advantage of letting the planning occur incrementally. However, when an applicant proposes a different land use from the assumed use in long range city plans, the applicant either must analyze the marginal differences and develop appropriate solutions for their land use proposal, or modify the planned use.

The draft policies in Appendix _ generally follow the Redmond model. The city and county should discuss the recommended approach and agree on a policy framework. That need not occur right away; the parties may proceed with plan amendments that establish the URA and postpone action on policies and procedures that clarify how the urban planning steps will be completed until a later date. This is an important issue, however.

Third, while the recommended URA boundary meets state law for selecting which land to include in the Urban Reserve, not all of the land is equally ready to convert to urban use. Rural residential subdivisions north and south of Madras are prime examples. The existing development pattern in these subdivisions is 1.5 to 2 acre lots with most homes sited in the center of each lot. The homes are relatively new – the land was platted and developed within the last 20 years. The land value to improvement value ratio on virtually all of these lots favors the improvement value, which suggests it will be some time before the owners have an economic incentive to redevelop their property. The County sanitarian has documented few problems with septic drain fields and these properties are connected to a public water supply, so well contamination is not a concern. In today's real estate economy, it appears unlikely if this land were immediately annexed to the UGB that it would redevelop at urban densities within 20 years.

Madras desires urban growth boundary additions that will deliver development within a 20-year planning horizon and to ensure the city's supply of developable land is not constrained. To help ensure that land added to the UGB from the urban reserve areas will genuinely augment the supply of urbanizable land, the policies in Section 5 of this report were designed to favor annexation of large undeveloped properties first. The requirement that property owners to band together and share expenses to complete planning for all applicable statewide planning goals and securing agreement on city annexation should favor larger holdings and land that is more economical to serve.

Finally, coordinating land use planning for expanding an urban growth boundary is a county responsibility. The policies and procedures for adding land to the Madras UGB from urban reserve areas should be made part of the Madras Comprehensive Land Use Plan, which is adopted jointly by both the city and county and implemented through a cooperative urban growth management agreement (UGMA). The city development code may be used to refine submission requirements for UGB related land use applications. The adoption of urban reserve areas affects this process but the existing city/county UGMA need not be acted upon at this time because the city has a 20-year supply of land in its UGB. The city and county, however, should take immediate steps to work on updating and amending the UGMA so that when the need arises to add land to the UGB from urban reserves, procedures are in place to guide the process.

B. Future Land Uses in URAs

This issue relates to managing expectations for the future distribution of land uses in urban reserve areas. The Urban Reserve Area Overlay zone that Jefferson County will use to regulate land use in the urban reserve only applies to rural property outside the UGB. All land in the URA is treated the same and other than limiting land divisions to 10 acres and imposing some added restrictions on land uses, the underlying rural base-zone still guides land use decisions in the URA.

During the analysis of the urban reserve study areas, the consulting team identified properties within the URA that were considered most suitable for certain types of land use. For example, large parcels approximately 1-mile from downtown with gentle

topography surrounded by land likely to be developed for residential use and was considered suitable for neighborhood commercial or office/professional/light industrial uses. Also, land with development constraints because of steep slopes or in a mapped flood hazard area was treated as open space in the analysis. The Jefferson County URA plan designation and overlay zone provides no guidance regarding future urban land use assumptions or how to plan ahead for when the land is brought into the UGB.

The City of Redmond addressed this problem by adopting a non-binding “*Framework Plan*” that provides, in very general terms, a vision for their urban reserve areas. Go to Redmond’s Framework Plan map at:

<http://www.ci.redmond.or.us/internet/content/view/198/255/>.

Redmond’s *Framework Plan* is not parcel specific; urban design concepts are displayed using symbols, colors, and text descriptors. The *Framework Plan* is referenced in the Redmond Comprehensive Land Use Plan as an advisory document, however, and it is not a formal element of the plan. It was adopted only by city resolution so it may be modified when new information emerges about urban land use needs and development trends. The city requires property owners to consider the *Framework Plan* when they begin working the area plan that will establish urban zoning and enable urban uses on their property. The *Framework Plan* provides property owners and decision makers some guidance regarding expectations for the distribution of land uses in urban reserve areas.

We recommend that Madras and Jefferson County work to develop a conceptual land use plan for Madras Urban Reserve Areas. The concept plan may reflect the development aspirations of property owners but it also should balance long term needs for the community as a whole to ensure that future development occurs in a manner that is compatible with existing and planned development patterns. The concept plan also may identify general goals for urban form, such as encouraging development on south facing slopes and retaining open-space on steep north-facing slopes to make better use of solar orientation. The point is to keep the concept plan general enough to allow flexibility for individual property owners but to also provide guidance for future decision makers so that unique sites and specific needs are taken into account when detailed land use plans are prepared in the future.

C. Long-Range Industrial Land Needs

The 2007 Madras Urbanization Study determined that the city has enough industrial land inside the UGB to meet land needs for more than 20-years but not enough to meet needs over a 50-year planning horizon. The PAC examined industrial land needs and considered comments from the public and elected officials for how best to address this long term need. One of the difficulties in doing this is that the Urbanization Study does not forecast land needs for light industrial and heavy industrial uses. All industrial needs are grouped under one acreage estimate. That figure, net of existing developable industrial land inside the UGB, is around 450 acres.

The consultant team tried several approaches to address long term industrial land needs. First, the team considered designating land south of Madras adjacent to US 97 and to Culver Highway (OR 361) for industrial uses. Properties in this area had desirable attributes for industrial development including transportation access and level ground. But these sites also include high-value farm land.

Next, the team evaluated land to the east of the Madras airport. The PAC agreed this land met some location criteria for industrial land, including truck access and relatively level ground, but rail access was considered impractical. Committee members also noted that the land is zoned EFU and if irrigated could be highly productive farm land.

The PAC discussed the potential for meeting its heavy industrial land need within the airport complex but discarded this option because federal rules prevent the city from selling the land. They also considered land on the city's west side between the rail road tracks and existing city boundary. There is an existing industrial reserve in this area and enough room for a rail siding. Industrial uses in this area would provide a buffer between high-value farmland west of the railroad. Sewage from this area would need to be pumped for treatment and some raised conserves about visual impacts.

The PAC also discussed a suggestion that emerged in the Joint City/County Legislative work session that unincorporated land near Hall Blvd in the existing UGB, which currently is zoned for commercial use, be re-planned as an employment district for light industrial and office use. That suggestion, if implemented, would not address heavy industrial land needs, which have special location requirements for transportation access and inter-modal freight linkages that cannot easily be assimilated into developed urban areas as easily as mixed use commercial or office parks or light manufacturing uses can.

After lengthy discussions about the industrial land needs outlined in the Urbanization Study, the PAC decided it did not have enough information to make a recommendation on this issue and elected to defer the matter to a separate planning process. The recommended URA boundary includes enough land to satisfy around 100 of the 450 acres of industrial land need. Those 100 acres presumably will be located in future employment centers that may be in urban reserve areas. The remaining need, some of which should be reserved for heavy industrial use, remains unaccounted for in the URA boundary recommendation.

To resolve this matter, we suggest that the city and county form a separate study group to consider this special land use need. The importance and complexity of this issue should not be underestimated. At one of the joint work session meetings, one official noted that Madras was unable to identify a single large industrial track that could be promoted through the governor's "shovel ready" industrial certification process. Madras has an abundance of small industrial sites but large sites are not available. A major constraint is that while large industrial sites can prove extremely valuable when sold for development, the interim the property owner bears a significant holding cost and the time horizon for when that investment will pay off is uncertain at best.

Figure 1 in Issue Paper #7 (Technical Appendix O – Industrial Land Need) illustrates one of the industrial solutions that was discussed in the URA planning process. The analysis associated with these and other potential industrial sites should be expanded and carefully deliberated to resolve this matter. Technical assistance from the related analysis may be available from Oregon Department of Economic Development, ODOT, DLCD, and from private community assistance foundations.

