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October 4, 2023

MEMORANDUM

TO: Fish & Wildlife Committee

FROM: Cathy P. Kellon

SUBJECT: Restoring streamflow in the Deschutes River basin

BACKGROUND:

Presenter: Kate Fitzpatrick, Executive Director, Deschutes River Conservancy

Summary: Kate Fitzpatrick will discuss the Deschutes River Conservancy (DRC)'s role as a Qualified Local Entity in implementing the Columbia Basin Water Transaction's Program. She will discuss DRC's history of working collaboratively to secure voluntary water right leases and transfers and the importance of instream flow to the health of fish and wildlife in the Deschutes River basin.

Relevance: In 2002, Bonneville and the Council established the Columbia Basin Water Transactions Program (CBWTP) to help return water to tributaries where flow is a limiting factor to healthy populations of anadromous or resident fish. The Council had identified the need to improve instream flows since the early 1990s, but it was the 2000 Fish and Wildlife Program that recommended to BPA that it establish a means to incentivize voluntary water rights transfers. The importance of improving streamflow was reiterated in the 2014 Program and 2020 Addendum. The CBWTP is administered through a partnership between BPA and the National Fish and Wildlife Foundation, but it relies on local organizations to prioritize, acquire, and monitor water rights transactions. These implementation organizations or "qualified local entities" (QLE) may be states, Tribes, or nonprofits. For the Deschutes basin, the qualified local entity is the nonprofit organization, the Deschutes River Conservancy.

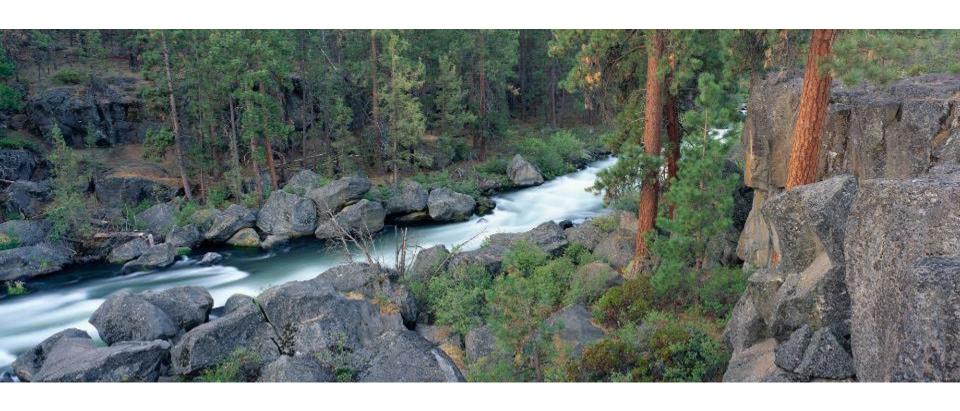
Background: The DRC is dedicated to restoring streamflow and improving water quality in the Deschutes River basin. It was founded in 1996 with the leadership of the Confederated Tribes of the Warm Springs, irrigators, and environmentalists. Its nonprofit Board of Directors includes key public and private interests from the basin.

DRC has been considered a leader in the CBWTP, pursuing innovative approaches for securing water for fish and wildlife in the upper Deschutes. They have leveraged significant match funding to handle transactions as well as to complement and increase the benefits of other habitat actions for resident and anadromous fish. Their work has been critical to recovery objectives for Mid-Columbia steelhead, and for enhancing climate and ecosystem resiliency in the Deschutes basin.

Kate assumed the Executive Director position at DRC in 2021 after 16 years of experience at the organization managing and directing programs to collaboratively restore streamflow in the basin.

