



## MEMORANDUM

**TO:** Deschutes County Planning Commission

**FROM:** Nick Lelack, AICP, Director  
Peter Gutowsky, AICP, Planning Manager

**DATE:** February 4, 2021

**SUBJECT:** Deschutes 2040 / Orientation to Statewide Planning Goals 10, 11, 13 and 14

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**I. Background**

The Community Development Department (CDD) anticipates initiating a Deschutes County Comprehensive Plan Update (Deschutes 2040) in the fall of 2021. Staff originally prepared a 12-part orientation for the Planning Commission to familiarize itself with the Statewide Planning Goals and their relationship to noteworthy state statutes (ORSs), administrative rules (OARs), Comprehensive Plan Sections, implementing codes, and issues emerging since 2010. More information is available at [www.deschutes.org/Plan2040](http://www.deschutes.org/Plan2040). Table 1 lists the Planning Commission work session dates for the Statewide Planning Goals. It has been modified to accommodate an annual joint meeting with the Board of County Commissioners (Board) on February 25. This completes the orientation series.

**Table 1 – Planning Commission Work Session Dates & Discussion Topics**

<b>Dates</b>	<b>Statewide Planning Goals</b>
September 10	<b>Oregon Land Use Program Overview</b>
September 24	<b>Goal 1</b> - Citizen Involvement <b>Goal 2</b> - Land Use Planning
October 8	<b>Goal 3</b> - Agricultural Lands <b>Goal 4</b> - Forest Lands
October 22	<b>Goal 5</b> - Natural Resources, Scenic and Historic Areas, and Open Spaces ( <u>PART 1 - Water Resources, Wildlife</u> )
November 12	<b>Goal 5</b> - Natural Resources, Scenic and Historic Areas, and Open Spaces ( <u>PART 2 - Scenic and Open Spaces and Historic Resources</u> ) <b>Goal 5</b> - Natural Resources, Scenic and Historic Areas, and Open Spaces ( <u>PART 3 - Mineral and Aggregate Resources</u> )
December 10	<b>Goal 6</b> - Air, Water, and Land Resources Quality <b>Goal 7</b> - Areas Subject to Natural Hazards
January 14	<b>Goal 8</b> - Recreational Needs
January 28	<b>Goal 9</b> - Economic Development

February 11	<b>Goal 10 - Housing</b> <b>Goal 11 - Public Facilities and Services</b> <b>Goal 13 - Energy Conservation</b> <b>Goal 14 - Urbanization</b>
* <b>Goal 12</b> – Transportation will be discussed during the Transportation System Plan Update, expected in late 2021 or 2022	

## II. Statewide Planning Goals 10, 11, 13 and 14

### Goal 10 – Housing

An adequate housing supply is a fundamental building block of a healthy community. Likewise, the provision of housing for a community is one of the primary elements in a comprehensive plan for cities in Oregon.<sup>1</sup> Housing takes many forms and should be built to serve people at a variety of income levels. A housing supply that meets community needs is one that offers people a range of different places to live, different community densities to choose from, and does not overburden the financial resources of any group living there. Goal 10 planning, at a local level, asks that cities inventory their "buildable lands," which refers to land inside an urban growth boundary (UGB) that is suitable and available for residential use. This is determined, in large part, by local zoning codes.

A housing needs analysis (HNA) is one of the components a city needs to consider if the city wants to satisfy the housing needs of its residents. An HNA is both a product and a process that the city goes through to determine areas of need in their current inventory of housing and their buildable land supply. Because the comprehensive planning process in Oregon is based on cities having a 20-year supply of land, the HNA is needed to determine if the city is satisfying this need. If the city has a deficit of housing supply for the next 20 years, the city must either expand its UGB, increase the amount of allowed housing development on lands already within the UGB, or combine these two alternatives.

As opposed to very small cities, cities with a population larger than 2,500 must include a broader range of housing types when they decide what "needed housing units" should be planned for in their communities. This means they must look beyond single-family detached housing and include multi-unit housing, manufactured homes, renter occupied units, and other forms of housing.

In 2019, the Oregon Legislature passed House Bill (HB) 2003 to help communities meet the diverse housing needs of Oregonians. The law requires Oregon's medium and large cities to study the future housing needs of their residents and to develop strategies to produce the housing their residents need. It requires cities over 10,000 people to analyze what housing is needed for current and future residents every six to eight years. Cities within Metro are required to update their HNA every six years; cities outside Metro must update theirs every eight years. The bill then requires each city to adopt a housing production strategy within a year of completing the HNA. The strategy must list specific actions a city will take – such as revising regulations or providing financial incentives – to promote the development of all identified housing needs.

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<sup>1</sup> Outside urban growth boundaries (UGBs), counties are not subject to the requirements of Goal 10.

The Land Conservation and Development Commission (LCDC) recently received a Regional Housing Needs Analysis Draft Legislative Report.<sup>2</sup> HB 2003 established a new Regional Housing Needs Analysis (RHNA), which fundamentally changes how cities comply with Goal 10 Housing of the Statewide Planning Program. The RHNA methodology determines how regions allocate housing need to cities. The regions are generally large blocks of counties, except for Deschutes County, which is its own region (and the only county that is also a stand-alone region). Central Oregon Intergovernmental Council (COIC), the City of Madras and others have expressed their concerns about this boundary issue, which then results in many other regional housing coordination challenges. The Draft Legislative Report recognizes this problem on page 21:

*“Central Oregon – Within the Central Oregon region, the aggregation of Census data did not allow for the grouping of three counties typically considered part of a broader regional housing market: Crook, Jefferson, and Deschutes Counties. The resulting data limitations required consolidation of Crook and Jefferson Counties into the larger northeastern region, which both agencies recognize as an inaccurate representation that should be addressed.”*

The following OARs implement Goal 10:

- OAR 660-007 – Metropolitan Housing (applies to the Portland Metro area)
- OAR 660-008 – Interpretation of Goal 10 Housing
- OAR 660-038 – Simplified Urban Growth Boundary Method
- OAR 660-039 – Affordable Housing Pilot Program

## **Goal 11 – Public Facilities and Services**

Goal 11 requires cities and counties to plan for and develop timely, orderly and efficient sewer, water, transportation, and other infrastructure that support existing and proposed land uses. Planning for these services is a principal means by which a city can affect the location, scale, and pace of development. Other public services and facilities such as law enforcement and fire protection also should be considered. Each local government with more than 2,500 residents must adopt a Public Facilities Plan for water, sewer and transportation facilities. These plans include an inventory of existing and needed future facilities, an estimate of the general timing, costs, and potential funding sources. While a public facility, transportation is implemented through Goal 12, rather than Goal 11.

Within a UGB, public facilities should have greater capacity in areas planned for higher densities, and available at appropriate levels of service throughout the city. Outside a UGB, public facilities should not, as a matter of practice, be provided. For example, public sewer service is only allowed outside a UGB to alleviate an existing health hazard, and public water service is only allowed if it is not used as justification to increase existing levels of allowed rural development. To sewer rural lands requires a Goal 11 Exception, such as was done for Oregon Water Wonderland and the County attempt to do so for South County due to high groundwater and nitrate loading.

The following OAR implements Goal 11:

- OAR 660-011 – Public Facilities Planning

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<sup>2</sup> [https://www.oregon.gov/lcd/Commission/Documents/2020\\_01\\_Item-7\\_RHNA\\_Attachment\\_B\\_RHNA-Report-Draft.pdf](https://www.oregon.gov/lcd/Commission/Documents/2020_01_Item-7_RHNA_Attachment_B_RHNA-Report-Draft.pdf)

## **Goal 13 – Energy Conservation**

Goal 13 requires local governments to consider the effects of their comprehensive planning decision on energy consumption. It encourages communities to look within existing urban neighborhoods for areas of potential redevelopment before looking to expand, to "recycle and re-use vacant land." The goal also directs cities and counties to have systems and incentives in place for recycling programs.

No OARs implement Goal 13.