5. Draft Comprehensive Plan and Code Amendments

A. City of Madras Comprehensive Plan

The following plan and code passages are proposed text amendments for the Madras Comprehensive Plan in order to implement the Madras URA. The language is intended for co-adoption by the City of Madras and Jefferson County. Additions to existing language is shown as underlined and deletions as ~~strikethrough~~.

GOAL 14 - To provide for an orderly and efficient transition from rural to urban land, and to provide for livable communities.

[Paragraph amended by Ordinance No. 781, Passed by Council on December 12, 2006]

POLICIES

A. The City, in cooperation with Jefferson County, shall establish an Urban Growth Boundary.

B. The City, in cooperation with Jefferson County, shall mutually agree to a management plan for the Urban Growth Boundary area.

C. The City, in cooperation with Jefferson County, shall establish an Urban Growth Boundary revision process to be utilized in a proposed change of the Urban Growth Boundary.

D. The City, in cooperation with Jefferson County, shall support adoption of an Urban Reserve Area boundary that, when taken together with land supplies in the Urban Growth Boundary, may contain up to a 50-year supply of land for the City of Madras to support housing, economic development, public facility, and recreation needs.

E. The City, in cooperation with Jefferson County, shall give priority to land in designated urban reserve areas over other land when considering urban growth boundary amendments.

F. The City shall favor UGB amendments that involve land in locations that are suitable to address identified urban land needs in order to minimize buildable land supply shortages and address identified needs. Factors that will be considered when evaluating UGB additions include:

- Existing and planned capacity of the transportation system
- Existing and planned capacity of the city waste water treatment plant
- Existing and planned capacity of the city sanitary sewer conveyance system
- Existing and planned capacity of the Deschutes Valley Water District supply system
- Impacts on schools, parks, and public safety service providers
- Impacts on future operating costs for public facilities and services

G. The City, in cooperation with Jefferson County, shall undertake an evaluation of the urban growth boundary land supply once every five years or more frequently if certified

population growth rates exceed 3.2% in three consecutive years. In the event certified population growth rates fall below 3.2% for three consecutive years, the City and County may agree to postpone the evaluation of UGB land supply for up to three years.

H. During years when a comprehensive UGB demand and supply evaluation is not scheduled, individual applications for adding property to the UGB shall be limited to requests of less than 50 acres. UGB amendment applications must demonstrate consistency with applicable Oregon statutes and administrative rules and be accompanied by information that addresses Policy 14-J below. Applications that involve more than 25 acres also must comply with provisions of Policy 14-I.

D I. The City, in cooperation with Jefferson County, shall encourage the development of complete, livable communities that include characteristics such as: a variety of lot sizes, dwelling unit types and ownership types, open spaces and other recreational amenities, a mix of land uses, school and community facilities, connected streets, proximity to downtown and other employment centers, and development that is scaled to the pedestrian and creates a sense of place. New growth areas added to the UGB should be planned and developed in accordance either with the city Master Planned Community Overlay zone, or an Area Master Plan.

1. A Master Planned Community (MPC) Overlay may apply to large multi-phased development projects where the master plan is intended to guide future development patterns and serves to regulate the site-development approval process. MPC's require generous open space and amenities, and encourage efficient use of land and public facilities and services, a variety of housing types, innovative designs and complete pedestrian-friendly communities. Physical barriers, such as highways, tend to disrupt complete communities and livability because they disconnect areas from downtown and result in an auto-oriented environment of sprawl along highway corridors.
2. An Area Master Plan (AMP) is appropriate for land added to the UGB where the approval of urban development is expected to rely on conventional urban zoning and a conventional development application and review process. An AMP must be prepared for all contiguous properties added to the UGB that are greater than 25 acres and which are not subject to a MPC overlay. An AMP shall encourage efficient use of land, zoning consistent with an identified urban land need, appropriate locations for transportation improvements, public facilities, protection for significant open space, scenic, historic, and natural resource areas. An AMP must show how planned land uses will be integrated with the existing urban development pattern.

J. All land use applications or legislative proposals to expand the Madras UGB must be accompanied by information that documents the following:

1. The proposed urban zoning or land use program for the subject properties;
2. An annexation program for subject properties;
3. Evidence that all public facilities required by OAR 660-011-000 can be provided either through planned system improvements outlined in adopted facility master plans or by supplemental improvements that augment adopted infrastructure plans;
4. Evidence that the proposed zoning or land use plan complies with requirements of OAR 660-0012-0060 either by demonstrating that the planned improvements in the Madras Transportation System Plan (TSP)

- have capacity to meet transportation needs of the proposed zoning or land use plan or that supplemental transportation improvements, which augment the adopted TSP, will meet this need;
5. Evidence that providers of other public facilities - including schools, parks and recreation, energy, health care, etc. - are able to meet the projected demand for their services;
 6. Evidence that development on property constrained by or affected by natural hazards are protecting from such hazards;
 7. Evidence that known or probable significant resources related to open space, scenic areas, historic places or structures, or fish and wildlife habitat with appropriate measures for protecting significant sites.
 8. Evidence that a majority of property owners support the conversion of land to urban uses and that land use regulations and financing for development related public improvements are available that ensure the land can be developed as planned within a 20-year horizon.

B. Jefferson County Comprehensive Plan

The following narrative shows proposed text amendments to the Jefferson County Comprehensive Plan, for adoption by Jefferson County. Additions are underlined, while deletions are shown ~~striketrough~~. Note that the proposed amendments include reformatting this section of the plan. As the document is currently configured, policies sometimes appear unrelated to the subsection in which they are found. For example, the URA section appears to include plan policies 14.1-3, most of which are clearly related to urban growth boundaries, not urban reserves. In addition, some text has the appearance of policy but is not labeled as such. For example, the paragraph and outlined text immediately preceding Policy 14.1, which describes criteria to consider when establishing a variety of plan related boundaries, reads like a formal policy but is not labeled as such. For clarification, when we have proposed relocating existing policies, they are shown with a double underline to distinguish that text from proposed new text.

GOAL 14: URBANIZATION

Goal: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

“Urban Lands” are those places which are inside an urban growth boundary, including lands within an incorporated city.

“Urbanizable Lands” are those places which are within an established Urban Growth Boundary (UGB) but outside city limits which, due to the present unavailability of urban facilities and services or for other reasons, have not been developed to urban densities and uses.

“Rural Lands” are those lands which are outside urban growth boundaries and that are:

1. Non-urban land that is suitable for use as agricultural, forest or open space;
2. Suitable for sparse settlement, small farms or acreage home sites with no or minimal public services, and not suitable, necessary or intended for urban use; ~~or~~
3. In an unincorporated community; or
4. In a designated Urban Reserve Area that is planned to become urban land.

To distinguish between urban, urbanizable and rural lands, the County has approved a variety of boundaries that separate these land types.

Policy 1: Changes to urban growth boundaries, the establishment of new urban growth boundaries or urban reserve areas, incorporation of a new city, or annexation of land into a city which is not in an established urban growth boundary requires an amendment to this Plan and the Zoning Map. The following factors should be used in considering such proposals:

- A. Demonstrated need to accommodate long-range urban population consistent with a 20-year population forecast coordinated with the cities;
- B. Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space;
- C. Orderly and economic provision of public facilities and services;
- D. Maximum efficiency of land uses within and on the fringe of the existing urban area.
- E. Comparative environmental, energy, economic and social consequences;
- F. Compatibility of the proposed urban uses with nearby agricultural activities on land outside the UGB; and
- G. Priority of land as required by ORS 197.298, with the additional requirement that non-irrigated land shall be a higher priority for inclusion in the UGB than irrigated land.

URBAN GROWTH BOUNDARIES (UGB)

Urban Growth Boundaries are established to identify and separate urbanizable land from rural land. Jefferson County contains three incorporated cities which have acknowledged comprehensive plans and urban growth boundaries. The urban growth boundaries were established through a coordinated process between the cities and the County.

The City of Madras Comprehensive Plan, including the UGB and the zoning therein, was originally adopted by the Madras City Council on June 20, 1979. The County adopted same as it pertains to the UGB on June 27, 1979. The Plan was acknowledged by the Land Conservation and Development Commission (LCDC) on January 30, 1980. The Madras UGB has been expanded since that time, most recently in 2003.

