

OREGON



WATER RESOURCES
DEPARTMENT

5 YEAR REVIEW OF THE DESCHUTES BASIN GROUNDWATER MITIGATION PROGRAM

Oregon Revised Statute (ORS) 540.155
Oregon Administrative Rule (OAR) 690-505

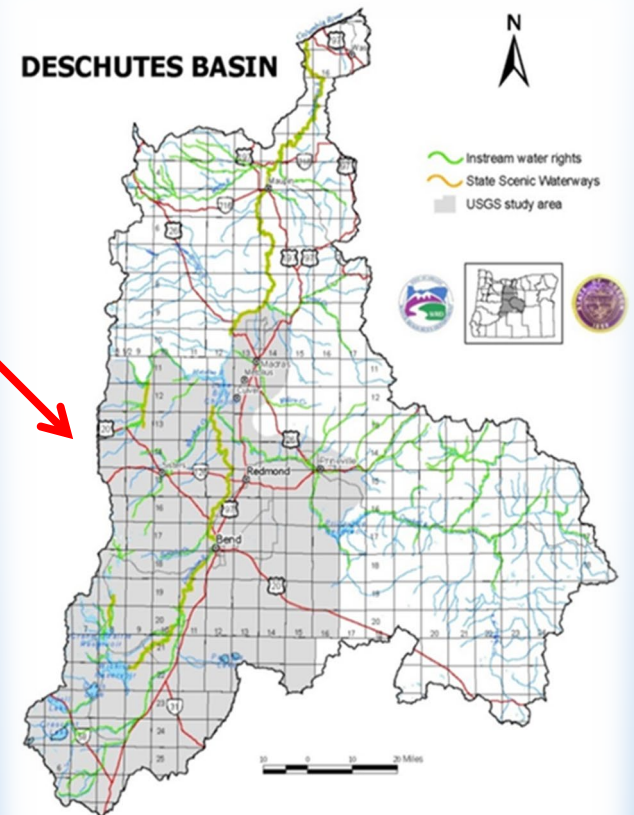
Dwight French, Water Right Services Division Administrator
Lisa Jaramillo, Transfer and Conservation Section Manager
Sarah Henderson, Flow Restoration Program Coordinator

Overview

- History, goals, reporting requirements
- Program elements, reporting and maintenance
- Top concerns discussed in the report
- Actions to improve program
- Questions and comments

History and Background

- Deschutes Basin Groundwater (GW) Study
- Direct hydrologic connection
- State scenic waterway flows
- No surface water available
- Mitigation Program developed



Mitigation Program Goals

- Maintain the flows for the scenic waterways and senior water rights, including instream water rights
- To sustain existing water uses and accommodate growth through new groundwater development
- To facilitate restoration of streamflows in the middle reach of the Deschutes River and its related tributaries

Elements of Mitigation Program

- New GW permits require surface water mitigation for impacts to surface water
- Tools for providing surface water mitigation
- Zones of impact
- System of mitigation credits
- Municipal and Quasi-Municipal permit holders
- Mitigation banks
- Annual and 5-year evaluations
- 200 Cubic Feet per Second (CFS) allocation cap

Reporting Requirements ORS 540.155 & OAR 690-505

- Legislative Reporting ORS 540.155
- Administrative Rule Reporting OAR 690-505
- Every 5 Years
- Current Reporting on 2015-2019
- Next 5 Year due 2026

Review Timelines

- July 16, 2020 – request for feedback on program
(comments accepted through Sept. 12, 2020)
- July 27, 2021 – request for feedback on draft report
(comments accepted through August 25, 2021)
- Sept. – Nov. 2021 – incorporation of comments and internal reviews
- December 2021 – present to Commission
- Deliver report to Legislative Assembly this month

Stakeholders, Tribes, & Others

- Oregon Department of Agriculture
- Arnold Irrigation District
- Association of Oregon Counties
- Avion Water Company
- Bureau of Land Management
- Cascade Geoengineering, LLC
- Central Oregon Irrigation District
- Central Oregon Landwatch *
- City of Bend *
- City of Prineville *
- City of Redmond *
- City of Wasco
- Clyde Snow LLC *
- Coalition for the Deschutes
- Central Oregon Cities Organization (COCO) *
- Confederated Tribes of the Warm Springs *
- Crook County
- Crook County Farm Bureau *
- Crooked River Watershed Council
- Oregon Department of Environmental Quality *
- Deschutes County
- Deschutes County Farm Bureau *
- Deschutes Basin Water Collaborative *
- Deschutes River Conservancy *

* Received feedback

Stakeholders, Tribes, & Others

- Nunzie Gould, Bend, Oregon *
- Natural Resources Conservation Service
- Newton Consultants, Inc.
- North Unit Irrigation District
- Ochoco Irrigation District
- Oregon Cattlemen Organization
- Oregon Department of Fish and Wildlife *
- Oregon land and Water Alliance
- Oregon Farm Bureau *
- Oregon Association of Nurseries
- Oregon Water Resources Congress
- Portland General Electric
- Sherman County
- Friends of the Metolius
- George Wuerthner, Bend, Oregon *
- GSI Water Solutions, Inc.
- Jefferson County
- Jefferson County Farm Bureau *
- Jim Powell, Bend, Oregon *
- John Short, Bend, Oregon *
- Kancler Consulting, LLC (City of Bend)
- Klamath County
- League of Oregon Cities
- League of Women Voters of Deschutes County *
- Lone Pine Irrigation District
- National Oceanic and Atmospheric Admin.