## **Goal 14 - Urbanization**

Goal 14 requires cities to project future growth and identify areas that may accommodate this growth in an orderly and efficient manner. Those areas slated for urban growth are identified after assessments of public facilities and services; environmental, energy, economic, and social consequences (ESEE); and the compatibility of urban uses with nearby agricultural and forest activities. They are then included within a UGB, a key feature of Oregon's land use planning system.

### *UGBs*

Goal 14 requires each city and the surrounding county to establish a UGB. UGBs separate urbanizable land from rural land, identifying the extent of urban growth planned for the next 20 years on a city's buildable lands. Cities assess their needs based on a 20-year population forecast from Portland State University using historic growth rates and assumptions about future trends.

Cities are required to estimate their needs for a 20-year supply of land to accommodate housing, employment and other urban uses. Public facilities, streets and roads, schools, parks, and open space also must be included in this 20-year estimate. Forecasts estimate the future population of a given area, based on historic growth and assumptions about future trends. All counties in Oregon must coordinate with their cities to develop, adopt, and maintain population forecasts for land use planning, including determining the size of UGBs.<sup>3</sup> Within the Portland metropolitan region, the Metropolitan Service District, or Metro, is responsible for planning coordination and establishing the region's UGB.

If the 20-year land supply within a UGB is considered insufficient, cities are required to amend their comprehensive plans by any or all of the following:

- Planning for more redevelopment
- Providing for more infill development
- Increasing residential densities
- Expanding the UGB

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<sup>3</sup> Oregon law required counties to create their own population forecasts. This resulted in widespread inconsistencies in the forecast methods used. Additionally, the costs of creating a forecast kept some communities from updating their forecast on a regular basis. To address these circumstances, the legislature passed a law in 2013, ORS 195.033, which assigned the forecast creation task to the Population Research Center at Portland State University (PSU). In 2015, LCDC adopted rules to implement the new law (OAR 660-032).

### *Expanding a UGB*

State rules set priorities for the types of land that can be added to a UGB. First priority are lands designated as urban reserves, exception areas and "marginal lands." Marginal lands apply only to Washington and Lane counties. If none of these areas are adequate to meet the projected 20-year land need, less productive farm or forest lands may be considered. Highly productive farm and forest lands are the last priority. Other matters to consider when contemplating a UGB expansion include the availability of urban services, the most efficient use for the land and constraints such as wetlands and steep slopes. The proposed UGB expansion must be approved by the City Council, then Deschutes County, and then acknowledged by the State.

### *Urban Growth Management*

The quality of life in cities depends in part on how urbanizable lands are managed so they remain suitable for eventual urban development. The key document for coordinating these efforts is an urban growth management agreement signed by each county and city.

### *Unincorporated Communities*

The State has a process for identifying "exception areas" and to enable counties to plan and manage land use in unincorporated communities with residential, commercial and industrial development that may be situated in or near resource areas. Typically, these land use predate the state's 1973 land use program and the exception recognizes that development pattern, whether residential, commercial, or industrial. The process allows such uses to continue and in some cases, expand. Counties are required to identify and designate these rural centers, plan for permitted and prohibited uses and anticipate current and future facility needs. These designations allow for different intensities of development:

- A rural community is primarily residential.
- A rural service center provides goods and services to the surrounding rural area.
- An urban unincorporated community includes a mixture of residential and employment uses and is served by a community water and sewer system.

The following OARs implement Goal 14:

- OAR 660-011 – Public Facilities Planning
- OAR 660-012 – Transportation Planning
- OAR 660-014 – Newly Incorporated Cities, Annexations, Urban Development on Rural Lands
- OAR 660-021 – Urban Reserves (applies statewide except the Portland Metro area)
- OAR 660-022 – Unincorporated Communities
- OAR 660-024 – Urban Growth Boundaries
- OAR 660-025 – Periodic Review
- OAR 660-027 – Urban and Rural Reserves in the Portland Metro Area
- OAR 660-032 – Population Forecasts
- OAR 660-038 – Simplified Urban Growth Boundary Method

### **III. Deschutes County Comprehensive Plan**

#### **Section 3.3 – Rural Housing**

Section 3.3 highlights Rural Residential Exception Areas, housing opportunities in unincorporated areas, housing diversity and transect planning (Attachment 1). The Planning Division recently completed a Housing Strategies project, a months-long effort to better understand the complexities and challenges of housing the residents of Deschutes County in a time of tremendous growth.<sup>4</sup> Staff last updated the Planning Commission concerning this project on December 10.<sup>5</sup> The housing profile now contains a summary of existing conditions in the County, a selection of potential action items of varying complexity, and potential challenges (such as certain provisions of State law). This document could be a starting point for addressing housing in the next Comprehensive Plan update and may help in other County-wide analyses relating to wildlife protection areas or wildfire regulations.

Deschutes County Rural Residential and Multiple Use Agriculture zoning (Deschutes County Code (DCC) Chapters 18.32 and 18.60) provide siting standards for dwellings and structures.

The Comprehensive Plan's Rural Housing Goals and Policies recognize among others:

- Maintain the rural character of the County while ensuring a diversity of housing opportunities, including initiating discussions to amend State Statute and/or Oregon Administrative Rules to permit accessory dwelling units in Exclusive Farm Use, Forest and Rural Residential zones.
- Support Central Oregon Regional Housing Authority and other stakeholders to meet the housing needs of all Deschutes County residents.
- Encourage new subdivisions to incorporate alternative development patterns, such as cluster development, that mitigate community and environmental impacts.

#### **Section 3.6 – Public Facilities and Services**

Section 3.6 recognizes that counties must ensure public facilities and services are planned for even if the facilities and services are not provided by county government (Attachment 2). This section lists service providers including but not limited to law enforcement, solid waste disposal, school districts, COIC, rural fire districts and irrigation districts. Deschutes County Title 22, Development Procedures Ordinance, allows CDD to notify service districts of land use applications to ensure their issues are identified in subsequent land use decisions.

The Comprehensive Plan's Public Facilities and Services Goals and Policies recognize among others:

- Encourage the formation of special service districts to serve rural needs rather than have the County serve those needs.

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<sup>4</sup> <https://www.deschutes.org/cd/page/deschutes-county-housing-strategies>

<sup>5</sup> <http://deschutescountyor.iqm2.com/Citizens/FileOpen.aspx?Type=1&ID=2338&Inline=True>

- New development shall address impacts on existing facilities and plans through the land use entitlement process.
- Coordinate with rural service districts and providers to ensure new development is reviewed with consideration of service districts and providers needs and capabilities.

## **Section 2.8 – Energy Resources**

Section 2.8 discusses energy conservation, siting energy facilities, alternative and commercial energy generation, and future opportunities and challenges (Attachment 3). Since 2015, Deschutes County has approved six solar farms generating over 60 megawatts of power. Solar farms are regulated in the Exclusive Farm Use Zone, DCC 18.16.030, and General Standards Governing Conditional Uses, DCC 18.128.015.

Other notable County Codes include Supplementary Provisions, DCC 18.116.170, .180, .190, and .300. They address solar height restrictions, building setbacks for the protection of solar access, solar access permits, and wind energy systems that generate less than 100 kW. Specific conditional use criteria in DCC 18.128.250 and 260 address high-temperature geothermal wells, small-scale geothermal energy facilities and hydroelectric facilities. To date, Deschutes County has not approved geothermal wells, geothermal energy facilities, or wind energy systems.

The Comprehensive Plan’s Energy Resources Goals and Policies recognize among others:

- Support incentives for homes and businesses to install alternative energy systems.
- Review County Code and revise as needed to permit alternative energy systems for homes and businesses and mitigate impacts on neighboring properties and the natural environment.
- Review County Code and revise as needed to develop an efficient permitting process and effective siting standards for commercial renewable energy projects that address all project components as well as environmental and social impacts.

## **Chapter 4 – Urban Growth Management**

Chapter 4, Urban Growth Management, in concert with the other chapters of the Comprehensive Plan, specifies how Deschutes County will work with cities and unincorporated communities to accommodate growth while preserving rural character and resource lands.