The Metolius Comprehensive Plan and implementing ordinances including the UGB were originally adopted by the Metolius City Council on December 11, 1978. The County adopted the program as it pertains to the UGB area on March 15, 1979. The Plan was acknowledged by the LCDC on July 12, 1980. Lands within the urban growth area retained Exclusive Farm Use A-1 zoning.

The Culver Comprehensive Plan and implementing ordinances were originally adopted by the Culver City Council on September 6, 1977. Due to the presence of considerable undeveloped land inside the City, the plan designated the existing City Limits as the Urban Growth Boundary. Therefore the County did not need to adopt a UGB management package for Culver. The LCDC acknowledged the Culver Comprehensive Plan on September 15, 1978. The Culver UGB was expanded in 1997 to incorporate two parcels. The land was given a city Comprehensive Plan Map designation of Park/School/Civic Center, but the zoning remained Exclusive Farm Use A-1. The UGB was also expanded in 2006 to add two parcels on the north side of the city for the future expansion of industrial/manufacturing businesses, and to add 45 acres on the south side of the city for future residential development to accommodate projected population growth. Both areas will remain zoned Exclusive Farm Use A-1 until they are annexed.

Policy ~~42~~: The County should cooperate with each city to determine where and when an urban growth boundary should be expanded.

~~42.1~~ Expansion of an existing urban growth boundary shall be in accordance with state requirements, including the priority of land to be included within the urban growth boundary. Non-irrigated land should have a higher priority for inclusion in the boundary than irrigated land.

~~1.2~~ If requested by a city, the County should cooperate in the identification and mapping of urban reserve areas.

The location of each city's UGB is shown on the following maps.

(Note: UGB maps are not show; no changes to existing UGB maps are anticipated with this plan amendment)

URBAN RESERVE AREAS

Oregon Administrative Rule 660-021 authorizes cities and counties to identify urban reserve areas, which are lands outside a UGB that have been identified as having the highest priority for inclusion in the UGB when the boundary is expanded. Identification of urban reserve areas can aid in long-term planning by preventing small-lot subdivisions or other development that would impede future development at an urban scale.

As of 2006, no urban reserve areas have been identified or mapped in the County. However, the Jefferson County supports the concept of urban reserve areas. The County will adopt and Urban Reserve Overlay zoning district for regulating land uses in ban reserve areas in a manner that facilitates the future conversion of these lands from rural to urban use. and, if When requested by a city, is willing to the County will coordinate with the city in identifying and mapping an urban reserve area and adopting any necessary applying appropriate land use regulations to protect the area for future urban development.

In 2008, Jefferson County approved an urban reserve area in the vicinity of the City of Madras. This urban reserve was originally configured with a 30-year land supply that, when included with developable land inside the Madras UGB, provide a 50 year inventory of land for most urban uses. The Madras URA, however, does not include sufficient land to meet long-term heavy industrial land needs and it may be augmented through a separate action to address this need.

Policy 3: The County will cooperate with each city to determine whether an urban reserve area is appropriate in, if so, what land should be included.

- 3.1 Approval and expansion of an urban reserve area shall be in accordance with state requirements, including the priority of land to be included within the urban growth boundary. Non-irrigated land should have a higher priority for inclusion in an urban reserve than irrigated land.
- 3.2 Land divisions in urban reserve areas should be limited to lot sizes that conform to minimum sizes allowed by state rules or 10 acres, which ever is greater.
- 3.3 Interim development in urban reserve areas will be regulated so as not to interfere with the conversion of these lands from rural to urban use. Land uses that pose a potential nuisance when included in an urban growth boundary will be restricted in designated urban reserves.
- 3.4 Interim development in urban reserve areas will be regulated in a manner that does not encroach within identified road corridors for future urban collector and arterial streets. The County will cooperate with cities to designate future urban road corridors within urban reserves on the County Transportation System Plan map.

The location of designated urban reserve areas are shown on the County zoning map using the symbol for Urban Reserve Overlay (URO).

UNINCORPORATED COMMUNITIES

An unincorporated community is a settlement located outside an urban growth boundary which is primarily made up of land not protected as farm land, range land or forest land. Unincorporated communities include "rural communities", which consist primarily of permanent residences but also have at least two other commercial, industrial or public

land uses; and “rural service centers”, which consist primarily of commercial or industrial uses but have some permanent residences. Unincorporated communities must either have been identified in the Comprehensive Plan before October 28, 1994, or be listed in the 1997 Department of Land Conservation and Development (DLCD) “Survey of Oregon’s Unincorporated Communities.”

The 1997 DLCD Survey lists six potential unincorporated communities in Jefferson County. They include Ashwood, Gateway, Camp Sherman, Crooked River Ranch, Chinook Airport and High Chaparral. In 1997 the Service Community zone was adopted for Ashwood and Gateway, to recognize and provide standards for development of those rural communities; a Rural Service Center zone was adopted to apply to High Chaparral and Chinook Village; and various residential, vacation rental and rural center zones were adopted to apply to the Camp Sherman resort community. Zoning regulations for Crooked River Ranch had been in place since 1987.

OAR 660-022-0070 requires that planning for unincorporated communities be completed by January 1, 1998 or a date specified in a Periodic Review work program. Information from DLCD approving completion of the County’s last Periodic Review indicates that the County had not completed the planning process for unincorporated communities in regards to Ashwood, Gateway, Chinook Airport and High Chaparral. In 2003 High Chaparral and Chinook Village were rezoned from Rural Service Center to Rural Residential. Thus these two areas are no longer considered to be unincorporated communities. Although the planning process may not have been completed for Ashwood and Gateway, they will continue to be zoned Service Community and classified as unincorporated communities. When time allows, the County will consult with DLCD about completing planning requirements for these areas. Camp Sherman will continue to be recognized as an unincorporated resort community, and Crooked River Ranch will continue to be recognized as an unincorporated rural community.

Policy 4: Recognize the importance of unincorporated communities in providing services and housing in identified areas of the County.

4.1 Unincorporated communities should have a compact commercial area to serve the needs of the local area and surrounding rural lands. The size of buildings for commercial uses should be limited to the size permitted by state rule.

4.2 The size and type of industrial uses permitted in unincorporated communities should be small-scale and low impact in order to maintain the rural character of the area. The size of buildings for industrial uses should be limited to the size permitted by state rule.

4.3 Both temporary accommodations and permanent residences should continue to be allowed in the Camp Sherman resort community.

RURAL LANDS

Rural lands should remain rural in nature in order to maintain open space and minimize conflicts with agriculture and forestry. Urban-scale development should be restricted to areas inside urban growth boundaries, where appropriate facilities and services can be provided, unless otherwise permitted such as destination resorts.

Policy 25: Urban development should not be permitted outside of established urban growth boundaries unless an exception to Goal 14 can be justified.

25.1 Commercial uses on rural lands should be small-scale and low impact. Commercial zones outside urban growth boundaries and unincorporated communities should limit the size of buildings for commercial uses.

25.2 Industrial uses on rural lands should be small-scale and low impact. Industrial zones outside urban growth boundaries and unincorporated communities should limit the size of buildings for industrial uses.

Land within the urban growth boundary (referred to as the urban growth area) is considered to be available over time for urban uses. The conversion of urbanizable land to urban uses shall be at the discretion of the city, based on the availability and orderly extension of urban services. Land in the urban growth area should be managed in a manner that maintains its potential for future urban development until such time as public facilities and services are available and the land is annexed into the city.

The County and each city may enter into an intergovernmental agreement establishing procedures and approval authority for land use decisions and other development actions concerning unincorporated lands inside the urban growth area. Absent an intergovernmental agreement stating otherwise, the County has jurisdiction over land use activities within urban growth areas.

Land within an adopted urban reserve area will remain under County jurisdiction, but should also be managed in a manner that will maintain its potential for future urban-scale development.

