

OREGON'S PLAYGROUND PREPARES FOR THE FUTURE: A GREENPRINT FOR DESCHUTES COUNTY



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FOR DESCHUTES COUNTY

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Acknowledgments

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For more information, contact:
Kristin Kovalik, Project Manager
The Trust for Public Land
Bend Field Office
115 NW Oregon Ave, Suite 16
Bend, OR 97701
Kristin.Kovalik@tpl.org
541.382.2092

**To download a copy of this report, a related brochure or maps,
visit www.deschutescountygreenprint.org or
www.oregonexplorer.info/deschutes/MappingTools/GreenprintMaps**

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EXECUTIVE SUMMARY

The Greenprint for Deschutes County is a conservation plan that identifies the landscapes that contribute the most to quality of life and the economic prosperity of the region. It highlights special places that make Deschutes County a great place to live, work, and play and create a unique competitive advantage as community leaders work to build a healthy economy.

Deschutes County's prosperity is directly tied to the character of its landscape and the ways the community integrates it into every aspect of life. People are drawn to Central Oregon for its world-class scenery, outstanding recreation opportunities, and abundant wildlife—all within minutes of the urban centers. Survey after survey has found that the region's quality of life is a key driver that attracts the entrepreneurs and modern businesses that are helping to diversify the local economy. With the current slowdown, local leaders have seized the opportunity to plan for a future that ensures that businesses, visitors, students, and families continue to find Deschutes County desirable. The Greenprint is a key investment in the region's economic prosperity and community stability.

The open and collaborative Greenprint process—which included two online surveys, more than 50 in-person interviews, a thorough review of existing related plans, and two telephone polls of Deschutes County residents—helped a stakeholder group of about 60 individuals representing more than 40 organizations and agencies agree upon eight core goals for Deschutes County:

- Protect water quality
- Protect habitat and significant ecological areas
- Preserve working farms and rangeland
- Create trails and recreation access
- Protect scenic viewsheds
- Restore degraded wildlife habitat
- Preserve forestland
- Protect historic and cultural resources

The eight Greenprint goal maps included in this report are designed to illustrate these land conservation and recreation priorities across Deschutes County. A ninth map, the Overall Conservation and Recreation Values map illustrates the landscapes that potentially meet the most goals at once. Together these maps show areas of opportunity rather than land-use prohibitions.

The people of Deschutes County can use the maps to:

- Leverage funding opportunities to ensure that conservation investments also benefit the local economy,
- Locate new trail and recreation areas close to local neighborhoods, and
- Prioritize investment in areas that contribute to quality of life, thereby attracting and retaining businesses.

INTRODUCTION

In the past ten years, Deschutes County has experienced the most rapid growth of any county in Oregon, largely due to its quality of life and year-round recreation. People are drawn to Deschutes County to enjoy the scenery, outstanding recreation opportunities, and abundant wildlife. In fact, the county's prosperity is directly tied to the local quality of life, which is a key driver in attracting entrepreneurs and high tech businesses, helping to diversify the local economy.

A study released in July 2010 by Headwaters Economics offers insight on this subject. In *Improving Deschutes County's Competitiveness: Business Location and Retention Factors*, the researchers observe: "The example of Boise and Boulder point to the importance of developing amenities to attract skilled workers and their families. Boise's system of green spaces and trails is a crucial element in that city's ability to appeal to younger technology workers in particular... Communities in Central Oregon, Bend in particular, have the ability to compete at this level if there is a continued commitment to green infrastructure, downtown development, and a lively arts and entertainment scene."¹

The Trust for Public Land and our local partners believe that careful, insightful planning is key to maintaining and improving the quality of life and economic vitality of the region. As a result, a broadly based group of local conservation groups, recreation groups, businesses, and residents, with the support of federal, state, county, city, park and recreation districts, gathered in 2009 and 2010 to help create a Greenprint that identifies and prioritizes the values that shape the community. With guidance provided by Greenprint maps, local leaders can conserve the things that make Deschutes County a great place to live, work, and play.

A Greenprint is a conservation approach that fully engages volunteers from across the community to create a tool that helps conservation professionals and local leaders make informed decisions about land conservation, recreation priorities, and balanced growth. Interactive maps that highlight and prioritize key protection areas for important scenic views, wildlife habitat and trail connections—as identified by the local people who use them—help guide future conservation purchases of land and easements that will protect these important resources. The Greenprint should be used for securing new public and private sources of funding as it provides strong, competitive and qualifying data. A collaborative process leading to a regional vision for land conservation and recreation strengthens the collective efforts of all the organizations involved.

Thinking ahead is the only way to make sure Central Oregon continues to be a great place to live and work.

¹ Improving Deschutes County's Competitiveness: Business Location and Retention Factors (July 2010), A report by Headwater Economics in Partnership with Economic Development for Central Oregon, available at: www.headwaterseconomics.org/deschutes/Deschutes_Report_Full.pdf.

CURRENT CONDITIONS²

Deschutes County is located in Central Oregon with an area of 1,955,000 acres. About eighty percent of the land in Deschutes County is in public (federal and state) ownership. The Cascade Mountain range, the Three Sisters Wilderness, numerous mountain lakes and the Deschutes National Forest border the western portion of the county. The Badlands and Horse Ridge are the eastern boundary. Newberry National Volcanic Monument is located to the south, while the northern portion of the county includes the cities of Sisters and Redmond as well as Smith Rock State Park. The eastern portion of the county, located east of Horse Ridge, is rural ranch and shrub-steppe landscape with the towns of Millican, Brothers and Hampton.

There are four municipalities within Deschutes County. Bend is the largest and most urban, followed by Redmond, Sisters and La Pine. Bend, Redmond and Sisters form a triangle in the northern portion of the county with each town approximately 20 miles from the other. La Pine is located at the very southern portion of the county. Sunriver is a popular resort community located off of Hwy 97 between Bend and La Pine with a year round population of 1,700 residents.

The Deschutes River flows through Deschutes County and attracted early settlers to live in the Central Oregon high desert. The Deschutes River is a community icon and continues to be a significant natural and economic resource for Central Oregon communities. The river begins flowing south from Little Lava Lake in the Cascade Mountains before turning north and flowing west of La Pine, through Sunriver and Bend and west of Redmond before being joined by the Crooked River and Metolius River at Lake Billy Chinook. The Deschutes River is controlled by a series of irrigation water supply dams. It ultimately ends its journey where it meets the Columbia River between Oregon and Washington.

Traditionally rural, the county has recently become more urban in character, and subsequently there are both common values and divergent interests and priorities between the four population centers and the rural unincorporated areas.

I. DEMOGRAPHICS

Between 2000 and 2008, the U.S. Census Bureau reported a population increase of 37.3%. Since 1960, U.S. Census Bureau data shows a population increase of 585% for Deschutes County, while the state's population grew 114%. Deschutes County has repeatedly been the fastest growing county in the state, although recent growth has significantly decreased due to the recession. The average age of Deschutes County residents is 38.3. This is higher than the state average of 36.3 and may be due to the popularity of the area for retirement. Deschutes County is projected to more than double in population between 2000 and 2025 as shown in Figure 1.

Figure 1. Population Projections – Deschutes County

Area	2000	2025
Bend UGB	52,800	109,389
Redmond UGB	15,505	45,742
Sisters UGB	975	3,747
La Pine UGB	1,697	2,352
Unincorporated County	47,320	79,599
Total	116,600	240,811

Source: Deschutes County Comprehensive Plan Draft – Exhibit “A” to Ordinance 2009-006

² J.T. Atkins and Company completed the current conditions report for this project in June 2009, and this text is excerpted from that report. Facts and figures are those that were available at that time. The full report is available from The Trust for Public Land by request.

2. ECONOMICS

Historically, the Deschutes County economy was based on timber harvesting, wood processing and agriculture. As lumber mills began to close, the beautiful scenery of Central Oregon proved a resource in itself, and tourism and recreation became the economic mainstay of the county. As more and more tourists discovered the region, some decided to stay and make Central Oregon their home. With the increase in population, the need for new residential and commercial buildings created a strong construction based job market that until the recent housing downturn seemed unstoppable.

The county's scenic and recreational lifestyle opportunities have attracted many successful companies (primarily owner-operated, small to midsized entities). For example, in Bend companies range from "... manufacturing, renewable energy, high-tech and recreation equipment sectors."³ There have also been a significant number of start-ups in biosciences. Sisters has attracted a few unique companies including a vitamin supplement company, a nationally distributed hand and foot cream company, and a company that designs camera cranes for video production.

According to Central Oregon Visitors Association studies, more than two-thirds of all visitors visit the Central Oregon region in the spring/summer. During the warm months, visitors enjoy a variety of activities including (but not limited to) mountain biking, boating, fishing, camping, hiking, rock climbing, golfing, sightseeing and motor sports. In the winter, skiing, snowboarding, cross-country skiing, snowshoeing and snowmobiling are all popular. In 2006, tourists visiting Deschutes County spent \$478.8 million. When surveyed, 45% percent of visitors to Central Oregon listed leisure and sightseeing as their primary activities while visiting and 42% listed outdoor recreation.

Since opening in 1958, Mt. Bachelor ski resort has been the premier winter tourist attraction in Central Oregon. With over 350 inches of snow a year, ten lifts and an operating season from November until May, Mt. Bachelor is a major force in the Deschutes County economy for both tourist dollars and job creation.

In 2008, Dean Runyan and Associates completed an economic study for Oregon Department of Fish and Wildlife and Travel Oregon to examine the 2008 expenditures by residents and tourists on fishing, hunting and wildlife viewing in Oregon's 36 counties. The statewide total spent on fishing, hunting and wildlife viewing for 2008 was \$972.8 million.⁴ In Deschutes County tourists spent nearly \$70 million: \$20.4 million on fishing trips; \$6.6 million on hunting trips; and \$42.7 million on wildlife viewing. Central Oregonians spent \$5.3 million on fishing trips, \$1.8 million for hunting trips and \$1.5 million wildlife viewing in Deschutes County – a grand total of almost \$79 million.

3. PARKS AND OPEN SPACE

Over one-half of the total acreage within Deschutes County lies within the Deschutes National Forest. There are also several state parks within the boundaries of the county and four local park districts provide parks and recreation services to the population centers.⁵ Land trusts provide additional local open space and recreation opportunities, while resort areas provide some private open space.

³ www.edcoinfo.com/communities/bend-profile/default.aspx

⁴ ODFW Draft Document 2009.

⁵ More information about the park and recreation districts is available in Appendix D.

The major park providers in the county are:

Redmond Parks

There are three groups that provide park services for the City of Redmond. The City of Redmond operates and maintains the city parks as well as the dry canyon. Redmond Area Park and Recreation District (RAPID), operates and maintains the swim center and manages the recreation programs for Redmond, Terrebonne and Tumalo. The ball fields are managed and maintained by the Redmond School District. The City of Redmond also has a Parks Commission that meets once a month to discuss the future goals and management of the Redmond city parks.

La Pine Park and Recreation District

The La Pine Park and Recreation District has been in existence for close to 20 years. The district serves an 85 square mile area in southern Deschutes County. Voters in May of 2009 approved the first permanent tax rate of \$.30 per thousand of assessed value for the district. This provides roughly \$200,000 for parks and recreation services. The district is governed by five elected board members and is partially supported by its tax base.

Sisters Park and Recreation District

The Sisters Park and Recreation District has a rich history of providing recreation services for the Sisters community. In 1995 a group of community organizations and leaders came together to address the need for organized youth activities and a non-profit organization was created. In 1998 voters approved the formation of the recreation district (a special taxing district). The district is governed by five elected board members and is partially supported by a tax base.

Bend Park and Recreation District

Bend Park and Recreation District (BPRD) serves the City of Bend and is a nationally recognized park and recreation district. In 2006, BPRD was awarded the National Gold Medal Award for excellence in Park and Recreation Management. This award is given to the best Park and Recreation agency in the country based upon its population category. BPRD manages and operates over 2,000 acres of parkland, which includes 74 parks and open space areas and 56 miles of trail. BPRD also offers over 770 recreation and education programs to the community.

BPRD completed a Parks, Recreation and Green Spaces Comprehensive Plan in September of 2005.⁶ The plan took into account a BPRD needs assessment, a community input process and a thorough existing facilities assessment. The plan is intended as a comprehensive planning tool to guide BPRD through the next 10 years of serving the recreational needs of the Bend community. In 2002, BPRD completed the Deschutes River Trail Action Plan.⁷ The Action Plan contains a project prioritization list with an additional level of detail from the earlier Bend Riverway planning process. Based upon these prioritizations, funding sources can be planned and/or applied for to complete the projects. There are currently 9.6 miles of existing improved trails adjacent to the Deschutes River. The Action Plan proposes to construct 10 miles of trail improvements, bike/pedestrian bridges and boat landings along the river and has identified 56 projects to complete the Deschutes River Trail.

⁶ Bend Park and Recreation District, Parks, Recreation and Green Spaces Comprehensive Plan, September 2005.

⁷ Bend Park and Recreation District, Deschutes River Trail Action Plan, September 2002.

Key Recreation Areas and Opportunities

Based on an informal survey of recreation and park groups around the county, these are some notable current and proposed places for recreation:

- **Deschutes Paddle Trail** – The Bend Paddle Trail Alliance would like to establish a paddle trail from the high lakes, through La Pine, Sunriver, Bend, Redmond and continuing on to Lake Billy Chinook.⁸ There are also plans for a “park and play” paddle park within the city limits of Bend to promote fun and safe paddling for a wide skill range of users and water craft. This area would become a popular attraction for both local and visiting paddlers while minimizing the impact upon the river.
- **Badlands** – The Badlands are located 15 miles east of Bend off of Highway 20. The 29,301-acre area has ancient juniper trees, interesting lava flows and rock formations. Desert wildflowers, dry river canyons and Native American pictographs can be seen in the Badlands. The area is popular with hikers, photographers, hunters, bird watchers and equestrian riders. The Badlands were included in the Public Lands Management Act of 2009 and as a result, have received a new designation as a wilderness area.
- **Crooked River National Grasslands** – The Crooked River National Grasslands encompasses 2.5 million acres and spans 100 miles along the foothills of the Cascade Mountains and east to the Ochoco Mountains. It is one of only six nationally designated grasslands within the United States.
- **Skyline Forest** – Skyline Forest is located on Bend’s western edge and to the south of Sisters. The owner of the property, Fidelity National Timber Resources, Inc., has been asked to sell the majority of Skyline Forest, approximately 45,000 acres and another 14,000 acres in Southern Deschutes County, in exchange for development opportunities. The area would be open to recreation and environmentally sensitive logging once it became publicly owned.
- **Mirror Pond** – Mirror Pond is the iconic view from downtown Bend’s Drake Park.
- **Whychus Creek** – Whychus Creek flows nearly 40 miles from the Cascade Mountains to the Deschutes River north of Lake Billy Chinook. In May 2009, more than 400,000 steelhead fry were reintroduced to Whychus Creek in an effort to bring anadromous fish to the upper Deschutes basin. The area has been degraded and straightened with bulldozers in the past, but there is a local effort underway to remove waterway barriers, restore habitat and stream banks along the creek and improve water quality. The Upper Deschutes Watershed Council and the City of Sisters are currently working on a plan to naturally support the banks of the creek flowing through approximately 200 backyards.

4. REGIONAL TRAIL OPPORTUNITIES

Central Oregon Trail Alliance (COTA) has been working with the U.S. Forest Service to build a state-of-the-art trail network 13 miles from Bend near Wanoga Sno-Park. The new Wanoga Complex trail network will connect to the Deschutes River Trail, Storm King, Edison Sno-Park and Phil’s Trail and will greatly expand trail options in the Bend area. There will be a variety of trail types, cycle cross loops and single and double track trails. The trails will appeal to serious racers, recreational riders and families.⁹

⁸ DC Committee on Recreation Assets – June, 2008

⁹ cotamtb.com/about-cota/

Sisters Community Trail System is a community wide trail system that focuses on connecting Sisters' downtown area, neighborhoods, schools and Deschutes National Forest trails. The Sisters Trail Alliance is a volunteer group that is part of Sisters Parks and Recreation District. The Sisters Trail Alliance builds and maintains trails found in the Sisters Community Trails Plan which is a comprehensive plan identifying over 150 miles of trails, paths and lanes to be incorporated into the Sisters trail system.¹⁰

The City of Redmond's Bicycle Master Plan is included in the Redmond Transportation System Plan Update. It also appears in the Comprehensive Plan Addendum and the Transportation Addendum. While the majority of the plan addresses bike lane issues, there is also a section identifying bike trails primarily in the Dry Canyon and along the irrigation canal. The City and County are also directed in the plan to provide bicycle and pedestrian connections to downtown Redmond, schools, shopping areas, community centers, parks, open spaces, and public gathering locations.

Deschutes and Ochoco National Forest staffers are cataloguing more than 10,000 miles of open forest roads to create new maps that show where off-road vehicles can be driven. Deschutes National Forest and Ochoco National Forest are looking at creating three new trail systems. The first trail system is west of Newberry National Volcanic Monument, the second is southwest of Crescent and the third is east of Prineville.¹¹

There is another noteworthy regional effort in progress. In 2008 Senator Ron Wyden appointed the Deschutes County Ad Hoc Committee on Recreation Assets. Among several recommendations, the committee identified the opportunity for a regional bikeway that would enhance the connectivity between the triangle communities of Bend, Sisters, and Redmond, as well as tie in the Sunriver and La Pine south county areas. A joint request was submitted to the state for designation of the "Three Sisters Scenic Bikeway" that would contain two routes around Sisters (McKenzie Pass and Camp Sherman Loops), two Central Deschutes loops (Twin Bridges and Sisters-Smith Rock-Redmond-Tumalo) and two routes in South County (Sunriver-La Pine Loop and Sunriver-Crane Prairie Loop). The following organizations jointly submitted the request: the Deschutes County Bicycle and Pedestrian Advisory Committee; Sisters Area Chamber of Commerce; Redmond Chamber of Commerce; La Pine Chamber of Commerce; Cities of Bend, La Pine, Redmond, and Sisters; Visit Bend; and the Deschutes County Committee on Recreation Assets.

5. WATER RESOURCES

Sections of the upper Deschutes, middle Deschutes, and lower Cooked River are designated as National Wild and Scenic Rivers.

The largest threat to the health of the upper Deschutes River is the fluctuation in river levels due to summer reservoir releases and irrigation diversions. There are two irrigation reservoirs, Crane Prairie Reservoir and Wickiup Reservoir, located south of Bend, that regulate the flow of water. The large volumes of water that are released for irrigation erode the banks of the river and damage the riparian environment. Between April and October, 90% of the stream flow from the Deschutes River is diverted to irrigation canals.¹² Historically there have been healthy populations of redband and bull trout, but due to the extreme flow fluctuations and habitat degradation, the spawning areas have been severely impacted.¹³

¹⁰ www.sisterstrails.com

¹¹ Bend Bulletin 1-27-09.

¹² www.deschutesriver.org/FAQ/default.aspx.

¹³ Upper Deschutes River Restoration Strategy, October 7, 2008.

6. HABITAT, WILDLIFE, AND ENDANGERED SPECIES

Around Bend there is the concurrence of three distinct ecoregions identified by the Oregon Department of Fish and Wildlife:

- **The East Cascades Ecoregion** is located just east of the Cascade Mountains summit and east to the high desert. From north to south the ecoregion begins in Hood River and terminates at the California border. A portion of Bend and Sisters are included in this ecoregion.
- **The Blue Mountains Ecoregion** covers a portion of Bend, Sisters, Redmond and northeastern Oregon to the Idaho boarder. This is the largest ecoregion in Oregon and contains mountain ranges, canyons, sagebrush steppe, juniper woodlands and areas used for dryland farming.
- **The Northern Basin and Range Ecoregion** is considered sagebrush country; it covers the southeastern portion of the state to the Nevada and Idaho borders. This area has a long history of cattle grazing and as a result, the degradation of sagebrush habitat.¹⁴

The diversity of habitats within Deschutes County supports a variety of wildlife species such as mountain lions, bobcats, coyotes, big horn sheep, mule deer, black tailed deer, elk, pronghorn antelope, fox, black bear, bats, squirrels, rabbits, golden eagles, osprey, waterfowl, blue herons, sage grouse, chucker, and quail.¹⁵ The northern spotted owl, currently federally listed as threatened, also lives in Deschutes County, as does another federally listed endangered species, Fender's Blue butterfly.¹⁶

Birdwatching at Farewell Bend Park



¹⁴ www.dfw.state.or.us/conservationstrategy/contents.asp#eco.

¹⁵ BLM document Upper Deschutes Resource Management Plan Oct. 2004.

¹⁶ U.S. Fish and Wildlife Service Species Profile.

THE PROCESS FOR CRAFTING A COMMUNITY VISION

First, the Stakeholder Group for the Greenprint for Deschutes County, using information gleaned from planning documents and new public input from a telephone poll and on-line survey:

- Defined conservation and recreation values for Deschutes County,
- Assigned relative weights to those values,
- Reviewed maps that illustrate where those values are evident on the landscape, and
- Discussed implementation strategies for preserving those landscapes.

Just as a builder needs a blueprint to build a house, local leaders need a Greenprint to build an interconnected system of parks and trails. The Greenprint for Deschutes County maps show the best locations for future parks, open areas and trails to realize specific conservation objectives identified during the planning process.