More Info:

- Deschutes River Conservancy: https://www.deschutesriver.org/
- Columbia Basin Water Transactions Program:
 - https://www.nfwf.org/programs/columbia-basin-water-transactions-program
 - https://www.nwcouncil.org/news/2022/12/19/putting-water-into-streamscolumbia-basin-water-transactions-program-gets-it-done/
- NPCC Fish and Wildlife Program references:
 - o 2000 Program https://www.nwcouncil.org/reports/columbia-river-basin-fish-and-wildlife-program-2000/
 - 2014 Program (see esp., p. 42) https://www.nwcouncil.org/sites/default/files/2014-12 1.pdf
 - o 2020 Program Addendum https://www.nwcouncil.org/reports/2020-9/

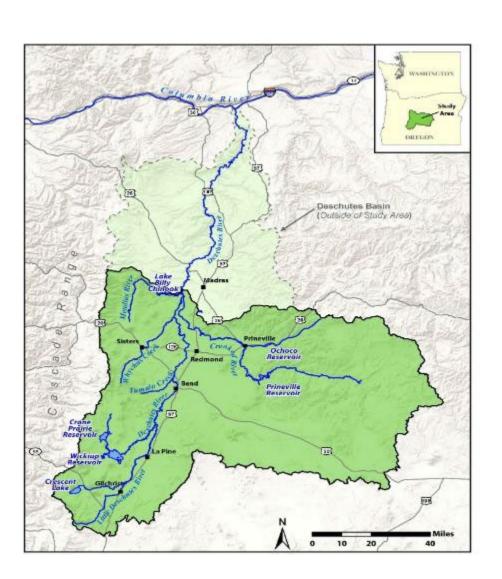


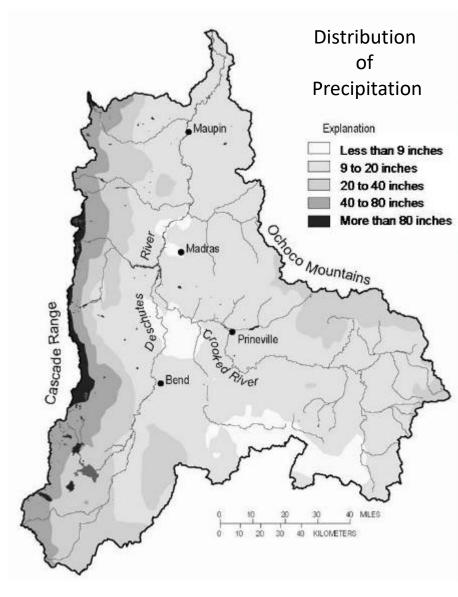


Kate Fitzpatrick
Executive Director
NWPCC Meeting 10/12/23

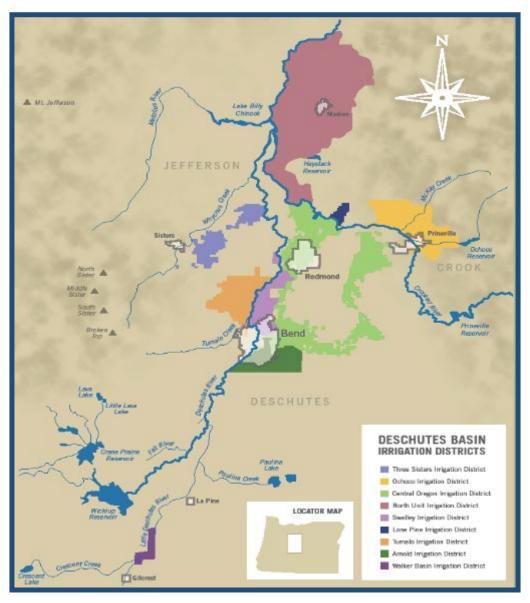


The Deschutes Basin



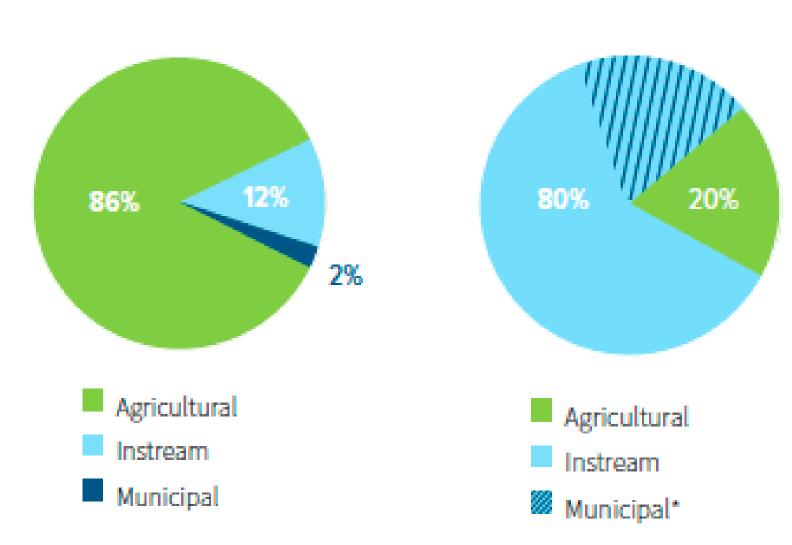


Upper Deschutes Basin



Basin Water Rights Distribution

Projected Unmet Needs



Deschutes River

98% of flows were diverted for irrigation

Whychus Creek

Every 2 out of 3 years, the creek would run dry

Crooked River

Extensively diverted flows would leave only a trickle of water at Smith Rock



Basin-Wide Strategy



- Whychus & Lower Crooked River systems