Policy 36: Land in the urban growth area or adopted urban reserve area should be managed so that it remains available for future urban development.

36.21 Any proposal to rezone land within an adopted urban reserve area or in close proximity to the urban growth area should take into consideration potential future urban uses. Minimum lot sizes in these areas should be at least ten acres in order to allow the future subdivision of the land at an urban density.

C. Jefferson County Development Code

The following proposed text amendments to the Jefferson County Development Code describe a new zoning overlay district that would be applied to land in designated urban reserve areas. Proposed new language is in underline, language to be deleted is in ~~strikethrough~~.

Section 323 – Urban Reserve Area Overlay Zone - (URA)

323.1 Purpose:

The urban reserve area contains lands that have been identified for future inclusion in the urban growth boundary and eventual annexation and development for urban uses. The purpose of the Urban Reserve Area Overlay Zone (URA) is to protect land within the urban reserve area from patterns of development that would impede future urbanization.

323.2. Applicability

- A. The provisions of this section apply to urban reserve areas as identified on the Jefferson County Zoning Map. These provisions shall remain in effect until such time as the land is included in the urban growth boundary.
- B. In a URA Zone, the requirements and standards of this section apply in addition to the requirements of the underlying zone. Where there is a conflict between regulations, the more restrictive shall apply.

323.3 Allowed and Prohibited Uses

All uses allowed in the underlying zone are allowed in the URA Zone subject to the approval criteria and procedures specified in the underlying zone, except for the following, which are prohibited:

- A. Feedlots, dairies and other farm uses that create, or require farming practices that create, odors, dust, noise or other conditions that would extend into an urban growth boundary in a manner that would interfere with lands within the urban growth boundary.
- B. Zoning Map amendments to change the zoning of nonresource land or land in an exception area if the amendment would allow more intensive uses or higher residential density.
- C. The exploration for, production of, mining or processing of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005.
- D. The exploration for, processing, mining, crushing or stockpiling of aggregate and other mineral and subsurface resources.
- E. Hunting and fishing preserves.
- F. Campgrounds.
- G. Personal use airport for airplanes and helicopter pads.

H. Commercial utility facilities for the purpose of generating power for public use by sale.

I. Solid waste disposal sites.

323.4 Minimum Lot Size

The minimum lot size for new lots and parcels in a URA Zone shall be ten (10) acres except when the underlying zone requires a larger minimum.

323.5 Development Regulations

A. New dwellings and accessory buildings shall be clustered within an area not exceeding ½ acre (21,780 square feet) of the lot or parcel.

B. New buildings, structures and other improvements shall be sited on lots and parcels in a location and manner consistent with any approved Conversion Plan for the area.

C. Development shall be sited in a manner that will not interfere with the creation of new roads, or the extension of existing roads or utilities, shown in any adopted Transportation System Plan, Urban Reserve Area Plan or public facility plan for the area. When a new or extended road is proposed in an adopted Transportation System Plan or Urban Reserve Area Plan, buildings and structures shall be set back at least 50 feet from the identified or most likely right-of-way location.

D. Prior to issuance of building or septic permits for the development of land within the URA Zone, the property owner shall sign and record in the deed records for the County an Irrevocable Consent to Annex to the City, which shall be binding on the landowner and the landowner's successor's in interest.

There are additional regulations related to URA development. Proposed new language is in underline, language to be deleted is in ~~strikethrough~~:

Section 703.2:

O. A tentative plan to create new lots or parcels less than twenty acres in size in an Urban Reserve Overlay Zone, or to create lots or parcels less than ten acres in size within an established urban growth boundary, or ~~urban reserve area~~ shall include a Conversion Plan showing how the subject property can be divided and developed at densities allowed by the most likely future city zone, including provisions for right-of-way, street and utility extensions in conformance with the city's future development and transportation plans. The applicant shall submit a copy of the Conversion Plan to the city for comments prior to submitting the tentative plan to the county. The city's comments as to whether the Conversion Plan complies with the city's future development plans shall be submitted

with the tentative plan. The tentative plan will not be approved if the city indicates that the division will interfere with future urban development or transportation plans. Existing and future structures and other improvements will be required to be sited on lots or parcels in a location and manner consistent with the Conversion Plan.

Section 105 – Definitions:

Conversion Plan: A drawing showing how a property can be divided and developed at an urban density, including provisions for streets and utilities.