The Stakeholder Group included representatives from many organizations and agencies working on related topics across Deschutes County (See Appendix A for list of participants). This Greenprint would not have been possible without their involvement. The stakeholders' decisions were informed by extensive community research to understand what values Deschutes County residents most cherish, and what specific types of conservation projects they are most interested in supporting. Appendix B contains an abbreviated summary of the public input findings. The Stakeholder Group discussed and incorporated the trends that emerged from the public inquiries. Figure 2 documents the steps in the 20-month process that was designed to use information from these diverse sources.

Figure 2: The Greenprint Timeline

February 2009 – June 2009	Interviews with more than 50 individuals about current conditions; reviewing plans on related topics
March 2009	Deschutes County Conservation Finance Feasibility Study completed
April 2009	Stakeholder meeting for Greenprint kick-off
May 2009	Steering committee meeting; public opinion poll (telephone)
June 2009	Stakeholder meeting for current conditions and poll results briefing
July 2009 – September 2009	Various community presentations; public on-line survey
October 2009	Stakeholder meeting for determining community goals
October 2009 – March 2010	Technical Advisory Team meets periodically by webinar to develop maps
February 2010	Second on-line survey
March 2010	Second public opinion poll (telephone)
April 2010	Stakeholder meeting for draft map review
May 2010	Steering committee meeting
June 2010	Stakeholder meeting for finalizing maps and action plan items; unveiling on-line mapping site
July 2010 – December 2010	Development and distribution of outreach materials; community presentations

COMMUNITY PRIORITIES RELATED TO RECREATION AND CONSERVATION UNVEILED

The Greenprint goals for Deschutes County are:

- **Protect water quality**
- **Protect habitat and significant ecological areas**
- **Preserve working farms and rangeland**
- **Create trails and recreation access**
- **Protect scenic viewsheds**
- **Restore degraded wildlife habitat**
- **Preserve forestland**
- **Protect historic and cultural resources**

A local Technical Advisory Team (TAT) helped the TPL team develop an individual map for each goal. To do so, they conducted a data inventory identifying GIS layers that represent the criteria associated with each goal. Maps were then created to reflect the criteria.

For instance, the Stakeholder Group decided that protecting water quality means protecting: (a) river corridors, (b) floodplains, (c) lakes, (d) springs, (e) wetlands, (f) areas where rain seeps into groundwater quickly, (g) areas identified as critical drinking water sources, and (h) soils likely to erode if disrupted. In this example, (a) – (h) are the criteria. If those types of lands are protected, then water quality may be preserved.

The Technical Advisory Team searched for the local, regional, state and federal data that would most accurately reflect these attributes. Please see Appendix C for more details about the data that informs the mapping results (the red and orange colors on each map).

Note: GIS map results are only as good as the data behind them. Data layers are sometimes inaccurate, and it is important that results are verified with site visits, as appropriate and as landowners permit. The GIS mapping provides only a first cut at determining the areas that best meet community needs.

The TAT then ranked the criteria, enabling the GIS model to highlight places where the highest-ranking criteria exist. (Note: Criteria do not have to intersect or overlap to appear in red or orange on a particular map; the existence of any one high ranking criterion may be enough for that land to appear in a red or orange. If the TAT has given that criterion a high ranking, then land that satisfies that criterion will likely appear in a darker red color.)

The resulting maps are color-coded based on the criteria weightings, identifying where resources can be most efficiently and effectively directed to meet the Greenprint goals. In general, the darkest red indicates the best opportunities for conservation or recreation development. As the color changes from red to orange, the priority diminishes. Overall, the maps indicate a tremendous wealth of conservation and recreation opportunities across Deschutes County, with many places for conservation specialists to focus their efforts depending on particular objectives. Some may be interested only in the darkest red, while others may pursue opportunities that appear as orange.

Some will be interested in maps for specific goals while others will focus on the Overall Conservation and Recreation Values map which shows the parts of the landscape that meet the most goals in one place.

Existing publicly managed lands include those associated with the U.S. Forest Service, Bureau of Land Management (BLM), Wilderness Areas, and Wilderness Study Areas. There is also a catch-all category for “public land,” which encompasses land managed by city, county, and state agencies, including Bend Park and Recreation District, City of Sisters, City of Redmond, La Pine Parks and Recreation, Central Oregon Parks and Recreation, Deschutes County, Deschutes Land Trust easements, and multiple agencies for the State of Oregon excluding Department of State Lands. Note that roughly 80% of Deschutes County is publicly managed land.¹⁷

Stakeholders can access the Greenprint maps through an on-line mapping site designed and hosted by Oregon State University. Pages that contain highly sensitive information are password protected. OSU is maintaining the web-based system on behalf of the county, municipalities, and local partners involved in the planning process. Data updates should be incorporated so that the mapping site continues to reflect the best data available.

One key benefit of the Greenprint computer model is that it provides a scalable tool through which the user can focus in or view a small area, a municipality or all of Deschutes County at once. General viewers can see which lands ranked as priorities and why.

Each of the following goals—and the maps that accompany them—reflect a critical asset that needs to be preserved to sustain Deschutes County’s quality of life and primary economic engine, tourism.

Miller’s Landing, a community river park in Bend



¹⁷ The publicly managed lands on these maps comprise 1,463,000 acres, or 75% of the study area, but others report that about 80% of the county is publicly owned. The Greenprint maps do not include Department of State Lands in green, which account for about 46,000 acres, and that may explain the discrepancy. They are not portrayed in green because these lands may be readily traded or sold.

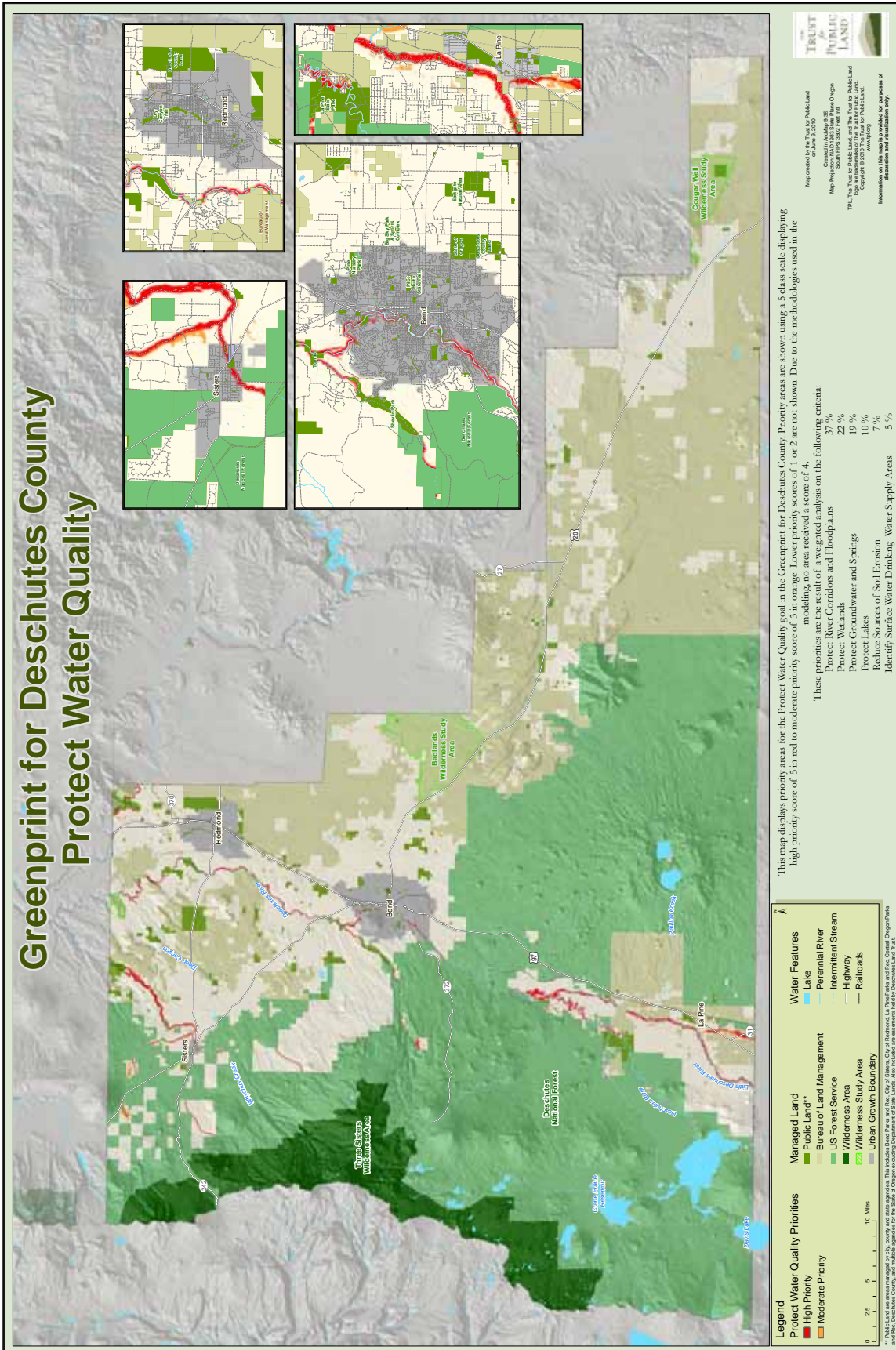
I. PROTECT WATER QUALITY

Water quality's highest priorities (in dark red and orange) reflect the location of river corridors, floodplains, wetlands, lakes, and springs (generally with a 100 – 200 foot buffer around them). It also shows land that represents the 15-year time-of-travel zone for groundwater that is within 6 feet of the surface (i.e. the places where rain hits the ground and if left alone, will typically percolate to an aquifer within 15 years). Additionally, the map shows surface water drinking water supply areas as high priority. To a limited extent, the map accounts for surface soil erosion potential.

The areas in red on this map primarily follow river corridors, crossing through Sisters and Bend because there are important rivers that flow through these towns. This map gives some indication for where strategic expansion of the Deschutes National Forest could help protect water quality, if willing sellers are interested. Many people who were interviewed and took on-line surveys mentioned the importance of the Deschutes River.



Greenprint for Deschutes County Protect Water Quality



Legend

Protect Water Quality Priorities	Managed Land	Water Features
High Priority	Public Land**	Lake
Moderate Priority	Bureau of Land Management	Perennial River
	US Forest Service	Intermittent Stream
	Wilderness Area	Highway
	Wilderness Study Area	Railroads
	Urban Growth Boundary	

0 2.5 5 10 Miles

** Public Land is administered by the County and various agencies. This includes Bend Parks and Rec, City of Bend, City of Sisters, City of Redmond, La Pine Parks and Rec, Cooper Canyon Parks and Rec, Deschutes County, and multiple agencies for the State of Oregon including Department of State Lands. Also included are easements held by Trout Unlimited and Trout Unlimited.

This map displays priority areas for the Protect Water Quality goal in the Greenprint for Deschutes County. Priority areas are shown using a 5 class scale displaying high priority score of 5 in red to moderate priority score of 1 or 2 are not shown. Due to the methodologies used in the mapping, no area received a score of 4.

These priorities are the result of a weighted analysis on the following criteria:

Protect River Corridors and Floodplains	37%
Protect Wetlands	22%
Protect Groundwater and Springs	19%
Protect Lakes	10%
Reduce Sources of Soil Erosion	7%
Identify Surface Water Draining Water Supply Areas	5%

Map prepared by the Trust for Public Land
on June 3, 2010
City of Bend
Map Projection: NAD 83 UTM Zone 10N Oregon
75° The Trust for Public Land, 1000 N. Redwood Lane, Bend, OR 97701
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2. PROTECT HABITAT AND SIGNIFICANT ECOLOGICAL AREAS

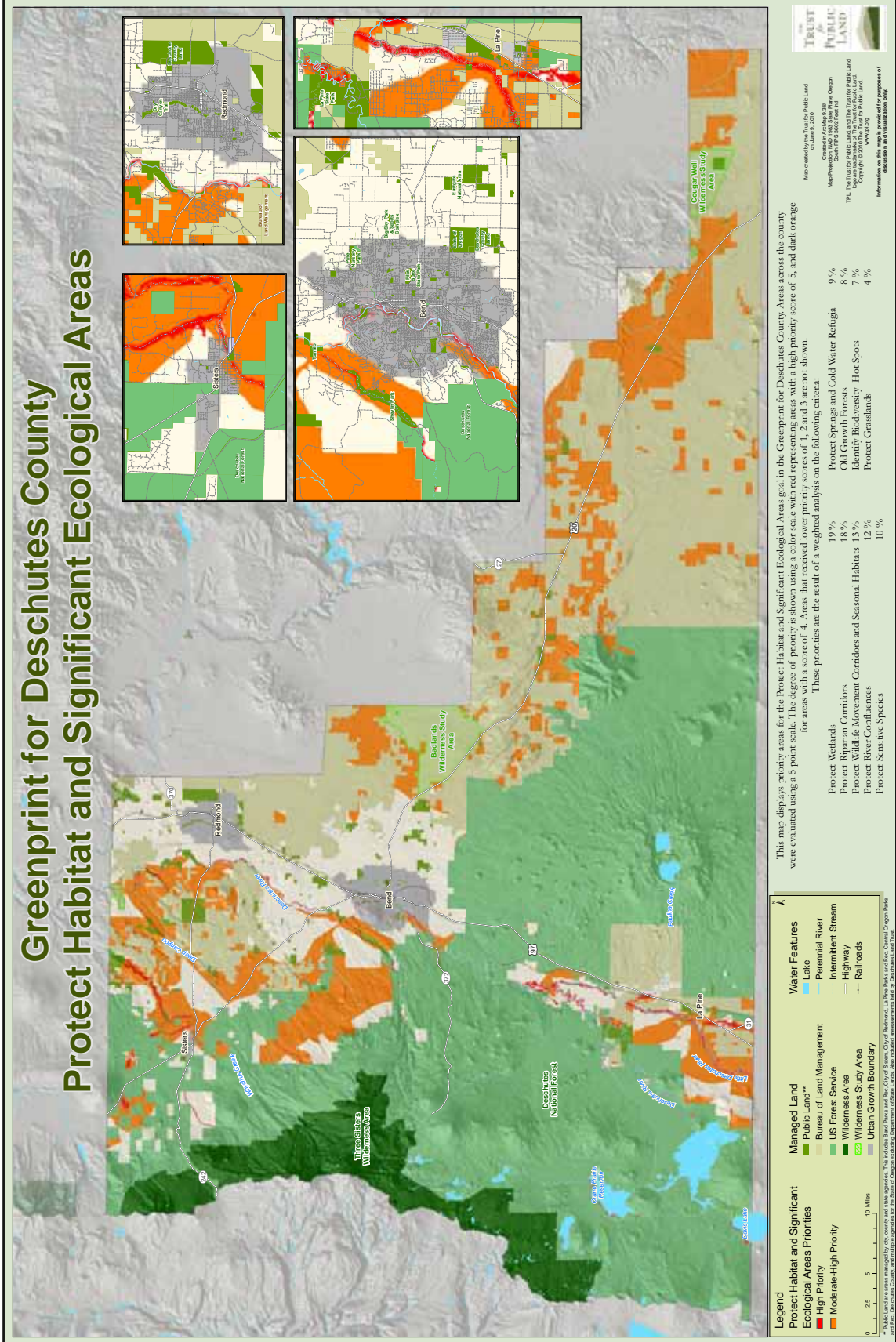
This map shows in dark red and orange places that are important for sustaining rare, threatened, and endangered species, like wetlands, riparian (riverside) corridors, river confluences, springs, cold water refuges, old growth forests, and grasslands. The results also show specific sensitive species habitat, mapped biodiversity hotspots, and corridors that have already been identified as important for wildlife movement and seasonal resting places. Compared to the previous map, this map shows more land in critical need of conservation.

Deschutes County has tremendous ecological value. There are many opportunities identified on this map, some in close proximity (but just outside) the urban growth boundaries of all four municipalities. Two large tracts show up for potential conservation to benefit species— Skyline Forest and the southeast portion of the county near Cougar Well Wilderness Study Area.

Flyfishing on the Deschutes River



Greenprint for Deschutes County Protect Habitat and Significant Ecological Areas



Legend

Protect Habitat and Significant Ecological Areas Priorities

- High Priority
- Moderate-High Priority
- Moderate Priority

Managed Land

- Public Land**
- Bureau of Land Management
- US Forest Service
- Wilderness Area
- Wilderness Study Area
- Urban Growth Boundary

Water Features

- Lake
- Perennial River
- Intermittent Stream
- Highway
- Railroads

Scale: 0, 2.5, 5, 10 Miles

**Map created by the Trust for Public Land
Contact: 503.325.2222
Map Projection: NAD 83 State Plane Oregon
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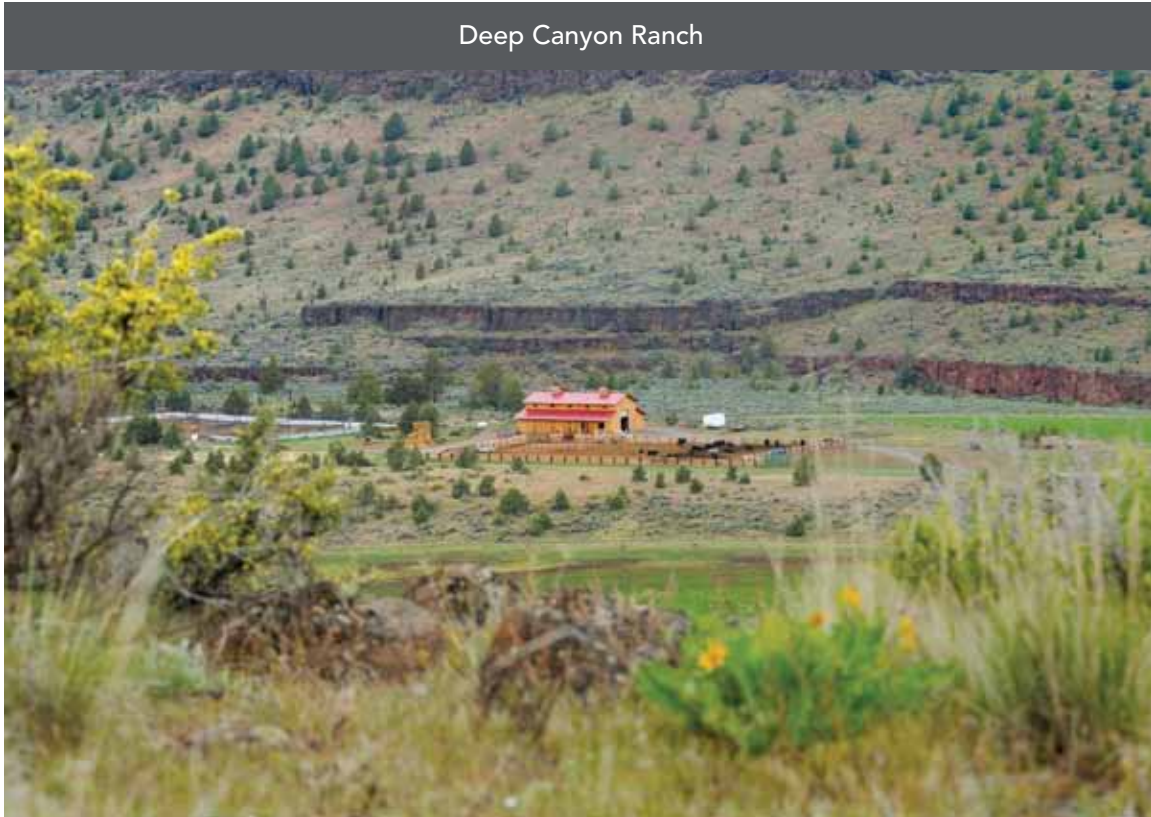
This map displays priority areas for the Protect Habitat and Significant Ecological Areas goal in the Greenprint for Deschutes County. Areas across the county were evaluated using a 5 point scale. The degree of priority is shown using a color scale with red representing areas with a high priority score of 5, and dark orange for areas with a score of 4. Areas that received lower priority scores of 1, 2 and 3 are not shown.