 - Restore habitat for reintroduced Chinook salmon and Mid-Columbia summer steelhead, redband trout
- Middle Deschutes & Tumalo Creek
 - Restore habitat for native redband trout
- Upper Deschutes River
 - Restore river function, habitat for native redband trout and ESAlisted Oregon spotted frog
- Trout Creek
 - Restore habitat for Mid-Columbia summer steelhead
 - Total Restorationt o-date

Whychus Creek



Whychus Flow Projects

Piping

- Over 31 miles
- 32 cfs restored instream
- 22 projects



Instream Leasing

- 350-400 acres leased annually
- □ ~8 cfs restored annually



Acquisitions

- Instream transfers
- 4.5 cfs permanently restored

8 projects



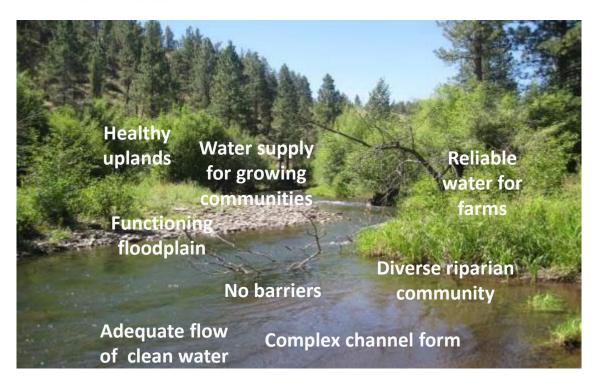
Total Protected Flow: 43 cfs instream

Minimum: 23 cfs

Whychus Creek Streamflow Timeline Years when Whychus Creek did not run completely dry Beginning in 1999, however, irrigators, non-profits, agencies and funders have successfully maintained year-round flows.













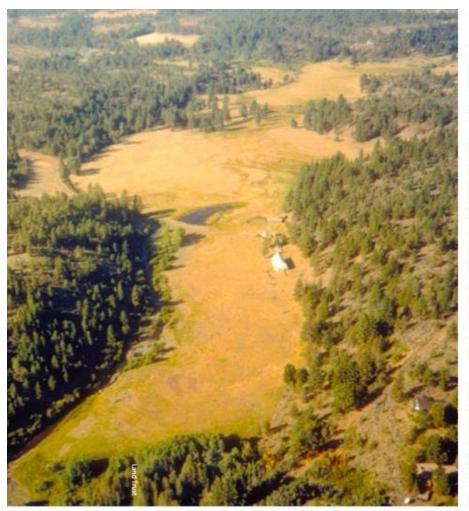


Outcomes and Results

- Over 35 cfs of restored streamflow in a creek that went dry 2 out of every 3 summers
- 10 stream miles and 3,100 total acres have been protected via land acquisition
- 6 of 6 fish passage barriers
 have been retrofitted or removed
- 6 miles of stream and 385
 acres of high-quality habitat



