



Oregon

Tina Kotek, Governor

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MEMORANDUM

TO: Water Resources Commission

FROM: Emelie McKain, Senior Water Advisor

SUBJECT: Agenda Item E, June 14, 2024
Water Resources Commission

Deschutes Basin Water Collaborative: Comprehensive Water Plan Development

I. Introduction

Representatives from the Deschutes Basin Water Collaborative (DBWC) will present an update on the development of the Deschutes Basin Comprehensive Water Plan. *This is an informational report.*

II. Integrated Water Resources Strategy Recommended Actions

- 1.B - Improve Water Resource Data Collection and Monitoring
- 1.C - Coordinate Inter-Agency Data Collection, Processing, and Use in Decision-Making
- 2.A - Regularly Update Long-Term Water Demand Forecasts
- 3.A - Determine Flows Needed (Quality and Quantity) to Support Instream Needs
- 5.5A - Plan and Prepare for Drought Resiliency
- 6.A - Improve Integration of Water Information into Land Use Planning (& Vice-Versa)
- 6.B - Improve State Agency Coordination
- 7.A - Develop and Upgrade Water and Wastewater Infrastructure
- 9.A - Continue to Undertake Place-Based Integrated Water Resources Planning
- 9.C - Partner with Federal Agencies, Tribes, and Neighboring States in Long-Term Water Resources Management
- 10.A - Improve Water-Use Efficiency and Water Conservation

III. Background

The DBWC is a forum for interested parties to collaborate on critical water allocation and management issues in the Deschutes Basin, and to develop strategies to meet stream flow, ecological, agricultural, and community needs for water. The DBWC was built on the momentum of the Upper Deschutes Basin Study Working Group, the Water Summit convened by the Confederated Tribes of Warm Springs and the State of Oregon in the fall of 2018, as well as the legacy of the Deschutes Water Alliance.

The DBWC is in the midst of developing a comprehensive Deschutes Basin Water Plan that is aligned with OWRD's Place-Based Integrated Water Resources Planning model.

IV. Status of Collaborative Planning Effort

Solutions to projected unmet water needs in the basin are actively being discussed. These solutions are in the form of tools – both existing and needing development. Creative, flexible tools to move water and incentivize sought-after benefits will be key components of the plan. The DBWC has expressed a desire to work with OWRD to develop tools and pathways to be successful. The DBWC's plan will be an important roadmap for water management priorities, collective commitments, and implementation strategies. OWRD is committed to work with the DBWC to complete this planning process and support implementation of the plan.

V. Next Steps

OWRD will continue to engage with the DBWC and people in the basin to develop solutions that advance collective priorities for water management.

Attachments:

1. DBWC Brochure

Emelie McKain

971-375-5477

We honor the native people who have called this region home for thousands of years.

We join them in stewardship of our rivers for the next seven generations.