Figure 3-1. Original Madras Urban Reserve Study Area, With One-Mile Buffer

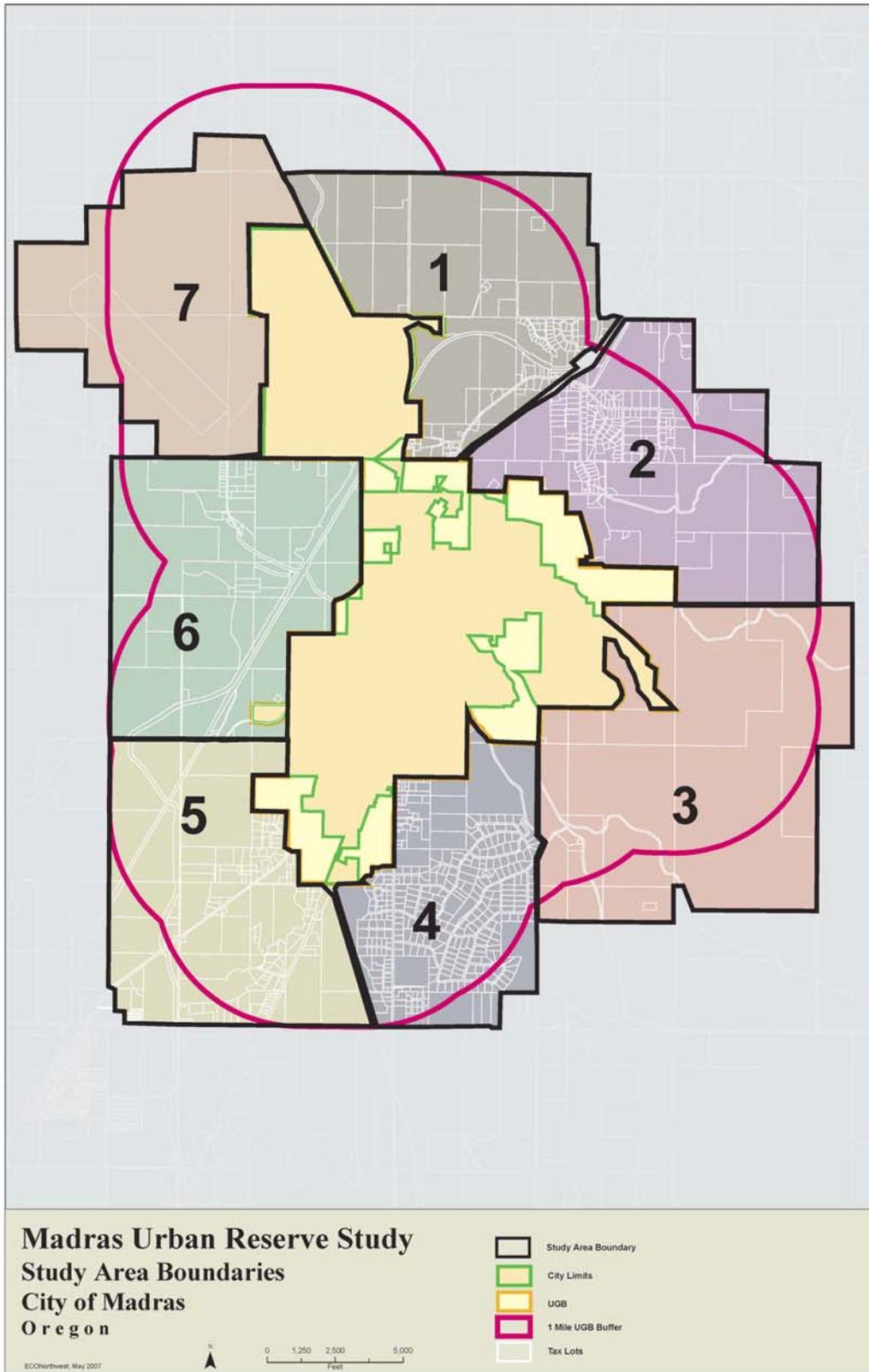


Figure 3-2. Original Madras Urban Reserve Study Area, With Acreage

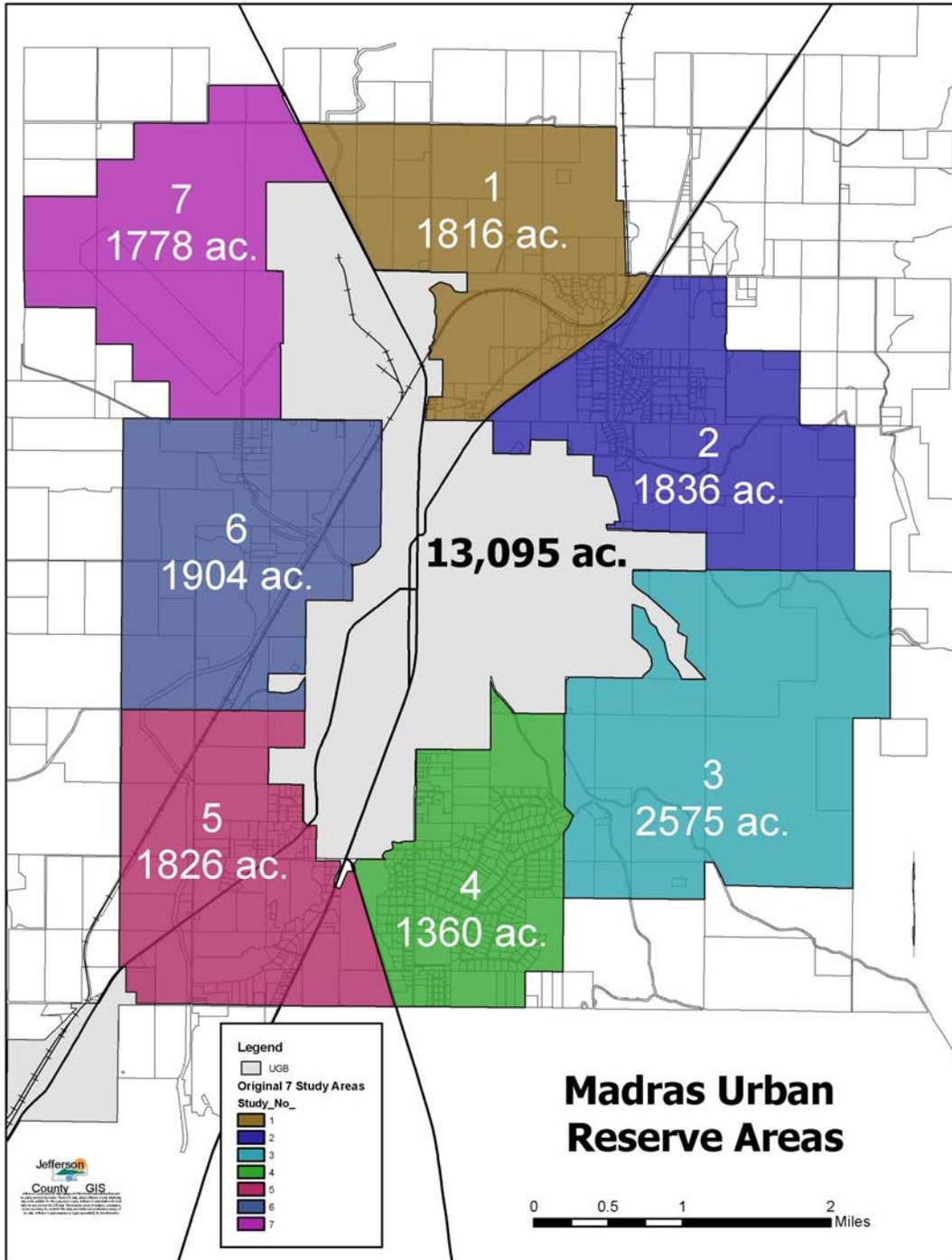


Figure 3-3. Revised Madras Urban Reserve Study Area

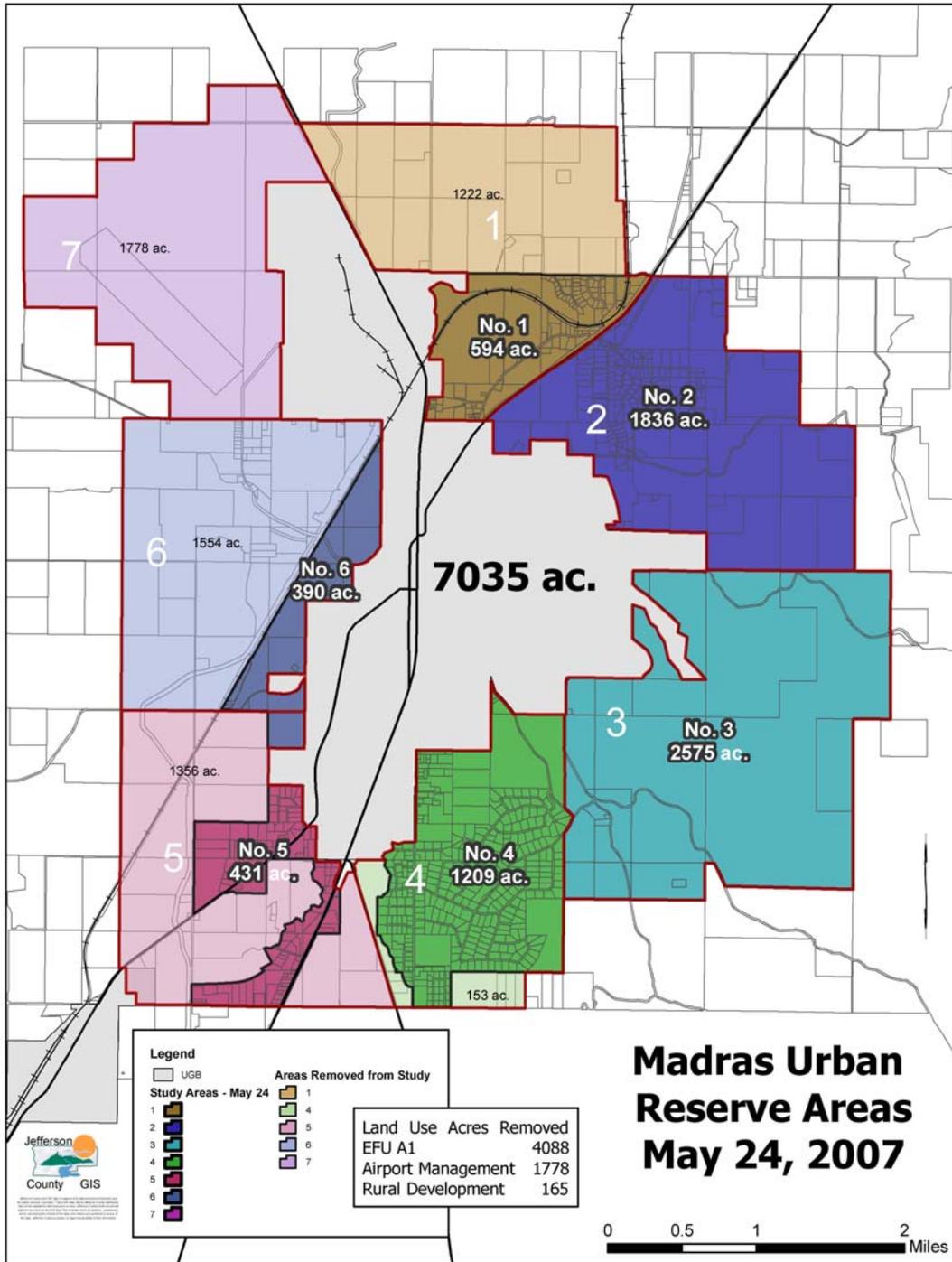