The following issues are covered in Chapter 4:

- Urbanization (Section 4.2)
- Unincorporated Communities Overview (Section 4.3)
- La Pine Urban Unincorporated Community (Section 4.4)
- Sunriver Urban Unincorporated Community (Section 4.5)
- Terrebonne Rural Community Plan (Section 4.6)
- Tumalo Rural Community Plan (Section 4.7)
- Black Butte Ranch and Inn of the 7<sup>th</sup> Mountain/Widgi Creek Rural Resorts (Section 4.8)
- Rural Service Centers (Section 4.9)

Below is a brief recap of each section. Footnotes instead of attachments are provided.

## **Section 4.2 - Urbanization**

This section describes the coordination between the County and the cities of Bend, La Pine, Redmond and Sisters on UGBs and Urban Reserve Areas (URAs).<sup>6</sup> Cities initiate legislative UGB amendments in coordination with the County to address housing, employment, and public institutional needs.

## **Section 4.3 - Unincorporated Communities**

Besides the four incorporated cities, there are a number of unincorporated communities in Deschutes County. Section 4.3 briefly describes them.<sup>7</sup> These consist of areas developed with urban uses in rural areas. Generally, unincorporated communities were developed prior to the Oregon planning system and recognized as rural service centers in the 1979 version of the Comprehensive Plan. Subsequently, to control their growth, the State initiated unincorporated community classifications and regulations to define allowable uses.

The 1979 comprehensive plan designated the following rural service centers (RSCs): Alfalfa, Brothers, Hampton, Millican, La Pine, Whistle Stop, Wickiup Junction, Terrebonne, Wild Hunt, Tumalo, Deschutes Junction and Deschutes River Woods. These areas were designated in that plan as exception areas from Goals 3, Agricultural Lands and 4, Forest Lands. Zoning under the Comprehensive Plan allowed for a mix of residential and commercial uses to support nearby residential developments. Until the early 1990s, the scope of those uses was never much of an issue since there was little development pressure.

In 1994 LCDC adopted a new administrative rule, OAR 660-22 to clarify what uses could be allowed in “unincorporated communities” without violating Statewide Planning Goals 11 and 14 relating to public facilities and urbanization. The rule identifies four different kinds of rural communities as shown below.

- Urban Unincorporated Community (UUC)
- Rural Community
- Resort Community
- Rural Service Center (RSC)

In response, Deschutes County reviewed its RSCs to determine which areas fit those four classifications. In addition to the original RSCs listed above, additional developments were identified as communities for review including Black Butte Ranch, Inn of the Seventh Mountain/Widgi Creek and Sunriver.

In reviewing these areas for conformance with OAR 660-22, some did not fit within the parameters of any of the four unincorporated community definitions and were instead zoned Rural Commercial or Rural Industrial. These areas are discussed in the Rural Economy section of the Comprehensive Plan.

Table 1 shows the Deschutes County unincorporated communities as of 2010.

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<sup>6</sup> [https://www.deschutes.org/sites/default/files/fileattachments/community\\_development/page/11797/comprehensive\\_plan\\_all\\_chapters.pdf](https://www.deschutes.org/sites/default/files/fileattachments/community_development/page/11797/comprehensive_plan_all_chapters.pdf). Page 157.

<sup>7</sup> Ibid. Page 166.



**Table 1 – Deschutes County Unincorporated Communities 2010**

<i>Community</i>	<i>Type</i>	<i>Approval Date</i>
La Pine	Urban Unincorporated Community	1996, 2000
Sunriver	Urban Unincorporated Community	1997
Terrebonne	Rural Community	1997
Tumalo	Rural Community	1997
Black Butte Ranch	Resort Community	2001
Inn of the 7 <sup>th</sup> Mountain/ Widgi Creek	Resort Community	2001
Alfalfa	Rural Service Center	2002
Brothers	Rural Service Center	2002
Hampton	Rural Service Center	2002
Millican	Rural Service Center	2002
Whistlestop	Rural Service Center	2002
Wildhunt	Rural Service Center	2002

Source: Deschutes County Planning Division

#### **Section 4.4 – La Pine**

This section recognizes the incorporation of La Pine.<sup>8</sup> On November 7, 2006, residents of the La Pine Urban Unincorporated Community voted to incorporate. One 2.7 acre parcel was not included within the City of La Pine or its UGB and remains within the La Pine Urban Unincorporated Community Boundary.

#### **Section 4.5 - Sunriver**

Section 4.5 describes Sunriver Urban Unincorporated Area.<sup>9</sup> In the fall of 1994, as mentioned above, LCDC adopted OAR 660-22, Unincorporated Communities. The new rule required counties to update land use plans and regulations for areas with urban-style development on rural lands. As part of Periodic Review, the County updated the Comprehensive Plan and implementing regulations for Sunriver to comply with the rule.

Under OAR 660-22, Sunriver meets the definition for both an “Urban Unincorporated Community” and a “Resort Community.” With the help of a stakeholder advisory committee representing a multitude of property owners and development interests, the decision was made to proceed with the planning process for Sunriver as an Urban Unincorporated Community. It was the consensus of the committee that the provisions allotted for Urban Unincorporated Communities under the rule offered the greatest practical degree of flexibility for future growth and development in Sunriver. Subsection OAR 660.22.010(8) defines “Urban Unincorporated Community” as

“[a]n unincorporated community that has the following characteristics:

- Includes at least 150 permanent dwelling units including manufactured homes;
- Contains a mixture of land uses, including three or more public, commercial or industrial land uses;
- Includes areas served by a community sewer system; and,

<sup>8</sup> Id. Page 168.

<sup>9</sup> Id. Page 170.

- Includes areas served by a community water system.

Sunriver met the definition because it historically included land developed with a mixture of residential, commercial and industrial uses. Sunriver utilities operate both a community sewer and water system which serve the existing development. Sunriver has its own fire and police departments and also essential services, such as an elementary school. The Comprehensive Plan designated Sunriver as an Urban Unincorporated Community, enabling it to plan for future growth and development.

#### **Section 4.6 – Terrebonne Community Plan**

Section 4.6 recognizes Terrebonne as a Rural Community.<sup>10</sup> The 1979 Deschutes County Comprehensive Plan designated Terrebonne a Rural Service Center (RSC). Comprising 667 acres and 577 tax lots, the 1979 Terrebonne RSC boundary included the Hillman Plat, excluding the portion east of the Oregon Trunk Railroad tracks. In 1994, LCDC adopted an OAR 660, Division 22 for unincorporated communities, instituting new land use requirements for Terrebonne. As part of periodic review, in 1997 Deschutes County updated its Comprehensive Plan and implemented zoning regulations to comply with the state requirements.

The Terrebonne Community Plan was adopted in Ordinance 2010-012.

#### **Section 4.7 – Tumalo Community Plan**

Section 4.7 recognizes Tumalo as a Rural Community.<sup>11</sup> The 1979 Deschutes County Comprehensive Plan designated Tumalo as a Rural Service Center because it contained a concentration of residential and commercial properties. A 1979 inventory showed Tumalo consisting of 491 acres and 288 tax lots. In 1994, the Oregon Land Conservation and Development Commission adopted a new Oregon Administrative Rule for unincorporated communities, instituting new land use requirements for Tumalo. As part of periodic review, in 1997 Deschutes County updated its Comprehensive Plan and implemented zoning regulations to comply with these state requirements.

The Tumalo Community Plan was adopted in Ordinance 2010-027.

#### **Section 4.8 – Resort Communities**

Section 4.8 describes Deschutes County's Resort Communities.<sup>12</sup> A Resort Community is characterized as an unincorporated community that is established primarily for, and continues to be used primarily for, recreation and resort purposes. It includes residential and commercial uses and provides for both temporary and permanent residential occupancy, including overnight lodging and accommodations. These communities are not be confused with Goal 8 destination resorts such as Caldera Springs, Eagle Crest, Pronghorn, and Tetherow.

