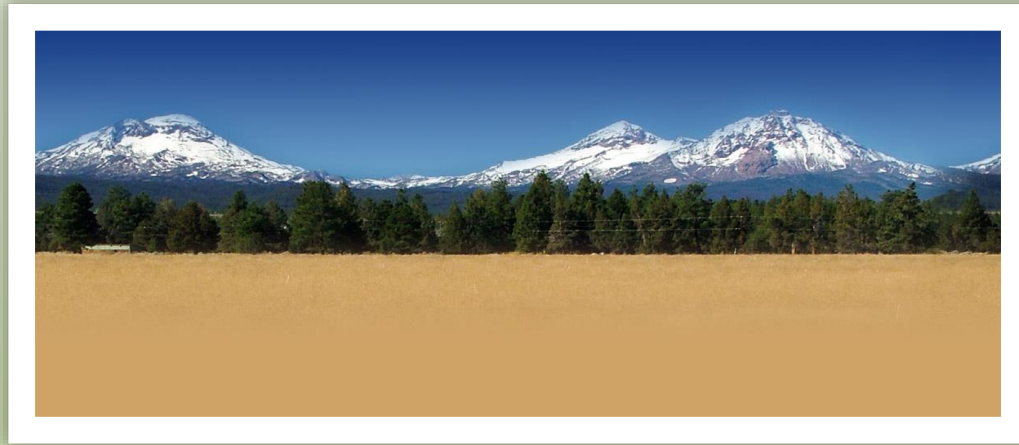


Deschutes Soil and Water Conservation District

Long-Range Plan

2019-2024



Providing local leadership, education, motivation, and assistance to the citizens of Deschutes County for responsible, efficient stewardship of our soil, water and other natural resources.

Deschutes SWCD Office

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Board of Directors

William Kuhn – Co-Chair, Sisters
Jeff Rola – Co-Chair, Tumalo
Susan Altman – Secretary, East County
Leslie Clark – Treasurer, North County
Colin Wills – South County
Robin Vora – At-large 1
Genevieve Hubert – At-large 2

Monthly Meetings

Board Meetings are held on the 2nd Thursday of the month.

Meetings start at 10:00 a.m. and are usually held in Bend at the Deschutes County Services Building at **1300 NW Wall Street** or in Redmond at the USDA Service Center **625 SE Salmon Avenue**, unless otherwise noted. The public is invited.

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Deschutes SWCD Mission:

“To provide local leadership, education, motivation, and assistance to the citizens of Deschutes County for responsible, efficient stewardship of our soil, water and other natural resources.”

Deschutes SWCD Vision:

- *Be a community leader in fostering a healthy, productive and beautiful landscape*
- *Be a facilitator and partner in voluntary conservation*
- *Encourage community participation in land stewardship*
- *Be a primary resource in Deschutes county for soil and water conservation*
- *Promote conservation of natural resources and the development of renewable energy and energy efficiency resources*

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EXECUTIVE SUMMARY

This five-year, or long-range, business plan (2019-2024) details the Deschutes Soil and Water Conservation District's (DSWCD) services, activities, resources, staffing, and finances for both current and future operations. The long range plan provides guidance for developing annual work plans, establishing priorities, advancing the goals and objectives of the DSWCD, and building future programs. The business plan also contains general information about the district and Deschutes County and guides the development of the district's annual work plans and budgets.

The top-five resource concerns in Deschutes County are water quality and quantity, invasive weeds, fish and wildlife habitat, wildfire risk, and land/soils. To address these concerns, eight goals of the DSWCD are to sustain and enhance water quality and quantity, identify and eliminate noxious and invasive weeds, restore and improve fish and wildlife habitat, reduce wildfire risk and restore degraded uplands, promote a sustainable local agriculture economy, improve and promote soil stewardship, develop renewable energy and energy-efficient resources, and continue to administer district operations to be legally accountable and fiscally responsible.

DSWCD programs for 2019-2024 emphasize water quality and quantity, weeds, fish and wildlife habitat, wildfire risk reduction, soil stewardship, wellbeing/wholeness/whole foods, and renewable energy and energy efficiency (wind energy, for example). Global climate change has the potential to impact all these programs. Additional partnerships and funding streams will be needed, including possibly a district tax base and levy authority, to develop the organizational capacity needed to accomplish these programs. That needed capacity includes transitioning to full-time staff, increased staffing numbers, a significant allocation of staff time for development, and a significant allocation of staff time for landowner outreach and education.

The Appendix is updated with additional detail in the Oregon Revised Statutes that govern SWCD's, current fiscal year programs, 4 priority strategies for the DSWCD, and a list of acronyms. The 4 priority strategies relate to current active programs with a business plan outline for each program but do not limit the SWCD to these programs.

Public Participation

The DSWCD works in partnership with a variety of individuals and agencies in Deschutes County. Board meetings are open to the public and citizens are encouraged to participate. Public comments may be limited in time at the board's discretion.

Audience

The purpose of the Deschutes Soil and Water Conservation District's (SWCD) business plan is to serve as a broad outline to inform and guide its directors, employees, partners, and the general public to respond to natural resource concerns, internal and external practices, and other factors that influence our strategies and actions. This plan outlines our current organizational structure, presents key goals and strategies, identifies key natural resource issues facing Deschutes County, and describes the services, programs, and assistance that we provide to customers. This five-year plan discusses under-addressed natural resource concerns in our County and describes additional

programs, staffing, and infrastructure that Deschutes SWCD might utilize to address these issues. Finally, this plan is used as the basis for developing annual work plans and directing funding requests.

Deschutes SWCD takes the lead in soil and water conservation through the following natural resource conservation programs: water quality and quantity, agricultural efficiencies, and education/outreach. These programs are based on accredited practices and current science. They rely on voluntary cooperation with urban and rural property owners, public officials, private citizens, businesses, state and federal agencies, and private organizations.

Deschutes SWCD believes in the protection, conservation, and improvement of soil, water and natural resources through our employees' and directors' abilities to plan, assist, and educate. It is our belief that concerns about water quality and quantity, soil erosion, functioning ecosystems and weed management be addressed while simultaneously respecting the rights of property owners. This plan has been formatted so it outlines both broad long-range and specific short-term strategic goals to benefit Deschutes SWCD, our cooperators, constituents, and the community we serve.

GEOGRAPHY AND AGRICULTURE

Topography

Deschutes County lies in the heart of the State of Oregon and encompasses a total of 3,054 square miles. The county was created in 1916 from a portion of Crook County and was named after the Deschutes River. Deschutes County is defined in part by the variety and beauty of the natural landscape. On the western side of the county, large snow-capped volcanoes tower over pine forests dotted with mountain lakes. The eastern side is characterized by high desert, sagebrush and large buttes. The Deschutes River runs north through the county, fed by several smaller rivers, creeks, and springs.

The high desert is a high-altitude, dry, grassy/shrubby area in Central Oregon. Deschutes County consists of a wide plateau bounded by forested mountains to the west, juniper and sagebrush to the east, and ponderosa pine and lodgepole pine to the south. Elevations range from 2,385 feet on the Deschutes River, to 10,240 feet at the top of South Sister, and 3,623 feet around Bend.

Most soils in Deschutes County are derived from ancient volcanic activity. Soils tend to be coarse, sandy, and sterile, and must be amended with organic material to improve moisture-holding capacity. Deschutes County has a wide range of growing seasons due to elevation differences, and frost can happen any time during the short growing season. Climate limits crop production.

Natural precipitation ranges from 8 to 22 inches per year at lower elevations (outside national forest land), much of which falls during the winter as snow. Water rights are necessary in order to irrigate property.

Land Use

Deschutes County has strict land-use laws and a 20-year comprehensive plan for the county that includes wildlife protection areas and wildlife migration corridors. The protections and

restrictions extend through wildlife designations and restrictions protected through overlay zones. Oregon’s land-use laws protect farm, ranch, and forest lands.

The settings and visual characteristics that draw people to rural properties are the same values that created the Oregon Scenic Waterways Act. A major function of the program is to protect the natural and scenic diversity of waterways and to achieve a balance between protecting natural resources and granting the wishes of riverfront property owners. The act designates the Deschutes River as a recreational river. The Oregon Parks & Recreation Department reviews land-use changes within state scenic waterways. Approval is required before proceeding with construction or changes on riverfront properties, including altering natural vegetation in riparian areas.

Approximately 80 percent of the land in the county is owned by federal, state, or local governments¹. Many of these lands are managed for public use and provide easy access for both residents and visitors to participate in hiking, biking, hunting, fishing, canoeing, skiing, and other outdoor activities. Oregon Department of Fish and Wildlife (ODFW) does impose restrictions and regulates off-road use in many areas.