Figure 3-4. Land Use Scenario for Public Facility Analysis

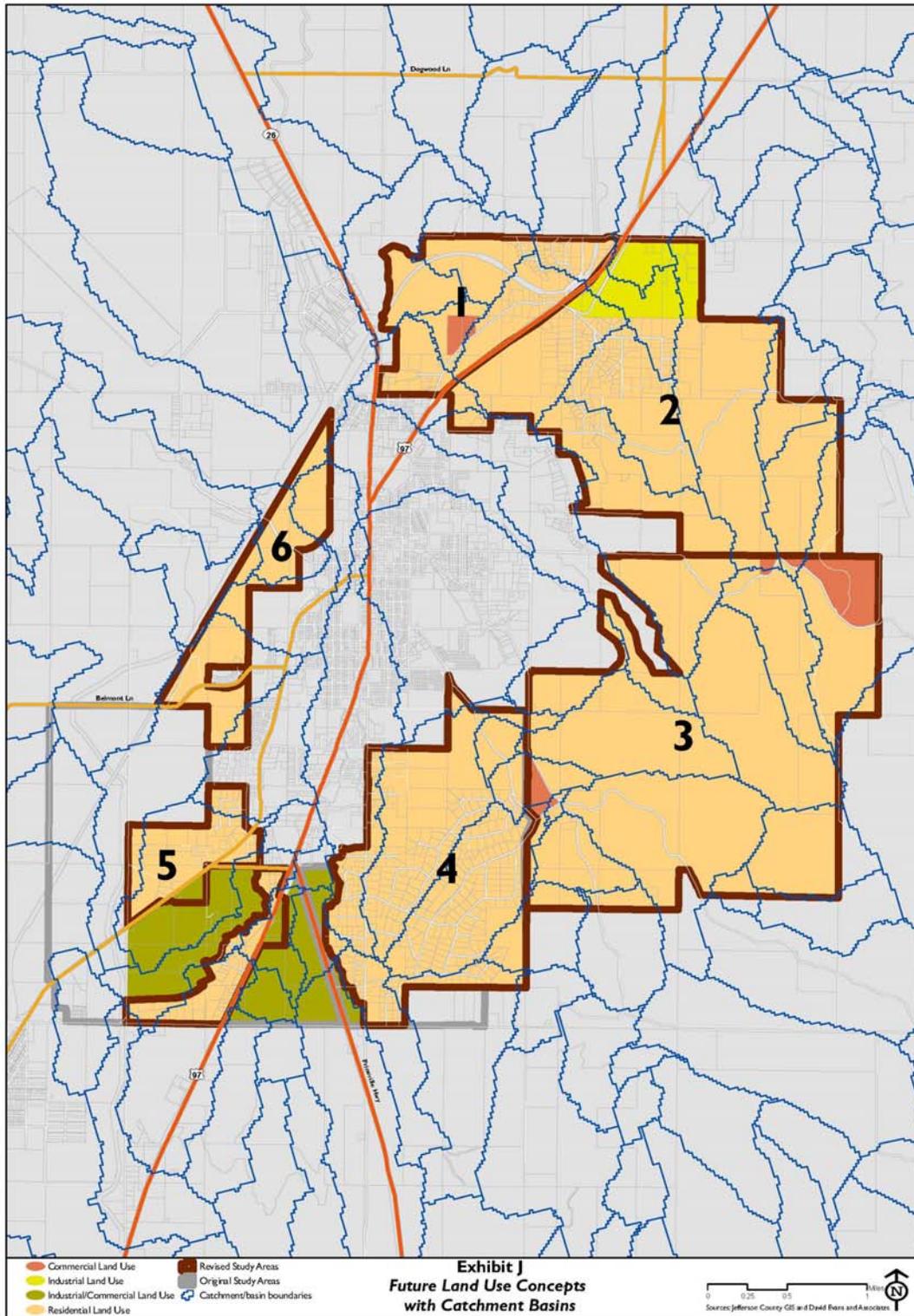


Figure 3-5. Preliminary Urban Reserve Area (URA) Recommendation, October 31, 2007

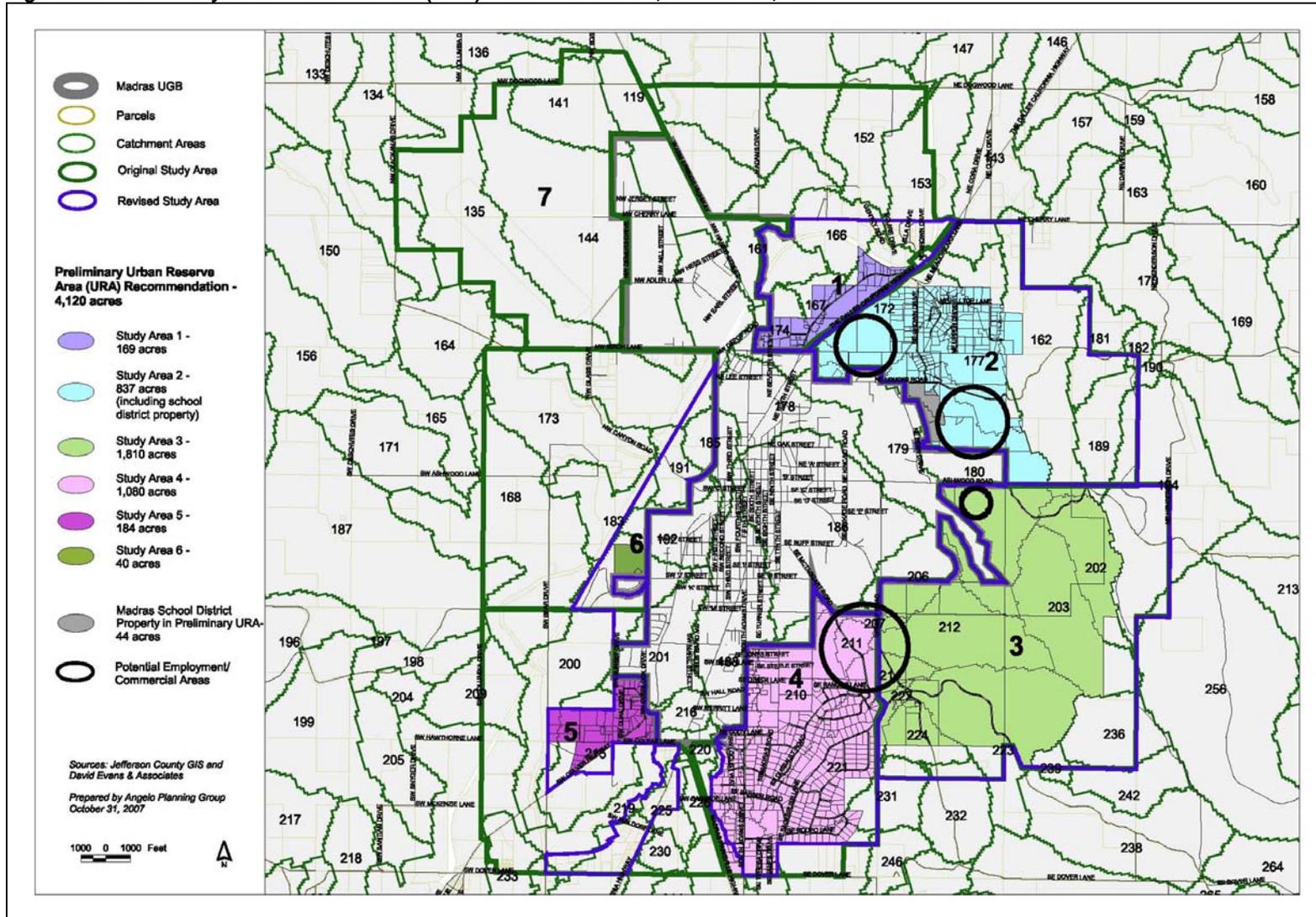


Figure 3-6. Preliminary URA Recommendation Without Exception Land, November 16, 2007