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<sup>10</sup> [https://www.deschutes.org/sites/default/files/fileattachments/community\\_development/page/11797/terrebonne\\_community\\_plan.pdf](https://www.deschutes.org/sites/default/files/fileattachments/community_development/page/11797/terrebonne_community_plan.pdf)

<sup>11</sup> [https://www.deschutes.org/sites/default/files/fileattachments/community\\_development/page/11807/comprehensive\\_plan\\_-\\_appendix\\_b\\_-\\_tumalo\\_community\\_plan.pdf](https://www.deschutes.org/sites/default/files/fileattachments/community_development/page/11807/comprehensive_plan_-_appendix_b_-_tumalo_community_plan.pdf)

<sup>12</sup> See footnote 6. Page 184.

LCDC's 1994 unincorporated rules, OAR 660, Division 22, provided guidelines for defining and regulating areas with urban style growth outside of UGBS. As part of periodic review Deschutes County updated the Comprehensive Plan and implementing zoning regulations for Black Butte Ranch and the Inn/Widgi Creek to comply with the rule.

Black Butte Ranch and Inn of the 7th Mountain/Widgi Creek met the definition of "resort community" because they have historically developed with a mixture of residential, recreation, and resort amenities. Commercial uses also exist, such as restaurants and stables. Other retail operations, such as golf pro shops and retail sales at the tennis shop are associated with specific recreation activities and are not designed as stand-alone retail operations intended by themselves to attract the traveling public to Black Butte Ranch or Inn of the 7th Mountain/Widgi Creek.

#### **Section 4.9 – Rural Service Centers**

Section 4.9 describes Deschutes County's Rural Service Centers.<sup>13</sup> A Rural Service Center is characterized as an unincorporated community consisting primarily of commercial or industrial uses providing goods and services to the surrounding rural area or persons traveling through the area, but which also includes some permanent residential dwellings.

In order to comply with OAR 660-022, Deschutes County updated the Comprehensive Plan and implementing zoning regulations in 2002 for the communities of Alfalfa, Brothers, Hampton, Millican, Whistlestop and Wildhunt. The Comprehensive Plan and zoning map boundaries for all of the RSCs were amended to comply with the requirements of the administrative rule and to reconcile historic mapping inconsistencies between the plan designation and zoning and inconsistencies between community boundaries and historic development patterns.

The predominant land uses in the areas surrounding the Alfalfa, Brothers, Hampton and Millican RSCs are farming and ranching. The predominant land uses in the areas surrounding Whistlestop and Wildhunt are forest, ranching and rural residential. The unincorporated RSCs serve the needs of the surrounding areas as well as the needs of the traveling public. Three of the communities are located on Highway 20 east of Bend: Millican is 26 miles away, Brothers is 42 miles and Hampton is 64 miles. Alfalfa is located approximately 11 miles east of Bend on Willard Road. Whistlestop is located approximately 30 miles southwest of Bend on Burgess Road. Wildhunt is located approximately 26 miles south of Bend at the junction of Highway 97 and Highway 31.

The communities of Alfalfa, Brothers and Hampton have approved public water systems that serve the school and combination store/café/post office in Brothers and the stores in Alfalfa and Hampton. The Central Oregon Irrigation District (COID) provides water for agricultural uses surrounding Alfalfa. Large ranches and Bureau of Land Management (BLM) land surround Millican, Brothers and Hampton. Most of the land is used for dry land grazing. Well water provides irrigation for land adjacent to Hampton. Millican, Brothers and Hampton are surrounded by land that is designated as antelope and sage grouse habitat. The area surrounding these communities is sparsely populated. Each community has a few residences within its boundary.

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<sup>13</sup> Ibid. Page 191.

Attachments:

1. Comprehensive Plan Section 3.3
2. Comprehensive Plan Section 3.6
3. Comprehensive Plan Section 2.8

## Section 3.3 Rural Housing

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### **Background**

Housing is a basic need that provides not just shelter, but connection to a wider community. A variety of housing types and price points ensures options for people at different life stages and needs. Oregon's statewide planning program directs cities to retain an adequate amount of land to accommodate residential growth. Generally counties are directed to protect farms, forests and other rural resources like wildlife while limiting new rural development. This section of the Plan looks specifically at housing on existing and potential new parcels and how the County can support a diverse and affordable housing supply.

Housing inside urban growth boundaries is addressed in Statewide Planning Goal 10, Housing and OAR 660-008. Statewide Goal 2, Land Use and Goal 14, Urbanization both have sections that address rural housing, supplemented by OAR 660-004 and 660-014. These rules refine how new rural residential lots can be created. The Deschutes County housing policies provide the framework for residential development. The policies further delineate the role of the County in facilitating the availability of an affordable and quality housing stock within both urban and rural communities.

### **Rural Residential Exception Areas**

In Deschutes County most rural lands are designated for farms, forests or other resources and protected as described in the Resource Management chapter of this Plan. The majority of the land not recognized as resource lands or Unincorporated Community is designated Rural Residential Exception Area. The County had to follow a process under Statewide Goal 2 to explain why these lands did not warrant farm or forest zoning. The major determinant was that many of these lands were platted for residential use before Statewide Planning was adopted.

In 1979 the County assessed that there were over 17,000 undeveloped Rural Residential Exception Area parcels, enough to meet anticipated demand for new rural housing. As of 2010 any new Rural Residential Exception Areas need to be justified through initiating a non-resource plan amendment and zone change by demonstrating the property does not meet the definition of agricultural or forest land, or taking exceptions to farm, forest, public facilities and services and urbanization regulations, and follow guidelines set out in the OAR.

### **Rural Residential Exception Areas 2009**

*Source: County GIS data*

- 71,000 acres of Rural Residential Exception Area (including right-of-way)
- 64,000 acres of Rural Residential Exception Area (excluding right-of-way)
- 24,750 Rural Residential Exception Area lots
- 18,100 Rural Residential Exception Area lots that are developed

### **Future of Rural Housing in Deschutes County**

In looking at rural housing growth, it is important to find the balance between protecting rural values and protecting property rights. In community meetings some people expressed concern over the level of new development that has been allowed while others highlighted the

restrictions on their property that do not permit it. Too much development can lead to the destruction of the qualities that bring people to Deschutes County, while too many restrictions keep out people who would choose a rural lifestyle.

#### *Housing Legality, Public Health and Safety*

One issue meriting attention is the need to be sure housing is legally developed. A house built without proper land use permits may not meet required setbacks or other regulations, causing legal disputes between neighbors. A house built without proper building permits could be constructed shoddily, causing safety issues. Land use and building permit requirements therefore are intended to safeguard the rights of property owners and neighbors. Historically, there have been problems in the County with substandard housing. Over the years substandard housing has become less of an issue. However, there are still areas where development has occurred without land use or building permits, leading to numerous code complaints. An area of south County, known as Section 36, has been identified as one place that the County could work closely with local residents to address health and safety issues. Another health and safety issue that came up in public meetings is the need to regulate large animals on residential lots. The idea is to control odors and flies that can accumulate and impact neighbors. Research on how large animals are regulated in other counties would provide some direction on this issue.

#### *Housing Diversity*

A challenge for the County given rural housing restrictions is how to support a diversity of housing to meet the needs of the community, while retaining the rural character important to residents. Deschutes County requires a 10 acre minimum lot size for new rural residential lots in order to protect the rural quality of life and its resources. Yet, the 10 acre minimum raises the cost of rural housing and may limit the rural lifestyle to households at the upper end of the income spectrum. Additionally much of the new rural housing being built is located in high-end destination resorts. This slant towards high priced rural housing is mitigated somewhat by the thousands of small lots that were platted before land use laws were enacted. These smaller lots provide an opportunity for less expensive housing.

One way the County can address the need for housing options is to promote the idea of housing alternatives such as co-housing or accessory dwelling units. Currently these alternatives are not permitted by State regulations that protect rural lands. Co-housing involves creating a community through clustered housing. Accessory dwelling units, sometimes known as granny flats, are small units accessory to the main housing. Regulated correctly, housing alternatives could provide flexibility in rural housing. The first step in permitting housing variety is to initiate a discussion with the State on how and where these types of housing would be appropriate. Another way to support a diversity of housing is to work closely with agencies and jurisdictions that promote it. The public corporation responsible for promoting affordable housing initiatives in Deschutes, Jefferson and Crook Counties is the Central Oregon Regional Housing Authority, also known as Housing Works. Organized under the Oregon Housing Authority Law (ORS 456), this agency provides affordable housing services to low income households. They also engage in public/private partnerships to provide and manage affordable housing. Cities are also involved in providing a diversity of housing. Promoting a variety of housing choices and mix of price points can be achieved through cooperating with Housing Works and local cities, the donation of County property, or other means.