These natural amenities make Deschutes County an attractive place to live. The US Census in 2017 estimated the county’s population at approximately 186,875². According to current forecasts³, the population will surpass 266,000 by the year 2030.

Over the years the number of farms in the county has decreased. Data from the USDA provide the following information on farm sizes and overall acreages.

Farm Size (Acres)	No. of Farms (2002)	No. of Farms (2007)	No. of Farms (2012)	No. of Farms (2017)	% Change from (2012-2017)
1-9	363	336	349	597	+52%
10-49	919	758	663	671	+12%
50-179	240	212	173	151	-14%
180-499	65	66	60	40	-40%
500-999	26	16	19	13	-38%
1,000+	19	17	19	12	-45%
Total	1,632	1,405	1,283	1,484	+15%

Table 1: Total farms in Deschutes County⁴

As of 2017, there were a total of 1,484 total farms in the county. Of these, 1,269 include irrigated acreages⁵ with water supplied predominately through one of a number of irrigation districts. Water for irrigation is typically drawn from local rivers and streams and distributed to

¹ Deschutes County Comprehensive Plan-2011; Section 1.1; p3

² US Census Bureau, Quick Facts, Deschutes County, OR, accessed April 17, 2019; <https://www.census.gov/quickfacts/fact/table/deschutescountyoregon/PST045218>

³ Deschutes County Comprehensive Plan-2011; Section 4.2; p6

⁴ USDA: Census of Agriculture, Chapter 2, Table 8 – Farms, Land in Farms, Value of Land and Buildings, and Land Use; https://www.nass.usda.gov/Quick_Stats/CDQT/chapter/2/table/8/state/OR/county/017

⁵ USDA: 2017 Census of Agriculture; Chapter 2, Table 10 – Irrigation; https://www.nass.usda.gov/Quick_Stats/CDQT/chapter/2/table/10/state/OR/county/017

users through networks of canals and pipelines. The presence of water rights for irrigation adds significantly to the value of these lands by enhancing their productivity and range of use.

Agricultural operations are protected by Oregon’s right-to-farm law, a policy that seeks to protect the investment farmers have made in their agricultural operations. Neighbors in rural communities must understand the principles regarding agricultural lands and that right-to-farm laws exempt farm operations from noise, dust, and odor ordinances, among other exceptions. Rural living comes with issues associated with irrigation, livestock, fences, gates, dogs, and open-range laws.

STRUCTURE AND GOVERNANCE

Enabling and Governing Legislation

The Deschutes Soil and Water Conservation District (SWCD) is one of 45 conservation districts in Oregon. Conservation districts are defined in Oregon law as political subdivisions of state government. The Deschutes SWCD is responsible to protect and promote any natural resources within Deschutes County. Deschutes SWCD is not a state agency. Rather, it is classified as a municipal corporation, a form of local government which is required to follow many of the same laws that govern state agencies and special districts. It is specifically governed by ORS 568.210 to 568.890 and ORS 568.900 to 568.933. See Appendix A for the specific powers and authorities granted to districts. Appendix B lists other statutes and administrative rules to which Deschutes SWCD is subject.

The Oregon Revised Statutes (ORS) that established and govern Oregon’s SWCDs (except the federal tribal Tiicham Conservation District) were significantly revised by the 2009 Legislative Assembly under House Bill 2082. The origin of the House Bill was a collaborative effort among the Oregon Association of Conservation Districts, member Conservation Districts, and the Oregon Department of Agriculture. It was designed to address the evolving challenges and opportunities presented to today’s SWCDs that were not envisioned when the statutes originated, and to eliminate antiquated provisions in the previous editions.

In addition to the general purpose of SWCDs under ORS 568.225 in the previous editions, the following was added: “promote collaborative conservation efforts to protect and enhance healthy watershed functions, assist in the development of renewable energy and energy efficiency resources.”

The Deschutes Soil and Water Conservation District (SWCD) is one of 45 conservation districts in Oregon and is organized under Oregon statute ORS 568.210-801. The Deschutes SWCD is responsible to protect and promote any natural resources within Deschutes County.

Requirements (mandatory)

1. Identify the most important resource problems in Deschutes County
2. Set up a long-range plan to solve resource problems
3. Develop and use an annual plan of work
4. Hold an annual meeting and present an annual report and audit
5. Conduct regular (monthly) meetings
6. Conduct a confined animal feeding operation waste management program
7. Include Coordinated Resources Management Planning in Annual Work Plan

History

The severe dust storms in the early 1930's that devastated farmlands in the Great Plains during the Dust Bowl brought the nation's attention to the need to conserve soil and other natural resources. In 1935, President Franklin D. Roosevelt sought to address the problems of soil erosion in the nation by shepherding the passage of the Soil Conservation Act, which established the Soil Conservation Service (SCS) within the United States Department of Agriculture (USDA).

The SCS was charged with developing a program to conserve and enhance the nation's soil and water resources while providing food at a reasonable price. At first, it was assumed the federal government could manage the whole program. However, during the first two years, it became apparent local leadership was needed to coordinate efforts of conservation agencies and tie their programs to local conditions and priorities. The SCS needed the assistance of local farmers, ranchers, and other land managers to put together and operate an effective program. In 1937, President Roosevelt asked all state governors to promote legislation to allow the formation of soil conservation districts. During the same year, Congress developed model conservation district law for consideration by state governments. Thus began a partnership that exists today.

In 1939, the Oregon passed legislation to establish conservation districts in Oregon. Conservation Districts are charged with directing programs to protect local renewable natural resources in their county. The Deschutes Soil and Water Conservation District was established on June 23, 1947 under the name "Midstate SCD", which later changed to the Deschutes SWCD on September 9, 1987.

Today there are nearly 3000 conservation districts nationwide, generally organized along county boundaries. In Oregon, Soil and Water Conservation Districts (SWCDs) are legal subdivisions of state government, administered under the Natural Resources Division of the Oregon Department of Agriculture. Districts in Oregon are governed by a locally elected board of directors, and work to protect natural resources in their geographic area. They work closely with USDA's Natural Resources Conservation Service and Farm Services Agency (FSA), and are often co-located in a common service center. Districts also have a strong history of partnering with local watershed councils, non-profits, industry groups, and a variety of federal, state, and local conservation agencies and organizations.

DSWCD is a political subdivision of state government but is not a state agency, rather a municipal corporation that follow the same laws that govern state agencies. The DSWCD is not a regulatory and enforcement agency nor is it an environmental activist group. We are an organization that works with farmers, ranchers, forest owners, and other natural partners to sustain and improve our natural resources in Deschutes County.

Today, the DSWCD's involvement in the local community includes funding and technical assistance for (but not limited to):

- Assisting landowners with conservation planning and implementation
- Enhancing streamside riparian areas
- Improving irrigation efficiency on farms
- Manure management
- Improving water quality (ditches, groundwater, stream)
- Controlling noxious weeds
- Assisting with native and dryland revegetation

Through partnerships and collaborative efforts, the DWSCD may participate in:

- Reducing fuels in local woodlands
- Range improvement
- Organic farming
- Supporting local food farmers
- Preserving sage-grouse habitat

As DSWCD's role has changed in the past, its role in Deschutes County will change as needed to adapt to future needs of the county's agricultural and urban communities. See the Oregon Soil and Water Conservation District Guidebook for more Oregon History⁶.

Leadership

Directors

A board of seven directors governs the district. Directors are elected by the electorate of Deschutes County at the November general election, which is held during even-numbered years. Director positions are elected in staggered terms to provide continuity on the board and maintain consistent operations. The Deschutes SWCD board may appoint a person to fill a board vacancy between elections for the duration of that position's term. Five of the seven positions are classified as zone positions and must meet the zone requirements and terms of office as specified in ORS 568.560 as follows:

“Zone directors must own or manage 10 or more acres of land in the district, be involved in the active management of that property, reside within the boundaries of the district, and be a registered voter.”

An individual may serve as a zone director in lieu of land ownership or management requirements if the individual resides within the zone that is represented, has served at least one year as a Deschutes SWCD director or associate director and has a conservation plan approved by the Deschutes SWCD. The other two positions are at-large positions. To qualify for an at-large position, a person must reside in Deschutes County and be a registered voter. No land ownership or management requirements are needed for an at-large position, which is also governed by ORS 568.560.

“An individual director has power only when acting as a part of the Deschutes SWCD board. Individual board members may be delegated authority or power to act on behalf of the board in specific, limited tasks. This authority or power is granted through board action (resolution, motion, policy, etc.) and must be recorded in the meeting minutes. Board members have a fiduciary responsibility to oversee the health of district operations.”