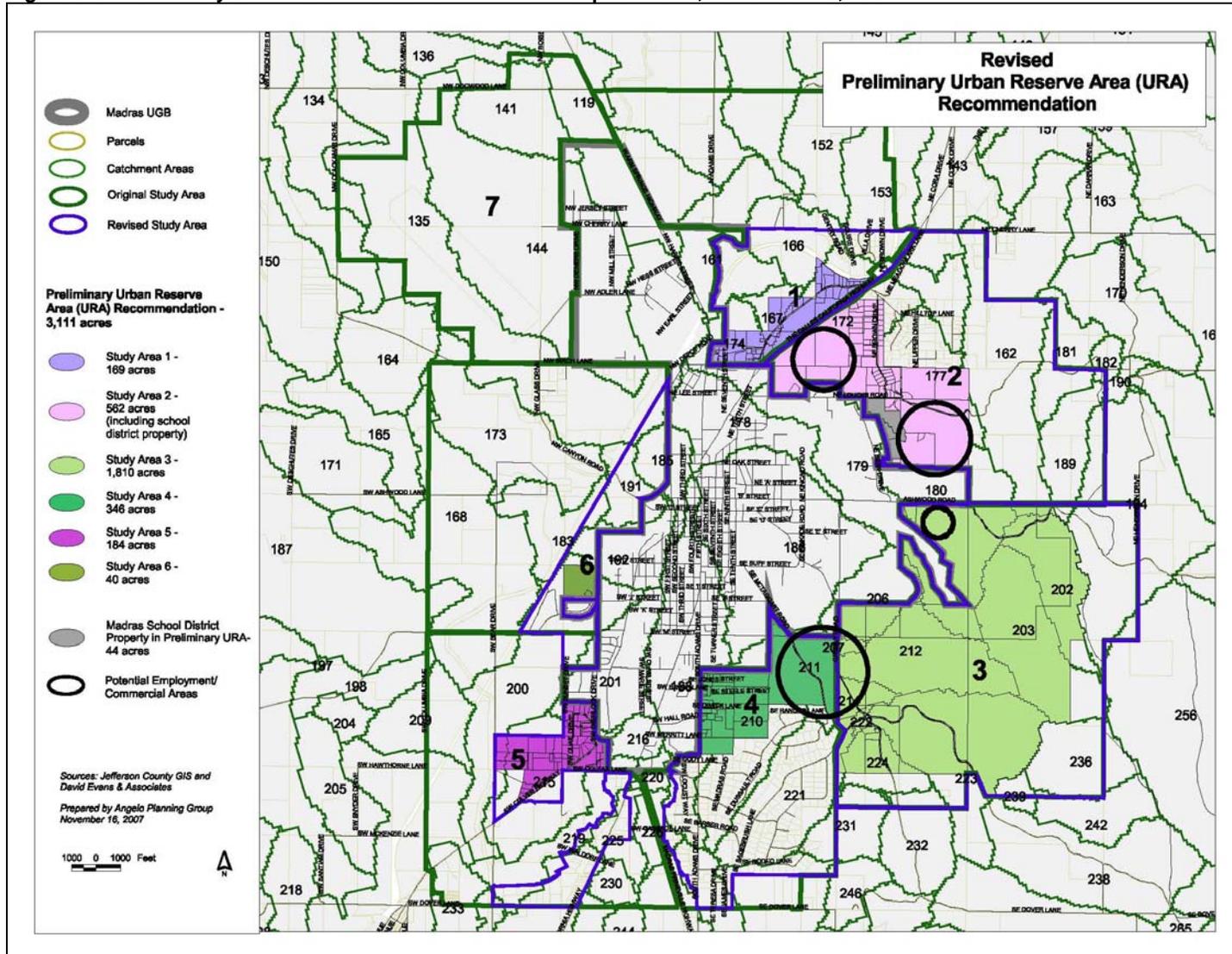


Figure 3-7. Revised Preliminary URA Recommendation, November 30, 2007

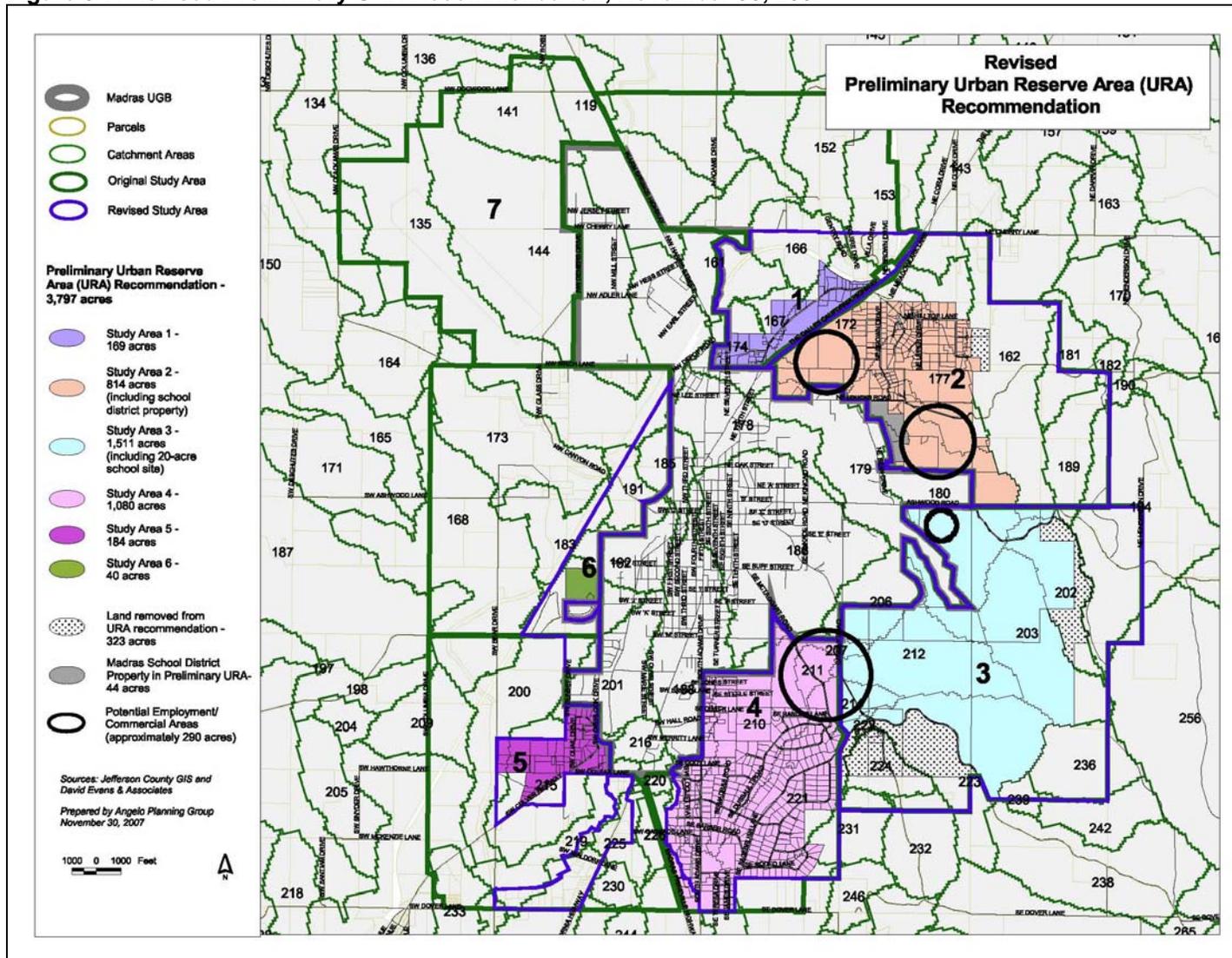


Table 3-2. Employment and Housing Productivity of URA Recommendations

PRELIMINARY URA RECOMMENDATION V1 (10/31/07) - all exception land and an estimate of additional lower priority resource land (range land) to meet housing targets