These priorities are the result of a weighted analysis on the following criteria:

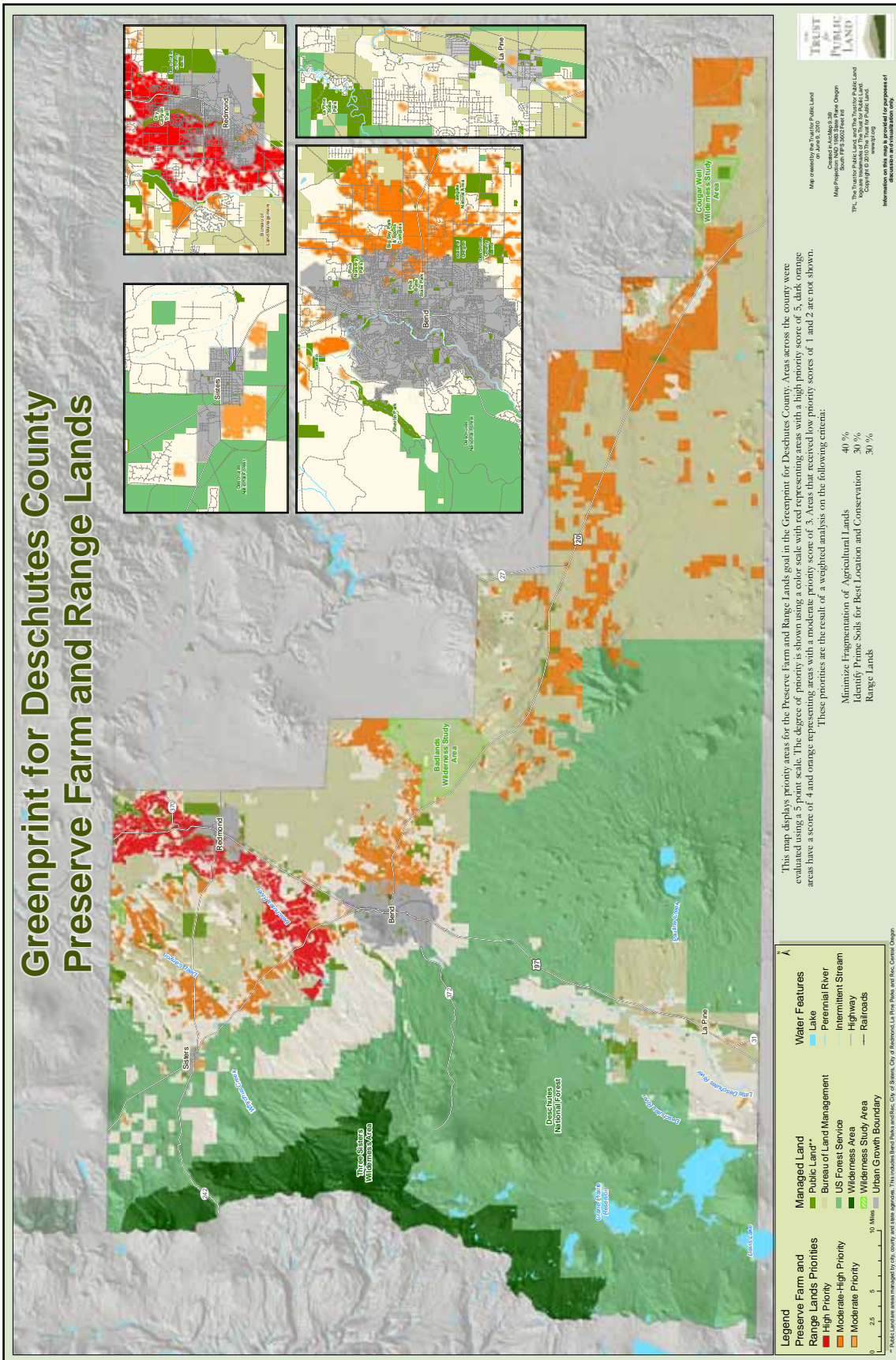
Protect Wetlands	19%	Protect Springs and Cold Water Refugia	9%
Protect Riparian Corridors	18%	Old Growth Forests	8%
Protect Wildlife Movement Corridors and Seasonal Habitats	13%	Identify Biodiversity Hot Spots	7%
Protect River Confluences	12%	Protect Grasslands	4%
Protect Sensitive Species	10%		

3. PRESERVE FARM AND RANGE LANDS

There is a crescent shaped area near Redmond that represents, according to this analysis, the best opportunity for protecting a large swath of prime farm and rangeland. The map shows (in red and orange) large, uninterrupted stretches of open rangeland with soils and land that could be prime farmland if irrigated. This map also suggests that almost all the non-BLM lands in the eastern third of the county may be promising for working land easements, based on the nature of the soil and/or the current land use. It shows only a few opportunities near La Pine and none west of Bend.



Greenprint for Deschutes County Preserve Farm and Range Lands



This map displays priority areas for the Preserve Farm and Range Lands goal in the Greenprint for Deschutes County. Areas across the county were evaluated using a 5 point scale. The degree of priority is shown using a color scale with red representing areas with a high priority score of 5, dark orange areas have a score of 4 and orange representing areas with a moderate priority score of 3. Areas that received low priority scores of 1 and 2 are not shown. These priorities are the result of a weighted analysis on the following criteria:

- Minimize Fragmentation of Agricultural Lands 40 %
- Identify Prime Soils for Best Location and Conservation 30 %
- Range Lands 30 %

Legend

Preserve Farm and Range Lands Priorities

- High Priority
- Moderate-High Priority
- Moderate Priority

Managed Land

- Public Land**
- Bureau of Land Management
- US Forest Service
- Wilderness Area
- Wilderness Study Area
- Urban Growth Boundary

Water Features

- Lake
- Perennial River
- Intermittent Stream
- Highway
- Railroads

Scale: 0 2.5 5 10 Miles

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Map Projection: NAD 83 State Plane Oregon
 Zone 10
 Units: Feet

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4. CREATE TRAILS AND RECREATION ACCESS OPPORTUNITIES

The map on the following page looks significantly different than the others, in part because it shows existing trails that crisscross the county, particularly through Deschutes National Forest and the Three Sisters Wilderness Area. According to this map, the regional trail systems already connect with Bend and Sisters, and sparingly with La Pine. Redmond appears to be the most underserved area, and there are no existing trails on the BLM lands in the southeastern portion of the county.

So, the reds and oranges on this map represent ideas for future trail connections. Many of these cross private land, and the map does not reflect the likelihood of securing permission from existing landowners for the right to use their property for public trail use. Rather, it shows a “birds eye” concept – an attempt to illustrate where there could be additional trails along river corridors or where potential routes could connect to active recreation areas, natural areas, rivers, and the municipalities. An attempt was also made to find the places with high resource values within a quarter mile of schools and connect the schools to those areas with a potential trail route.

The trail connectivity results are, therefore, a preliminary analysis of where opportunities may exist (based on a GIS analysis of impediments and features to connect) and should not be interpreted as a conceptual route for future trails.

Mountain biking in the Deschutes National Forest



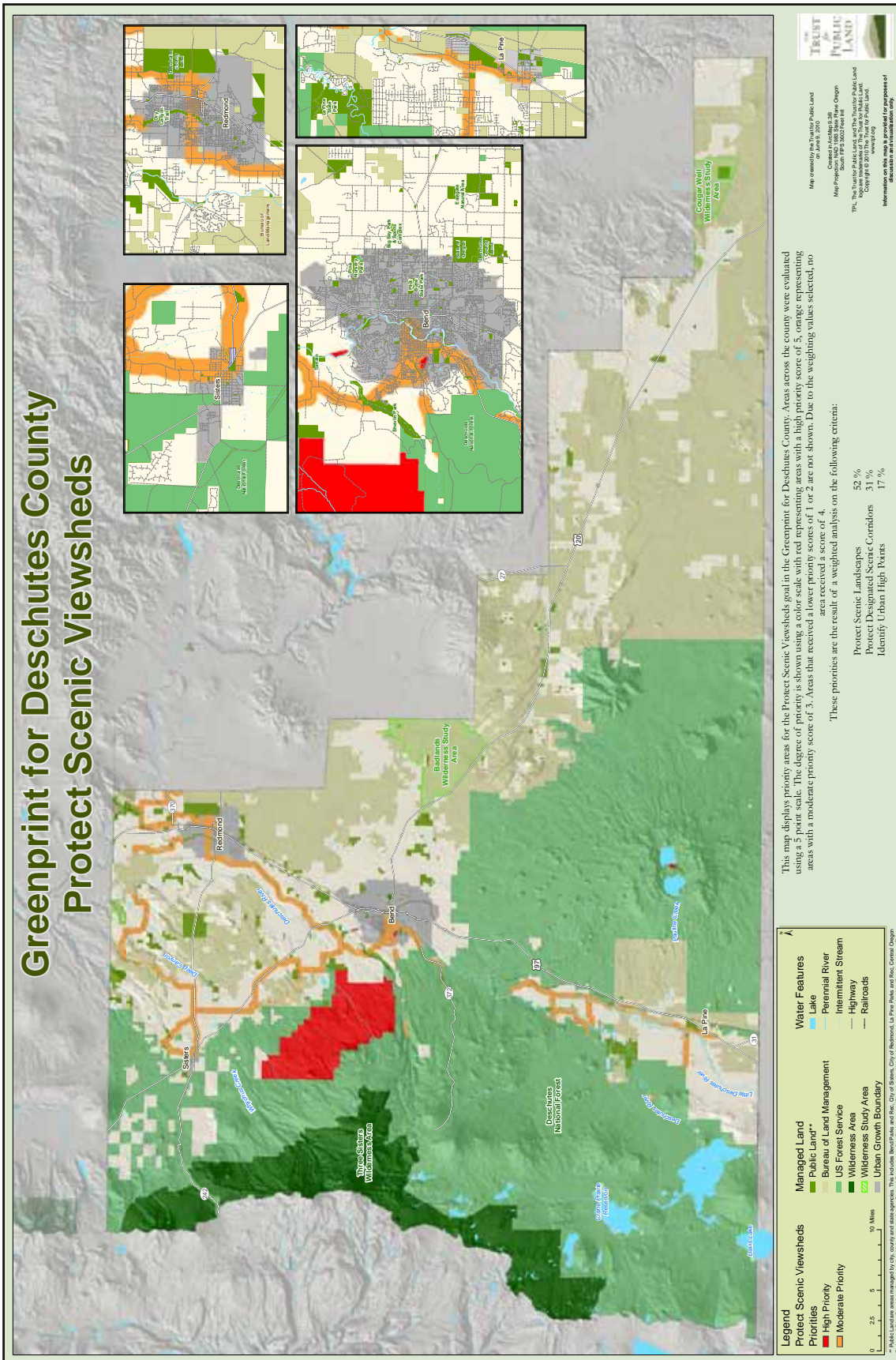
5. PROTECT SCENIC VIEWSHEDS

A disparate variety of datasets were pieced together to identify scenic viewsheds across Deschutes County. Skyline Forest appears as a valuable scenic resource on this map. Designated scenic corridors – which consist of scenic bikeways, wild and scenic rivers, and scenic highways – are also included, and there are a few urban high points highlighted in red within Bend. Appendix C contains a complete list of features considered priority scenic landscapes.

Enjoying the views along the upper Deschutes River Trail



Greenprint for Deschutes County Protect Scenic Viewsheds



This map displays priority areas for the Protect Scenic Viewsheds goal in the Greenprint for Deschutes County. Areas across the county were evaluated using a 5 point scale. The degree of priority is shown using a color scale with red representing areas with a high priority score of 5, orange representing areas with a moderate priority score of 3. Areas that received a lower priority score of 1 or 2 are not shown. Due to the weighting values selected, no area received a score of 4.

These priorities are the result of a weighted analysis on the following criteria:

Protect Scenic Landscapes	52 %
Protect Designated Scenic Corridors	31 %
Identify Urban High Parts	17 %

Legend

Protect Scenic Viewsheds Priorities	Water Features
High Priority	Lake
Moderate Priority	Perennial River
	Intermittent Stream
	Highway
	Railroads
Managed Land	Public Land**
Bureau of Land Management	US Forest Service
US Forest Service	Wilderness Area
Wilderness Area	Wilderness Study Area
Wilderness Study Area	Urban Growth Boundary
Urban Growth Boundary	

Scale: 0, 2.5, 5, 10 Miles

** Public Lands shown include private lands and state agencies. This includes Bend Parks and Rec, City of Bend, City of Redmond, La Pine Parks and Rec, Central Oregon Parks and Rec, Deschutes County, and multiple agencies for the State of Oregon including Department of State Lands. Not included are easements held by Deschutes Land Trust.

TRUST FOR PUBLIC LAND

Map courtesy of Trust for Public Land
 10000 NE Oregon Street, Suite 100
 Corvallis, Oregon 97331
 541-325-2200
 www.trustforpublicland.org

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Information was made available for purposes of
 public review and comment.

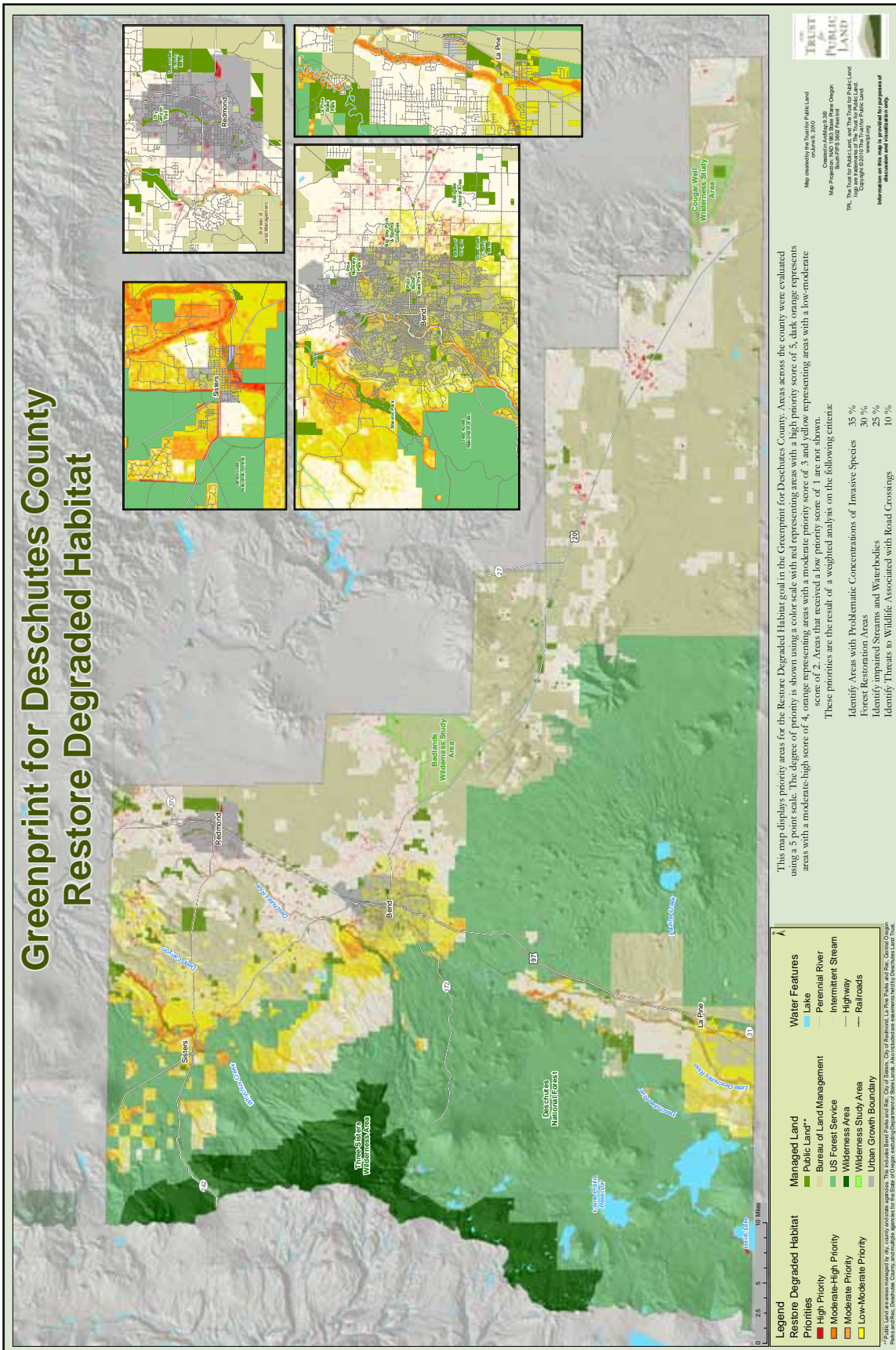
6. RESTORE DEGRADED HABITAT

This is the only map in the set of eight that includes some lower priority (yellow) results. Consequently, it is the best example of the gradations of priority, showing some concentrated high priority opportunities for land restoration (dark red) in Sisters, Redmond, around Davis Lake, and scattered opportunities near Highway 20, mostly east of its intersection with Highway 27. There are also some restoration opportunities in Skyline Forest, though they are comparatively minor. The dark red covers about 7,000 acres and the orange and yellow together cover about 131,000 acres. Taken together, these results highlight 7% of the entire county for potential restoration.

The criteria used to pinpoint land in need of restoration are, in order of importance: problematic concentrations of invasive species, high priority forest restoration as identified by the Deschutes Fire Learning Network (through a collaborative workshop), impaired lakes and streams, and places along roads known for high levels of species crossings.



Greenprint for Deschutes County Restore Degraded Habitat



This map displays priority areas for the Restore Degraded Habitat goal in the Greenprint for Deschutes County. Areas across the county were evaluated using a 5 point scale. The degree of priority is shown using a color scale with red representing areas with a high priority score of 5, dark orange represents areas with a moderate-high score of 4, orange representing areas with a moderate priority score of 3, and yellow representing areas with a low-moderate score of 2. Areas that received a low priority score of 1 are not shown.

These priorities are the result of a weighted analysis on the following criteria:

- Identify Areas with Problematic Concentrations of Invasive Species 35 %
- Forest Restoration Areas 30 %
- Identify Impaired Streams and Waterbodies 25 %
- Identify Threats to Wildlife Associated with Road Crossings 10 %

Map assembly by the Trust for Public Land
October 2018
City of Redmond, City of Scio, City of La Pine
Map Preparation: Matt and Dana Price Oregon
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Information was made available for purposes of public review and comment.

Legend

Restore Degraded Habitat Priorities	Managed Land	Water Features
High Priority	Public Land**	Lake
Moderate-High Priority	Bureau of Land Management	Perennial River
Moderate Priority	US Forest Service	Intermittent Stream
Low-Moderate Priority	Wilderness Area	Highway
	Wilderness Study Area	Railroads
	Urban Growth Boundary	

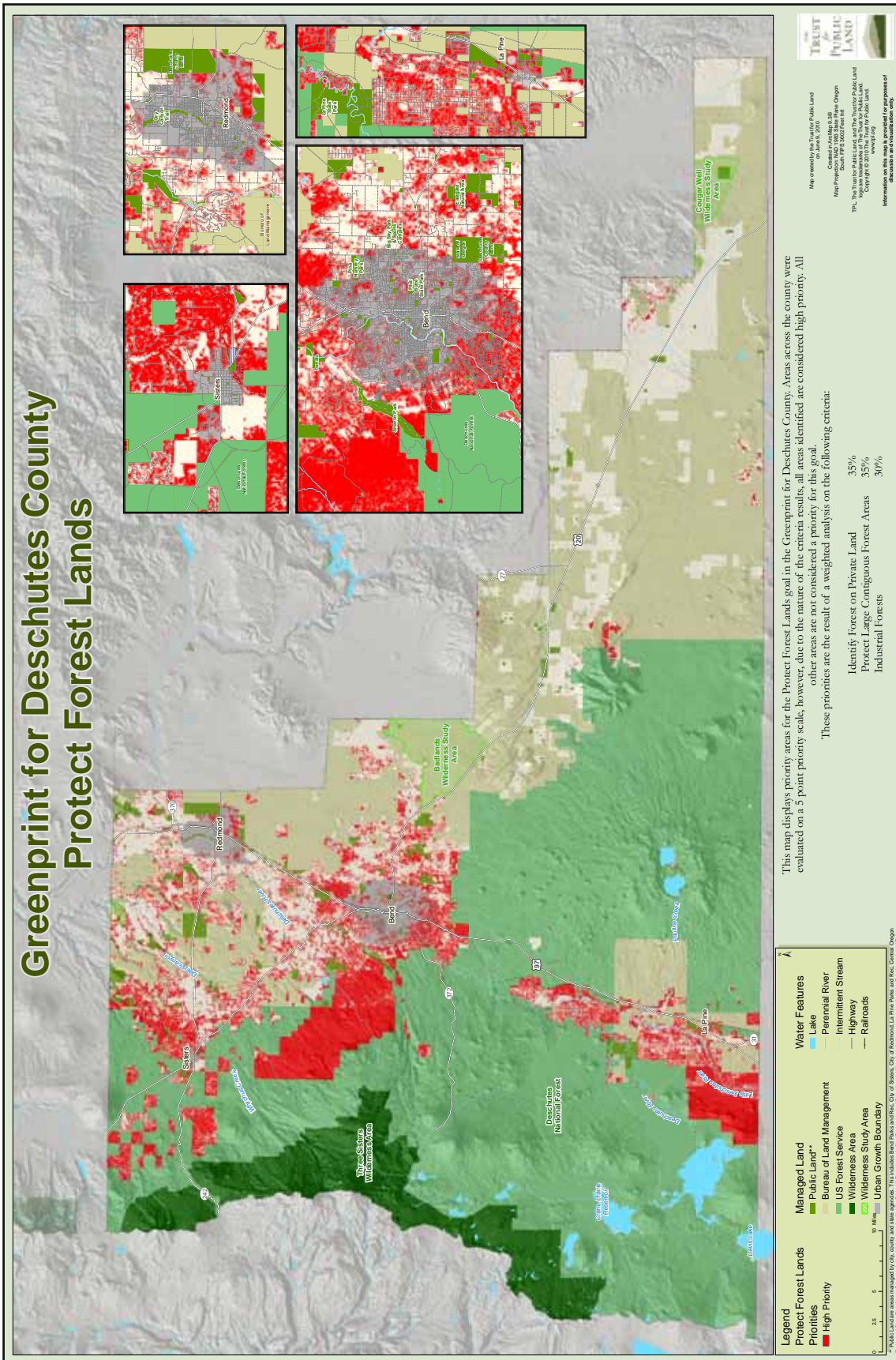
** Public Land includes managed by the county include agencies. This includes Forest Parks and Ref., City of Redmond, City of Scio, City of La Pine, and the Central Oregon Public Lands. Deschutes County administers approximately 200,000 acres of public lands. All other land is administered by other public land trusts.