### *Transect Planning*

Transect Planning concepts are frameworks which organize natural, rural and urban landscapes into categories of density, design, complexity and intensity. The concept integrates the natural environment of a particular location into the design, density and planning efforts to enhance and respect the character of a given place with appropriate and specific development patterns.

The City of Bend has utilized the transect concept in its Urban Growth Boundary (“UGB”) planning efforts, identifying two areas (Shevlin and West Area) on the western edge of the city where lower-densities provide buffers between urban densities and Shevlin Park, Tumalo Creek and the forested lands to the west.

In coordination with the city transect planning efforts, Deschutes County has continued the transect concept for the areas in the county bordering Shevlin Park and adjacent to the Shevlin and West Areas (refer to figure/map), creating the Westside Transect Zone. The Westside Transect Zone is intended to provide for a transition area between urban transect areas within the City of Bend (to the east) and Shevlin Park, Tumalo Creek and forest zoned lands within Deschutes County (to the west).

The location of the Westside Transect Zone is unique where the Zone is located between the Bend Urban Growth Boundary to the east and Tumalo Creek and forestlands to the west. Given the location, a unique opportunity is provided to implement intensive fire prevention measures and building standards that will assist in protecting city and county lands from the danger of the spread of wildfire from the west and northwest. The Zone consists of a four-mile virtually contiguous set of lands where consistent landscape management practices and fire-resistant building standards will be applied. By incorporating the transect concepts, the zone provides an initial line of defense to wildland fire for existing development inside the city of Bend while providing a resilient, low-density neighborhood on the city’s western edge.

A key component of the Westside Transect Zone is balancing the protection of wildlife habitat with fire management plans that will help establish wildfire-resilient neighborhoods. The success of the Westside Transect Zone is due to the transitioning residential densities that gradually decrease from the City’s core to the Shevlin and West areas inside the UGB and continuing from the UGB outward to Shevlin Park.

Development within the Westside Transect Zone will include residential subdivisions with dedicated open space and resource management corridors with funded and enforceable provisions for the management of wildlife habitat and wildfire prevention and mitigation plans. The development plans will also address various vegetation management techniques, structural and building design as well as materials selection, and operational issues and standards, such as evacuation routes and communication plans for residents, as well as wildlife habitat conservation and management measures.

## Section 3.3 Rural Housing Policies

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### Goals and Policies

**Goal 1      Maintain the rural character and safety of housing in unincorporated Deschutes County.**

- Policy 3.3.1      Except for parcels in the Westside Transect Zone, the minimum parcel size for new rural residential parcels shall be 10 acres.
- Policy 3.3.2      Incorporate annual farm and forest housing reports into a wider system for tracking the cumulative impacts of rural housing development.
- Policy 3.3.3      Address housing health and safety issues raised by the public, such as:
- a. The number of large animals that should be permitted on rural residential parcels; or
  - b. The properties south of La Pine, in Township 22S, Range 10E, Section 36, many of which are not in compliance with planning and building codes.
- Policy 3.3.4      Encourage new subdivisions to incorporate alternative development patterns, such as cluster development, that mitigate community and environmental impacts.
- Policy 3.3.5      Maintain the rural character of the County while ensuring a diversity of housing opportunities, including initiating discussions to amend State Statute and/or Oregon Administrative Rules to permit accessory dwelling units in Exclusive Farm Use, Forest and Rural Residential zones.

**Goal 2      Support agencies and non-profits that provide affordable housing.**

- Policy 3.3.6      Support Central Oregon Regional Housing Authority and other stakeholders to meet the housing needs of all Deschutes County residents.
- a. Assist as needed in coordinating and implementing housing assistance programs.
  - b. Support efforts to provide affordable and workforce housing in urban growth boundaries and unincorporated communities.
- Policy 3.3.7      Utilize block grants and other funding to assist in providing and maintaining low and moderate income housing.
- Policy 3.3.8      The transect concept provides a range of development patterns from most to least developed. The Westside Transect Zone implements the transect concept by providing a rural, low density range at the western edge of the Bend UGB adjacent to the urban transect typology inside the Bend UGB and extending outward westerly to the public and forested lands. The Westside Transect Policies set forth below and the zoning ordinance provisions implementing those policies are specific to the area located between the Bend UGB and Shevlin Park and do not apply to other areas adjacent to the Bend UGB.
- Policy 3.3.9      Westside Transect Policies:



- 3.3.9.1 Protect the sensitive eco-systems and interrelationships of the urban/rural interface on the west side of Bend between the urban area and Shevlin Park and the public and forestlands to the west.
- 3.3.9.2 Protect natural resources and environmentally sensitive areas and provide special setbacks between development and Shevlin Park, Tumalo Creek, and forestlands.
- 3.3.9.3 Development patterns shall reflect the protection of land with environmental significance and fire-wise community design best practices.
- 3.3.9.4 Limit residential development to 200 single-family residential lots.
- 3.3.9.5 Manage all areas outside of the structural building envelopes on residential lots for wildfire mitigation and wildlife habitat in accordance with coordinated plans prepared by professionals, reviewed annually with reports submitted to the County every three years. The wildfire mitigation and wildlife habitat plans shall be funded through homeowner assessments and administered and enforced by a homeowners association established at the time of creation of any residential lots.
- 3.3.9.6 Reduce the impact of construction by using best management practices to minimize site disturbance during construction and construction impacts (i.e., erosion) on Shevlin Park, Tumalo Creek, and forestlands.
- 3.3.9.7 Coordinate with the City of Bend for mitigation of impacts to City infrastructure from development within the Transect.

## Section 3.6 Public Facilities and Services

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### Background

Public facilities and services provide the basic infrastructure for urban and rural development. These systems include water and sewer systems, police and fire protection, health and social services, schools, and libraries. Transportation is also a public facility and is addressed separately (see Section 3.7).

Most people have an expectation that the public facilities and services that support our lives, from law enforcement to electricity, will be available. Generally, the provision of facilities and services is more efficient and cost-effective in compact urban areas than in scattered rural development. In some areas of the County, particularly east County, available services are limited due to the large properties and distance from urban centers. Many of the people who choose to reside there consider the limited availability of services and facilities as an acceptable trade off for the ranching lifestyle.

Statewide Planning Goal II, Public Facilities and Services and the associated Oregon Administrative Rule 660-011 specify that facilities and services should be appropriate for, but limited to, the needs and requirements of rural areas to be served. Public facility plans are not required for rural areas as they are for urban development (except for certain Unincorporated Communities). In fact, Goal II and the associated rule define limits to the provision of sewers and water systems in rural areas, in order to limit rural growth.

There are several important issues relating to the provision of public facilities and services.

- Meeting the needs of county residents while supporting the protection of resource lands
- Maintaining health, safety, and security throughout the county
- Cooperating and collaborating among the various providers of public services

Although counties must ensure public facilities and services are planned for, the facilities and services need not be provided by county government. The discussion below highlights who provides the services listed and how the County can manage development impacts on existing facilities and services.

### County Facilities and Services

*Law Enforcement:* The Deschutes County Sheriff's Office is a full service organization providing patrol, traffic team, criminal investigations, corrections, civil and search and rescue. Special operations include a Marine Patrol, K-9 units, and Forest Patrol. The Sheriff is an elected public official who serves a four year term. A 2006 vote created two taxing districts to permanently fund Sheriff Office operations.

*Solid Waste Disposal:* The County manages Knott Landing landfill and four transfer stations, Negus, Northwest, Alfalfa and Southwest. Knott Landing landfill receives the transfer and recycling waste from the four transfer stations (see Section 2.9 for recycling). Knott Landfill is anticipated to last until 2029 at which time it is planned to be reclaimed as park land. A replacement site will be identified approximately 10 years prior to the proposed closure date.