The Deschutes SWCD board works cooperatively as a unit to plan and oversee implementing Deschutes SWCD programs. As a representative of the Deschutes SWCD board, opinions expressed

⁶ Oregon Soil and Water Conservation District Guidebook
<http://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/SWCDGuidebook.pdf>

publicly by individual board members should be consistent with established board policy, not the individual's personal agenda or opinions.

ORS 568.560 requires all SWCDs to select a chairperson and secretary from among its directors. Deschutes SWCD may elect other officers as desired.

The chair, or co-chairs, are granted the responsibility to represent Deschutes SWCD with other districts, agencies, associations, partners, organizations, legislators, and property owners consistent with the policies, plans, and interests of Deschutes SWCD. The chair(s) will also conduct regular and special meetings of the board as well as oversee the manager.

A vice-chair has been given the authority to act as the chair in case of the absence or unavailability of the chair. This position will not be filled when the district has co-chairs.

The secretary is the custodian of all Deschutes SWCD records, minutes, contracts, and other official documents.

The treasurer receives and reviews financials, budgets, and is the fiscal agent.

Committees are an effective way for Deschutes SWCD to plan and implement Deschutes SWCD functions. They can be comprised of board members, associate directors, SWCD advisors, representatives of cooperating agencies and associations, or interested citizens.

The Deschutes SWCD may have various ad hoc committees, which are charged with specific tasks over a specific time period. Ad hoc committees are then disbanded after the assigned task and/or timeframe is completed.

Associate directors and directors emeritus

Associate directors and directors emeritus are non-voting members of the district board. They are appointed by the directors to serve as advisors and representatives. Associate and emeritus directorship offers a way to educate potential directors, broaden community input to the district, and expand district programs.

MISSION, VALUES, AND GUIDING PRINCIPLES

Mission

To provide local leadership, education, motivation, and assistance to the citizens of Deschutes County for responsible, efficient stewardship of our soil, water and other natural resources.

Vision

The vision of the Deschutes SWCD is to:

- Be a community leader in fostering a healthy, productive, and beautiful landscape
- Be a facilitator and partner in voluntary conservation
- Encourage community participation in land stewardship

- Be a primary resource in Deschutes County for soil and water conservation
- Promote conservation of natural resources and the development of renewable energy and energy efficiency resources
- Support efforts to reduce greenhouse gas emissions and adaptation to anticipated climate change

Values: Guiding Principles

The programs rely on locally-led conservation districts sharing and promoting stewardship and conservation activities. Districts provide conservation and stewardship field days, programs, workshops, and additional outreach efforts throughout their community to educate citizens about the need to care for our resources.

The stewardship concept involves personal and social responsibility, including a duty to learn about and improve natural resources as we use them wisely, leaving a rich legacy for future generations.

Other values or guiding principles include:

- Fostering state and local partnerships among the partners' respective members
- Listening and responding to customers' local resource conservation needs
- Advocating a holistic, ecosystem-wide approach to conservation
- Maintaining and enhancing grassroots conservation delivery systems
- Building alliances with a wide variety of agencies and organizations
- Fostering economically viable environmental policies
- Respect personal property rights
- Stewardship/conservation of natural resources, including watershed health and wildlife
- Enhancing the viability of agricultural endeavors including urban agriculture, small farms, and ranches
- Being a non-regulatory agency promoting voluntary participation and cooperation
- Partnerships and collaboration
- Trustworthiness
- Open space and view-sheds
- Food security
- Energy conservation
- High-quality natural environment
- Clean water and air
- Increasing water efficiency while increasing in-stream flows

Roles and Responsibilities

The Deschutes SWCD works with agencies and individuals as partners in our efforts to achieve our vision. Various memorandums of agreement and/or understanding, working agreements, intergovernmental agreements and informal arrangements formalize the partnerships. The agreements outline the responsibilities of each partner and identify the types of assistance, resources, and support each will provide to accomplish common conservation goals.

Local Level

Landowners, producers, general public

Historically, the general public uses the Deschutes SWCD as its primary point of contact for all district programs as well as those of the Oregon Department of Agriculture (ODA), the USDA's NRCS and Oregon Watershed Enhancement Board (OWEB). Today that public contact is limited to water quality programs, primarily funded by ODA and grants funded through OWEB. Landowners and agricultural producers can avail themselves of technical assistance with natural resource concerns and assistance in securing grant or loan funding for an array of natural resource conservation projects. The scope of programs handled by the Deschutes SWCD may expand in accordance with this five-year plan and as additional funding is secured.

OSU Extension Service

The district works with Oregon State University (OSU) Extension to further their mutual goals of natural resource conservation, management, and education by working closely with private property owners. OSU Extension assists Deschutes SWCD in delivering efficient conservation, education and outreach programs.

County government

The district works cooperatively with Deschutes County government in various capacities including, but not limited to, referrals to vegetation manager, code enforcement, input and assistance to the community development department, and presentations to the board of county commissioners and the county planning commission.

Regional Level

Local advisory committee

The local advisory committee is made up of landowners, agricultural producers, and an environmental representative whose charge is to develop an Agricultural Water Quality Management Area Plan in conjunction with Oregon Department of Agriculture (ODA).

This Upper Deschutes Agricultural Water Quality Management Area Plan and associated Upper Deschutes Agricultural Water Quality Management Area Rules address water quality and water's designated beneficial uses in the Upper Deschutes Management Area that must be protected. The area plan and rules address temperature, sediment, turbidity, chlorophyll, pH, dissolved oxygen, biological criteria, mercury, aquatic weeds/algae, and bacteria concerns related to agricultural activities on private lands in the management area. All these parameters are on DEQ's 2012 303(d) list of "water quality limited" streams in the management area. Inadequate fish habitat and low

stream flows are also of concern. Total maximum daily loads (TMDLs) have not yet been developed for any of these listings in the management area.

The goal of the area plan is to prevent and control water pollution from agricultural activities and soil erosion through voluntary activities by landowners, aided by informational and technical and financial assistance from local, state, and federal agencies, and other sources.

Water quality standards for surface water are not designed to provide water of sufficient purity for direct human consumption or food preparation. It may be hazardous to human health to use agricultural water for direct human consumption.

This area plan addresses conditions resulting from agricultural management that may affect water quality. These activities include, but are not limited to, the management of:

- Stream banks
- Cultivated lands
- Nutrients, farm chemicals, and pesticides
- Livestock
- Agricultural wastes
- Irrigation water and surface drainage
- Invasive plants (noxious weeds)

The area plan is voluntary and can help landowners comply with the area rules. The area rules (Oregon Administrative Rules [OARs] 603-095-3000 through 603-095-3060) contain required conditions to protect water quality. When voluntary approaches do not adequately achieve those conditions, as a last resort the Oregon Department of Agriculture (ODA) exercises its enforcement authority under the area rules.

The Upper Deschutes Local Advisory Committee (LAC) helped develop the area plan and rules and participates in biennial reviews of the area plan and rules. The LAC is assisted by the Deschutes Soil and Water Conservation District (SWCD) and ODA.

State Level

[Oregon Department of Agriculture \(ODA\)](#)

The Oregon Department of Agriculture Natural Resources Division provides administrative oversight and partial administrative and technical support funding to address concerns listed above.

[OWEB, DEQ, and other state agencies](#)

The Oregon Watershed Enhancement Board (OWEB), the Department of Environmental Quality (DEQ), and other state agencies provide financial resources through grants for habitat restoration and water quality improvement projects.

[Oregon Association of Conservation Districts](#)

The OACD provides technical and administrative support to the district. It is also the main conservation district advocacy organization with the Oregon State administration and legislature.

National Level (Federal Support)

USDA Natural Resource Conservation Service (NRCS)

The district maintains a cooperative working agreement with the NRCS to provide office space and equipment and assistance with conservation planning and conservation practice implementation activities in Deschutes County. The district also from time to time enters into contribution agreements with NRCS to produce complete conservation plans. The NRCS provides technical assistance to the district and directly to county landowners and producers. Through the Farm Bill the federal USDA NRCS offices provide the funding of the work agreements with the district. The district is served through the NRCS office just outside Redmond airport.

Revenue to the County Economy

Over the last five years, the Deschutes SWCD has expended approximately \$500,000 in payroll, supplies, services, and project expenses. These dollars were brought into the local economy primarily through federal and state grants. Studies from the University of Oregon have shown that for every million dollars in grant money received, 15 to 23 local jobs are created or supported. Additionally, 80% (\$400,000) of these dollars are spent within the county and generate a compounded economic impact of 1.7 to 2.6 times the original expenditures, in this case \$850,000 to \$1,300,000 from the operations of the Deschutes SWCD over the last five years.

GOALS AND OBJECTIVES

Goals are destinations—where you want your district to be. **Objectives** are progress markers along the way to goal achievement.