7. PROTECT FOREST LANDS

This map basically appears to be a mirror image of the farm and rangeland map, suggesting that whatever is not prime farm land is prime forest land. The largest concentration of red appears to the west of Bend, in the area known as Skyline Forest. There is also a large contiguous block identified to the west and south of La Pine. The inset maps reveal a number of forest protection opportunities within urban growth boundaries as well. The criteria for this goal are: (a) identifying forests on private lands (where mean tree diameter is between 13 and 55 inches), (b) protecting large contiguous forest areas, and (c) identifying industrial forests.



Greenprint for Deschutes County Protect Forest Lands



This map displays priority areas for the Protect Forest Lands goal in the Greenprint for Deschutes County. Areas across the county were evaluated on a 5 point priority scale, however, due to the nature of the criteria results, all areas identified are considered high priority. All other areas are not considered a priority for this goal.

These priorities are the result of a weighted analysis on the following criteria:

Identify Forest on Private Land	35%
Protect Large Contiguous Forest Areas	35%
Industrial Forests	30%

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8. PROTECT HISTORIC AND CULTURAL RESOURCES

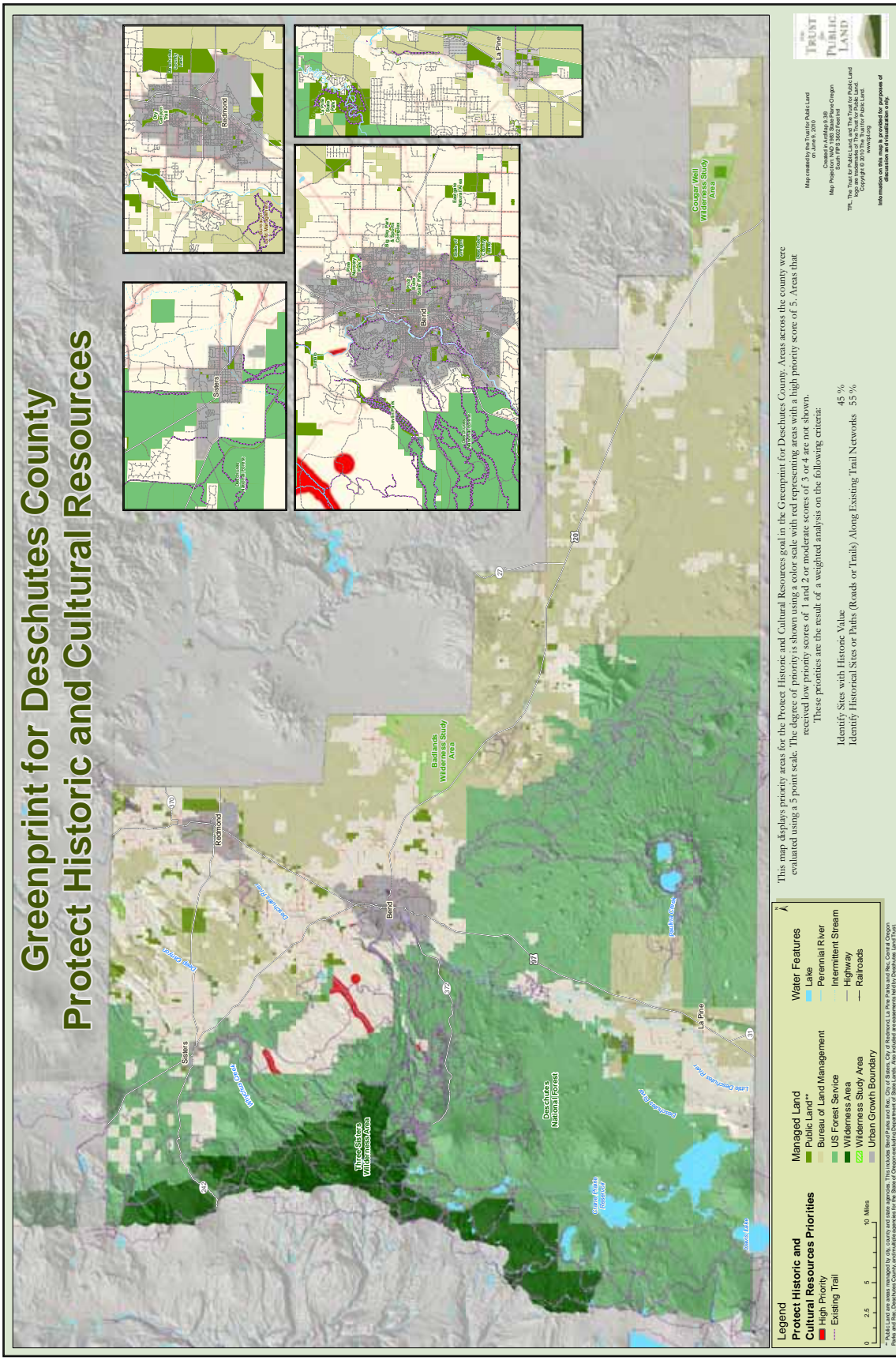
As with water quality, opportunities are relatively scarce on the Protect Historic and Cultural Resources map. However, there is more color than a viewer might see at first glance, because of the size of the study area and the fine-grained nature of this data. Observe, for example, how much red appears on the inset maps that zoom-in on the four municipalities.

To develop this map, stakeholders instructed the Technical Advisory Team to identify sites with historic value and historic paths along existing trail networks. TPL and the technical team collected data from the National Register of Historic Places, Historic Area Bend, Historic Landmarks of Deschutes County, Deschutes' County's list of historic roads, Oregon Parks and Recreation Department's list of scenic landscapes, and Deschutes Land Trust's catalogue of Skyline cultural areas. (TPL's trail database was also used to assist in identifying the existing trail networks.) Only the most promising areas are identified on this map (i.e. only red, none of the lesser value orange opportunity areas appear).

Horseback riding in the high desert landscape



Greenprint for Deschutes County Protect Historic and Cultural Resources



This map displays priority areas for the Protect Historic and Cultural Resources goal in the Greenprint for Deschutes County. Areas across the county were evaluated using a 5 point scale. The degree of priority is shown using a color scale with red representing areas with a high priority score of 5. Areas that received low priority scores of 1 and 2 or moderate scores of 3 or 4 are not shown.

These priorities are the result of a weighted analysis on the following criteria:

- Identify Sites with Historic Value: 45 %
- Identify Historical Sites or Paths (Roads or Trails) Along Existing Trail Networks: 55 %

Legend

Protect Historic and Cultural Resources Priorities

- High Priority
- Existing Trail

Managed Land

- Public Land**
- Bureau of Land Management
- US Forest Service
- Wilderness Area
- Wilderness Study Area
- Urban Growth Boundary

Water Features

- Lake
- Perennial River
- Intermittent Stream
- Highway
- Railroads

Scale: 0, 2.5, 5, 10 Miles

Footnote: **Public Land is areas managed by the county and state agencies. This includes Boardman and the City of Steam, City of Redmond, La Pine, Heppner and the County of Wheeler. The Oregon Department of Land Conservation and Development (ODLCD) is the lead agency for public land in Deschutes County. Information is provided for purposes of discussion and is not intended for any other purpose.

Map prepared by the Oregon Department of Land Conservation and Development (ODLCD) on June 15, 2009.

Map Project Number: 2009-001

Map Title: The Trail for Public Land and the Trail for Public Land

Copyright © 2009 by the Oregon Department of Land Conservation and Development (ODLCD)

Information on this map is provided for purposes of discussion and is not intended for any other purpose.

SUMMARY OF GREENPRINT PRIORITIES

Figure 3 provides a snapshot comparison of high priority acreage proposed for the eight goals. The GIS model, using the set criteria (outlined above and detailed in full in Appendix C), identifies the least amount of new acreage for creating trails/recreation access and the most for protecting forest land. Less than 40,000 acres has been identified as high priority for 7 of the 8 goals.

Figure 3: High Priority Greenprint Results (dark red on maps)

Goal	Acres	Portion of County
Create Trails and Recreation Access Opportunities	2,728	0.1%
Restore Degraded Habitat	6,804	0.4%
Protect Historic and Cultural Resources	8,291	0.4%
Protect Water Quality	11,266	0.6%
Protect Habitat and Significant Ecological Areas	12,740	0.7%
Preserve Farm and Range Lands	31,112	1.6%
Protect Scenic Viewsheds	38,992	2.0%
Protect Forest Lands	164,416	8.5%
Overall Conservation and Recreation Values	7,718	0.4%

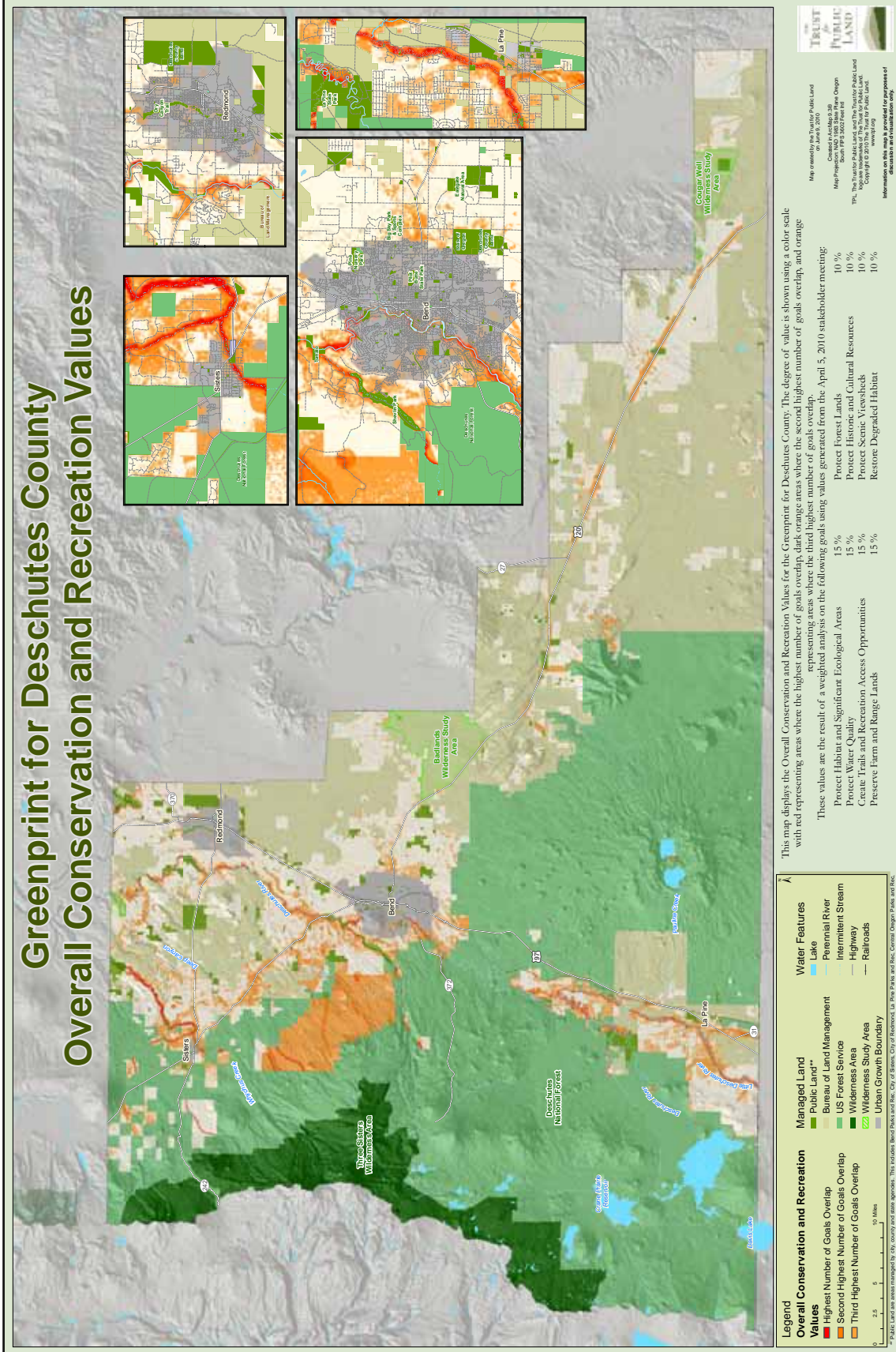
Overall Conservation and Recreation Values (the last row of this chart) refers to a map that looks at the intersection of all eight goals. To be clear, the criteria for this map are the eight overarching goals identified by the community, and these map results reveal the intersection between multiple goals. The areas in red featured on the map on page 32 do not necessarily show where all 8 goals can be met in one place, but where the most goals can be met in one place.

The preservation of these, the highest priority lands identified by the Greenprint, would give the biggest “bang for the buck” across the county. This could be particularly useful for securing grant funds for conservation, restoration or management.

The goals are nearly equally weighted in the GIS model for Overall Conservation and Recreation Values, with slightly less emphasis placed on protecting forest lands, historic and cultural resources, scenic viewsheds, and degraded habitat because these four goals did not resonate as much with the general public (determined through the statistically significant random telephone survey of residents in May 2010). The goals of protecting habitat, water quality, trail and recreation access, and farms and rangelands, emerged as the most important to the public, and those preferences were similar to the priorities of the stakeholders themselves. (They were also surveyed in May 2010; See Appendix B for details.)

The river corridors through Sisters, Bend and La Pine emerge as high priority (darkest red), as well as land along the Deschutes River and Little Deschutes River. Skyline Forest is the largest contiguous block of priority opportunity land, and there are also opportunities along Highway 20 as it angles south toward Lake County, as well as many opportunities scattered between Sisters and Bend.

Greenprint for Deschutes County Overall Conservation and Recreation Values



Map created by the Trust for Public Land
 1000 North Main Street, Suite 100
 Bend, Oregon 97701
 Phone: 531.325.2222
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This map displays the Overall Conservation and Recreation Values for the Greenprint for Deschutes County. The degree of value is shown using a color scale with red representing areas where the highest number of goals overlap, dark orange areas where the second highest number of goals overlap, and orange representing areas where the third highest number of goals overlap.

These values are the result of a weighted analysis on the following goals using values generated from the April 3, 2010 stakeholder meeting:

Protect Forest Lands	10 %
Protect Habitat and Significant Ecological Areas	15 %
Protect Water Quality	15 %
Create Trails and Recreation Access Opportunities	15 %
Preserve Farm and Range Lands	15 %
Protect Forest Lands	10 %
Protect Historic and Cultural Resources	10 %
Protect Scenic Viewsheds	10 %
Restore Degraded Habitat	10 %

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Preserve Farm and Range Lands	15 %
Protect Forest Lands	10 %
Protect Historic and Cultural Resources	10 %
Protect Scenic Viewsheds	10 %
Restore Degraded Habitat	10 %

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Protect Water Quality	15 %
Create Trails and Recreation Access Opportunities	15 %
Preserve Farm and Range Lands	15 %
Protect Forest Lands	10 %
Protect Historic and Cultural Resources	10 %
Protect Scenic Viewsheds	10 %
Restore Degraded Habitat	10 %

NEXT STEPS

The Greenprint is an objective representation of the highest and best opportunities within Deschutes County to achieve multiple conservation goals across the landscape. In reviewing the maps, it is important to note that they show areas of opportunity for new parks, trail corridors, natural resource protection, as well as conservation of working lands, and that they are not land-use prohibitions. These maps also provide a guide to the natural assets in Deschutes County that contribute most to quality of life.

They may be helpful in:

- Identifying future opportunities for parks, natural areas and trail connectivity. Ultimately it will be up to the districts to access the on-line mapping site and identify their top priorities.
- Leveraging funding opportunities to ensure conservation investments benefit the local economy to the fullest extent.
- Locating new outdoor recreation facilities close to local neighborhoods.
- Prioritizing investment in areas that contribute to the quality of life as a driver for retaining and attracting businesses.

Digital maps are available at www.deschutescountygripint.org. They allow viewers to tailor datasets to show individual or multiple layers and zoom into parcel level detail. You may need to register to obtain access to the complete interactive mapping platform.

Options for Land Conservation:

Land conservation is a vital strategy for implementing all of the Greenprint goals, and can utilize a variety of tools to protect land for public enjoyment. Here are three potential tools available:

- Fee Simple Acquisition (Outright purchase)
 - May include donation of land and/or improvements (may be eligible for tax credits)
- Conservation Easements (Purchase of development rights only)
 - May include donation of land and/or improvements (may be eligible for tax credits)
- Transfer of Development Rights (e.g. existing wetlands program in Deschutes County)

With these conservation tools in mind, the Stakeholder Group was asked to achieve consensus upon a list of potential implementation strategies and to brainstorm action steps for each of them. More time could be dedicated to elaborating on each of these, but here is the initial list of items that stakeholders supported.

- 1. Investigate a mechanism for keeping the Deschutes Greenprint on-line mapping site active for the foreseeable future.**
- 2. Conduct outreach in the community.**
 - a. Identify key messengers and messages to convey.
 - b. Use the Greenprint to support acquisition projects that are already underway.
 - c. As a means of closure, provide a tutorial to agencies that will be using the data.

3. Maintain public-private partnerships to realize the Greenprint objectives. Pursue partnerships between governmental, not-for-profit, and landowners for conservation of lands and development of improvements. Identify the key partners:

- Park and Recreation Districts
- Cities (Bend, Redmond, Sisters, La Pine)
- Deschutes County
- Federal and State Agencies (Bureau of Land Management, United States Forest Service, Bureau of Reclamation, Oregon State Parks)
- Land Trusts
- Natural Resource Groups (Watershed Councils, Watershed Coalitions, Trout Unlimited, Deschutes River Conservancy, Oregon Natural Desert Association, Central Oregon Landwatch, etc.)
- Recreation user groups (Central Oregon Trails Alliance, Sisters Trail Alliance, Bend Paddle Trail Alliance, Central Oregon Running Klub (CORK), DogPAC, Oregon Hunters Association, Tumalo Langlof Club, Oregon Equestrian Trails, Deschutes Recreation Assets Committee, Bike/Pedestrian Committee, etc.)
- Irrigation districts

4. Identify funding.

- a. Identify private donors and various public finance mechanisms to raise local dollars to leverage state and federal resources for land acquisition, conservation, trail development, and park improvements.

5. Support other conservation efforts.

- a. Check with the communities, agencies and user groups within the county, specifically those not represented on the Stakeholder committee to make sure their high priority lands are considered.
- b. Identify specific project priorities around the county.

The Trust for Public Land's Conservation Finance team examined the options for generating and dedicating local revenue for conservation, including the revenue raising capacity and costs of several financing tools. This information can be found in Appendix D, together with a summary of relevant state and federal conservation funding programs that may be leveraged by the county. Appendix D is, in essence, a guide considering the public finance options to fund additional parks and protect open spaces in the county.

Protecting land for conservation and recreation requires flexibility and responsiveness. It is not possible without a willing landowner and an agreement that satisfies the parties. The timing is critical, and funding is crucial. The Greenprint for Deschutes County does not address those variables directly, but does help real estate specialists, municipalities, park districts and the county to cost-effectively evaluate properties for their community values related to conservation or recreation. Taken together, these considerations should ultimately determine where the next great parks and trails are created and the farms and ranches that will continue to operate in Deschutes County for generations to come.