Deschutes Basin

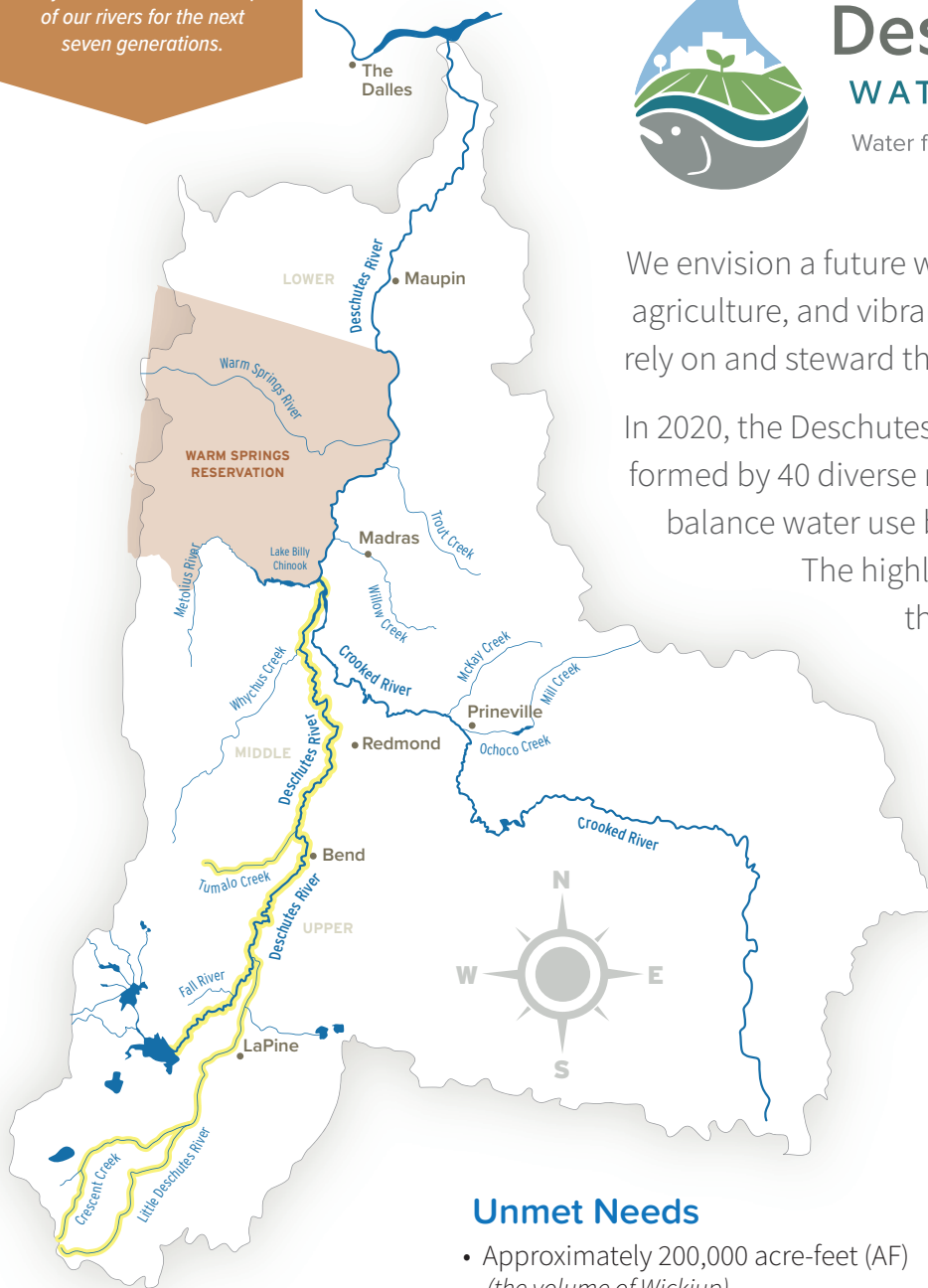
WATER COLLABORATIVE

Water for Rivers, Agriculture and Communities

We envision a future watershed with healthy streams, thriving agriculture, and vibrant, connected communities that both rely on and steward the water resources in the basin.

In 2020, the Deschutes Basin Water Collaborative (DBWC) was formed by 40 diverse members who are working together to balance water use between human and ecological needs.

The highlighted area on the map is phase one of the DBWC's focus.



Healthy Streams

Restore flows in the Deschutes River and its tributaries. Water quantity and quality to support fish, frogs, and other wildlife.



Thriving Agriculture

Support irrigated agriculture by promoting water equity and increased efficiency so that production in Central Oregon remains viable.



Vibrant Communities

Enough water to secure and maintain a safe, affordable, and high-quality water supply for urban communities in one of the fastest growing regions in the country.

Issues

- Low and altered streamflows
- Water quality
- Increased water temperatures
- Prolonged, exceptional drought
- Degraded habitat
- Threatened species
- Water use inefficiency
- Uneven and unreliable water supply
- Climate change

Unmet Needs

- Approximately 200,000 acre-feet (AF) (the volume of Wickiup)
- Up to 400,000 AF in dry years

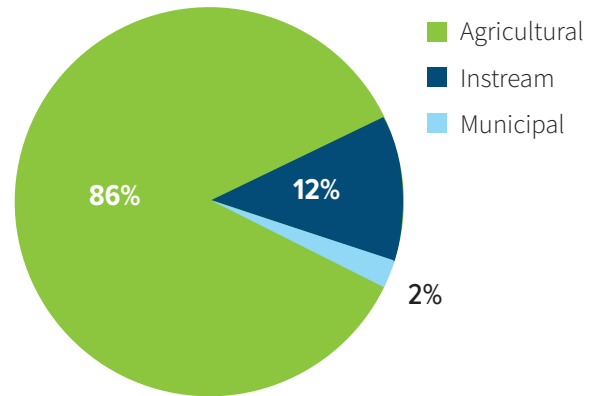
The basin is working to secure sufficient water supply (acre-feet) to meet current and future water needs for agriculture and cities and to restore instream flows (cubic feet per second) in specific reaches. Total annual inflows to the basin amount to 860,000 to 2.3 million AF.