Goal #1: Sustain and Enhance Water Quality and Quantity

Objectives:

1. Reduce potential manure, chemical, noxious weed, or sediment runoff to surface or groundwater.
2. Stabilize and increase stream flows.
3. Improve private ditch water conveyance and irrigation efficiency and provide education opportunities in Irrigation Water Management (IWM).
4. Maintain, improve and restore native riparian vegetation.
5. Stabilize eroding lands.
6. Partner in and support markets to incentivize the adoption of farming practices that improve water conservation.
7. Work with partners in compliance (e.g. Deschutes County and ODA).
8. Promote a better understanding of "beneficial use" of a water right.
9. Seek conservation opportunities with PL-566 irrigation district projects.

Goal #2: Identify and Eliminate Noxious and Invasive Weeds

Objectives:

1. Control the spread of noxious and invasive weeds that threaten native vegetation and resource values.
2. Educate landowners about noxious and invasive weeds.
3. Maintain and restore native riparian vegetation.
4. Pursue funding for weed projects.
5. Identify opportunities to partner on projects (Project Wildfire, HOA's Count/State/Federal agencies).

Goal #3: Restore and Improve Fish and Wildlife Habitat

Objectives:

1. Reduce juniper encroachment into native sagebrush-grass communities.
2. Restore sage-grouse habitat and native perennial grasses.
3. Provide wildlife alternatives in conservation planning with landowners (e.g. ODFW Wildlife Habitat Conservation Management Plans).
4. Promote or obtain conservation easements and agreements.
5. Maintain and restore riparian habitats.
6. Maintain and restore priority fish and wildlife habitats identified in the Oregon Conservation Strategy (http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp) and the Deschutes County Comprehensive Land Use Plan.
7. Restore/enhance Oregon spotted frog habitat.
8. Aid in reduction of human-caused mule deer mortality and enhance mule deer habitat.
9. Promote pollinator conservation and improve pollinator habitat.
10. Identify opportunities to partner on projects.

Goal #4: Reduce Wildfire Risk and Restore Degraded Uplands

Objectives:

1. Reduce density of trees and flammable brush in forests.
2. Promote rangeland health.
3. Restore native perennials.
4. Coordinate efforts with local groups.
5. Manage forests through Community Forests⁷ as defined by the USDA (Forest Service) and originally authorized in the 2008 Farm Bill.

Goal #5: Promote a Sustainable Local Agriculture Economy

Objectives:

1. Encourage a local farm-to-market economy.

⁷ The USDA Forest Service Community Forest and Open Space Conservation Program (CFP) is a competitive grant program that provides financial assistance to tribal entities, local governments, and qualified conservation non-profit organizations to acquire and establish community forests that provide community benefits (pending Federal budget authorizations). Community benefits include economic benefits through active forest management, clean water, wildlife habitat, educational opportunities, and public access for recreation.

2. Encourage the cultivation and marketing of local organic food.
3. Pursue funding for farm-to-market projects.
4. Promote local farms and gardens to food bank.
5. Encourage participation in Oregon Agricultural Heritage Program.
6. Collaborate with partners to determine urban and rural needs and opportunities.

Goal #6: Improve and Promote Soil Stewardship

Objectives:

1. Encourage and support use of best management practices to conserve soil and water.
2. Encourage and support the use of USDA NRCS soil survey maps and soil tests and information to guide soil enhancement projects and appropriate use of sites.
3. Encourage the production of soil amendments that are ancillary to pollution control measures, including manure management and biomass energy production.
4. Stabilize eroding lands.
5. Support markets to incentivize the adoption of farming practices that build soil carbon.

Goal #7: Develop Renewable Energy and Energy-Efficient Resources

Objectives:

1. Support capacity for energy production within the irrigation delivery system.
2. Encourage development of biomass energy production.
3. Support integrated energy strategies including solar, wind, hydropower, combined heat and power, geothermal, energy conservation, and actions that are cost effective, including reduction of future production costs /reduced future costs.
4. Pursue funding for energy projects.
5. Encourage development of low carbon energy alternatives.

Goal #8: Legal Accountability and Fiscal Responsibility

Objectives:

1. Implement board-approved five-year or long-range plan. Review and update periodically.
2. Produce and maintain annual work plan and operating budget.
3. Conduct regular board and staff meetings.
4. Provide public outreach of district activities in accordance with Oregon public meeting laws.
5. Provide orientation, development and training for staff and board.
6. Develop administrative policies and processes.
7. Recruit board members and associate board members as needed.
8. Hold an annual public meeting.
9. Maintain a working relationship with agricultural and ranching organizations, watershed councils, local natural resources non-profits, cities, county, and federal entities.
10. Personnel, financial, and contract management.
11. Reduce insurance costs.

NATURAL RESOURCE CONCERNS AND OUTCOMES

A natural resource concern is a condition that does not meet agreed-to or established criteria for a quality, sustainable resource. The resource concerns described below are intended to give a picture of the natural resource challenges in Deschutes County and why they are important. Some of these resource concerns are currently funded and others are not at this time. These are areas where the DSWCD could potentially partner. It is worth noting that some of these problems may become worse with anticipated population growth and climate change.

The top five resource concerns in Deschutes County are:

- Water quality and quantity
- Weeds
- Wildlife and fish, including endangered and invasive species
- Wildfire
- Land/soils

These resource concerns are evident in our county as:

- Water quality and quantity
 - Low winter flows in the Deschutes River below Wickup Reservoir and low flows in Middle Deschutes, Tumalo and Whychus Creeks during summer irrigation
 - City of Bend water use (needs)
 - Full appropriation of surface waters
 - Declaration of groundwater restrictions and related mitigation requirements
 - Dependency of municipal water providers on groundwater for future needs
 - Diversion of substantial river flows by irrigation districts
 - 303(d) listings for water quality parameters and need for TMDLs throughout the Deschutes and Crooked sub-basins
 - Protection of scenic waterway flows in the lower reaches of the Deschutes and Crooked Rivers
 - Potential Endangered Species Act requirements
 - Predation on native species by non-native bullfrog, brown trout, and other non-native species
 - Re-introduction of anadromous fish species in the Deschutes, Crooked, and Metolius Rivers and Whychus Creek
 - Rapid growth, urbanization, fragmented farmlands, and land-use change in the basin
- Proliferation of noxious weeds such as knapweed
- Large and more frequent stand-replacement wildfires that threaten communities and important natural resources and reduce air quality
- Declining populations and habitats for several species of concern (e.g., northern spotted owl, Oregon spotted frog, some woodpeckers, eagles, bats, some fish, mule deer, sage-grouse)
- Reduction of agriculture and forest lands due to development
- Climatic constraints to viable agriculture (short growing season)
- Lack of stewardship by some landowners
- Awareness or lack of awareness of issues/concerns
- Soil quality in Deschutes County necessitates growing crops with irrigation

- Soils are naturally deficient with little or no organic matter

The desired outcomes to address these concerns are:

- Meeting the Oregon Department of Fish and Wildlife’s instream water rights and flow targets for a healthy, thriving fishery and ecosystem - and adaptively meeting the US Fish and Wildlife Service flows to support ESA requirements

Current Deschutes River (in Deschutes County) minimum instream flows and targets set by Oregon Department Fish & Wildlife (personal communication with ODFW & Deschutes River Conservancy staff).*

River	Season	Current flow (cfs)	Target flow (cfs)	River reach
Upper Deschutes**	Winter	100-300	300	Wickiup Reservoir to confluence with Little Deschutes River
Middle Deschutes	Summer	70-135	250	Bend (North Canal Dam) to Lake Billy Chinook
Tumalo	Late Summer	9-15	32-82	Tumalo Irrigation Diversion to confluence with Deschutes River
Whychus	Summer	20	20-33	Three Sisters Irrigation Diversion to confluence with Deschutes R

* Metolius has no minimum instream flow problems at this time

** Variable from Wickiup Dam each winter; minimum flow due to settlement agreement over Oregon spotted frog is now 100 cfs. This will increase over a schedule set by USFWS and will be published in the pending Habitat Conservation Plan (HCP). Flow needs increase below the confluence with Little Deschutes.