APPENDIX A: GREENPRINT PARTICIPANTS

Steering Committee

The Trust for Public Land
Nelson Mathews, Northwest Program Director
Kristin Kovalik, Project Manager

Deschutes Land Trust
Brad Chalfant, Executive Director

Bend Park and Recreation District
Don Horton, Director

Redmond Area Parks and Recreation District
Katie Hammer, Director

Sisters Park and Recreation District
Carrie Ward, Director

City of Bend
Erik King, City Manager

City of Sisters
Sharlene Weed, City Council

City of Redmond
Shirlee Evans, City Council

City of La Pine
Barbara Hedges, City Council

Deschutes County
Tammy Baney, Commissioner

Oregon Park and Recreation District
Mark Davison, Master Planning Coordinator

Technical Advisory Team

Bend Park and Recreation District
Steve Jorgensen

Bureau of Land Management
Greg Currie

Central Oregon Trails Alliance
Kent Howes

City of Bend
Colleen Flores
City of Redmond
Chris Doty

City of Sisters
Laura Lehman

Deschutes County
Tim Berg

Deschutes Land Trust
Brad Nye

The Nature Conservancy
Chris Zanger

Oregon Department of Fish and Wildlife
Glen Ardt

Oregon State Parks and Recreation Department
Mark Davison

Upper Deschutes Watershed Council
Ryan Houston

U.S. Fish and Wildlife Service
Jennifer O'Reilly

U.S. Forest Service
Mollie Chaudet

Stakeholder Group

City Representatives

Matt Martin, City of Bend
Brad Emerson, City of Bend
Eric Porter, Planner, City of Sisters
Laura Lehman, City of Sisters
Heather Richards, City of Redmond
Chris Doty, City of Redmond
Barbara Hedges, City of LaPine

County Representatives

Nick Lelack, Deschutes County
Planning Department
Peter Gutowsky, Deschutes County
Planning Department

State Representatives

Chris Parkins, Oregon State Parks and
Recreation Department
Mark Davison, Oregon State Parks and
Recreation Department
Glen Ardt, Oregon Department of Fish
and Wildlife
Stuart Otto, Oregon Department of Forestry
Mark Radabaugh, Oregon Department of Land
Conservation and Development

Federal Representatives

John Allen, Deschutes National Forest,
U.S. Forest Service
Mary Fransworth, Deschutes National Forest,
U.S. Forest Service
Jennifer Letz, Deschutes National Forest,
U.S. Forest Service
Molly Chaudet, Deschutes National Forest,
U.S. Forest Service
Greg Currie, Bureau of Land Management
Jennifer O'Reilly, U.S. Fish and Wildlife Service
Nancy Coleman, Bureau of Reclamation

Irrigation Districts

Steve Johnson, Central Oregon
Irrigation District

Economic Interests

Dale VanValkenberg, Brooks Resources
Doug LaPlaca, Visit Bend
Dennis Oliphant, Central Oregon Visitors
Association
Phil Chang, independent representative
Erin Borla, Sisters Chamber of Commerce
Eric Sande, Redmond Chamber of Commerce

Dan Varco, La Pine Chamber of Commerce
Eric Strobel, Economic Development of
Central Oregon
Robyn Sharp, City Club of Central Oregon
Stephanie Manzo, Sun Light Solar Energy
Carolyn Perry, Tumalo Business Association

Recreation

Bruce Ronning, Bend Park and
Recreation District
Carrie Ward, Sisters Park and
Recreation District
Katie Hammer, Redmond Area Parks
and Recreation
Justin Cutler, LaPine Parks and
Recreation District

Education

Matt Shinderman, Oregon State University

Environmental / User Groups

Brad Chalfant, Deschutes Land Trust
Ryan Houston, Upper Deschutes Watershed
Council
Scott McCaulou, Deschutes River Conservancy
Bea Armstrong, Deschutes River Conservancy
Garth Fuller, The Nature Conservancy
Chris Zanger, The Nature Conservancy
Kent Howes, Central Oregon Trail Alliance
Kevin Black-Tanski, Deschutes County Bike/
Pedestrian Committee
Ted Brownrigg, Trout Unlimited Deschutes
Chapter
Darek Staab, Trout Unlimited Homewaters
Initiative
Kim McCarrel, Oregon Equestrian Trails
Karl Koenig, Bend Paddle Trail Alliance
Jason Offutt, Bend Paddle Trail Alliance
Kreg Lindberg, Oregon State University
Sally Russell, Deschutes County Recreation
Assets Committee
Gena Goodman-Campbell, Oregon Natural
Desert Association

Working Lands

Dana Martin, Oregon State University
Extension Agency

Other

Robin Gyorgyfalvy, Bend 2030
Ruth Williamson, Bend 2030
David Blair, Senator Ron Wyden's Office
Charley Miller, Landowner
Tom Atkins, J.T. Atkins & Company PC

APPENDIX B: SUMMARY OF GOALS AND SENTIMENTS FROM DESCHUTES COUNTY RESIDENTS

I. IN-PERSON INTERVIEWS (SPRING 2009)

As part of the Greenprint information gathering process, J.T. Atkins & Company PC and TPL interviewed 30 to 40 community stakeholders and groups. They were asked what natural and heritage resources and recreation opportunities were important to them. Their responses, in sum, are (in no particular order):

- **Rivers/creeks:** especially the Deschutes River, Tumalo Falls, Whychus Creek, Green Lakes, High Lakes, Todd Lake
- **Wildlife and habitat**
- **Geologic features:** like Cline Buttes, Dry Canyon, Horse Butte, Skyline Forest, Peterson Ridge, Smith Rock, Shevlin Park, Mt. Bachelor, mountain lakes, Paulina, Lava Lands, Gray Butte, Badlands, United States Forest Service Lands, Newberry Crater, Tam McArthur Rim, Pine Mountain, the Desert, Cascade Mountains, Broken Top Mountain, Redmond Caves, Phils Trail
- **Heritage resources:** Historic Mill and Timber Buildings, Pioneer Homesteads, High Desert Museum, Peterson Rock Garden
- **Recreation opportunities:** Biking, Hiking, Skiing, Snowshoeing, Regional Connector Corridors, Horseback Riding, Off Highway Vehicle (OHV) use, Fishing, Kayaking, Golf, Tennis, Boating, Rafting, Rock Climbing, Hunting, the Natural Environment, Destination Resorts
- **Farmland and working forests**
- **Scenic views**
- **Regional trail connections**

2. PUBLIC TELEPHONE SURVEY (MAY 2009)

Between May 12-15, 2009, Fairbank, Maslin, Maullin, and Associates completed 400 telephone interviews with (randomly selected) Deschutes County registered voters. Among the key specific findings of the survey are the following:¹⁸

Deschutes County residents enjoy a high quality of life, attributing much of it to the community's natural environment. A remarkable 83 percent of survey respondents rated the overall quality of life in Deschutes as "excellent" or "good" (36% "excellent" and 47% "good") and only 16 percent rated it as "only fair" or "poor." When asked to explain in their own words what they like most about living in Deschutes County, the most commonly cited reasons dealt with the County's natural environment, including outdoor recreation, open spaces and natural beauty, and the local weather (see figure below). Additionally, three-quarters (75%) indicated that they have "generally positive" feelings about the "condition of land, air and water" in Deschutes County.

¹⁸ Note: This text has been excerpted from a briefing prepared by Fairbank, Maslin, Maullin, and Associates. Additional questions were asked that are not summarized here.

Top Reasons Residents Like Living in Deschutes County

(Open-End; Response Grouped; Top Categories Shown)

Reasons	Percentage (%)
Outdoors Recreation / Variety of Activities	27
Outdoors Topography / Open Spaces / Scenic Beauty	20
Weather / Climate	20
Small Town / Low Population Density / Quiet / Rural	9
People / Friendly Community	5
Air Quality / Water Quality / Clean Environment / Low Pollution	4

The importance of the natural environment was further highlighted when survey respondents were presented with a list of factors that contribute to the quality of life in Deschutes County and asked to indicate whether each one is a “major factor, a minor factor, or not a factor” in the community’s high quality of life. As shown in the figure below, enjoyment of the natural environment ranked at the top, along with the friendliness of local residents.

Factor Contributing to Deschutes County’s Good Quality of Life

Factor	Contribution to a Good Quality of Life in Deschutes County (%)			
	Major Factor	Minor Factor	Not a Factor	DK/NA
Year round outdoor recreational opportunities	83	11	4	1
Beauty of the natural environment	79	11	9	1
Friendly people	74	21	4	1
Easy access to outdoor recreational opportunities	73	14	13	0
Clean air and water	73	17	9	1
Easy access to natural areas	69	17	13	2
Good weather	65	24	8	2
Small town feel	54	29	15	1
Good quality public schools	54	25	14	6
Availability of good-paying jobs	53	23	19	5
Safety from crime	52	32	14	2
Affordable cost of living	51	32	13	3
Ready availability of affordable homes	43	33	21	3
A community of diverse kinds of people	41	37	19	3
Sense of community history	40	36	21	3

Respondents were presented with a list of types of projects and asked to indicate how important it is to them that each project be undertaken. Here are the results:

Factor Contributing to Deschutes County's Good Quality of Life

Project	Level of Importance (%)		
	Ext. Important	Very Important	Ext./Very Important
Protecting water quality in rivers, creeks and streams	54	34	88
Protecting and improving drinking water quality	48	33	81
Protecting wildlife habitat	47	32	79
Preserving natural areas	41	38	79
Protecting natural watersheds	45	34	79
Protecting and improving drinking water supplies	45	31	76
Preserving forests	47	29	76
Protecting farmland	34	35	69
Planting more trees and protecting forests to help reduce global warming	40	29	69
Preserving habitats for recreational fishing	35	32	67
Repairing and improving community parks	29	34	63
Reintroducing salmon and steelhead to the upper Deschutes basin	36	25	61
Improving access to the outdoor and natural areas	29	28	57
Creating hiking, biking and walking trails	30	27	57
Improving access to rivers, streams and lakes	30	26	56
Repairing and improving urban parks	30	26	56
Connecting regional trails	21	27	48
Expanding urban parks	24	22	46
Making existing trails more bicycle-friendly	21	22	43
Making existing trails more horse-rider friendly	18	17	35

Respondents were asked to indicate which of 5 different categories of conservation projects they felt were most important to undertake. Here are the results:

Prioritization of Potential Conservation Project Categories

Category of Projects	Priority (%)		
	First Choice	Second Choice	First or Second Choice
Protecting and improving water quality	37	14	51
Protecting wildlife habitat	21	23	44
Preserving natural areas	14	20	34
Protecting farmland	10	20	30
Repairing, improving and expanding access to existing trails, parks and outdoor recreation	12	12	24

Overall, the survey results show that Deschutes County residents are very happy with the overall quality of life in the County, with much of their positive feelings owing to the beauty of the natural environment and the availability of outdoor recreational activities. That being said, residents are extremely worried about jobs and the local economy, though many are hopeful that it will improve in the near future. While most residents believe Deschutes has done a good job balancing development pressures with environment protection – and recognize how important new outdoor recreation and resort industries have been to the local economy – many still believe that the rate of development has been too fast and some harbor concerns that the influx of new residents has made things worse in the County. While these results suggest a population that is conflicted on the impact of its recent growth, they are unified in their love of the natural beauty and amenities of Deschutes County and are deeply committed to conserving the environment to maintain their high quality of life.

3. PUBLIC ON-LINE SURVEY (FALL 2009)

In contrast to the administered telephone poll (randomly selected individuals), the on-line survey reflects opinions of a self-selected group of 259 respondents. TPL spread news of the survey through a post card and email campaign to attract as many participants as possible. Environmental Center, Trout Unlimited, Deschutes Land Trust, the Bend Park and Recreation District, Redmond Park and Recreation District, COTA, Bend Paddle Trail Alliance, Central Oregon Fly Fishers, Foot Zone and Pine Mountain Sports were involved. Postcards were distributed around town to various businesses and organizations. There was also an e-mail blast through multiple list serves and e-newsletters.

The survey received a good spread of respondents between the age of 35 and 75, but younger people were under-represented. More than 75% live within urban area/city limits. They self-identify as follows: 90% outdoor enthusiasts, 50% members of environmental group/organization, 20% Chamber of Commerce members, 12% involved in tourism industry, and less than 2% students.

Overall goals in order of importance:

1. Protect water quality and quantity.
2. Protect wildlife habitat.
3. Provide public access and recreation. Skyline Forest and the Deschutes River were mentioned most frequently when asked which specific places they would like to see acquired for outdoor recreation. Only about one-half of survey participants responded to this question, and 14 of them (11%) indicated they thought there were enough recreational areas/trails already.
4. Preserve cultural and historic resources (People are slightly more interested in preserving identified archeological sites than protecting places of historical significance in Deschutes County.)
5. Protect farmland (low importance compared with other goals).
6. Protect rangeland (low importance compared with other goals). The number one reason that farm and agricultural land is considered important is for agricultural production value (about 56% of votes; the other options for them to choose from were: cultural values, scenic values, or wildlife/ecological values).

If they had to choose between protecting natural areas, creating new parks or creating new trails, **69% would choose protecting natural areas** (24% would create trails and 7% would create parks).

About natural areas:

- If they had to choose between protecting significant natural features throughout the County regardless of how close they are to their homes (like the Deschutes River or Smith Rock) or protecting and creating natural areas, parks, and trails that they can walk or bike to: **80% of people would prefer to protect significant areas throughout the County.**
- **Skyline Forest** was mentioned most frequently and the Deschutes River was also mentioned often as specific places in Deschutes County they would like to see acquired for conservation value. More than a handful of people mentioned Metolius River, Tumalo Creek, or protection of wetlands generally. Of the 118 people who responded to this question, only five (4%) indicated they did not want any more land protected for natural areas.

4. PUBLIC ON-LINE SURVEY (FEBRUARY 2010), STAKEHOLDER SURVEY (MARCH 2010), AND PUBLIC TELEPHONE SURVEY (MARCH 2010)

Three surveys were conducted in the winter of 2010. The first was a 13-question on-line survey in early 2010. It was emailed to stakeholders, and attempts were made to receive input beyond the stakeholder group. Fifty-three (53) individuals completed the survey. The Technical Advisory Team used these survey results when they developed a map for each Greenprint goal. The questions asked respondents to evaluate the criteria (or dataset) for each goal, and TAT members took these responses into consideration when deciding how much emphasis to give to the criteria relative to one another.

In March 2010 Deschutes County Greenprint Stakeholders completed a two-question on-line survey. Forty (40) stakeholders completed the survey. Participants were asked first whether they believed all Greenprint goals should be equally weighted. Twelve respondents (30%) believed that the goals should be equally weighted. Then they were asked to rank all 8 Greenprint goals. Results are below.

Also in March, Fairbank, Maslin, Maullin, Metz & Associates conducted 400 telephone interviews with Deschutes County residents, asking them to rank Greenprint goals, except that they were asked to rank their top 2 Greenprint goals instead of all 8 goals. This was a statistically significant survey of likely voters in Deschutes County.¹⁹ Note that 3% of survey respondents indicated that they thought all 8 goals should be equally weighted, and an additional 3%+ didn't answer this question.

A profile of survey respondents is available upon request, as well as a briefing related to the other telephone survey questions.

The charts on page 36 illustrate some differences in terms of respondent priorities. For example, the public put more emphasis on preserving working farms and ranches as well as restoring degraded wildlife habitat. Also, the public appears (at the time of the survey) to have less interest in creating multiple recreation opportunities. The goals were described using the same language for both of these surveys, and they closely resemble the goal descriptions provided in this report except that the recreation goal in this report specifically includes "trails" in its title, and the focus is indeed on trail opportunities whereas the survey question was more amorphous.

¹⁹ The margin of sampling error is +/-4.9% and higher for subgroups.

Raw Survey Data

Public Opinion Survey			Stakeholder Survey		
Greenprint Goal	1st Choice	2nd Choice	Greenprint Goal	1st Choice	2nd Choice
Protecting water quality	121	55	Protecting water quality	15	9
Preserving working farms and ranches	76	74	Protecting habitat & sig ecological areas	11	15
Protecting habitat & sig. ecological areas	63	49	Creating multiple recreation opportunities	6	5
Restoring degraded wildlife habitat	34	52	Protecting historic or cultural resources	2	0
Protecting forests	34	50	Protecting scenic views	1	1
Creating multiple recreation opportunities	20	18	Preserving working farms and ranches	1	1
Protecting historic or cultural resources	15	31	Protecting forests	0	4
Protecting scenic views	9	30	Restoring degraded wildlife habitat	0	1
TOTAL:	372	359	TOTAL:	36	36

Survey Results Comparison for 1st and 2nd Choice Goals*

Public Opinion Survey		Stakeholder Survey	
Greenprint Goal	Priority (%)	Greenprint Goal	Priority (%)
Protecting water quality	25%	Protecting habitat & sig ecological areas	36%
Preserving working farms and ranches	21%	Protecting water quality	34%
Protecting habitat & sig. ecological areas	15%	Creating multiple recreation opportunities	15%
Restoring degraded wildlife habitat	12%	Protecting forests	5%
Protecting forests	11%	Protecting historic or cultural resources	3%
Protecting historic or cultural resources	6%	Protecting scenic views	3%
Creating multiple recreation opportunities	5%	Preserving working farms and ranches	3%
Protecting scenic views	5%	Restoring degraded wildlife habitat	1%

*Note: A weighted average is applied to derive a value for combining 1st and 2nd choices.

APPENDIX C: GIS MODEL INPUT, DATA SOURCES, AND DESCRIPTIONS

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
Protect Water Quality	15%					
		Protect River Corridors and Floodplains	37%	A 5 is given to natural landcover, developed open space, and agriculture that is within 200 feet of perennial streams and rivers or within floodplain or slopes greater than 25% that intersect the 200 foot buffer.	River Streams Scenic Waterways Floodplain Slope Greater the 25% 2008 GAP landcover	Deschutes County Deschutes County Oregon Parks & Recreation Department Oregon DNR Deschutes County Oregon Geospatial Library
		Protect Lakes	10%	A 5 is given to natural landcover, developed open space, and agriculture that is within 200 feet of lakes or within floodplain or slopes greater than 25% that intersect the 200 foot buffer.	Lakes Floodplain Slope Greater the 25% 2008 GAP landcover	Deschutes County Oregon DNR Deschutes County Oregon Geospatial Library
		Protect Groundwater and Springs	19%	Result identifies springs with 100 ft buffer as high priority (5), Groundwater Drinking Water Source Areas 0-15 yr travel time, Depth to Ground water 0 - 2 ft and 2-6 ft, and Playas are also High Priority (5).	Depth To Groundwater Springs Springs Playa from Landcover Groundwater Drinking Water Source Area Cold Water Springs County Drinking Water Wells City of Bend Drinking Water Wells Groundwater Drinking Water Source Areas	Deschutes County BLM USGS Oregon Geospatial Library Deschutes County TNC Deschutes County Bend OR DEQ
		Protect Wetlands	22%	Result identifies all wetlands as high priority (5).	Wetlands	USFWS
		Reduce Sources of Soil Erosion	7%	Result ranks soils based on their surface soil erodibility factor. (Ranking provided by Chad McGrath, Soil Scientist, Oregon NRCS) priority ranking: 5 = >= .43 4 = .30 - .43 3 = .15 - .30 1 = .50 - .15	NRCS SSURGO soils data NRCS STATSGO soils data	NRCS NRCS
		Identify surface water drinking water supply areas	5%	Result identifies surface water supply areas as high priority (5).	Surface Water Drinking Water Source Area	OR DEQ

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
Protect Habitat and Significant Ecological Areas	15%					
		Protect Riparian Corridors	18%	High Priority (5) is given to natural landcover and agriculture that is within 200 feet of perennial streams and rivers or within floodplain or slopes greater than 25% that intersect the 200 foot buffer. Medium Priority (3) is given to natural landcover and agriculture that is within 200 feet of intermittent streams or within floodplain or slopes greater than 25% that intersect the 200 foot buffer.	River Streams Scenic Waterways Floodplain Slope Greater the 25% 2008 GAP landcover Result from PW01	Deschutes County Deschutes County Oregon Parks & Recreation Department Oregon DNR Deschutes County Oregon Geospatial Library TPL
		Protect Wetlands	19%	Result identifies as high priority all contiguous wetlands with spotted frog areas and all hydrologically connected wetland areas; identifies as medium priority (4) all other wetlands.	Wetlands Oregon Spotted Frog Oviposition sites Oregon Spotted Frog Population sites Rare Species Locations Floodplain Rivers and Streams	USFWS USFWS USFWS Oregon Natural Heritage Program Oregon DNR Deschutes County
		Protect Wildlife Movement Corridors and Seasonal Habitats	13%	Result identifies priority areas based on overlap of various wildlife movement corridors, seasonal habitats, and wildlife conservation and priority areas.	Wildlife corridors TAT Identified Corridor Deer Winter Range Elk Winter Range Antelope Winter Range Antelope Year round Habitat Occupied Sage Grouse Habitat TNC portfolio Sites Conservation Opportunity Areas Bird Conservation Areas Riparian Bird Conservation Areas 2008 GAP vegetation Roads	BLM Glen Ardt ODFW ODFW ODFW BLM BLM TNC ODFW Intermountain West Joint Venture Intermountain West Joint Venture Oregon Geospatial Library Deschutes County
		Identify Biodiversity Hot Spots	7%	Priority based on Species Relative Value, Values divided into 5 classes based on symbology in accompanying layer file: 1-11=1, 11-28=2, 28-51=3, 51-85=4, 85-137=5	TNC Biodiversity data	TNC
		Old Growth Forests	8%	Result identifies as high priority (5) areas where tree diameter is greater than 21" in LEMMA data.	LEMMA Tree Diameter Data	Interagency Mapping and Assessment Project