As of 2010 an issue that has been discussed is creating a landfill overlay zone to prevent conflicts between landfills and homeowners.

*County Health Department:* The County health department promotes and protects the health of the community through collaboration, education, prevention and the delivery of compassionate care through a variety of supportive programs.

*Government Administration Buildings:* The County provides government functions pertaining to the County Recorder and Licensing, Assessor and Finance departments.

*Fairgrounds:* The County maintains the County Fairgrounds and Expo Center. With panoramic views of the snow-capped Cascade range, the Deschutes County Fair and Expo Center is situated on the outskirts of Redmond just off of Hwy 97 and adjacent to the Redmond Municipal Airport. Due to its central location, the fairgrounds also serves as an emergency center. The fairgrounds hosts the annual County Fair and numerous other events throughout the year.

### **Other Agency Facilities and Services**

Where other agencies provide facilities and services, the County role is to coordinate with these agencies and work cooperatively on projects and proposals that benefit County residents. Where there are gaps in the coverage for specific areas, the County can work with providers to fill them. For example, there are gaps in coverage by fire districts that leave some areas unprotected.

*Central Oregon Intergovernmental Council:* COIC began serving the residents and communities of Central Oregon in 1972 as a Council of Governments organized under ORS 190 by Crook, Deschutes and Jefferson Counties and Bend, Culver, Madras, Metolius, Prineville, Redmond and Sisters. COIC provides a wide variety of educational and economic development services such as workforce training, alternative high school education, business loans and public transportation. COIC continues to evolve to meet the needs of Central Oregon.

COIC is governed by a 15-member board made up of elected officials who are appointed by each of the member governments as well as appointed representatives of key economic sectors – business and industry, tourism and recreation, agribusiness and agriculture, timber and wood products, and the unemployed/underemployed. The respective county court or commission makes each appointment.

*School Districts:* There are three school districts in Deschutes County: Bend-La Pine (SD 1), Redmond (SD 2J) and Sisters (SD 6). Additionally, since the school in Brothers closed for lack of students, some residents in the eastern parts of the County attend schools in Crook County School District (SD 15). East County residents have expressed interest in additional, but limited, rural development, to facilitate the reopening of Brothers School. The High Desert Education Service District (ESD) partners with the districts to provide support services such as special education, school improvement, administrative and legal services.

*Fire Districts:* The following fire districts support rural residents: Bend Fire Department, Black Butte Ranch Rural Fire Protection District, Cloverdale Rural Fire Protection District, Crooked River Ranch Rural Fire Protection District, Deschutes County Rural Fire Protection District #1 and #2, La Pine Rural Fire Protection District, Sisters-Camp Sherman Rural Fire Protection District, and Sunriver Service District. Public lands are protected by federal agencies. There are

some areas in Deschutes County not covered by a fire district. (See Section 3.5 for more on fire protection.)

*Irrigation Districts:* Irrigation districts in Oregon are organized as Special Districts under ORS Chapter 545. They are thus public corporations under Oregon Law, with prescribed rules for purpose, boards, elections, staffing, charges, etc. The districts are created for the purpose of delivering water to their patrons. As such they are effectively non-profit water user associations. In addition to irrigation uses, these districts also supply a number of other uses, including municipal, industrial, and pond maintenance, warranting coordination with municipalities.

*Libraries:* Deschutes Public Library has branches in Bend, Redmond, Sisters, La Pine and Sunriver. They also operate a bookmobile program that focuses on children and parenting books and a program for supplying books to homebound residents.

*Higher Education:* Located in Bend, Central Oregon Community College and the Oregon State University Cascade Campus provide secondary educational opportunities. As of 2010 there is considerable discussion about the need for a full four-year university.

*Deschutes County Extension and 4-H Service District:* In Oregon, 4-H is part of the Oregon State University Extension Service. It is a youth education program with membership available to all Oregon youth in grades 4-12. The 4-H Program in Deschutes County involves approximately 300 volunteer leaders working with about 1,200 youth. Additionally, the Oregon State University Extension Service reaches over 400 youth through non-traditional programs on a continuing basis.

*Soil and Water Conservation District:* Soil and Water Conservation Districts are uniquely authorized by the State of Oregon to provide for the conservation of its soil and water resources. Working in cooperation with stakeholders, the districts address issues such as control and prevention of soil erosion, conservation and development of water resources, water quality and preserving wildlife. The Deschutes Soil and Water Conservation District is a legally defined subdivision of the state government, but, like all soil and conservation districts, functions as a local unity led by a locally elected board of directors who serve without pay.

### **Mixed Public and Private Facilities and Services**

*Water Districts:* Water districts include both publically-owned and privately-owned Public Water Systems. Public Water Systems are defined as those that have more than three connections, supply water at least 60 days/year and are used by at least 10 persons/day. All water systems are regulated under the federal 1974 Safe Drinking Water Act and 1981 Oregon Drinking Water Quality Act. Public Water Systems serving over 3,300 people are overseen by the Oregon Department of Human Services Drinking Water Program. The County acts as a contractor for the Department of Human Services to monitor approximately 180 Public Water Systems. Some privately owned systems are, for various reasons, regulated by the Public Utility Commission, which sets rates and rules for public utilities.

### **Privately Owned Facilities and Services**

*Utilities:* Electricity is provided by Pacific Power around Bend and Redmond. Central Electric Cooperative and Midstate Electric provide service in the rest of the County.

Phone service is provided by Qwest and numerous cell phone providers. Cable is provided by Bend Cable and satellite providers. Internet is provided by a variety of servers.

*Hospitals:* Cascade Healthcare Community manages two hospitals: St. Charles Bend and St. Charles Redmond. Additionally there are numerous health providers and clinics.

*Sewer Districts:* Creating or expanding existing sewer systems outside an urban growth boundary or unincorporated community is governed by Statewide Goal 11 and OAR 660-011-0060. In order to protect rural areas from urban-style development, the rules regulate where and when rural sewers are appropriate. Some sewer districts, such as Oregon Water Wonderland Unit 2, have used the Statewide Goal 2 exception process to create or expand a sewer system.

*Vector Control District:* Four Rivers Vector Control District was formed in 1985 to combat seasonal infestations of mosquitoes. Using environmentally sensitive chemicals, the District fights approximately 22 different species of mosquitoes. The district is located between Sunriver and La Pine. They are the only district in Deschutes County that does aerial mosquito spraying.

### **Individual Facilities and Services**

*Private wells:* Most rural properties are served by private wells that are approved and managed by the Oregon Water Resources Department. The County currently does not track the number of wells. 2009 legislation requires new well diggers to provide a map of the well location and pay \$300 that will be used for monitoring groundwater. Wells existing as of the date of the legislation are not required to comply.

*Individual septic systems:* Most rural properties are served by septic systems that are approved by the County Environmental Soils Division.

### **Coordination on Facility and Service Planning**

The County role in planning for facilities and services involves coordination, to assure that as new growth is approved, facilities and services are available. Some specific areas for coordination are listed below.

*Schools:* ORS 195.110 requires large school districts, cities, and counties to plan for the future and coordinate with one another to assist school districts with obtaining land. Districts are generally required to prepare a 10-year capital improvement plan for sites and facilities. Cities and counties are generally required to help the districts protect or obtain sites and through land use policies and development codes. In specific circumstances, cities and counties may deny applications for residential development if adequate school capacity is not available. The law includes mandates for each entity and delineates responsibilities.

*Other Jurisdictions:* There are instances where other jurisdictions facilities are located in unincorporated lands. For example, the City of Bend wastewater treatment plant and Airport are sited on lands regulated by the County. Close coordination with cities goes a long way in ensuring adequate operation and maintenance for those facilities.

*Service Districts:* Close coordination with service providers will assure that as new development is approved adequate facilities and services are available.

### **Facility Issues 2010**

As of 2010 there is controversy over the siting of power facilities and cell towers. These facilities generally provide community-wide benefits with area-specific visual impacts. A review of County Code and how other jurisdictions regulate these uses can identify potential siting and design standards that can be adopted to minimize impacts.