- Reduction in extent and populations of county-listed noxious weeds
- Reduced loss of private property and natural resources values due to large wildfires
- Reduced poor air quality from smoke from wildfires
- Contribution to recovery of declining wildlife and fish species of concern or of economic interest
- Appropriate and best uses of lands and good land-use planning
- Increase amount of organic matter in the soils
- Improve irrigation efficiency
- Promote healthy, productive rangelands

Resource Concern #1: Water Quality and Quantity

- Distribution needs to be improved
- Conservation efficiency
- Impaired water quality due to water quantity issues/temperature
- Concept of “use it or lose it” can provide opportunities in restoration
- Promote a better understanding of "beneficial use" of a water right
- Juniper encroachment
- Degradation of some riparian habitats
- Low winter flows and high summer flows in the Upper Deschutes; low summer flows in the Middle Deschutes

Trends

- More water available in-stream due to conservation efforts
- Climate change and fluctuation in water storage due to droughts and water management for endangered species

Strategies

- Improve distribution system
- Improve intelligent use of water/education
- Improve on-farm efficiencies
- Liaison between irrigation districts and landowners
- Irrigation efficiency, e.g., reduction of irrigation water loss (seepage and evaporative losses) and reduction of runoff from flood irrigation
- Manure removal/exchange where potential water impact exists; fertilizer management
- Wildfire risk reduction within ¼ mile of water
- Invasive juniper removal within 300 ft of water to reduce future sedimentation
- Fencing riparian areas and developing alternate water sources for livestock
- Riparian restoration/canal bank stabilization
- Riparian/canal bank noxious weed removal (e.g., ribbon grass, yellow iris, reed canary grass, St. John's wort)
- Remove lodgepole pine encroachment in wetlands

Intended outcomes

- More efficient on-farm water usage
- More water in-stream/natural flows
- Improved water quality and compliance with the Clean Water Act

Resource Concern #2: Noxious and Invasive Weeds

- Reduction in productivity of land/loss of production
- Erosion
- Livestock health/loss
- Impacts to wildlife habitat
- Impacts to water quality
- Increased fire hazard
- Juniper encroachment
- Increase early detection and rapid response

Trends

- Increase in noxious or invasive weeds (Deschutes County [Noxious](http://webroad.deschutes.org/noxiousweeds/default.aspx) Weed List: <http://webroad.deschutes.org/noxiousweeds/default.aspx>)
- Increase in juniper (roughly 10-fold increase in western US since the 1870s⁸)
- Potential climate change may exacerbate problems

Strategies

- Education and outreach
- Partnerships
- Identify appropriate cover crops
- Participate in the county weed board
- Weed pulls and support of projects to eradicate noxious and invasive weeds

⁸ Woodland Fish and Wildlife; 2001. Managing Western Juniper for Wildlife, publication number MISC0286. Pg 1; <http://juniper.oregonstate.edu/wildlife.pdf>

- Careful use of herbicides where appropriate, and especially on large weed populations
- Use of certified weed-free hay
- Support native plant propagation in nurseries
- Proper land management

Intended outcomes

- Well-educated population able to identify noxious weeds
- Weed-free county
- Landowner education to increase BMPs

Resource Concern #3: Fish and Wildlife Habitat

- Landowners unaware they live in wildlife overlay zones
- Present or potential federal listing of sage-grouse, northern spotted owl, Oregon spotted frog, bull trout, and reintroduced anadromous fish
- Wildlife destruction of crops and personal property
- Declining population of mule deer and significant human-caused mortality on roads and from poaching
- Woodpeckers such as white-headed woodpecker and Lewis woodpecker
- Riparian habitats
- Bald and golden eagle
- Bats (especially given white-nose syndrome, a disease from an invasive and exotic fungus that decimates bat population)
- Pollinators
- Salmon and trout
- See the Oregon Conservation Strategy (http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp) and the Deschutes County Comprehensive Land Use Plan for more priorities and information

Trends

- Declining populations of key species and habitats of interest
- Increasing conflicts with large predators (mountain lions, coyotes, wolves)

Strategies

- Develop conservation easements
- Develop wildlife corridors
- Education of landowners about wildlife overlay zones
- Develop strategies to deal with destructive wildlife
- Partner with efforts to reduce human-caused mortality and enhance mule deer habitat, including the Tumalo winter range
- Partner with other local efforts to improve fish and wildlife habitat
- More participation in land-use development
- Wildlife relocation
- Reduction of juniper encroachment and cheatgrass
- Reduce forest density while maintaining larger trees
- Protect Oregon spotted frog and sage-grouse habitats
- Riparian habitat restoration

- Protect key cave (lava tube) habitats for bats
- Enhance and protect pollinator habitats
- See the Oregon Conservation Strategy (http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp) and the Deschutes County Comprehensive Land Use Plan for more strategies
- Working with partner counties to support the federal Conservation Reserve Enhancement Program or CREP⁹

Intended outcomes

- Hold conservation easements and agreements; potentially title to Community Forests
- Reduction in crop damage and livestock hazards
- Improved habitat for key wildlife species (e.g., mule deer, sage-grouse, Oregon spotted frog, redband trout, anadromous fish, bats, pollinators, owls)
- Better wildlife habitat that leads to improved human habitat
- Protection of key wildlife habitats and species of special interest
- Carbon sequestration to reduce impacts on potential climate change

Resource Concern #4: Wildfire Risk

- Large fuel load on private and public property
- Irresponsible recreational use of public lands
- Emergency response
- Juniper encroachment
- Replacement of native grasses by cheatgrass and medusahead (makes areas more susceptible to repeated grass fires)

Trends

- Juniper expansion (see earlier)
- Non-native cheatgrass expansion (about 2.2 million acres > 10% cheatgrass on just BLM lands in Oregon)
- Increase in acres and locations of forests that are too dense (e.g., lodgepole encroachment in ponderosa pine forest or ponderosa pine forest > 40% canopy cover)

Strategies

- Education and outreach
 - Homeowner safety response to a wildfire
 - Danger of fuel loading
 - How to create defensible space
- Partnerships
- Assist county forester, Oregon Department of Forestry, and Upper Deschutes River Communities (Coalition)
- Improve neighborhood awareness and response (early detection/rapid response)
- Reduce density of trees and flammable brush in forests

⁹ CREP is a federal/state natural resource conservation program targeted to address state and nationally significant agricultural related environmental problems. Participants receive financial incentives from USDA to voluntarily remove cropland from production in the Conservation Reserve Program (CRP).

- Reduce juniper encroachment
- Use selective livestock grazing management to reduce cheatgrass
- Participate in Community Forest programs

Intended outcomes

- Responsible access and use of recreational areas
- Improved neighborhood awareness and response
- Reduced fuel load on private and public lands
- Restored native sagebrush–steppe plant communities
- Restored native forests
- Carbon sequestration through reduced high intensity wildfire to reduce potential impacts on potential climate change

Resource Concern #5: Land Suitability and Productivity

- Poor soil tilth and health (condition to support plant growth)
- Lack of organic matter in soil
- Highly erodible soils due to water and wind
- Lack of natural ground cover due to land disturbances
- Juniper encroachment
- Noxious weeds
- Local food security

Trends

- Juniper encroachment
- Increases in wildland–urban interface
- Projected higher temperatures, longer growing seasons, less snow and more extreme weather over the next 100 years

Strategies

- Education of best management practices
- Develop rangeland/grazing plans
- Help landowners comply with existing laws
- Education on ways to reduce soil erosion
- Reduce runoff from irrigation
- Promote small-scale, organic, and local food production
- Soil carbon sequestration markets

Intended outcomes

- Improved soil health
- Reduction of soil erosion
- Improved composting opportunities
- Long-term local economic development
- Local farm-to-market economy and more organic food
- Carbon sequestration to reduce impacts on potential climate change

DISTRICT PROGRAMS 2019-2024

The DSWCD may provide technical assistance, education and outreach for these programs pending funding.

Program: Water Quality and Quantity

Goal: Water is clean and abundant for fish, farms and families.

Program:

- Improve irrigation efficiency
- Encourage livestock manure management/manure exchange to maintain water quality
- Improve or restore streamside vegetation
- Support on-farm projects

Program: Noxious and Invasive Weeds

Goal: Control the spread of noxious and invasive weeds that threaten native vegetation and resources.

Program:

- Maintain and restore native riparian vegetation
- Coordinate weed management
- Assist with education throughout the district

Program: Fish and Wildlife Habitat

Goal: Restore and improve fish and wildlife habitat.

Program:

- Reduce juniper encroachment into native sagebrush/grass communities
- Restore sage-grouse habitat and native perennial grasses
- Promote or obtain conservation easements and agreements
- Maintain and restore riparian and aquatic habitats, including habitats for threatened and endangered species such as Oregon spotted frog and bull trout, or native species of importance such as redband trout and reintroduced steelhead trout and Chinook salmon
- Partner with efforts to reduce human-caused mule deer mortality and enhance mule deer habitat
- Partner with efforts to improve pollinator habitats
- Partner with efforts to improve sage-grouse habitats in the Brothers area
- Partner with efforts to eradicate non-native predatory bullfrog in the Upper Deschutes
- Partner with efforts to install and maintain nest boxes for owls and bats

Program: Wildfire Risk Reduction

Goal: Reduce wildfire risk and maintain healthy forests.