Deschutes Land Trust's Whychus Canyon Preserve. Deschutes Land Trust/ J. Mather







Crooked River



North Unit Water Exchange

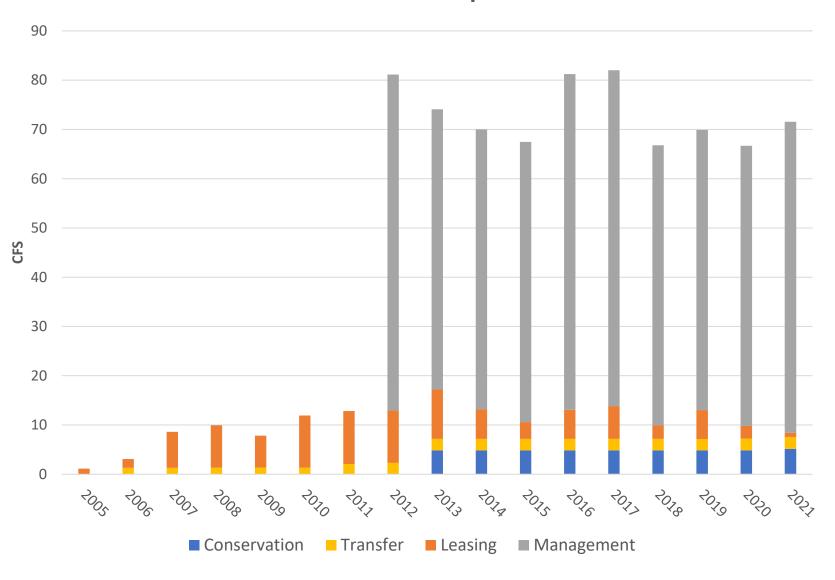


10,685 Acre-Feet Conserved

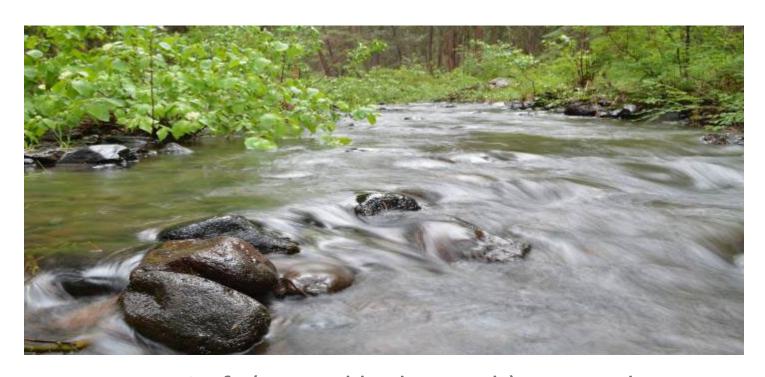




Crooked River below NUID Pumps: 2005-2021



McKay Creek Water Rights Switch



- 11.2 cfs (natural hydrograph) restored instream: 2025
- Comprehensive Effectiveness Monitoring

Trout Creek

Forbearance Agreements

Permanent Instream Transfer Opportunities
Flow- Habitat Integration



Reintroduction Efforts



2022 Adult Fish Returns to the Pelton Trap

Mid-Columbia Steelhead: 1,181

• Spring Chinook: 860

Opal Springs Fish Passage addressed

Middle Deschutes Flow Restoration



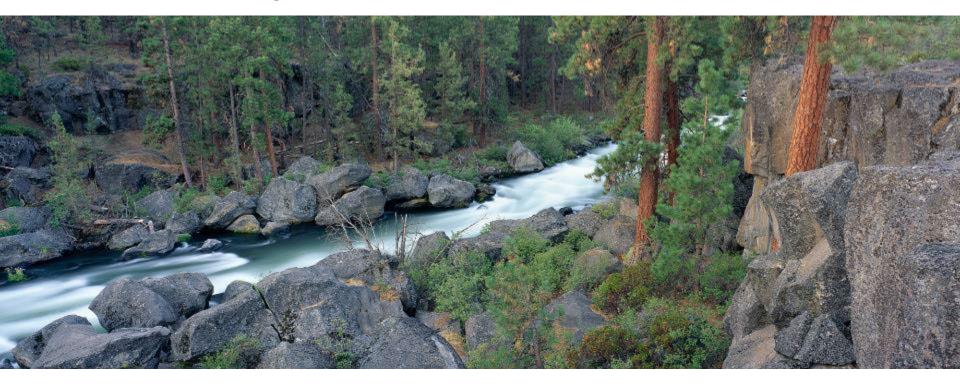
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Upper Deschutes Winter Flow Restoration