Preliminary URA Recommendation	Total area (gross acres)	Potential employment land (gross acres)*	Floodway on employment land (acres)	Slope over 5% on employment land (acres)	Total flood and slope constraints (acres)	Total potential buildable employment land (acres)	Potential residential lots 5 acres and larger (acres)	Slope over 25% on residential land (acres)	Floodway on residential land (acres)	Total flood and slope constraints (acres)	Buildable residential land, lots 5 acres and larger (acres)	x average 4.5 units/gross acre (units)	Acres of potential residential lots less than 5 acres x 1 unit/acre (units)	Existing housing (assumes 1 unit/lot for lots less than 5 acres) (units)	New housing on lots less than 5 acres (units)	Total potential housing production (units)
Study Area 1	168.6						112.9	1.0	0.0	1.0	111.9	503	56.0	48	8	511
Study Area 2**	836.7	306.0	0.0	131.8	131.8	174.3	219.7	11.1	0.0	11.1	208.6	938	259.9	153	107	1,045
Study Area 3***	1,810.3	78.2	4.2	27.3	31.4	46.8	1,728.2	195.5	10.5	205.9	1,502.3	6,760	5.9	4	2	6,762
Study Area 4	1,079.9	166.5	11.5	85.1	96.6	70.0	211.4	0.6	0.0	0.6	210.8	949	702.0	362	340	1,289
Study Area 5	183.7						91.9	0.0	0.0	0.0	91.9	414	91.8	48	44	458
Study Area 6	39.9						38.9	0.0	0.0	0.0	38.9	175	1.0	1	0	175
	4,119.2	550.8	15.7	244.1	259.8	291.0	2,403.0	208.2	10.5	218.7	2,164.4	9,740	1,116.6	616	501	10,240
																9,042
																1,198

PRELIMINARY URA RECOMMENDATION V2 (11/16/07) - removing exception land/rural subdivisions

Preliminary URA Recommendation	Total area (gross acres)	Potential employment land (gross acres)*	Floodway on employment land (acres)	Slope over 5% on employment land (acres)	Total flood and slope constraints (acres)	Total potential buildable employment land (acres)	Potential residential lots 5 acres and larger (acres)	Slope over 25% on residential land (acres)	Floodway on residential land (acres)	Total flood and slope constraints (acres)	Buildable residential land, lots 5 acres and larger (acres)	x average 4.5 units/gross acre (units)	Acres of potential residential lots less than 5 acres x 1 unit/acre (units)	Existing housing (assumes 1 unit/lot for lots less than 5 acres) (units)	New housing on lots less than 5 acres (units)	Total potential housing production (units)
Study Area 1	168.6						112.9	1.0	0.0	1.0	111.9	503	56.0	48	8	511
Study Area 2**	562.3	306.0	0.0	131.8	131.8	174.3	118.1	2.8	0.0	2.8	115.3	519	94.5	55	40	559
Study Area 3***	1,810.3	78.4	4.2	27.3	31.4	47.0	1,728.2	195.5	10.5	205.9	1,502.3	6,760	5.9	4	2	6,762
Study Area 4	345.9	166.5	11.5	85.1	96.6	70.0	129.9	0.0	0.0	0.0	129.9	584	46.5	33	13	598
Study Area 5	183.7						91.9	0.0	0.0	0.0	91.9	414	91.8	48	44	458
Study Area 6	39.9						38.9	0.0	0.0	0.0	38.9	175	1.0	1	0	175
	3,110.8	551.0	15.7	244.1	259.8	291.2	2,219.9	199.3	10.5	209.7	1,990.2	8,956.0	295.7	189.0	106.7	9,063
																9,042
																21

PRELIMINARY URA RECOMMENDATION V3 (11/30/07) - including exception land/rural subdivisions and removing EFU land and lower priority land for sewer service

Preliminary URA Recommendation	Total area (gross acres)	Potential employment land (gross acres)*	Floodway on employment land (acres)	Slope over 5% on employment land (acres)	Total flood and slope constraints (acres)	Total potential buildable employment land (acres)	Potential residential lots 5 acres and larger (acres)	Slope over 25% on residential land (acres)	Floodway on residential land (acres)	Total flood and slope constraints (acres)	Buildable residential land, lots 5 acres and larger (acres)	x average 4.5 units/gross acre (units)	Acres of potential residential lots less than 5 acres x 1 unit/acre (units)	Existing housing (assumes 1 unit/lot for lots less than 5 acres) (units)	New housing on lots less than 5 acres (units)	Total potential housing production (units)
Study Area 1	168.6						112.9	1.0	0.0	1.0	111.9	503	56.0	48	8	511
Study Area 2**	814.0	306.0	0.0	131.8	131.8	174.3	196.9	2.8	0.0	2.8	194.2	874	259.9	153	107	981
Study Area 3***	1,510.8	78.4	4.2	27.3	31.4	47.0	1,431.4	162.0	10.5	172.5	1,238.9	5,575	2.4	2	0	5,576
Study Area 4	1,079.9	166.5	11.5	85.1	96.6	70.0	211.4	0.6	0.0	0.6	210.8	949	702.0	362	340	1,289
Study Area 5	183.7						91.9	0.0	0.0	0.0	91.9	414	91.8	48	44	458
Study Area 6	39.9						38.9	0.0	0.0	0.0	38.9	175	1.0	1	0	175
	3,797.0	551.0	15.7	244.1	259.8	291.2	2,083.5	166.4	10.5	176.8	1,886.7	8,490.0	1,113.1	614.0	499.1	8,989
																9,042
																-53

URA RECOMMENDATION (12/17/07) - exchanging for land that is higher sewer service priority, eliminating boundary along catchment boundaries, and adding range land to boost housing productivity

Preliminary URA Recommendation	Total area (gross acres)	Potential employment land (gross acres)*	Floodway on employment land (acres)	Slope over 5% on employment land (acres)	Total flood and slope constraints (acres)	Total potential buildable employment land (acres)	Potential residential lots 5 acres and larger (acres)	Slope over 25% on residential land (acres)	Floodway on residential land (acres)	Total flood and slope constraints (acres)	Buildable residential land, lots 5 acres and larger (acres)	x average 4.5 units/gross acre (units)	Acres of potential residential lots less than 5 acres x 1 unit/acre (units)	Existing housing (assumes 1 unit/lot for lots less than 5 acres) (units)	New housing on lots less than 5 acres (units)	Total potential housing production (units)
Study Area 1	168.6						112.9	1.0	0.0	1.0	111.9	503	56.0	48	8	511
Study Area 2**	897.7	306.0	0.0	131.8	131.8	174.3	288.9	8.1	0.0	8.1	280.8	1,264	259.9	153	107	1,371
Study Area 3***	1,373.3	78.4	4.2	27.3	31.4	47.0	1,290.5	133.4	10.5	143.9	1,126.7	5,070	5.9	4	2	5,072
Study Area 4	1,079.9	166.5	11.5	85.1	96.6	70.0	211.4	0.6	0.0	0.6	210.8	949	702.0	362	340	1,289
Study Area 5	183.7						91.9	0.0	0.0	0.0	91.9	414	91.8	48	44	458
Study Area 6	39.9						38.9	0.0	0.0	0.0	38.9	175	1.0	1	0	175
	3,743.3	551.0	15.7	244.1	259.8	291.2	2,034.6	143.1	10.5	153.6	1,861.1	8,374.8	1,116.6	616.0	500.6	8,875.4
																9,042
																-167

changes in acreages and results between previous recommendation versions

* Study Area 3 includes a small commercial center, about 1.3 acres, designated in current Yarrow master plans (manually added in table)

** Study Area 2 includes 42.5 acres of Madras School District property, which is being not being used in housing or employment production estimates/calculations (lots left out in GIS layer)

*** Study Area 3 included 20 acres for a school site in the Yarrow Master Plan, which is being not being used in housing or employment production estimates/calculations (manually subtracted in table)

Note: acreage in Study Areas 2 and 3 do not always add up because of slightly different map acreages that resulted from dividing lots by catchment boundaries