Program:

- Partner with local stakeholders to reduce density of trees and flammable brush
- Partner on Community Forest opportunities

Program: Soil Stewardship

Goal: Improve and promote soil stewardship.

Program:

- Encourage and support use of best management practices that conserve soil and water, and conservation planning that assists delivery of USDA assistance to private landowners
- Encourage and support the use of USDA NRCS soil survey maps and information to guide soil enhancement projects and appropriate use of sites
- Encourage nutrient management that reduces potential for pollution including manure management, compost, and biomass energy production
- Support and participate in national or state programs (expected to be available by 2022) to incentivize the adoption of farming practices that build soil carbon

Program: Wellbeing/Wholeness/Whole Foods

Goal: Promote health and a sustainable local agricultural economy.

Program:

- Encourage local farm-to-market economy and pursue funding for farm-to-market products
- Encourage the cultivation and marketing of locally grown food
- Encourage participation in the Oregon Agricultural Heritage Program¹⁰

Program: Energy

Goal: Support development of renewable energy and energy-efficient resources.

Program:

- Encourage and support capacity for energy conservation and production within the irrigation delivery system
- Encourage development of biomass energy production
- Support integrated energy strategies including solar, wind, hydropower, combined heat and power, geothermal, energy conservation and actions that are cost effective, including reduction of future production costs (reduced future costs)
- Recognize hydropower as a renewable resource

DISTRICT CAPACITY, NEEDS, AND STRATEGIES

Capacity

Staff

The current staff consists of two employees. The manager is a part-time position and the technician/ planner is a full-time position of limited duration. Expansion requires the support of the

¹⁰ The Oregon Agricultural Heritage Program provides voluntary incentives to farmers and ranchers to support practices that maintain or enhance both agriculture and natural resources such as fish and wildlife on agricultural lands.

board and initiative of the district manager. Additional well-defined projects need to be identified to attract funding. A stronger effort at grant writing will be needed. Sustainable funding strategies need to be pursued, including exploring a district tax base. Community-driven support is critical in order to address and prioritize resource issues in the county.

The district manager manages the executive function of the district, maintains public files, and pursues opportunities to expand in conjunction with this five-year plan. A transition to a full-time position will be needed as funding is available.

Currently the district has one technician. The technician executes all conservation programs under active grants and seeks other funding to continue the work of the Deschutes SWCD. However, the DSWCD will need a full-time position (as funding is available) or additional position(s) depending on new programs and additional funding. For example, the district may need specialized technical assistance in engineering or various natural resource fields.

Other positions will be created and filled as needed pending funding: assistant manager, administrative assistant, technicians, public outreach/communications, and contractors as applicable.

Board of Directors

The board of directors consists of seven members elected county-wide by voters. Directors work on a volunteer basis to set policy, planning goals, and supervise fiscal accounting for the district. Directors may initiate and manage specific resource conservation projects through their areas of interest, involvement in watershed councils and non-profit organizations. Individual directors are involved with their constituents, understanding natural resource issues in their zones and engage their constituents through partner involvement in local, state and federal organizations. Directors actively engage staff in developing alternatives and solutions to resource problem.

DSWCD encourages associate directors, who are appointed by the board and are non-voting members of the district's board. Serving as an associate director offers a way to educate potential directors, broaden community input to the district, and expand district programs.

Volunteers

Volunteers may occasionally work on specific tasks for the district. Additional volunteer resources to support program expansion and development are needed.

Partnerships

The district relies on partnerships with other local agencies and non-profit institutions to further its natural resource conservation goals. Current partnerships include:

- Oregon Department of Agriculture
- Deschutes County
- Crook and Jefferson County Soil & Water Conservation Districts
- Irrigation districts
- USDA Natural Resources Conservation Service (NRCS)

- OSU Extension Service
- Deschutes River Conservancy
- Upper Deschutes Watershed Council

Facilities and equipment

The district operates out of the NRCS office in Redmond. All equipment is supplied by NRCS with the exception of a laptop and printer which are owned by the district. Additional equipment and facility needs will be dictated by program growth and may include the following:

Funding

The district office receives its funding from the Oregon Department of Agriculture. Specific natural resource conservation projects are funded through grants from the Oregon Watershed Enhancement Board and Deschutes County.

The 2019 fiscal budget is included in Appendix C.

Needs

In order to improve the capacity and delivery of services for the Deschutes SWCD, multiple support systems are needed.

Staff

1. Sustaining permanent full-time staff.
2. Allocation of time for staff development.
3. Allocation of staff time for landowner outreach and education.
4. Efforts to develop partnerships and additional funding streams for the district.
5. Train or recruit additional staff to fulfill the district's mission.
6. Assist in developing a long-range plan for staffing.
7. Add training to develop communication, outreach, and educational efforts of the district.

Board of directors

1. Support in developing partnerships and additional funding streams for the district.
2. Encourage professional development through board and staff training.
3. Support for a district tax base and levy authority.
4. Promote intergovernmental agreements between the district and local governments.
5. Actively participate with the district in cooperative conservation outreach efforts.
6. Coordinate good district relations with non-governmental, state and federal agencies, executive, and legislative leaders through local partnerships in program areas.
7. Focus on opportunities for non-traditional and small-scale projects that address local resource concerns.
8. Utilize expertise to assist in the implementation of staff and volunteer strategies.
9. Develop and value associate directors.

Volunteers

1. Develop stewardship program(s).
2. Facilitate peer-to-peer landowner mentoring.
3. Utilize the wisdom of elders in school outreach program (e.g Kokanee Karnival).
4. Network and seek assistance from organizers of successful volunteer programs.
5. Match volunteers to their passion in order to encourage full participation.
6. Honor and publicize volunteer participation.

Facilities and equipment

1. A DSWCD-marked service vehicle.
2. Display booth and outreach materials.
3. Secure storage and office site.
4. Seek donations of surplus from other agencies.
5. Include facility and equipment procurement in partnership agreements.
6. Use and promote donated services.

Partnerships

1. Active intergovernmental agreements between the district and local governments.
2. Active participation of the district in cooperative conservation outreach efforts.
3. Coordinate good district relations with state and federal, executive and legislative leaders.
4. Focus on opportunities for non-traditional and small-scale projects that address local resource concerns.
5. Active local partnerships in all program areas.

Funding

1. Maximize existing funding streams.
2. Secure stable funding that leverages greater conservation investments.
3. Develop projects that require multi-year implementation and funding.
4. Support partners on projects of mutual interest through development of a tax base.
5. Focus on the economic returns afforded by an ecosystem-services approach to district funding.
6. Grant applications, including some in partnership with other organizations.
7. Develop and promote the unique position of DSWCD to leverage and multiply on-the-ground conservation efforts.

Strategies

A wide range of strategies can be utilized to fulfill the district's needs.

Staff

1. Train or recruit staff to fulfill the district's mission.
2. Develop a long-range plan for staffing.

3. Add training to develop communication, outreach, and educational efforts of the district.

Board of directors

1. Maintain a full board.
2. Utilize board member expertise to assist in the implementation of staff and volunteer strategies.
3. Develop and value associate directors.

Volunteers

1. Network and seek assistance from organizers of successful volunteer programs.
2. Match volunteers to their passion in order to encourage full participation.
3. Honor and publicize volunteer participation.

Facilities and Equipment

1. Seek donations of surplus from other agencies.
2. Include facility and equipment procurement in partnership agreements.
3. Use and promote donated services.

Partnerships

1. Emphasize the added value and shared risk on projects with partnerships.
2. Deliver on projects.
3. Act with integrity to defend the interests of our constituents.
4. Support partners on projects of mutual interest through development of a tax base.
5. Additional potential partners include, but are not limited to:
 - a. Central Oregon Intergovernmental Council
 - b. High Desert Food & Farm Alliance
 - c. Central Oregon Locavore or Agricultural Connections
 - d. Upper Deschutes Watershed Council
 - e. Deschutes Basin Board of Control
 - f. Deschutes River Conservancy
 - g. Deschutes Water Alliance
 - h. Other resource management agencies of the state of Oregon (ODF, ODFW, DEQ, OWRD)
 - i. Other federal agencies: US Forest Service, Bureau of Land Management, USDA, US Fish and Wildlife Service
 - j. Upper Deschutes River Communities
 - k. Deschutes Land Trust
 - l. NRCS
 - m. NACD and OACD
 - n. Oregon Department of Fish & Wildlife
 - o. Oregon Department of Transportation (wildlife fencing and highway underpasses)
 - p. Protect Animal Migration
 - q. East Cascades Audubon Society

- r. Sunriver Nature Center
- s. Trout Unlimited
- t. Oregon State University Extension Service

Funding

1. Focus on the economic returns afforded by an ecosystem-services approach to district funding.
2. Grant applications, including some in partnership with other organizations.
3. Promote the value of conservation in real dollars-and-cents terms.
4. Develop and promote the unique position of DSWCD to leverage and multiply on-the-ground conservation efforts.
5. Support partners on projects of mutual interest through development of a tax base.