## Section 3.6 Public Facilities and Services Policies

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### Goal and Policies

**Goal I      Support the orderly, efficient and cost-effective siting of rural public facilities and services.**

- Policy 3.6.1      Encourage the formation of special service districts to serve rural needs rather than have the County serve those needs.
- Policy 3.6.2      Encourage early planning and acquisition of sites needed for public facilities, such as roads, water and wastewater facilities.
- Policy 3.6.3      Support community health clinics.
- Policy 3.6.4      Where possible, maintain County offices in locations convenient to all areas of the county.
- Policy 3.6.5      Support the County Fairgrounds as a community gathering place, event facility and home to the annual County Fair.
- Policy 3.6.6      Maintain the County Fairgrounds as an emergency readiness location.
- Policy 3.6.7      Before disposing of County-owned property review whether the land is appropriate for needed public projects such as schools, health clinics, fire stations or senior centers.
- Policy 3.6.8      Coordinate with rural service districts and providers to ensure new development is reviewed with consideration of service districts and providers needs and capabilities.
- Policy 3.6.9      New development shall address impacts on existing facilities and plans through the land use entitlement process.
- Policy 3.6.10      Support education districts, library districts and recreation districts in meeting community needs, such as meeting spaces.
- Policy 3.6.11      Where possible, locate utility lines and facilities on or adjacent to existing public or private right-of-ways and to avoid dividing farm or forest lands.
- Policy 3.6.12      Review public facilities and services to minimize impacts of the facilities on the larger community.
  - a. Review and revise as needed County Code to require screening of public facilities including power generating facilities and sewage treatment plants, and to address impacts from cell towers.
- Policy 3.6.13      Support the creation of a landfill overlay zone.
- Policy 3.6.14      Guide the location and design of rural development so as to minimize the public costs of facilities and services.

## Section 2.8 Energy Resources

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### **Background**

Land use decisions often have a direct effect on energy use and conservation. How communities and buildings are designed and what transportation and utility options are available all impact energy usage. Energy is addressed in the Oregon land use system through Statewide Planning Goal 13, Energy, which requires land uses to be managed for energy conservation, based on sound economic principles.

A prime method of managing land for energy conservation is to design communities to be compact and walkable, so as to limit the need for automobiles and conserve fossil fuel. For a rural county, these types of transportation related energy savings are limited. Instead the County can focus on other conservation measures.

The second energy issue to be addressed is how to promote alternative energy generation, while managing the inevitable impacts. The impacts and problems stemming from traditional fossil fuel energy sources such as oil and coal are clear, but little agreement exists over a solution. As of 2010 there is an emphasis on promoting sustainable, alternative power generation from wind, solar, biomass, hydroelectric or geothermal.

### **Energy Conservation**

Energy conservation frees existing energy resources for other uses and saves money. It is generally seen as a win-win, where the environment benefits from lowered demand for power, and households benefit from lower electric bills. Conservation is also being incorporated into other sections of this Plan, including Water Resources and Environmental Quality.

There are a few ways the County can work proactively to conserve energy. One is to apply energy conservation techniques at County facilities, then track and publicize the energy saved. The County can also support local utility companies that provide energy audits. These educational tools can alert the community to individual actions that can save money as well as energy. Education could also be directed to address thermal ratings for new buildings and to promote more efficient lay-outs. Another option is to strengthen regulations, such as amending subdivision standards.

The County has long promoted energy conservation through a passive solar code that requires new structures to be sited so that they do not block the sun from falling on adjacent properties. This code effectively ensures that all structures are able to obtain passive solar energy. Various studies have shown that solar orientation can create significant energy savings. During implementation of the passive solar code some simple revisions have been identified that could create exemptions for small lots and provide a variance procedure. These changes would provide some flexibility to the existing code while retaining the benefits of passive solar.

### **Siting Energy Facilities**

In general, cities and counties have siting authority over energy projects below a certain size or generating capacity. This includes individual projects powering or supplementing homes and businesses or small commercial projects which produce energy for sale. Larger facilities are



regulated by the Oregon Energy Facility Siting Council. The thresholds for Siting Council jurisdiction are determined by the Legislature and are defined in Oregon Revised Statutes (ORS) 469.300. The Siting Council does not regulate hydroelectric development. Instead, the Oregon Water Resources Commission has the authority to issue licenses for hydroelectric development.

Counties may face planning decisions for the following types of energy projects:

- Thermal power or combustion turbine electric generation projects having a nominal electric generating capacity of less than 25 megawatts.
- Wind or solar electric generating projects having a peak generating capacity of less than 105 megawatts.
- Geothermal electric generating projects with a peak generating capacity of less than 38.8 megawatts.
- Electric transmission and distribution lines carrying less than 230 kilovolts and less than 10 miles in length.
- Biofuel production facilities, if the fuel produced is capable of being burned to produce the equivalent of less than six billion Btu of heat a day or if the facility is otherwise exempt from Siting Council jurisdiction under ORS 469.320(2).

Although the County is considered rich in alternative energy sources, a study of potential sites would provide more specific information on where these sources exist. The map would also allow a comparison between the energy sites and other protected resources.

### **Home and Business Alternative Energy Generation**

The following are known viable sources of alternative energy production for individual homes and businesses in Deschutes County. Impacts to be managed from these uses are increasingly understood and are limited by the size of the projects. In 2010 the County is in the process of creating code to permit small wind turbines for home or business use.

#### *Wind*

Small electric wind turbines for residential or small commercial use convert the energy of the wind to electricity. A small wind turbine can produce from 500 watts to 100 kilowatts of electricity, typically producing up to 10 kilowatts. Small turbines range in height from 60-100 feet in height. Unobstructed access to a consistent wind resource is necessary for safe, efficient operation of wind turbines. Oregon law allows landowners to secure a “wind energy easement” to ensure the undisturbed flow of wind across a site (ORS 105.900 - 915).

The electricity generated can be stored in batteries for times of limited wind. If there is a connection to a traditional power grid and excess electricity is produced, it is sometimes possible to sell the excess to the local utility. The primary impacts from small wind generation that need to be considered include: height of the structure, lot size, setbacks, noise, aesthetics, abandonment and wildlife impacts.

#### *Solar*

Generally, small solar electric generating systems use photovoltaic cells on the roof of a building to produce electricity from the radiant energy of the sun. The impacts from individual solar projects are regulated through building regulations, rather than land use regulations. The

main issue with home or business use of solar energy is that as of 2010 it is not competitively priced and requires subsidies. This is anticipated to change as the technology improves.

#### *Biomass*

Biomass is solar energy stored in organic material from living plants. The most common and most widely used source of biomass is firewood used to heat homes and to a lesser extent small businesses. Additionally, biomass materials are being produced from waste products, such as crop residue or forest thinning. The primary impact from home or business use of biomass is air pollution. Although considered carbon neutral since the carbon release through burning was carbon that was absorbed during the growth of the material and would be released as the material decays, the particles caused by the burning may impact air quality. Regulations limiting the burning of firewood are often enacted in urban areas, but are not as useful in rural communities.

### **Commercial Energy Generation**

The State oversees construction and approval of large commercial energy facilities, as noted above. However there is a role for local governments to oversee smaller commercial projects.

Commercial energy generation is considerably more complex than permitting small projects for homes and businesses. From a land use perspective, the scale, extended time frame, investment required and required off-site components all complicate the approval process. For example, to move the electricity generated at an alternative energy facility to market there is often a need for approval of roads, transmission lines or substations. The accessory facilities may or may not be in place at the same site as the main facility, but are an integral part of the project and are currently reviewed separately, based on State regulations.

Although the commercial alternative energy systems listed below have some similarities, there are often different requirements, advantages and impacts to be considered. The primary impact they all share is that they are large industrial structures that will impact the land through the construction process, causing noise, dust, erosion, the spread of noxious weeds and similar damages. These impacts can generally be controlled through proper management of the site. Other types of impacts to be noted are listed below.

#### *Wind Energy Generation*

There is a growing interest in commercial wind farms. As of 2010, a wind farm is undergoing approval in Crook County, with some accessory uses to the wind farm being approved in Deschutes County.