Basin Progress

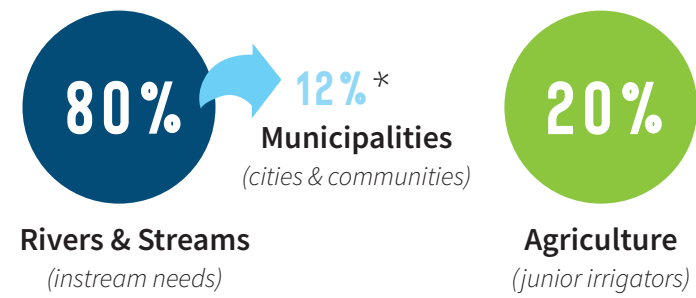
- Success through collaboration
- Nearly 300 cfs restored in key reaches
- Increased agricultural reliability
- Some future water supply secured for municipalities

Where water *currently goes* and where there are *unmet needs*

Current distribution of water rights:



Over the next 50 years, projected unmet needs:



*Since groundwater and surface water are interconnected, **municipal needs** are incorporated into unmet instream needs because water must be dedicated instream to mitigate for groundwater pumping.

A HISTORY OF *Working Together*



CASE STUDY: **Whychus Creek**

Since the early 1900s, Whychus Creek ran dry in two out of every three years due to irrigation diversions. Through a combination of instream transfers from urbanizing lands, instream leasing from fallowing acres, irrigation efficiency from on farm improvements, and canal piping, the creek is now well on its way to achieving the flows necessary for reintroduced steelhead and salmon. Continued investments in streamflow projects have a direct effect on other indicators of river health, such as improved habitat availability and lower water temperatures.



Municipalities

Permanent instream transfers under the Deschutes Basin Mitigation Program have created 6,000 acre-feet of mitigation credits for new groundwater permits for municipal, irrigation, and other uses in the Upper Deschutes Basin. Meeting the projected 50-year demands of municipal water suppliers in the basin will require that an additional 16,000 AF of water be dedicated instream for groundwater mitigation.