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
		Protect Springs and Cold Water Refugia	9%	Result identifies as high priority (5) cold water source areas with 100 ft buffer and springs with 100 ft buffer.	Springs Springs Cold Water Refugia Whychus Creek Cold Water Refugia Deschutes County	BLM USGS BLM BLM
		Protect River Confluences	12%	Result identifies as high priority (5) confluences between the Deschutes River and major rivers buffered by 1/2 mile. Confluences between major rivers and the perennial streams buffered by 1/4 mile.	River Streams Major Intersections Minor Intersections	Deschutes County Deschutes County TPL TPL
		Protect Sensitive Species	10%	Result identifies as high priority (5) all buffered sensitive species locations (Spotted Frog, T&E vascular plants, Golden Eagle, Bald Eagle, Osprey, Sage Grouse, Bat, Salmon reintroduction, fish distribution, and Herron rookeries).	Buffered locations for Sage Grouse Salmon and Steelhead Reintroduction Fish Habitat Distribution (Chinook, Steelhead) Buffered locations for Spotted Frog Threatened & Endangered plant species Buffered locations for Bald Eagle Buffered locations for Golden Eagle Buffered locations for Osprey Buffered locations for Bats Buffered locations for Heron rookeries Bull Trout DNF Fish Distribution DLT sensitive Bird and Bat locations	USFWS DLT ODFW USGS Oregon Natural Heritage USFWS USFWS ODFW USFWS USFWS Stream Net DLT DLT
		Protect Grasslands	4%	Result identifies as high priority large blocks of unfragmented grassland > 500 acres. Identifies as medium high priority unfragmented blocks 60 - 500 acres.	2008 GAP vegetation Roads	Oregon Geospatial library Deschutes County
Preserve Farm and Range Lands	15%					
		Identify prime soils for best location and conservation	30%	Result identifies as high priority (5) all prime farm soils.	SSURGO Soils Data	NRCS
		Minimize fragmentation of agricultural lands	40%	Result identifies unfragmented land currently being used for agriculture or could be prime farmland if irrigated, and larger than 40 acres: 5 = 7377-14754 acres 4 = 1959-7377 acres 3 = 57-1959 acres	SSURGO Soils Data 2008 GAP landcover	NRCS Oregon Geospatial Library

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
		Rangelands	30%	Result identifies range lands as high priority (5).	Developed Zones 09	Oregon Forestry
Create Trails and Recreation Access Opportunities	15%					
		Access to River Corridors	25%	Result identifies as high priority (5) all river access areas adjacent to a park. Identifies as medium priority (4) any river access area not adjacent to a park. Identifies as medium priority (3) any river access area that contained a T&E sighting dated after 1990. (Potential access areas are all streams and rivers buffered by an 1/8 mile. Next, existing access points buffered by 1/4 mile area are removed from the potential access areas. Developed lands, slopes over 10%, emergent herbaceous freshwater wetlands and freshwater forested/shrub wetlands, and areas under 2 acres are also removed).	Access points Boat Launches Access Points Access Points Launch Sites River Streams Wetlands Slope 2008 GAP landcover Parks Threatened & Endangered species	Deschutes County Deschutes County BMPRD Bend Paddle Trail Alliance Bend Paddle Trail Alliance Deschutes County Deschutes County USFWS USGS Oregon Geospatial Library TPL Oregon Natural Heritage
		Provide access to active Recreation Areas	20%	Result identifies as high priority (5) areas where a road and/or a trail access a park within a 1-mile Urban Growth Boundary (UGB) donut buffer. Identifies as medium priority (3) areas inside the UGB or outside the UGB donut buffer where a road and/or trail access a park. Also, access to Tumalo Park is a high priority and the Deschutes river in the UGB and UGB buffer is a high priority.	Existing Trails Urban Buffer Roads	TPL Census (Claritas) Deschutes County

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
		Provide access to Natural Areas	14%	Result identifies as high priority (5) all natural areas >= 50 acres inside the urban growth boundary or areas adjacent to parks or within 1/8 mile of trails and within a one mile buffer of the urban growth boundary. Identifies as medium high priority (4) natural areas >= 50 acres within the mile buffer of the urban growth boundary. Identifies as medium priority (3) all other natural areas >= 50 acres outside the 1-mile urban growth boundary buffer.	Protected Lands Parks 2008 GAP landcover Roads Urban Buffer Existing Trails	TPL TPL Oregon Geospatial Library Deschutes County Census (Claritas) TPL
		Consider places for Educational/ Interpretive Opportunities	11%	Result identifies as high priority (5) all Areas of Critical Environmental Concern, wetlands, and Scenic Landscape rivers within a 1/4 of schools. Identifies as medium-high priority (4) those features that are inside the urban boundary. Identifies as medium priority (3) those features that lie outside the urban boundary.	Wetlands Scenic Landscapes Areas of Critical Environmental Concern Urban Buffer Schools TPL Parcels	USFWS Deschutes County BLM Census (Claritas) Deschutes County TPL
		Trail Connectivity	30%	Result identifies connectivity from hubs to destinations using opportunities. Hubs: Existing trails Destinations: features of interest, trailheads, parks, campsites, resorts, schools, etc. Opportunities (in order of significance): potential trails, canals, scenic roads and rivers, roads, flat slopes.	Hubs: Existing Trails Opportunities: Potential Trails Canals Scenic Landscapes Flat slopes Roads Destinations: Features of Interest Trailheads Lake Campsites Destination Resorts USFS Recreation Points Schools	Hubs: TPL Opportunities: Deschutes County Deschutes County Deschutes County USGS Deschutes County Destinations: Deschutes County Central OR Trail Alliance Bend Paddle Trail Alliance Deschutes County USFS Deschutes County
Protect Scenic Viewsheds	10%					
		Identify Urban high points	17%	Result identifies as high priority (5) high points within the urban boundary.	DEM 10 meter City Boundaries	USGS Deschutes County

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
		Protect Scenic Landscapes	52%	Result identifies as high priority (5) the following scenic features Skyline Forest, Smith Rock, Horse Ridge, Pilot Butte, Lava Butte, Cline Butte, Deschutes River, Major Creeks, Little Deschutes, Crooked River, Crescent Creek, Fall River, Overturf Butte, Pine Mountain, Broken Top Mountain, New Berry Crater, Badlands, Wickiup Reservoir.	Skyline Forest USGS Points of Interest Features of Interest DEM Lakes TPL Projects	DBLT USGS Deschutes County USGS Deschutes County TPL
		Protect Designated Scenic Corridors	31%	Result identifies as high priority (5) all proposed scenic bikeways. As medium priority (3) wild and scenic rivers, and scenic highways given a 1/4 mile buffer.	Scenic Rivers State Scenic Byways Designated Scenic Corridors in Comprehensive Plan Wild and Scenic Rivers Proposed Scenic Bikeways Century Rd Proposed Scenic Bikeways Skyliners Rd Proposed Scenic Bikeways Road 41 Proposed Scenic Byway 3 Sisters	OPRD ODOT Deschutes County BLM Deschutes County Deschutes County Deschutes County
Restore Degraded Habitat	10%					
		Identify Threats to Wildlife Associated with Road Crossings	10%	Result identifies as high priority (5) road crossings designated as severe threat level with multiple species crossing. Identifies as medium high priority (4) crossings designated as moderate threat level with multiple species crossing.	Linkage Areas for wildlife	ODFW
		Identify Areas with problematic concentrations of invasive species	35%	Result identifies as high priority (5) areas containing invasive weeds and/or invasive landcover types from landcover data.	2005 Invasive Weed Control EIS for the Deschutes National Forest 2007 Invasive categories in Landcover data	NRIS Terra database Oregon Geospatial Library

Goal	Goal Weights	Criteria	Criteria Weights	Methodology	Data (Description, Date)	Data Source
		Forest Restoration Areas	30%	This original data is the result of a collaborative workshop where spatial data were compiled to show where values existed and where values overlapped. The Greenprint result identifies areas on a scale of 1-5 where combined value scores overlap. High priority (5) are areas with the most overlap, identifying areas of current importance and/or restoration opportunity.	Deschutes Fire Learning Network	Deschutes Fire Learning Network Collaborative
		Identify impaired Streams and Waterbodies	25%	Result Identifies as high priority (5) lakes and streams designated as 303d with standard hydrology buffer.	303d Lakes 303d Streams	Deschutes County Deschutes County
Protect Forests Lands	10%					
		Identify Forest on private land	35%	Result identifies as high priority (5) all forest types with mean diameter 13"-55" on private or DSL lands.	LEMMA All Protected Land	Interagency Mapping and Assessment Project TPL
		Protect Large Contiguous Forest Areas	35%	Result identifies as high priority (5) contiguous forest blocks of 500+ acres. Identifies as medium priority contiguous forest blocks of 40-500 acres. Result excludes public lands and juniper is not included.	LEMMA Transportation Geodatabase Protected land	Interagency Mapping and Assessment Project Deschutes County TPL
		Industrial Forests	30%	Identify all private industrial forests, designate as high priority (5).	IMAP Forest Ownership Owner Code Table for Join	OSU OSU
Protect Historic/Cultural Resources	10%					
		Identify sites with historic value	50%	Result identifies as high priority (5) all historic areas with a 100 ft. buffer, and historic roads buffered by 100 ft.	NPA Historic Register Historic Area Bend Historic Landmarks Deschutes County Historic Roads Skyline Cultural Areas	NPA Bend Deschutes County Deschutes County DLT
		Identify historical sites or paths (roads or trails) along existing trail networks	50%	Result identifies as high priority (5) historic areas with a 100 ft. buffer that are within 1/4 mile of existing trails and scenic landscapes, and historic roads buffered by 100 ft.	NPA Historic Register Historic Area Bend Historic Landmarks Deschutes County Existing Trails Scenic Landscapes Historic Roads Skyline Cultural Areas	NPA Bend Deschutes County TPL OPRD Deschutes County DLT

APPENDIX D: CONSERVATION FINANCE FEASIBILITY STUDY JULY 2010

INTRODUCTION

This brief study presents funding options potentially available to Deschutes County for financing the acquisition of land (or development rights) for conservation and parks purposes. There are a number of potential public funding options that can be knit together into a “funding quilt” to protect land and increase access to public land in the county. A funding quilt is the combination of funding sources — state, federal, local, and private— that are brought together to help achieve conservation objectives. The most reliable form of funding to achieve conservation objectives over the long-term is local funding. Due to the competition for state, federal and private funding, these sources often serve as supplements or incentives.

As such, the report starts with an examination of the options for generating and dedicating local revenue for conservation including the revenue raising capacity and costs of several financing tools. This information is followed by a summary of relevant state and federal conservation funding programs that may be leveraged by the county. Together, the information on the following pages will provide a guide for considering public finance options to fund the provision of additional parks and protection of open spaces in the county.

A. LOCAL CONSERVATION FINANCING OPTIONS

Nationwide, a range of public financing options has been utilized to fund parks and open space preservation, including general obligation bonds, the local sales tax, and the property tax. Less frequently used mechanisms have included special assessment districts, real estate transfer tax, impact fees, and income tax. In Oregon, counties and municipalities are authorized to acquire land and easements for purposes including parks, trails, watershed protection, floodplain management, farmland, and cultural and historic preservation. Historically, municipalities, rather than counties, have largely undertaken conservation finance ballot measures in Oregon.

Choosing a Funding Strategy

While most local governments can create funding for land conservation through their budgetary process, this either happens infrequently or does not yield adequate funding. In so-called “emergency room conservation” a city or county may rally to make an emergency appropriation to purchase a piece of land to avoid imminent loss to development or other use that impacts its natural or agricultural resource value. However, this is a high-risk strategy and one that often requires the local government to pay a high price to conserve land that is usually fully permitted.

In TPL’s experience, local governments that create funding via the legislative process provide substantially less funding than those that create funding through ballot measures. As elected officials go through the process of making critical budgetary decisions, funding for land conservation lags behind other public purposes, and well behind what voters would support. It is understandably often quite difficult to raise taxes without an indisputable public mandate for the intended purpose.

The power of conservation finance ballot measures is that they provide a tangible means to implement a local government’s vision. With money in hand, local governments can proactively approach landowners to negotiate with them to protect land now, before bulldozers are ready to plow it under, and before land prices rise sky high. With their own funding, local governments are much better positioned to secure scarce funding from state or federal governments or private philanthropic partners. Rather than being “stuck with the rest,” local governments can go out and “protect the best.” Having a predictable funding source typically empowers the city or county to establish conservation priorities that protect the most valuable resources, are geographically distributed, and otherwise meet important community goals and values.

In Oregon, since 1998, voters in 12 municipalities, 5 parks and recreation districts, and Metro Portland have voted on local referenda to provide funding for parks and land conservation (twenty-two total measures). All local measures have been bond or property tax measures, and voters approved approximately half of the conservation finance measures. Appendix 1 of this report contains a chart summarizing these conservation finance ballot measures for parks and greenspace throughout Oregon.

Oregon Local Conservation Finance Measures 1998 – 2009

Finance Mechanism	Measures	Approved Measures
Bond	15	10
Property Tax	6	1
Other	1	1
Total	2	12

However, conservation finance measures are not right for every local government or they might not be the right approach at the moment. Budget appropriations and other revenue sources that can be implemented through the legislative process may well serve as short-term funding options while parks and conservation proponents develop a strategy and cultivate broad support for longer-term finance options. Funding sources detailed in this report for Deschutes County include voter-approved property taxes and bonds, and system development charges.

BONDS

To raise funds for capital improvements, such as land acquisition or building construction, counties and cities may issue bonds. In Oregon, there are three types of bonds: (1) general obligation (“GO”) bonds, which are guaranteed by the local taxing authority; (2) limited tax bonds; and (3) revenue bonds that are paid by project-generated revenue or a dedicated revenue stream such as a particular tax or fee. Generally, bond proceeds are limited to capital projects and may not be used for operations and maintenance purposes.¹ As such, funding alternatives for operation and maintenance costs, such as a property tax, specific tax, local improvement district assessment, or general fund allocation, would need to be considered.

¹ Federal regulations governing the issuance of tax-exempt bonds limit the use of proceeds to capital purposes such that only a small fraction (up to five percent) of bond funds may be used for operation and maintenance directly related to the funded facilities. Treasury Reg. 1.148-6(d)(3)(ii)(A)(5). State and local laws may further limit the use of bond proceeds. In Oregon, general obligation bonds may not be used for maintenance and repairs and supplies and equipment not intrinsic to the capital project. Or. Const. Art. XI, §11(11).

General Obligation Bonds (GO Bonds)²

With the passage of Measure 5 in 1990 and Measure 50 in 1997 by Oregon voters, general obligation indebtedness is restricted to voter-approved capital construction or capital improvements.³ To pay the debt service on these bonds, bond levies may be imposed. Such bond levies are not subject to the Measure 5 limitation upon property tax rates. This limitation is discussed further on p. 54.

Counties in Oregon are statutorily limited to a legal debt margin of 2 percent of the real market value of all taxable property within its boundaries, after deducting from outstanding bonds such cash funds and sinking funds as are applicable to the payment of the principal thereof.⁴ In addition, as a matter of policy, some local governments further limit debt service tax rates.

DEBT IN DESCHUTES COUNTY

With real market value of \$37.8 billion, the current debt limitation for Deschutes County is \$753 million. The county's current general obligation of \$31 million represents only 4.2 percent of this limitation.

Communities in Oregon that have approved the issuance of general obligation bonds for park, recreation and greenspace purposes include Corvallis, Eugene, Portland Metro, Lake Oswego, Roseburg, Troutdale, Gresham, Lincoln City and West Linn. The most recent bond measure approved was at the November 4, 2008 election, where voters in the Tualatin Hills Parks and Recreation District approved a \$32 million GO bond to preserve parks, trails, and greenspaces.

Issuing GO Bonds for Land Conservation

Deschutes County could consider asking its voters to approve a GO bond to pay for the acquisition of additional conservation lands in the county. The chart below illustrates the estimated annual debt service, required bond levies, and annual household cost of various general obligation bond issue amounts. For example, a \$25 million general obligation bond requires a debt service of roughly \$2 million a year and would cost the typical household in the county an average of \$23 a year.

Deschutes County GO Bond Financing Costs

*Assumes 20-year bond issues at 5%.
2010 Total Assessed Value = \$17,332,985,466*

Bond Issue	Est. Avg. Annual Debt Service	Bond Levy*	Cost/Year/ Avg. Home**
\$10,000,000	\$802,426	\$0.0463	\$9
\$15,000,000	\$1,203,639	\$0.0694	\$14
\$25,000,000	\$2,006,065	\$0.1157	\$23
\$45,000,000	\$3,610,916	\$0.2083	\$42
\$50,000,000	\$4,012,129	\$0.2315	\$46

The assessed, or taxable, value of real property is equal to 90 percent of its real market value in 1997 plus an increase of no more than three percent (3%) per year, except for new construction and annexations (Measure 50). However, the taxable value of a new home is equivalent to the real market value. Increases to the taxable value of this home are capped at 3% going forward. Therefore, significant variability in taxable values of homes exists throughout the county.

*Per \$1,000 of assessed value.

**Based on estimated average home assessed value of \$200,000.

Source: Deschutes County Assessor.

² §§287.001 to .146.

³ Or. Const. Art. XI, §11(5), (11), (13); Or. Const. Art. XI, §11b(2)(d).

⁴ §287.004.

TPI's bond cost calculations provide a basic estimate of debt service, tax increase, and cost to the average homeowner in the community of potential bond issuances for parks and land conservation. Assumptions include the following: the entire debt amount is issued in the first year and payments are equal until maturity; 20-year maturity; and 5 percent interest rate. The property tax estimates assume that the jurisdiction would raise property taxes to pay the debt service on bonds, however other revenue streams may be used. The cost per household represents the average annual impact of increased property taxes levied to pay the debt service. The estimates do not take into account growth in the tax base due to new construction and annexation over the life of the bonds. The jurisdiction's officials, financial advisors, bond counsel and underwriters would establish the actual terms of any bond.

Process for implementation for GO Bonds

The governing body of the county may issue bonds upon approval of the majority of electors voting upon the question of issuance.⁵ The bond ballot title must contain the following statement immediately after the ballot title question:⁶

Question: (herein the question is stated) If the bonds are approved, they will be payable from taxes on property or property ownership that are not subject to the limits of sections 11 and 11b, Article XI of the Oregon Constitution.

The ballot title statement must also contain a reasonably detailed, simple and understandable description of the use of proceeds. If the bond election is to be conducted by mail, the front of the outer envelope in which the ballot title is mailed shall state, clearly and boldly printed in red, "CONTAINS VOTE ON PROPOSED TAX INCREASE."

A bond measure must be approved by a majority of those voting at a May or November election or at an election with at least 50 percent turnout (i.e. by a "double majority" of voters). A ballot measure authorizing a local option levy may also state that the taxing district may issue bonds payable from the levy and voter approval of the local option levy constitutes voter approval of the bonds.

Limited Tax Bonds

Limited tax bonds are general obligation bonds payable from property taxes that have not been approved by voters. These bonds fall under the tax rate limitation for government operations of \$10 per \$1,000 of assessed value. Due to tax rate compression concerns, this report does not delve further into limited tax bonds as a funding mechanism for parks, trails and greenspace. The county finance manager and the assessor should be contacted for further information about the capacity of the county to issue non-voted debt.

The county also could issue bonds backed by revenues from its System Development Charge (SDC). A public vote is not required, but debt service must not exceed expected revenues. SDCs are discussed in greater detail on page 57.

⁵ §287.004.

⁶ §250.037. Section 250.035 also requires that the ballot title of any measure, other than a state measure, to be initiated and referred must consist of a (i) caption that is not more than 10 words and reasonably identifies the subject of the measure, (ii) a question that is not more than 20 words and plainly phrases the chief purpose of the measure so that an affirmative response to the measure corresponds with an affirmative vote on the measure, and (iii) a concise and impartial statement of not more than 175 words summarizing the measure and its major effect.

PROPERTY TAXES

In many cities in Oregon, the property tax is the largest source of revenue for local (not state) government programs. Property taxes raised nearly \$5 billion for local governments in fiscal year 2009-10, an increase of 6.3 percent from the previous year.⁷ The increase is primarily attributable to growth in assessed property values and to growth in local option levies. Schools receive the largest share of property tax revenue (42 percent of the total), followed by cities (22 percent), counties (19 percent), and special districts (13 percent).

Property taxes are composed of four primary parts:

1. Permanent (operating) rate imposed by counties and municipalities subject to a limitation of \$10 per \$1,000 of assessed value.
2. Local option levies imposed by local taxing districts other than school districts and which may be imposed for no more than five years, except for a levy for a capital project which may be imposed for the lesser of the expected useful life of the capital project or ten years.⁸ Capital projects include the acquisition of land.⁹ Local option levies are subject to the \$10 per \$1,000 of assessed value limitation. In addition, these levies must be approved by a majority of voters in the tax district at a general election in an even-numbered year or at an election with at least 50 percent voter participation (double-majority).
3. Bond levies utilized to pay the debt service for bonds and not subject to the \$10 per \$1,000 of assessed value limit.
4. Urban renewal special levy imposed by an urban renewal agency and not subject to the \$10 per \$1,000 of assessed value limit.¹⁰

The permanent property tax constitutes 78 percent of all property taxes imposed statewide. Bond levies comprise 14 percent of total property taxes imposed in Oregon.

The maximum allowable property tax for government operations is \$10 per \$1,000 of assessed value (and \$5 for public school funding) and includes local option levies (Measure 5).¹¹ Property taxes imposed to pay debt service for bonds are not subject to the \$10 per \$1,000 of assessed value limitation. The assessed, or taxable, value of real property is equal to 90 percent of its real market value in 1997 plus an increase of no more than three percent (3%) per year, except for new construction and annexations (Measure 50).¹²

When property tax rates exceed the Measure 5 limitation, the imposed taxes are reduced proportionately (“compressed”) to conform to these requirements. The reduction in taxes due to compression is equivalent to the difference between what taxing districts wished to raise through property taxes (tax extended) and the amount they actually raised (tax imposed). The amount by which tax revenue is reduced on a property is called “compression loss.” Local option taxes are compressed before all other property tax rates are adjusted such that districts with local options account for the majority of compression loss.¹³ In recent years, the compression loss in Oregon has

⁷ Oregon Property Tax Statistics, FY 2005-06, Research Section, Oregon Dept. of Revenue, at 3 to 4 (revised May 2010), <http://www.oregon.gov/DOR/STATS/docs/303-405-10/303-405-10.pdf> Oregon Property Tax Statistics Supplement, FY 2005-06, Research Section, Oregon Dept. of Revenue, (revised June 6, 2006), at <http://www.oregon.gov/DOR/STATS/docs/303-448-06/303-448-06.pdf>

⁸ Or. Const. Art. XI, §11(4) and (8); §§280.040 to .150.