*Wildlife impacts:* Construction of wind energy projects may have both temporary and permanent impacts on wildlife habitat. Bird or bat fatalities from collision with turbine towers or blades have been reported. Requiring an applicant to conduct appropriate pre-construction wildlife surveys as well as post-construction monitoring can address wildlife concerns.

*Visual impacts:* The need for high towers and exposure to open terrain is inherent in the function of wind turbines, and therefore some visual impact is unavoidable. Careful placement with a thought to nearby roads and homes can aid in limiting the visual impacts.

### *Solar Energy Generation*

Various technologies assist in capturing, converting and distributing solar energy. State officials have declared solar energy a priority sector in developing the Oregon's economy. One of the key regions for developing the solar power industry is Central Oregon, due in part to its plentiful cool and sunny days, and the number of solar power companies already doing business here.

*Wildlife impacts:* The concentrated sunlight reflected by solar panels or mirrors could kill or injure wildlife, and in a sensitive habitat – such as a desert ecosystem – the environmental effects might be significant. Similar to wind turbines, requiring the applicant to conduct appropriate pre-construction wildlife surveys and post-construction monitoring would also be important.

*Visual impacts:* Solar facilities can stretch for miles and create visual impacts. Thoughtful design and placement are important for solar facilities.

### *Commercial Biomass*

Commercial biomass uses organic material such as wood, agricultural waste or crop residues to power boilers to generate heat. According to the Oregon Forest Resources Institute an estimated 4.25 million acres (about 15% of Oregon's forestland) have the potential to provide useful woody biomass through thinning to reduce the risk of uncharacteristic forest fires. A potential long-term use is converting woody biomass to biofuels and bioproducts to replace fossil fuels.

Identified biomass opportunities include:

- Warm Springs
- Gilchrist
- La Pine

*Transportation impacts:* Biomass materials need to be transported to a central location, generating traffic and air pollution. Building a biomass facility as close as possible to an available source will mitigate this somewhat.

*Visual impacts:* A biomass plant is an industrial use with tall smokestacks, so visual impacts are unavoidable. Similar to wind facilities, appropriate siting can go a long way towards mitigating this concern.

*Air quality impacts:* There is potential for air quality impacts. These impacts will be managed by the Oregon Department of Environmental Quality rather than the County.

### *Geothermal Energy Generation*

Geothermal energy is a form of renewable energy derived from heat in the earth. This heat is transferred to water through various means and the steam produced is used to produce electricity.

Geothermal energy is completely dependent on the location of geothermal resources. Central Oregon may contain some of the best prospects for geothermal exploration in the continental United States. As of 2010 the area around Newberry Crater is being explored for potential geothermal energy. This exploration is in the Deschutes National Forest and therefore does

not need County approval. However, accessory uses such as substations or transmission lines might potentially require County review.

A 1984 a Geothermal Study was adopted into the Resource Element of the Comprehensive Plan and led to more specific regulations for geothermal energy generation being adopted into the Zoning Code in 1991.

#### *Hydroelectric Energy Generation*

Irrigation canals in Central Oregon are now being looked at as more than just a way to distribute water from the Deschutes River to farmers and ranchers. With energy costs rising and the desirability of renewable energy sources, the power of water rushing through the canals is seen as a source of power and revenue. Hydropower projects that are currently constructed include:

- Central Oregon Irrigation District (COID) has installed two hydropower projects totaling 10.5 megawatts (MW). The Siphon Power Project (5.5 MW) in the south part of Bend and the Juniper Ridge Power Project (5.0 MW) approximately 5 miles north of Bend.
- Swalley Irrigation District has installed a hydropower project totaling 750 kilowatts (kW) in their main canal 5.1 miles below an existing diversion.

Additionally, Tumalo Irrigation District received a grant with which they conducted a hydroelectric feasibility study.

In 1986 a River Study was adopted into the Resource Element of the Comprehensive Plan and led to more specific regulations for hydroelectric energy generation being adopted into the Conditional Use section of the Zoning Code in 1991.

#### **Future of Energy**

Energy conservation is likely to be an ongoing issue over the next few decades and the County can continue to promote more efficient energy use. As for alternative energy facilities, the State of Oregon promotes these through a requirement that utility suppliers include renewable energy in their portfolios. Additionally, the State offers numerous tax credits and other incentives for both commercial and individual alternative energy projects.

The Rural Renewable Energy Development Zone is another State initiative. These zones encourage investment in alternative energy through granting tax exemptions, similar to an enterprise zone. This idea should be investigated further as an option for the County.

Looking at County regulations in place in 2010, the acreage needed to allow a utility facility is likely on farm or forest lands. Farm and forest land is highly regulated through ORS and OAR. State requirements for utility facilities and accessory uses have been incorporated into the County Zoning Code. Additionally, utility facilities and accessory uses are permitted in most non-farm or non-forest zones, subject to the general conditional use and site plan requirements. The County has additional conditional use regulations for geothermal and hydroelectric facilities, but not for wind or solar energy. The geothermal and hydroelectric regulations are over a decade old and may no longer be effective given the growth of the industry and technology.

In considering existing or potential new regulations, thought should be given to not just the energy generation facility, but also the necessary accessory uses, such as transmission lines,

roads or substations that are necessary to market the energy produced. Regulations should also acknowledge that some forms of alternative energy are dependent on the location of the power source, such as geothermal and hydroelectric. Another area to consider for the regulations is how to provide incentives to energy providers to encourage them to first offer the energy they generate to local utility companies. The review of regulations should also consider how other protected resources would be impacted by the development of alternative energy facilities.

In reviewing regulations, the County should coordinate with agencies, organizations and businesses with expertise in the alternative energy field. For example, an Interagency Working Group (Working Group) comprised of Oregon Department of Fish and Wildlife, United States Fish and Wildlife, United States Forest Service and the Bureau of Land Management created a report (Interagency Report, see Section 2.7 of this Plan) that includes a number of recommendations for protecting wildlife when approving alternative energy facilities. A review of these recommendations will provide valuable information on managing wildlife impacts from new energy facilities.

New regulations should ensure that the County's are in compliance with State requirements, are flexible and minimally intrusive so as to encourage interest, provide incentives where feasible and still manage impacts to the rural community and natural environment.

## Section 2.8 Energy Policies

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### Goals and Policies

#### **Goal 1      Promote energy conservation.**

- Policy 2.8.1      Incorporate energy conservation into the building and management of all County operations and capital projects using regular energy audits to refine the results.
- Policy 2.8.2      Reduce energy demand by supporting energy efficiency in all sectors of the economy.
- Policy 2.8.3      Encourage energy suppliers to explore innovative alternative energy conservation technologies and provide energy audits and incentives.
- Policy 2.8.4      Support stakeholders that promote energy conservation.
- Policy 2.8.5      Review County Code and revise as needed to ensure effective energy conservation regulations, such as revising County Code on solar energy to create flexibility and permit exceptions for small properties and sites with specific anomalies.

#### **Goal 2      Promote affordable, efficient, reliable and environmentally sound energy systems for individual home and business consumers.**

- Policy 2.8.6      Review County Code and revise as needed to permit alternative energy systems for homes and businesses and mitigate impacts on neighboring properties and the natural environment.
- Policy 2.8.7      Support incentives for homes and businesses to install alternative energy systems.

#### **Goal 3      Promote affordable, efficient, reliable and environmentally sound commercial energy facilities.**

- Policy 2.8.8      Review County Code and revise as needed to develop an efficient permitting process and effective siting standards for commercial renewable energy projects that address all project components as well as environmental and social impacts.
- Policy 2.8.9      Support commercial renewable energy projects, including the following:
- a. Review the concept of Rural Renewable Energy Development Zones;
  - b. Support studies that identify and inventory potential significant commercial energy resource sites;
  - c. Examine alternatives to protect identified significant commercial energy resource sites;
  - d. Support the use and marketing of methane gas from County Landfills.
- Policy 2.8.10      Encourage commercial renewable energy providers to supply local power.
- Policy 2.8.11      Goal 5 energy inventories, ESEEs and programs are retained and not repealed.