APPENDICES

Appendix A: General Powers of Soil and Water Conservation and District Directors

The state legislature set forth the reason for formation of the conservation districts and outlined district responsibilities in ORS 568.225:

(1) In recognition of the ever-increasing demands on the renewable natural resources of the state and of the need to conserve, protect and develop such resources, it is hereby declared to be the policy of the Legislative Assembly to provide for the conservation of the renewable natural resources of the state and thereby to conserve and develop natural resources, control and prevent soil erosion, control floods, conserve and develop water resources and water quality, prevent impairment of dams and reservoirs, assist in maintaining the navigability of rivers and harbors, preserve wildlife, conserve natural beauty, promote recreational development, promote collaborative conservation efforts to protect and enhance healthy watershed functions, assist in the development of renewable energy and energy efficiency resources, protect the tax base, protect public lands and protect and promote the health, safety and general welfare of the people of this state.

(2) It is further the policy of the Legislative Assembly to authorize soil and water conservation districts established under ORS 568.210 to 568.808 and 568.900 to 568.933 to participate in effectuating the policy set forth in subsection (1) of this section and for such purposes to cooperate with landowners, land occupiers, natural resource organizations, natural resource users, local governments as defined in ORS 174.116 and with agencies of the government of this state and of the United States in projects, programs and activities calculated to accelerate such policies. In effectuating the policy set forth in subsection (1) of this section, the soil and water conservation districts also shall strive to achieve the goal set forth in ORS 468B.155.

Requirements (mandatory)

1. Identify the most important resource problems in Deschutes County
2. Set up a long-range plan to solve resource problems
3. Develop and use an annual plan of work
4. Hold an annual meeting and present an annual report and audit
5. Conduct regular (monthly) meetings
6. Conduct a confined animal feeding operation waste management program
7. Include Coordinated Resources Management Planning in Annual Work Plan

ORS 568.550 General powers of board of directors; erosion control covenants; interagency cooperation; land use regulations; department rules. (1)The board of directors of a soil and water conservation district has the following powers: [*Letters correspond to actual statute format.*]

- a. To secure surveys and investigations and do research relating to:
 - (A)The character of soil erosion;
 - (B)The character of floodwater and sediment damage;
 - (C)All phases of the conservation, development, utilization and disposal of water; and
 - (D)The preventive measures, control measures and improvements needed.
- b. To conduct demonstrational projects on lands within the district upon obtaining the consent of the owner and occupier of such lands.
- c. To carry out preventive and control measures on lands within the district upon obtaining the consent of the owner and occupier of such lands.

- d. To enter into written agreements *(see specifics in 568.330[(d)][A]&[(B)])*
- e. To obtain options upon and to acquire by purchase, exchange, lease, gift, grant, bequest or devise any property, real or personal or rights therein, *(see specifics in 568.330[e])*
- f. To borrow money and to mortgage personal property of the district as security *(see specifics in ORS 568.330[ff])*
- g. To issue general obligation bonds of the district as provided in ORS 568.803
- h. To make available, on such terms as the directors shall prescribe, to landowners or occupiers within the district, agricultural and engineering machinery and equipment, fertilizer, seeds and seedlings and other material or equipment.
- i. To construct, operate and maintain such structures as may be necessary or convenient for performance of any of the operations authorized in ORS 568.210 to 568.880 and 568.900 to ORS 568.933.
- j. To develop comprehensive plans and specifications for the conservation of soil resources and for the continued control of soil erosion within the district, and to publish such plans, specifications and information and bring them to the attention of owners and occupiers of the lands within the district.
- k. To take over, by purchase, lease or otherwise, and to administer, any soil conservation, erosion control or erosion prevention project, or combination thereof, located within district boundaries undertaken by the United States or any of its agencies, or by this state or any of its agencies.
- l. To manage, as agent of the United States or any of its agencies, or of this state or any of its agencies, any soil conservation, erosion control or erosion prevention project, or combination thereof, within district boundaries.
- m. To act as agent for the United States or any of its agencies, in connection with the acquisition, construction, operation or administration of any soil conservation, erosion control or erosion control project, or combination thereof, within district boundaries.
- n. To accept donations, gifts and contributions in money, services, materials, or otherwise from the United States or any of its agencies, or from this state or any of its agencies, and to use or expend such moneys, services, materials or other contributions in carrying on its operations.
- o. To sue and be sued in the name of the district, to have a seal, which shall be judicially noticed, to have perpetual succession unless terminated as provided by law, to make and execute contracts and other instruments necessary or convenient to the exercise of its powers, and to make, and from time to time amend or repeal, rules not consistent with ORS 568.210 to 568.808 and 568.900 to 568.933 to carry into effect its purposes and powers.
- p. To purchase liability or indemnity insurance, in such amounts and containing such terms and conditions as the board believes necessary for the protection of directors, officers and employees of the district against claims incurred in the performance of their duties.
- q. To place liens on real and personal property.
- r. To enter into written agreements with, coordinate activities with and provide assistance to landowners, managers and residents within the districts and federal, state and local governments, relating to natural resource issues, including but not limited to issues of:
 - (A) Agriculture and forestry;
 - (B) Economic development based upon natural resources;
 - (C) Watershed management and ecosystem health;
 - (D) Invasive species;
 - (E) Alternate and renewable energy;
 - (F) Air quality;
 - (G) Animal waste and nutrient management;
 - (H) Carbon sequestration;
 - (I) Access to market-based services and certification;

(J) Fuel reduction and wildfire planning and management; and
(K) Preservation of agricultural, forestry and other lands.

- s. To conduct outreach and conservation education activities.
- t. To provide financial assistance, including but not limited to loans and grants to implement activities and projects authorized under ORS 271.715 to 271.795, 569.210 to 568.808 or 568.900 to 568.933.
- u. To hold patents, trademarks and copyrights.
- v. To hold conservation easements under ORS 271.715 to 271.795.

ORS 568.550(2). As a condition to the extending of any benefits under ORS 568.210 to 568.808 or 568.900 to 568.933 to lands or the performance of work upon lands, the directors may require contributions in money, services, materials or otherwise to any operations conferring such benefits, and may require landowners or occupiers to enter into and perform such agreements or covenants as to the permanent use of such lands as will tend to prevent or control erosion thereon.

ORS 568.550(3). In order to avoid duplication of activities under subsection (1)(a) of this section, the department may call upon other state and federal agencies for assistance and cooperation in their fields in accordance with memoranda of understanding to be signed by all cooperating agencies.

ORS 568.550(4). A district may not adopt land use regulations under ORS chapter 197, 215 or 227. A district has the standing of an affected landowner to participate in the public process involving administrative rules, regulations, goals, guidelines, plans or other public body actions that may affect one or more properties within the district.

Appendix B: Statutes and Administrative Rules

The Deschutes SWCD is specifically governed by Oregon Revised Statutes (ORS) 568.210 through 568.890. In addition, the Deschutes SWCD is subject, but not limited to, the conditions of several statutes and administrative rules as follows:

- ORS 568.900 through 568.933 (Agricultural Water Quality Management)
- ORS 561.395 (Soil and Water Conservation Commission)
- ORS 561.400 (Natural Resources Division)
- ORS 44.320 (Oath of Office)
- Oregon Constitution, Article XV, Section 3 (Oath of Office)
- ORS 190.003 through 190.110 (Intergovernmental Cooperation)
- ORS 192.001 (Public Records Policy)
- ORS 192.005 through 192.190 (Custody and Maintenance Records)
- ORS 192.310 (Records and Reports)
- ORS 192.410 (Inspection of Public Records)
- ORS 192.610 through 192.710 (Public Meetings)
- ORS 198.010 through 198.955 (Special Districts)
- ORS 198.330 through 198.365 (Dissolution of Inactive Districts)
- ORS 198.410 through 198.440 (Recall)
- ORS 240.379 through 240.394 (Employment of Persons with Severe Disabilities)
- Title VII, Civil Rights Act of 1964 (Equal Opportunity Employment/Sexual Harassment/Discrimination) (Federal)
- Americans with Disabilities Act of 1990 (Hiring Persons with Disabilities) (Federal)
- ORS 244.010 through 244.4000 (Conflict of Interest)
- ORS 247.035 (Residency)
- ORS 294.305 through 294.565 (Local Budget) (required of districts with a tax levy)
- ORS 297.005 through 297.712 (Contracting)
- ORS 297.405 through 297.485 (Municipal Audits)
- ORS 542.750 (watershed Protection and Flood Prevention)
- ORS 659.010 through 659.990 (Employment Practices)
- ORS 659.405 (State Policy/Employment of Disabled Persons)
- OAR 839-07-550 through 839-07-656 (Sexual Harassment Prevention)