⁹ §280.060(4)(b).

¹⁰ Urban renewal special levies are imposed if the amount of revenue raised from the urban renewal excess value (total assessed value of property in urban renewal area in excess of the base assessed values when the plan areas were established) is below the agency's revenue raising authority.

¹¹ Or. Const. Art. XI, §11b (Measure 5) (passed in 1990).

¹² Or. Const. Art. XI, §11 (Measure 50) (passed in 1997).

¹³ K-12 school districts (\$23.8 million), city districts (\$16.1 million), and county districts (\$13.2 million) accounted for nearly all compression loss in 2005-06.

declined as increases in real market value have exceeded increases in assessed value. For example, in 2005-06, compression reduced property taxes such that all districts in Oregon were extended by \$56.2 million, or 19 percent less than the \$69.6 million compression loss in 2004-05 and 31.1 percent less than the \$81.6 million compression loss in 2003-04.

The Property Tax in Deschutes County

In 2009-10, Deschutes County has a total assessed value of \$17.3 billion.¹⁴ The county imposes a permanent property tax of \$1.2783 per \$1,000 of assessed value. Additional levies are imposed by various municipalities and special local districts. For example, in November 2006, voters approved the formation of Countywide Law Enforcement District (District 1) and a Rural Law Enforcement District (District 2) with permanent rates to fund sheriff services of \$1.25 (District 1) and \$1.55 (District 2) per \$1,000 of assessed value, respectively.

Using the Local Option Levy for Parks & Open Space

Local option levies allow local governments to raise revenue beyond the permanent rate amounts. Deschutes County could impose a local option levy to raise a substantial amount of money on an annual basis for the acquisition, construction, operation and maintenance of parks, trails, and greenspaces. A local option levy for operation and maintenance may not exceed five years, while a local option levy for capital projects may not exceed the lesser of the expected useful life of the project or ten years.

Without considering any property tax compression, the chart on the following page illustrates the estimated revenue and cost of various local option levies per \$1,000 of assessed value as it affects residential properties in the city. For instance, a local option levy of \$0.15 could generate an estimated \$2.6 million a year at an annual average household cost of approximately \$30.

Estimated Revenue and Cost of Local Option Levy

Local Opt Levy*	Assessed Valuation	Annual Revenue	Cost / Avg. / House**
\$0.10	\$17,332,985,466	\$1,733,299	\$20
\$0.15	\$17,332,985,466	\$2,599,948	\$30
\$0.25	\$17,332,985,466	\$4,333,246	\$50

* Per 1,000 of assessed valuation.

** Based on average home assessed value of \$200,000.

Source: Deschutes County Assessor.

¹⁴ Deschutes County 2009-2010 Assessment Roll.

Process for Implementation of Local Option Levy¹⁵

Local option levies must be approved by a majority of those voting at a May or November election or at an election with at least 50 percent turnout (i.e. by a “double majority” of voters). Specifically, the county may call an election¹⁶ for the purpose of approving a local option levy to be held on the following dates:

- Second Tuesday in March;
- Third Tuesday in May;
- Third Tuesday in September; or
- First Tuesday after the first Monday in November.¹⁷

As part of the question, the ballot title for a measure authorizing the imposition of local option taxes must state the length in years of the period during which the proposed local option tax will be imposed and the first fiscal year in which the proposed local option tax will be imposed.¹⁸ The ballot title must also contain a statement not exceeding 175 words explaining the chief purpose of the measure, reasons for the measure, and the fiscal details.¹⁹

A ballot measure authorizing the local option levy may also state that the taxing district may issue bonds payable from the levy and voter approval of the levy constitutes voter approval of the bonds.²⁰

If more than one proposal to impose local option levies is submitted to the electors at the same election, the several ballot measures shall be voted upon separately. However, not more than four separate ballot measures proposing local option levies may be submitted to the electors within a single calendar year. Local option levy ballots for capital projects with a term greater than five years must be submitted to the electors separately than local option taxes with a term of five years or less.²¹

SPECIAL DISTRICTS

In Oregon, counties and cities may establish a special district (or local service district) to provide additional services, including parks and recreation services, and to finance their activities. A park and recreation district is the only special district available to cities in Oregon for financing parks and greenspace.

Park and Recreation District²²

A community²³ may form a municipal corporation²⁴ to provide park and recreation facilities for the inhabitants. In Oregon, 50 park and recreation districts exist, with the largest being Tualatin Hills Park and Recreation District in Beaverton.²⁵

¹⁵ §§280.060 to .090

¹⁶ The order, resolution or ordinance, as the case may be, pursuant to which the election is called and held, shall set forth (1) the purpose for which the funds to be provided by the tax levies are to be expended; (2) the estimated total outlay for such purpose; and (3) the period of time for which the levy will be imposed. §280.080.

¹⁷ §280.070; §221.230.

¹⁸ §280.070(5).

¹⁹ §280.075.

²⁰ §280.075. and §280.060(5).

²¹ §280.060(4)(a).

²² §§266.010 to .550.

²³ The relevant statutory chapter does not define a “community.” However, because park and recreation districts may be formed on a less-than-countywide basis, it is assumed that a city may form such a district.

²⁴ A municipal corporation is statutorily defined to mean a city; county; special district; corporation which is conferred powers of the state for the purpose of local government; or public corporation, including a cooperative body formed between municipal corporations. §297.405.

²⁵ Oregon Property Tax Statistics Supplement, at 232-236.

Districts may be formed by petition of voters or landowners, or by a local government. Creation of a countywide district would require a public vote.²⁶ An elected board comprised of three to five members governs the park and recreation district. A park and recreation district has the power to construct, reconstruct, alter, enlarge, operate and maintain lakes, parks, recreation grounds and buildings; to acquire necessary lands; and to call necessary elections after the formation of the district. In addition, to finance itself, a park and recreation district may impose impact fees, levy property taxes, and issue revenue and general obligation bonds.²⁷ Voter approval is required to impose taxes or issue bonds.

Districts in Deschutes County

A county parks and recreation district could be formed in Deschutes County. Presently, there are four local recreation districts within the county and state law prohibits overlapping districts, which provide the same services, so there are two options for formation of a county district. First, the county district could be drawn so that the boundaries include only those areas not currently served by one of the four local districts (i.e. essentially the unincorporated area of the county). Alternatively, the existing districts could be consolidated to create a new countywide parks and recreation district.

A district created to encompass only the unincorporated area would have a significantly smaller tax base than the county, as nearly 2/3rds of the taxable assessed value in the county is in the four municipalities.

SYSTEM DEVELOPMENT CHARGES²⁸

Cities, counties and special districts in Oregon may impose system development charges for capital improvements, which include parks and recreation facilities but not operation and maintenance costs or replacement costs for existing infrastructure capacity. A SDC is a one-time fee charged on new development and certain types of redevelopment to help pay for existing and planned infrastructure to serve the development. It is assessed or collected at the time of increased usage of a capital improvement or issuance of a development permit, building permit or connection to the capital improvement. SDCs are collected from builders who may include the costs in their charges.

Deschutes County presently imposes a Parks System Development Charge (SDC) that funds park and recreation capital improvements and acquisitions. A proposal to create a transportation systems development charge (paid by new development and used to fund capacity enhancement projects that benefit new development) was approved in 2009. The county could consider increasing the existing park SDC, however many communities in Oregon are currently waiving or reducing their SDCs in order to help spur development and boost local economies.

Bonding with Parks SDCs

System development charges may be pledged by the city or special district to pay debt service on general obligation bonds for parks and recreation facilities.²⁹ Such bonds are known as General Obligation Bancroft Bonds, which are expended only for payments duly authorized for construction or expansion of systems development.³⁰ The GO bonds are authorized in an amount not to exceed the unpaid balance of all SDCs, plus necessary financing costs.

²⁶ ORS 198.810. A vote is not required if a petition to create the district is signed by all landowners in the district. ORS 198.830.

²⁷ Levy is limited to one-half of one-percent (.005) of the real market value of all taxable property. ORS 266.420. General obligation debt may not exceed two and one-half percent of the real market value of property in the district. ORS 266.512.

²⁸ §§223.297 to .314. System development charges have been in use in Oregon since the mid-1970s for water and sewer improvements. State legislation regarding SDCs was not adopted until 1989 and limits the use of SDCs to water, wastewater, drainage, flood control, transportation and parks and recreation capital improvements.

²⁹ §223.313(2) ("The provisions of ORS 223.297 to 223.314 [System Development Charges] shall not be applicable if they are construed to impair bond obligations for which system development charges have been pledged or to impair the ability of local governments to issue bonds or other financing as provided by law for improvements allowed under ORS 223.297 to 223.314").

³⁰ §§223.205 to .295 (Bancroft Bonding Act).

A city or district may not incur indebtedness for general obligation bonds that are secured and payable from SDCs in an amount greater than three percent of the latest real market valuation of the city or district.

Their use is limited because the revenue stream is unpredictable - revenues rise or fall with building activity. However, these fees already exist and can be used to acquire land now.

System Development Charges in General

System development charges are utilized in at least 25 cities and six park and recreation districts in Oregon to fund park and recreation facilities. Park SDC rates in select cities and park and recreation districts across Oregon range from \$1,000 to \$8,029 for single-family residences (average \$3,130). The Parks and Recreation SDCs are based on population and employment, and the SDC rates are calculated based on the specific impact a development is expected to have on the District's population and employment.

A 2006 Metro analysis of Park SDCs in the Portland metropolitan area found that most of the jurisdictions spent their SDC revenue as they collect the SDCs.³¹ A few jurisdictions accumulate fund balances that are disproportionately large in comparison to the annual revenues flowing into their respective SDC or Capital Development Funds. These jurisdictions accumulated their Park SDC revenue for a variety of reasons, including saving for significant capital projects or land acquisitions or other economic factors.

System development charges are only one component of an overall parks and recreation funding strategy. Because they depend directly upon the level of new residential construction activity, SDCs are an unpredictable revenue sources. Moreover, because land values in Oregon have increased substantially in the past few years, a fully loaded Park SDC is politically ambitious and increases to the rate will be difficult in keeping pace with land value inflation.

B. STATE PARKS, TRAILS, AND GREENSPACE FUNDING

A number of grant programs provide funding for parks, trails and greenspaces in Oregon. The majority of the state grant programs require matching contributions from the applicant. Grant programs in general do not serve as stable sources of funding as they tend to fluctuate year-to-year but should be considered as an additional source of revenue for specific park, trail and greenspace projects.

State funding for conservation largely comes from an allocation of the lottery. In 1998 Oregon voters passed Measure 66 that allocated 15 percent of net lottery proceeds to fund new parks, beaches, salmon, wildlife habitat, and watershed protection. Of that 15 percent, half is dedicated to create/maintain state parks, ocean shores, public beach access areas, historic sites, and recreation areas. The other half provides funds to protect native salmon, wildlife habitat, and watersheds. The other 85 percent of the proceeds go to job creation, economic development, and public education. Measure 66 is due to sunset in 2014. There are efforts underway to reauthorize it in either 2010 or 2012. State grant programs are listed in alphabetical order below.

³¹ GPAC Finance Report: Part 1--Existing Financial Environment, prepared for Metro Greenspace Policy Advisory Committee (May 25, 2006).

Access and Habitat Grants

Oregon Department of Fish and Wildlife

<http://www.dfw.state.or.us/AH/grants/>

To qualify for an access and habitat grant, a project must improve wildlife habitat, increase public hunting access to private land, or solve a wildlife damage issue. Some examples of projects that have been approved and implemented to date include development of wetland habitat, noxious weed control, improving wildlife forage on private lands, developing water in arid regions, riparian fencing, seeding after wildfire, hunting leases, land acquisition, seasonal road management and hunter access through private lands to inaccessible public lands. Projects may be on private or public lands, though preference is given to projects on private lands. Individual landowners, groups of landowners, conservation organizations, and government agencies may submit applications (or project proposals).

All-terrain Vehicle (ATV) Grant Program

Oregon Park and Recreation Department

<http://egov.oregon.gov/OPRD/ATV/Grants.shtml>

The ATV Grant Program provides funding, through a competitive process, for ATV recreational projects in acquisition, planning, development, operation and maintenance, law enforcement and first aid, and safety education. Eligible applicants include public agencies, private land managers, clubs, and non-profit organizations. A 20 percent match is required and includes in-kind donations.

Bicycle/Pedestrian Grant Program

Oregon Department of Transportation

<http://www.oregon.gov/ODOT/HWY/BIKEPED/>

The Bicycle/Pedestrian Grant Program provides funding for stand-alone pedestrian or bicycle projects on a competitive basis to cities and counties for improvements on city streets or county roads.³² The competitive grant program provides approximately \$5 million dollars every two years to Oregon cities, counties and ODOT regional and district offices for design and construction of pedestrian and bicycle facilities. The Oregon Bicycle and Pedestrian Advisory Committee awards the grants.

Land and Water Acquisition Grants

Oregon Watershed Enhancement Board

<http://www.oregon.gov/OWEB/GRANTS/index.shtml>

A state agency led by a policy oversight board, the Oregon Watershed Enhancement Board offers grants and technical assistance to restore salmon runs, improve water quality, and strengthen ecosystems that are critical to healthy watersheds and sustainable communities. The Board also administers a grant program that awards more than \$20 million annually to support voluntary efforts by Oregonians seeking to create and maintain healthy watersheds. Grants from the Board require at least 25 percent match funding and a state or federal agency must serve as a co-applicant on the grant application. Funding for programs comes from Oregon Lottery revenues and other sources including salmon license plate revenues, federal salmon funds, and funds that come from the purchase of “salmon-friendly” power. Beginning in 2000 and through 2003, the Oregon Watershed Enhancement Board awarded grants for the acquisition of 29,227 fee-title acres and 126 easement acres at a total cost of \$7.9 million, of which \$3 million was for the \$4 million purchase of 26,920 acres in the Imnaha watershed in 2001.

³² Pursuant to §366.514, cities, counties, and ODOT must provide pedestrian and bicycle facilities on all road construction and reconstruction projects, and cities, counties, and ODOT are required to spend no less than one percent of the State Highway Fund (including Oregon Transportation Investment Act funding) on projects that improve bicycle and pedestrian transportation.

Local Government Grants

Oregon Park and Recreation Department

<http://egov.oregon.gov/OPRD/GRANTS/local.shtml>

Funded by the state lottery ticket sales,³³ the Local Government Grants program provides funding on a biannual basis for land acquisition and development and rehabilitation of park areas and facilities. Eligible agencies include city and county park and recreation departments, METRO, park and recreation districts, and port districts. A 50 percent match is required for larger agencies (cities with over 5,000 in population) and a 40 percent match for small agencies. Staff at the Oregon Parks and Recreation Department reviews and approves small projects of \$50,000 or less. Large projects exceeding \$50,000 but less than \$250,000 are reviewed and approved by the Local Government Advisory Committee.

Marine Grants

Oregon State Marine Board

<http://www.boatoregon.com/>

The Oregon State Marine Board manages Oregon's waterways. From revenues the Board receives from the licensing of pleasure boats and a portion of the automobile gas tax, the Board provides grants to local governments (cities, counties, park districts, port districts) to develop and maintain accessible boating facilities and protect water quality. Grants are provided for construction projects related to waterfront improvements, such as boat ramps, restrooms, parking, and other related projects, as well as operating funds for maintenance and patrol.

C. FEDERAL PARKS, TRAILS, AND GREENSPACE FUNDING

The U.S. federal government is an important partner for state and local governments, parks and conservation organizations, and community advocates in Oregon. Each program has different requirements and offers various partnership opportunities (e.g. applying through the state, working with private landowners, etc.) that should be further evaluated to determine most likely funding outcomes. The descriptions are meant to provide a broad overview of funding sources. TPL can provide additional information on program rules and accessibility.

The primary federal sources of funding for park, trail, and greenspace purposes are listed below.

Migratory Bird Conservation Fund

U.S. Fish and Wildlife Service

<http://www.fws.gov/realty/mbcc.html>

Each year, duck stamp (migratory bird and conservation stamps) revenues are deposited into the Migratory Bird Conservation Fund along with appropriations from the Wetlands Loan Act of 1961, import duties from arms and ammunitions, receipts from refuge admission fees, receipts from the sale of refuge-land crops and refuge rights-of-way, and Federal Aid funds. Administered by the U.S. Fish and Wildlife Service (USFWS), the Migratory Bird Conservation Fund is used to acquire waterfowl breeding, wintering, and migration habitat needed for maintaining optimum migratory bird population levels and to achieve desirable migration and distribution patterns. The habitat areas, acquired in fee, easement, or other interests such as leases or cooperative agreements, become units of the National Wildlife Refuge System or Waterfowl Production Areas. The Service focuses its acquisition efforts to benefit waterfowl species most in need of habitat protection. Over 4 million acres have been protected with funds from the Migratory Bird Conservation Fund.

³³ Approved by 65 percent of state voters in 1998, 15 percent of lottery proceeds in Oregon fund state park projects and salmon/stream restoration projects, namely the restoration and protection of parks, beaches, watersheds, and critical fish and wildlife habitat. The revenues are split between the state park projects (7.5%) and the salmon/watershed conservation projects (7.5%). At least 65 percent of the proceeds must be expended for capital improvements. Lottery proceeds generate about \$350 million a year.

The North American Wetlands Conservation Act (NAWCA)

U.S. Fish and Wildlife Service

<http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm>

The North American Wetlands Conservation Act (NAWCA) was passed in 1989 to provide matching grants for the acquisition, restoration, and enhancement of wetland ecosystems for the benefit of waterfowl and other wetland dependent migratory species. Administered by the U.S. Fish and Wildlife Service, grants are available to nonprofit organizations, state and local agencies, tribes, and private individuals in the U.S., Canada, and Mexico. Two types of grants are awarded; small grants for up to \$75,000 and standard grants for up to \$1 million. There is a 1:1 non-federal match requirement for each grant although the average match of successful proposals is over 2:1. In December 2002, Congress reauthorized the Act and expanded its scope to include the conservation of all habitats and birds associated with wetlands ecosystems. Congress also increased the appropriation authorization of the grant program to \$55 million for FY 2003, with \$5 million increases to occur annually until FY 2007, when the appropriation cap will be \$75 million. The Congressional appropriation to fund the grant program in FY 2008 is approximately \$40.3 million. Additional program funding is expected to bring the total funding available to approximately \$84.4 million in FY 2008.

Since 1990, over 3,500 partners have been involved in over 1,650 NAWCA standard and small grant projects, affecting 23.8 million acres of wetlands and associated uplands across the continent.

The Lower Columbia River Ecoregion Project has received multiple NAWCA grants in past fiscal years for the conservation and enhancement of wetlands in many counties in Washington and Oregon, including Clatsop County. This project conserved and enhanced thousands of acres of palustrine emergent, palustrine forested, and estuarine intertidal wetlands; riparian areas; and adjacent uplands. Habitat protection was accomplished through fee-title, easement, and lease acquisitions and donations. Restoration and enhancement work included activities such as breaching dikes, installing water-control structures, building beams, and installing fish ladders.

Cooperative Endangered Species Conservation Fund:

HCP Land Acquisition Grants and Recovery Land Acquisition Grants

U.S. Fish and Wildlife Service

<http://www.fws.gov/endangered/grants/index.html>

Grants offered through the Cooperative Endangered Species Conservation Fund (authorized under section 6 of the Endangered Species Act) fund participation in a wide array of voluntary conservation projects for candidate, proposed, and listed species.

HCP Land Acquisition Grants

Habitat Conservation Plan (HCP) Land Acquisition Grants provide funding to states and territories explicitly for land acquisitions that complement approved HCPs. These grants are available only for land purchases that go above and beyond the conservation responsibilities that nonfederal partners already bear under the terms of the HCP. Specifically, the grants fund land acquisitions that complement but do not replace private mitigation responsibilities contained in HCPs; have important benefits for listed, proposed, and candidate species; and that have important benefits for the ecosystems that support those species. Although Oregon has yet to receive a HCP Land Acquisition grant, both Clatsop and Tillamook Counties have HCPs.

Recovery Land Acquisition Grants

Recovery Land Acquisition Grants provide funds to States for the acquisition of habitat, through both fee and easement, for federally-listed threatened and endangered species in support of approved recovery plans. These funds must contribute to the implementation of a finalized and approved recovery plan for at least one listed species. In the past four fiscal years, Oregon has

received four Recovery Land Acquisition grants totaling almost \$1.8 million and conserving over 7,000 acres of endangered species habitat. However, none of these grants were awarded for conservation in Clatsop, Tillamook, or Lincoln County.