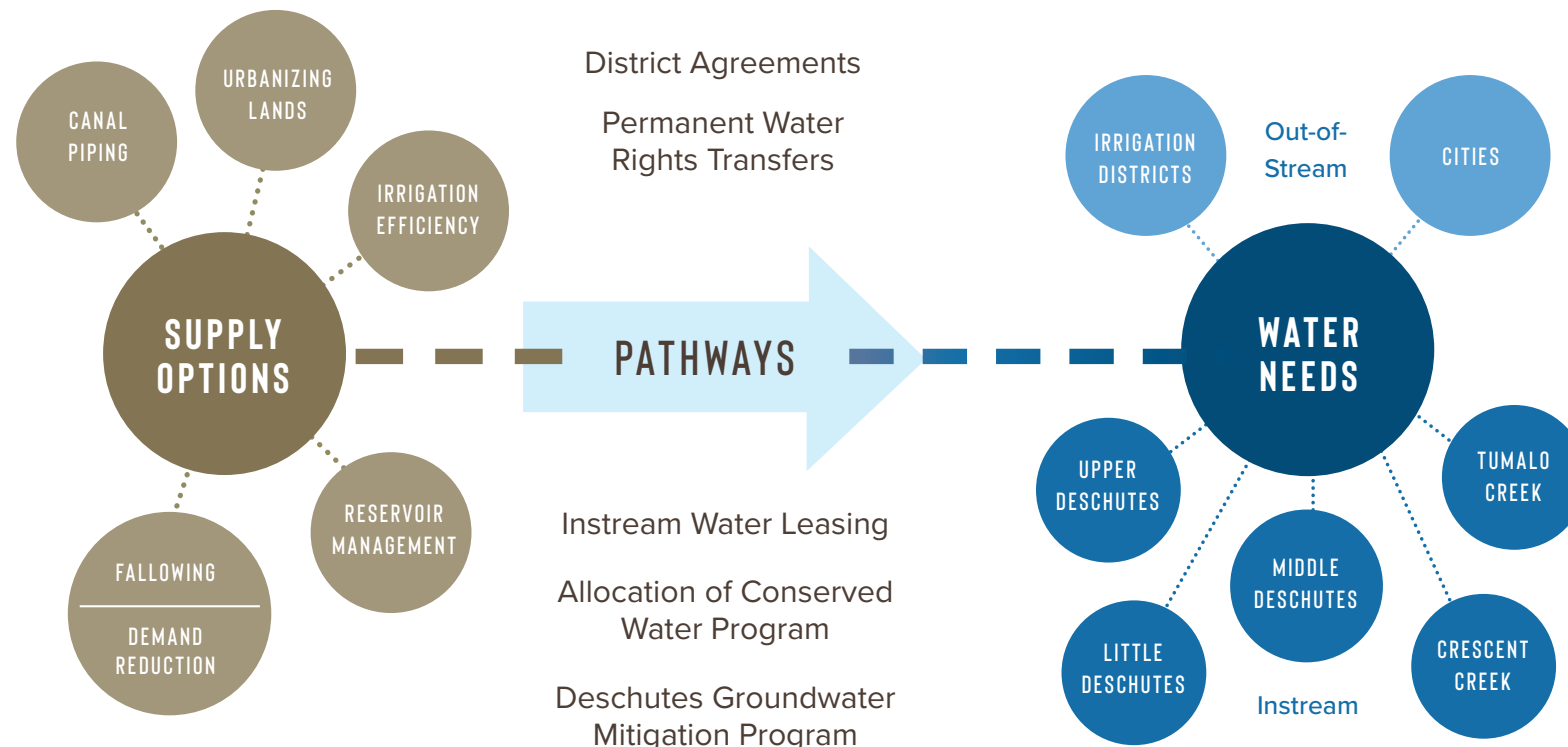


Agriculture

Junior irrigation districts experience water shortages (30,000 – 160,000 AF), particularly in dry years. Basin partners are focusing on utilizing the tools to conserve water in senior irrigation districts and boost the reliability of junior water rights. Accomplishing this enables winter flow restoration in the Upper Deschutes.

SOLUTIONS

Tools to *get water where it's needed*



The DBWC has an Instream Committee that is assessing existing information on the biological flow needs across the basin, which are discussed below.

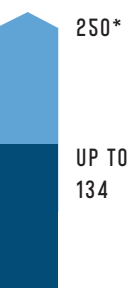
Upper Deschutes

Winter flows in the Upper Deschutes have increased from a minimum of 20 cfs to a minimum of 100 cfs. State instream water rights based on minimum needs for fish are 300 cfs. Habitat Conservation Plan flow targets include 300 cfs by 2028 and 400-500 cfs by 2033. Flows are needed to support river function, redband trout, and Oregon spotted frog in a federally designated Wild and Scenic River.



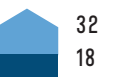
Middle Deschutes

Up to 134 cfs have been restored instream in the Middle Deschutes; 28 cfs from instream leasing and 106 cfs from transfers and conserved water projects, though these flows are lower in the spring and fall. Basin partners are working towards a minimum instream flow goal of 250 cfs to support redband trout habitat, while recognizing that biological flow needs may be higher.



Tumalo Creek

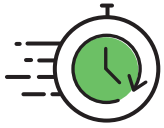
Up to 26 cfs has been restored in Tumalo Creek through a combination of instream leasing and conserved water projects. Basin partners are working towards meeting a minimum instream flow goal of 32 cfs, which is important for restoring redband trout habitat and meeting temperature goals in Tumalo Creek and the Middle Deschutes River. Biological flow needs are higher.