Priority Initiatives



- Crooked River Water Quality→ Lower Deschutes
- Regional water planning & management
- Enabling policies



More than 40 member organizations

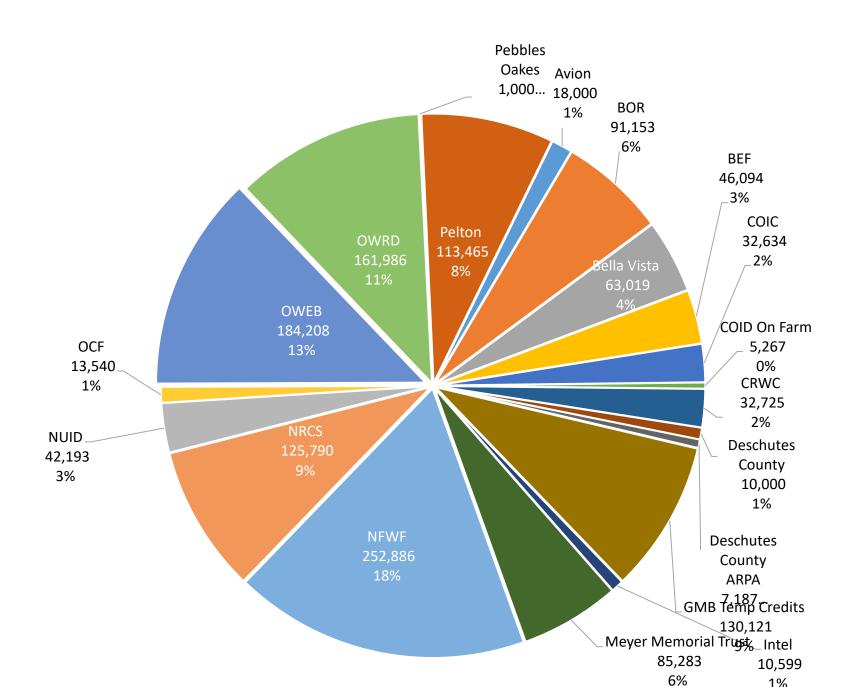
Deschutes Basin Water Collaborative **Members**

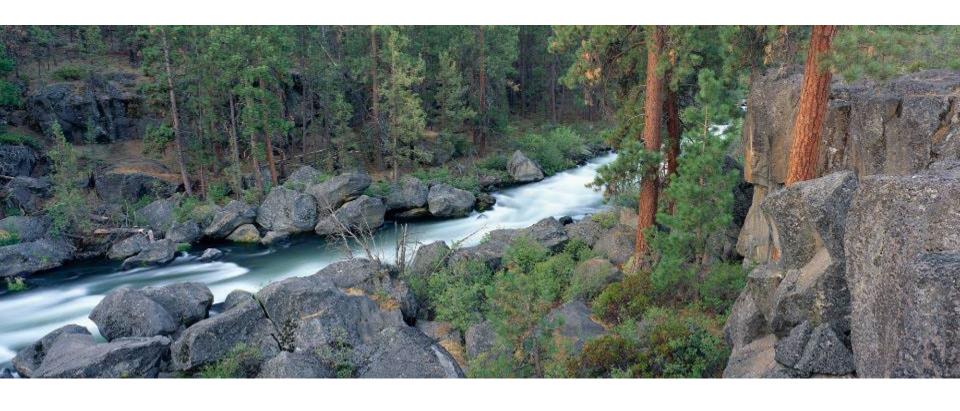
Oregon Governor's Office
Oregon Dept. of Agriculture
Oregon Dept. of Environmental Quality
Oregon Dept. of Fish & Wildlife
Oregon Water Resources Dept.
US Fish & Wildlife Service
US Forest Service
Oregon Environmental Council
Arnold Irrigation District
Central Oregon Irrigation District
Lone Pine Irrigation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







QUESTIONS?