DSWCD Programs 2018-2019

Manure Exchange Program

Secured Grants

Small Grant Programs

- Invasive species/weed control (COID, SID)
- Spotted frog habitat
- Off-site livestock watering

NACD Grant

- Tower Ditch
- G-4 lateral

ODA - SIA Grant

- Indian Ford Creek

ODA Capacity Grant

- Landowner conservation assistance
- LOAFA support and participation

NRCS/OWEB

- Technical assistance to NRCS

Pending grants - grant development

OWRD - technical assistance grant(s)

- Lundy ditch, proposed for funding by OWRC
- Tower ditch, proposed for funding by OWRC

OWEB

- Technical assistance grant - Lundy ditch
- Technical assistance grant - Indian Ford CRMP
- Stakeholder engagement

OWEB small grants

- 3 separate pipeline projects
- 2 water quality projects

Appendix D: Four Priority Strategies for Deschutes SWCD (fiscal year 2019)

Priorities may include but are not limited to the following in future fiscal years:

1. Indian Ford Watershed
2. Irrigation Conveyance Water Savings
3. Forest Health – Catastrophic Fire South County
4. Urban Agriculture

Indian Ford Creek

2015 the Strategic Implementation Area (SIA) brought about a connection with landowners. The SIA will sunset on December 2019. The primary project includes riparian restoration, removing a ditch and allowing floodplain access by the stream. Additional weed control and restoration work is still needed.

Resource concerns addressed: water quality, forest and pasture health, wildlife (salmonid, spotted owl)

Monitoring/outcomes: project and streamflow

Limitations: staff time and funding

Potential full time employees needed (FTEs): 1-2

Funders: various OWEB grants, USFS, Education and Outreach grants, ODA capacity grant, possible NRCS Conservation Implementation Strategy (CIS) grant

Term/longevity: 5-10 years

Irrigation Conveyance Water Savings

Irrigation conveyance and efficiency is complex. The DSWCD will develop an action plan to focus on Point of Delivery projects (PODs) with willing landowners and willing irrigation district partners.

Resource concerns addressed: water quality and quantity, plant health and vigor (crop), wildlife

Monitoring/outcomes: water savings at point of delivery (POD) or aggregate PODs

Limitations: staffing, outreach, funding

Potential FTEs: 1-2

Funders: OWEB grants, ODA SIA (if an area can be defined), Education and Outreach grants, possible NRCS – CIS grant

Term/longevity: 5-10+ years

Forest Health – Catastrophic Fire South County

A Joint Chief Initiative project utilizing USFS and NRCS funding for restoration projects (funded for 2 years). Not extended through 2019. The city of La Pine and south Deschutes County are at risk of catastrophic wildfire as identified by USFS, ODF and Deschutes County. The effects of climate change is expected to exacerbate this problem.

Issues addressed: safety, forest health, water quality, wildlife (Oregon spotted frog, spotted owl, resident fish)

Monitoring: measured in acres treated near urban centers, streambank stabilization

Limitations: landowner participation, too many acres, understanding the requirements of EQIP contracts, costs set to low (EQIP)

Potential FTEs: 0.5-1

Funders: OWEB grants, ODA SIA (if an area can be defined), ODA capacity grant, Education and Outreach grants, possible NRCS – CIS grant

Term/longevity: 5+ years

Urban Agriculture

Urban agriculture has gained interest across the US and locally. Deschutes County urban populations are growing quickly and landowners are growing crops on large and small parcels, including in urban areas. DSWCD will explore interest, resource concerns to address and incentives.

Issues addressed: urban interest in locally grown food crops, soils, water quality and water conservation practices, local food for underserved populations and low income households, proper manure management (urban chickens)

Monitoring: will depend on resource concern addressed

Limitations: unknowns such as – level of interest, who are the stakeholders and partners, staff time to develop program, funding

Potential FTEs: 1

Potential Funders: NACD grant – for program development

Term/longevity: 5+ years

COMMONLY USED ACRONYMS

303d	DEQ list of streams with impaired water quality
AgWQM Act	Agricultural Water Quality Management Act (SB 1010, 1993)
AgWQM Area	Agricultural Water Quality Management Area
AgWQM Area Plan	Agricultural Water Quality Management Area Plan
AgWQMP	Agriculture Water Quality Management Program
AID	Arnold Irrigation District
BLM	Bureau of Land Management
BMP	Best Management Practices
BOR	Bureau of Reclamation
CAFO	Confined Animal Feeding Operation
CDD	Community Development Department (Deschutes County)
COID	Central Oregon Irrigation District
CORPS	US Army Corps of Engineers
CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program
CSP	Conservation Security Program
CWA	Clean Water Act
CWMA	Cooperative Weed Management Area
DEQ	Department of Environmental Quality (Oregon)
DBBC	Deschutes Basin Board of Control (Irrigation Districts)
District	Soil and Water Conservation District
DLCD	Department of Land Conservation and Development (Oregon)
DSL	Department of State Lands (Oregon)
DLT	Deschutes Land Trust
DRC	Deschutes River Conservancy
DVID	Deschutes Valley Irrigation District
ECP	Emergency Conservation Program
EIS	Environmental Impact Statement
EPA	US Environmental Protection Agency
EQIP	Environmental Quality Incentives Program
ES	Extension Service
ESA	Endangered Species Act (Federal)
EWP	Emergency Watershed Protection Program
FAAP	Focus Area Action Plan (ODA)
FCA	Farmers Conservation Alliance
FIP	Forestry Incentive Program
FS	Forest Service (also, USFS)

FSA	Farm Service Agency (formerly ASCS)
FY	Fiscal Year
FTE	Full-Time Equivalent Employee (2,080 hrs/yr)
GIS	Geographic Information Systems
GWMA	Ground Water Management Area
HEL	Highly Erodible Land
IWM	Irrigation Water Management
LAC	Local Advisory Committee
LMA	Local Management Agency (Oregon SB1010)
LOAFA	Living on a Few Acres Workshop
LPID	Lone Pine Irrigation District (off COID)
LUB	Lower Umatilla Basin
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NACD	National Association of Conservation Districts
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine and Fisheries Service
NPS	Non-Point Source (pollution)
NWMP	Northwest Weed Management Partnership
NRCS	Natural Resources Conservation Service (formerly SCS)
NRD	Natural Resources Division (ODA)
NUID	North Unit Irrigation District
OACD	Oregon Association of Conservation Districts
OAR	Oregon Administrative Rule
OCEAN	Oregon Conservation Employees Association Network
ODA	Oregon Department of Agriculture
ODEQ	Oregon Department of Environmental Quality
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife (aka ODF&W)
OFRI	Oregon Forest Resources Institute
OID	Ochoco Irrigation District (in Crook County)
ORS	Oregon Revised Statute
OSDF	Oregon State Department of Forestry
OSU-IWW	OSU Institute for Water and Watersheds
OSU	Oregon State University
OSWB	Oregon State Weed Board (ODA)
OWEB	Oregon Watershed Enhancement Board
PNW	Pacific Northwest
POA	Point of Appropriation (location of appropriation from a well)
POD	Point of Diversion (location of diversion from stream or reservoir)
POD	Point of Delivery (to a group of landowners on an irrigation lateral)
RARE	Resource Assistance for Rural Environments
RC&D	Resource Conservation and Development
RCA	Resource Conservation Act

RCPP	Regional Conservation Partnership Program (USDA-NRCS)
RD	Rural Development (formerly Farmers Home Administration)
SCS	Soil Conservation Service (currently NRCS)
SDAO	Special Districts Association of Oregon
SB1010	Agricultural Water Quality Management Act of 1993 (OR)
SIA	Strategic Implementation Area (ODA)
SID	Swalley Irrigation District
SmART	Small Acreage Resource Team (Central Oregon-specific)
SWCC	Soil and Water Conservation Commission
SWCD	Soil and Water Conservation District
TASKFORCE	Umatilla County Critical Groundwater Taskforce
TID	Tumalo Irrigation District
TMDL	Total Maximum Daily Load
TSID	Three Sisters Irrigation District
UDRC	Upper Deschutes River Communities (Coalition)
UDWC	Upper Deschutes Watershed Council
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	US Fish and Wildlife Service
USGS	United States Geological Survey
WHCMP	Wildlife Habitat Conservation Management Program
WHIP	Wildlife Habitat Incentives Program
WRD	Water Resources Department (Oregon)
WRP	Wetland Reserve Program