National Fish and Wildlife Foundation- Keystone Initiative Grants & Special Grants Programs

National Fish and Wildlife Foundation

<http://www.nfwf.org/programs.cfm>

In 1984, Congress created the National Fish and Wildlife Foundation (NFWF) to benefit the conservation of fish, wildlife, plants, and the habitat on which they depend by attracting diverse investments to conservation and encouraging locally supported stewardship on private and public lands. Through their Keystone Initiatives Grant Program, NFWF funds projects to conserve and restore bird, fish, and wildlife populations as well as the habitats on which they depend. The Foundation awards matching grants to projects that address priority actions laid out by their strategic plan, work proactively to involve other conservation and community interests, leverage funding, serve multiple objectives, involve strong partnerships, and fit into a larger ecosystem approach to conservation. The most successful applications will display the long-term environmental benefits of a project that yield high quality conservation returns.

Eligible grantees include federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Grants can range from \$50,000 to \$300,000 and typically require a 2:1 nonfederal match.

In addition to the Keystone Initiative matching grants, the Foundation administers a variety of special grant programs with specific conservation objectives, programmatic guidelines, and timelines. *(See the Foundation's website for more information on these numerous grant opportunities or call NFWF's Western Partnership Office (503) 417-8700).*

State Wildlife Grants

U.S. Fish and Wildlife Service

<http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG.htm>

Created by Congress in 2001, the State Wildlife Grants Program is a matching grant program available to every state in support of cost-effective, on-the-ground conservation efforts aimed at restoring or maintaining populations of native species before listing under the Endangered Species Act is required. In order to maximize the effectiveness of this program, Congress required each state to develop a comprehensive wildlife conservation strategy for the conservation of the state's full array of wildlife and the habitats they depend upon. These plans identify species and habitats of greatest conservation need and outline the steps necessary to keep them from becoming endangered. The State Wildlife Grants Program provides matching funds that are to be used to implement the conservation recommendations outlined in these state wildlife action plans.

Funds appropriated under the SWG program are allocated to every states according to a formula based on a state size and population. Since its inception in 2001, Oregon has received slightly over \$6.6 million in matching funds from this program.

**Land and Water Conservation Fund (LWCF)
Department of the Interior (varies by agency)**

<http://www.nps.gov/ncrc/programs/lwcf/>

Created in 1965, the Land and Water Conservation Fund (LWCF) is the largest source of federal money for park, wildlife, and open space land acquisition. Specifically, the LWCF provides funding to assist in the acquiring, preserving, developing and assuring accessibility to outdoor recreation resources, including but not limited to open space, parks, trails, wildlife lands and other lands and facilities desirable for individual active participation.³⁴ The program's funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year, while federal recreation fees, sales of federal surplus real property, and federal motorboat fuel taxes fund also contribute to the LWCF. Under this program, a portion of the money is intended to go to federal land purchases and a portion to the states as matching grants for land protection projects.

**LWCF – Federal
Department of the Interior**

The federal side of the Land and Water Conservation Fund provides funding for federal agencies (Fish and Wildlife Service, National Forest Service, National Park Service, and the Bureau of Land Management) to add land to existing recreation areas, parks, forests, refuges and other federal units. LWCF funding provides the bulk of the money available for this purpose.

The Cape Meares National Wildlife Refuge, Three Arch Rocks National Wildlife Refuge, and Nestucca Bay National Wildlife Refuge are located in Tillamook County and are eligible for federal LWCF. The Lewis And Clark National Refuge located in Clatsop County and The Siletz Bay National Refuge in Lincoln County may also be receiving LWCF funding.

**LWCF – Stateside
National Park Service**

<http://www.nps.gov/ncrc/programs/lwcf/funding.html>

The stateside LWCF program provides a 50 percent match to states for planning, developing and acquiring land and water areas for natural resource protection and recreation enhancement. Funds are distributed to states based on population and need. Once the funds are distributed to the states, it is up to each state to choose the projects, though the National Park Service has final approval. Eligible grant recipients include municipal subdivisions, state agencies and tribal governments, each of whom must provide at least 50 percent matching funds in either cash or in-kind contributions and a detailed plan for the proposed project. Grant applications are evaluated based on the technical merits of the project, the public/private partnerships, and how the project addresses the identified needs and priorities of a statewide comprehensive plan.

Annual appropriations to the fund have ranged from a high of \$369 million in 1979 to four years of zero funding between 1996 and 1999. A little more than \$38 million is being distributed for grants in FY 2010. This is a 40% increase over the total amount apportioned in FY 2009, which was \$27,160,947. The President's request for FY 2011 proposes a \$10 million increase in appropriations for LWCF State grants (to \$47.2 million).

In FY 2010, Oregon received \$569,849 from the state grant portion of the LWCF. The program is administered in the state by the Department of Culture, Recreation and Tourism, Office of State Parks, Division of Outdoor Recreation.

³⁴ <<http://www.iac.wa.gov/iac/grants/lwcf.htm>>.

Natural Resources Conservation Service Wetland Reserve Program (WRP)

Department of Agriculture

<http://www.nrcs.usda.gov/PROGRAMS/wrp/>

Congress authorized and amended the Wetland Reserve Program (WRP) under the Farm Bill in 1996 as a means of addressing the loss of wetlands nationwide. Administered through the Department of Agriculture's Natural Resources Conservation Service (NRCS), WRP is a voluntary program to restore wetlands. Participating landowners can establish conservation easements of either permanent or 30-year duration or can enter restoration cost-share agreements of a minimum 10-year duration. In order for a property to be eligible for a WRP grant, the landowner must have owned the land for at least one year (unless the land was inherited or the landowner can prove the land was not purchased for enrollment into the program), and the land must be restorable and suitable for wildlife benefits. The landowner continues to control access to the land and may lease the land for recreational activities.

The amount of funding available in a given fiscal year depends on the amount of acres Congress permits to be enrolled in the program. The funding level is dependent on the value of the land and funding occurs on a statewide basis wherein a per-acre value is assigned in each state.

In FY 2008, Oregon received slightly over \$1.4 million in WRP funds for easement acquisition.

Farm and Ranch Lands Protection Program (FRPP)

U.S. Department of Agriculture Natural Resources Conservation Service

<http://www.nrcs.usda.gov/programs/frpp/>

USDA Farm and Ranch Lands Protection Program provides matching funds to assist in the purchase of development rights to keep productive farm and rangeland in agricultural uses and works with state, tribal, or local governments and non-governmental entities. Grants are awarded by the Natural Resource Conservation Service (NRCS) to states, local governments and non-governmental entities on a competitive basis, according to national and state criteria and require up to a 50 percent non-NRCS match to cover the cost of the easement. Up to 25 percent of donated land value can be counted as the match.

In FY 2008, Oregon received no FRPP funds.

U.S. Army Corps of Engineers Civil Works Programs

Department of Defense

The U.S. Army Corps of Engineers has both military and civilian responsibilities. Under its civil works program, the Corps plans, constructs, operates, and maintains a wide range of water projects, headed by a civilian Assistant Secretary of the Army for Civil Works. A military Chief of Engineers oversees the Corps' civil and military operations and reports on civil works matters to the Assistant Secretary for Civil Works. Projects generally originate with a request for assistance from a community or local government entity. A study of the project is often in order, allowing the Corps to investigate a problem and determine if there is a federal interest in proceeding further. The study must be authorized by Congress, usually in the biennial Water Resources Development Act (WRDA), and must be funded through the annual Energy and Water Appropriations bill.

Congress also provides authorizations and appropriations to the Corps for the Continuing Authorities Programs (CAP). Two programs, Section 1135 and Section 206 are of special interest. Section 1135 provides authority for the Corps of Engineers to investigate, study, modify, and construct projects for the restoration of fish and wildlife habitats where degradation is attributable to water resource projects previously constructed by the Corps of Engineers. Project modifications

are limited to a Federal cost of \$5 million per project. The program limit for Section 1135 is \$25 million.

Aquatic Ecosystem Restoration (WRDA Section 206) provides authority for the Corps of Engineers to carry out aquatic ecosystem restoration and protection projects if the project will improve the quality of the environment, is in the public interest, and is cost effective. Each project is limited to a Federal cost of \$5 million. The total program limit is \$25 million.

Brownfields Program

U.S. Environmental Protection Agency (EPA)

<http://www.epa.gov/brownfields/applicat.htm>

If a property identified for acquisition or redevelopment is or might be a “brownfields” site, many programs and other benefits at the local, state and federal levels encourage its redevelopment. The U.S. Environmental Protection Agency’s Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, and environmental job training. In addition, legislation signed into law in 2001 limits the liability of certain contiguous property owners and prospective purchasers of brownfields properties, and innocent landowners are also afforded liability benefits to encourage revitalization and reuse of brownfield sites. EPA’s brownfields program provides several types of grants:

- Assessment grants provide funding for a grant recipient to inventory, characterize, assess, and conduct cleanup and redevelopment planning and community involvement related to brownfield sites. \$200,000 grants (or up to \$350,000 with a waiver).
- Remediation grants are available for remediation of brownfield sites. These grants are limited to \$200,000 per site, with no more than three applications per entity. There is a 20 percent cost-share. NGOs are eligible to apply, but must have site control of the property. One site may qualify for two grants if pollutants include petroleum and non-petroleum contaminants.
- Revolving Loan Fund grants (RLF) provide funding for a grant recipient to capitalize a revolving loan fund to provide sub grants to carry out cleanup activities at brownfields sites. \$1 million per eligible entity, with a 20 percent cost share.

Annual grants are announced in approximately October of each calendar year.

Program Example: TPL received an EPA brownfields grant to assist in the capping of a landfill in Providence, R.I. on a 1.5-acre property that is now part of the Woonasquatucket Greenway.

Clean Water and Drinking Water State Revolving Funds

The U.S. Environmental Protection Agency is charged with implementing both the Clean Water Act and the Safe Drinking Water Act, two landmark pieces of legislation whose respective goals are to clean up America’s waterways and to ensure that we have safe water to drink. Conservation is an eligible activity under both laws. Both programs utilize “State Revolving Funds” or SRFs to fund projects that better water quality and enhance our drinking water supplies. Every year, Congress appropriates funds that are portioned out to the states on a formula basis to fund the SRFs.

Clean Water State Revolving Fund (CWSRF)

<http://www.epa.gov/OWM/cwfinance/cwsrf/index.htm>

Through the CWSRF program, each state maintains a revolving loan fund to provide a source of low-cost financing for a wide range of water quality infrastructure projects. In FY07, Congress appropriated \$1.083 billion for the CWSRF, distributed among the states. Pennsylvania has received \$968 million for this program from 1989-2006. Federal funds must be matched by 20% non-federal funds.

The CWSRF program is available to fund a wide variety of water quality projects including all types of nonpoint source, watershed protection or restoration, and estuary management projects, as well as more traditional municipal wastewater treatment projects. Nationwide, 95% of these funds go toward infrastructure projects, but watershed protection projects are increasing.

CWSRF programs operate much like environmental infrastructure banks that are capitalized with federal and state contributions. CWSRF monies are loaned to communities and loan repayments are recycled back into the program to fund additional water quality protection projects. The revolving nature of these programs provides for an ongoing funding source that will last far into the future.

States have the flexibility to target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, brownfields remediation, estuary management, and wastewater treatment.

Land or easement acquisition is permitted with CWSRF funds as a method to reduce nonpoint source pollution. For example, California has already used \$112 million of its CWSRF funds to acquire over 29,000 acres of land for water quality benefits.

Program Example: Oregon's FY 2009 CWSRF allotment was \$7.6 million.

Drinking Water State Revolving Fund (DWSRF)

<http://www.epa.gov/safewater/dwsrf/index.html>

The Drinking Water State Revolving Fund (DWSRF) program was established by the 1996 Safe Drinking Water Act Amendments, under which EPA provides grants to States to establish revolving loan funds from which they provide loans and other types of financial assistance to public water systems for eligible infrastructure improvements. Since its inception, Congress has directed \$4.2 billion for the DWSRFs. In FY 2007, states were awarded \$822,933 towards their DWSRFs. Conservation easements and fee simple acquisition are permitted with these funds.

Since its inception, only \$2.7 million has been for acquisition to protect less than 2,000 acres of land under the DWSRF. However, EPA has begun a concerted effort to focus more attention on protecting "source water," which they roughly define as "untreated water from streams, rivers, lakes, or underground aquifers which is used to supply private wells and public drinking water." There is growing recognition that protecting the source from contaminants is often more efficient and cost-effective than treating drinking water later.

Loans under the DWSRF are typically low interest and can be repaid over 20 years. There is some flexibility given to the states to allow them to waive the principal repayment, offer negative interest rates or extend the loans to 30 years in specific hardship cases.

Up to 31 percent of these capitalization grants can be set-aside to administer the DWSRF and state source protection programs and to fund source water protection activities, including land acquisition. Up to 15 percent of the set-aside can be used for land conservation and voluntary, incentive-based protection measures, with no more than 10 percent used for a single type of activity, such as land protection.

Program Example: Oregon's FY 2009 DWSRF allotment was \$14.6 million.

Feasibility Study Appendix 1: Oregon Parks and Conservation Finance Measures
Selected Measures 1998 - 2008

Jurisdiction Name	Date	Finance Mechanism	Description	Total Funds at Stake	Status	% Yes
Atfalati Recreation Partnership	Nov-00	Property tax	Property tax increase to form the district and provide recreation facilities and services, including a regional trail and open space system		Fail	46%
Blue Heron Recreation District	Nov-00	Property tax	Property tax increase to purchase and preserve open spaces for recreational uses	\$7,600,000	Fail	45%
Corvallis	Nov-00	Bond	Bond issue for open space acquisition	\$7,900,000	Pass	65%
Eugene	Nov-98	Bond	Ballot Measure 20-30, Bond for Parkland Acquisition, Sports Field, Swimming Pool	\$25,305,000	Pass	67%
Eugene	Nov-06	Bond	Bond to acquire parks and open space	\$27,490,000	Pass	59%
Lake Oswego	Nov-98	Bond	Measure No. 3-20, Bond for open space, sports field renovation	\$13,000,000	Pass	60%
Lake Oswego	Nov-02	Bond	Measure 3-93; Bond for parks, open space and pathways	\$9,750,000	Pass	58%
Lincoln City	Nov-98	Bond	Bond measure for open space acquisition	\$3,000,000	Pass	52%
Metro-Portland	Nov-06	Bond	Bond to preserve natural areas, and protect water quality, fish and wildlife habitats	\$227,400,000	Pass	59%
North Clackamas Parks & Rec District	Nov-00	Property tax	Property tax increase to maintain parks, programs, services, and to provide more open space, natural areas, trails, pathways and recreational opportunities	\$7,600,000	Fail	50%
Oregon	Nov-98	Other	Measure 66, 15-years, Constitutional amendment dedicating 15 percent of lottery proceeds for parks, beaches, wildlife, watershed protection	\$700,000,000	Pass	67%
Portland	Nov-98	Bond	Measure No. 26-70, Bond for parks	\$64,850,000	Fail	49%
Portland	May-02	Property tax	5-year \$.39 per \$1,000 assessed value property tax increase for parks repair and maintenance		Fail*	70%
Portland	Nov-02	Property tax	5-year \$.39 per \$1,000 assessed value property tax increase for park services, repairs, maintenance, and recreation programs.	\$49,400,000	Pass	65%
Roseburg	Nov-98	Bond	Bonds for parks and trails	\$2,500,000	Pass	55%
Salem	Nov-02	Bond	Measure 24-27; bond for parks	\$39,995,000	Fail	45%
Sandy	Nov-98	Bond	Measure 3-32, Bond for parks, recreation	\$1,500,000	Fail	49%
Troutdale	Nov-02	Bond	Measure 26-41, bond for parkland and open space	\$3,430,000	Fail	47%
Tualatin Hills Park & Rec District	Nov-00	Property tax	Property tax increase for maintenance, land acquisition, and capital improvements	\$29,000,000	Fail	44%
Tualatin Hills Park & Rec District	Nov-08	Bond	Bond for new parks, land acquisition, trails, and facility renovation	\$32,200,000	Pass	51%
West Linn	Nov-98	Bond	Measure 3-37, Bond for Parks, Recreation	\$8,000,000	Pass	51%
West Linn	May-02	Bond	Measure 3-67; Bond to acquire parkland for athletic fields	\$2,500,000	Fail	48%
				\$1,262,420,000		

*Measure was approved by voters but was invalidated due to insufficient turnout.
Source: LandVote Database, The Trust for Public Land, at www.landvote.org.

FEASIBILITY STUDY APPENDIX 2: FUNDING QUILT CASE STUDIES

Below are two examples of how communities in the West are leveraging multiple funding sources to acquire land for the protection of agricultural lands, water resources, and the provision of open space, and recreation.

Gallatin County, Montana

Open Land Bonds

Over the past 35 years Gallatin County, in the Northern Rockies, saw its population increase by nearly 140 percent. To respond to growth and the community's desire to protect working ranches, Gallatin County pursued the development of an Open Land Conservation System implemented through various county plans, task force reports and regulatory changes. The Gallatin County Open Lands Board, a 15-member citizens' advisory panel, in conjunction with the Gallatin County Commission, the Planning Department, federal conservation agencies, local land trusts, conservation organizations, including The Trust for Public Land, and other stakeholders provided input and information throughout the strategic planning process.³⁵

To support the Open Land Conservation System, citizens were asked in 2000 and 2004 to authorize the county to sell up to \$10 million dollars in General Obligation Bonds, for conservation of agricultural and natural resource lands and water quality and quantity and to provide recreational opportunities. The voters overwhelmingly approved the two requests for a total of \$20 million. In FY 2004 the county also began receiving revenues generated by the sale of Open Land license plates.

The Open Lands Board reviews and approves all open space expenditures. The county has been extremely successful in leveraging its local bonds with state and federal money, including matching funds from the federal Farm and Ranchland Protection Program (FRPP), and from private donations, especially the Doris Duke Charitable Foundation. To date the Board has completed 22 conservation easements and three park projects. The value of completed easements is more than \$60 million. The county leveraged its investment of \$12 million in local bond funds for easements by nearly \$5 to \$1 through funding from state and federal agencies and private donations of money and land value.³⁶

For example, The Trust for Public Land (TPL), together with Gallatin Valley Land Trust (GVLT), Gallatin County Open Lands Board and Natural Resource Conservation Service (NRCS), completed a major conservation easement purchase, which protected 1,572 acres of farm and ranchland in the heart of the Gallatin Valley. The project was the largest conservation easement purchase ever funded in Montana through the FRPP. The easement, which has been appraised at \$2,170,000, was purchased for a bargain price of \$1,075,000. Funding for the purchase includes \$437,500 from the Gallatin County Open Space Program, \$537,500 from the FRPP, and \$100,000 from the Doris Duke Charitable Foundation as part of its Greater Yellowstone Land Protection Initiative. The conservation easement, which significantly limits the future development potential of the property, allows traditional farming and ranching activities to continue and will be held by the Gallatin Valley Land Trust for long-term monitoring and stewardship.

³⁵ Gallatin County Open Land Board History and Strategic Plan, January 1, 2008. http://www.gallatin.mt.gov/Public_Documents/gallatincomt_openlands/chapter1rebuild.pdf

³⁶ *Ibid.*

Boise, Idaho

Foothills Conservation Levy

For more than 30 years, Boise City officials, staff and citizens have thoughtfully considered plants, wildlife, rivers, slopes, recreation and public open spaces integral to the quality of life in their community. Numerous planning efforts have guided the city's growth and protected its natural resources, setting the table for an important community decision: How does the community protect public open space in the Boise foothills in the face of increasing development pressure? With leadership of the Mayor, City Council and a grass-roots community coalition, the citizens of Boise passed a \$10 million serial levy on May 22, 2001. The levy provides the city with an important tool to work with private property owners in conserving important open space corridors and creating a valuable public resource for future generations.³⁷

The Foothills Conservation Advisory Committee, a 12-member body, appointed by the Mayor and confirmed by City Council, makes recommendations for the permanent protection of natural open space in the Boise Foothills and ensures that levy funds are spent wisely. As of the end of 2007, the City of Boise has protected a total of 3,198 acres with a market value of more than \$27 million. The city leveraged its investment of \$6 million in local levy funds by nearly \$4 to \$1 through funding from state and federal agencies and private donations of money and land value.

For any questions or more information please contact:

Josh Alpert
Northwest Conservation Finance Director
The Trust For Public Land
806 SW Broadway, Suite 206
Portland, OR 97205
(971) 244-4110
josh.alpert@tpl.org

Wendy Muzzy
Conservation Finance Program
The Trust for Public Land
1011 Western Ave, #605
Seattle, WA 98104
(206) 274-2926
wendy.muzzy@tpl.org
<http://www.tpl.org>

³⁷ Excerpted from City of Boise.org. <http://www.cityofboise.org/Departments/Parks/Foothills/Conservation/History/page12101.aspx>

THE
TRUST
for
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THE TRUST FOR PUBLIC LAND
115 NW OREGON AVE.
SUITE 16
BEND, OR 97701
541.382.2092

NATIONAL OFFICE
THE TRUST FOR PUBLIC LAND
101 MONTGOMERY STREET, SUITE 900
SAN FRANCISCO, CA 94104
415.495.4014
tpl.org