■ Progress ■ State instream water right target ■ Long-term goal

* State instream water rights are pending in the Middle Deschutes Measurements in cubic feet per second (cfs)

Deschutes Basin Water Collaborative *Priority Actions*



Accelerate Implementation



Develop a Comprehensive Water Management Plan



Leverage Funding

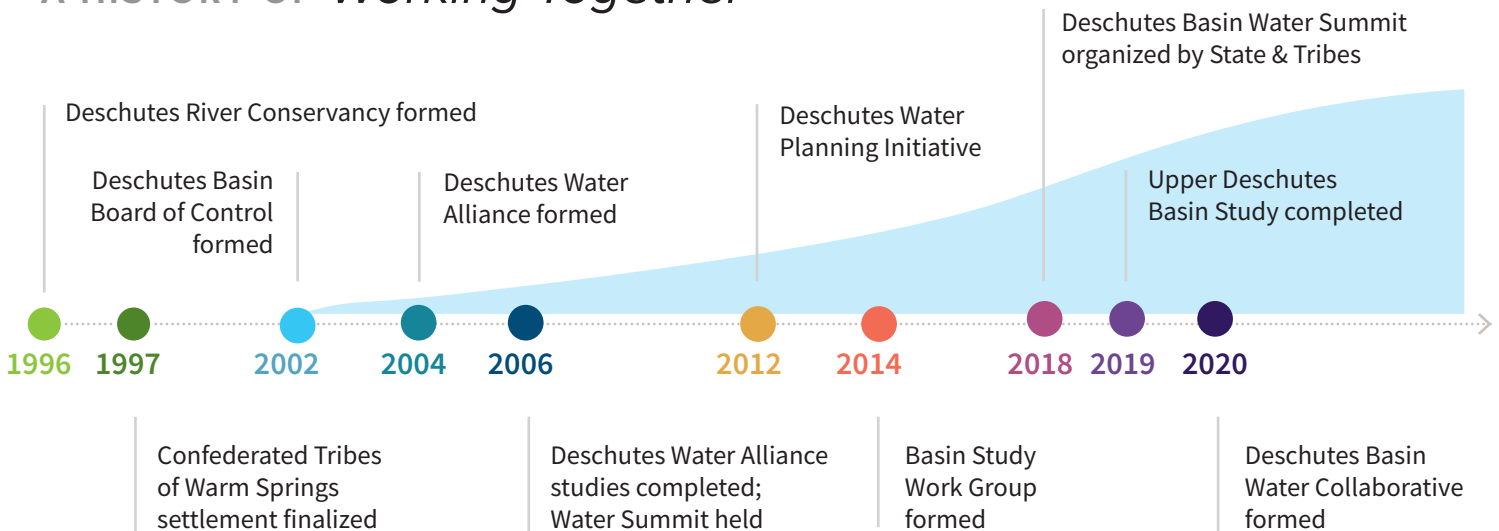


Support Policies that Advance DBWC Goals and Consensus Agreements



***Moving Forward:**
Expand forum to address issues in other river reaches and tributaries*

A HISTORY OF *Working Together*



Deschutes Basin Water Collaborative Members

Oregon Governor’s Office
 Oregon Dept. of Agriculture
 Oregon Dept. of Environmental Quality
 Oregon Dept. of Fish & Wildlife
 Oregon Water Resources Dept.
 US Fish & Wildlife Service
 US Forest Service
 Oregon Environmental Council
 Arnold Irrigation District
 Central Oregon Irrigation District
 Lone Pine Irrigation District
 North Unit Irrigation District

Deschutes Soil & Water Conservation District
 Central Oregon Intergovernmental Council
 Confederated Tribes of Warm Springs
 League of Women Voters – Deschutes County
 Central Oregon Cities Organization
 Avion Water Company
 Ochoco Irrigation District
 Water for Life
 City of Bend
 City of La Pine
 City of Prineville
 City of Redmond
 Crook County
 Jefferson County
 Central Oregon LandWatch
 Central Oregon Informed Angler
 Crooked River Watershed Council

Deschutes River Conservancy
 Great Old Broads for Wilderness
 Oregon Natural Desert Association
 Oregon Sierra Club – The Juniper Group
 Sunriver Anglers
 Trout Unlimited – Deschutes Redband Chapter
 Trout Unlimited (State Office)
 Upper Deschutes Watershed Council
 WaterWatch of Oregon
 Portland General Electric
 Coalition for the Deschutes



Deschutes Basin
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