* Received feedback

Stakeholders, Tribes, & Others

- Oregon Division of State Lands
- Groundwater Advisory Committee
- Yancy Lind, Bend, Oregon *
- Oregon Parks and Recreation Department
- Sunriver Anglers
- Swalley Irrigation District
- The Freshwater Trust
- Three Sisters Irrigation District
- Trout Unlimited
- Tumalo Irrigation District
- City of Culver *
- City of Lapine *
- City of Maupin *
- United States Fish and Wildlife Service
- Wasco County
- WaterWatch of Oregon *
- List-Serve for the Water Resource Commission Members
- Deschutes Soil and Water Conservation District
- Doug Riggs (lobbyist for COCO)
- Upper Deschutes Watershed Council
- United State Bureau of Reclamation
- United States Geological Survey
- City of Metolius *
- City of Sisters *

* Received feedback

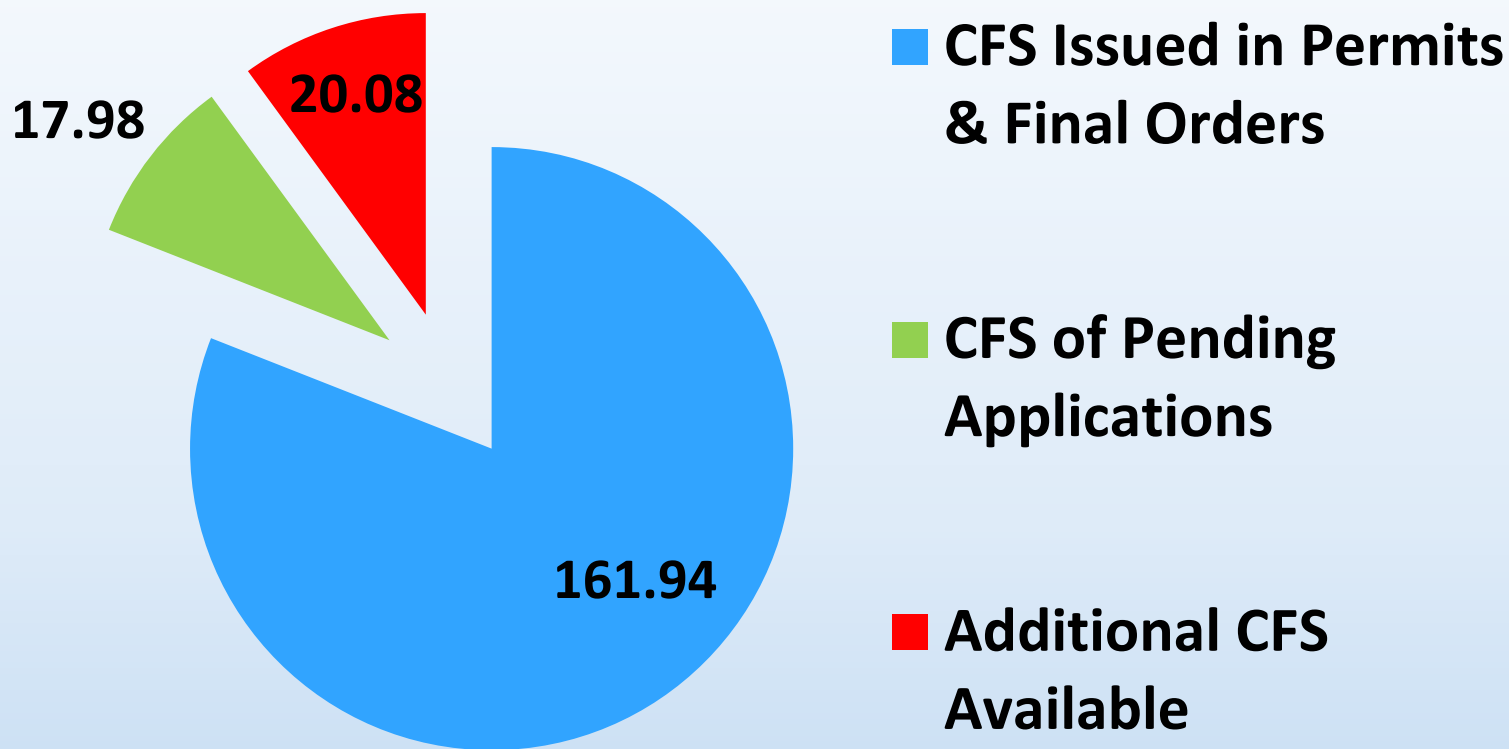
Key Department Take Away

- Goal - mitigate impacts of additional permitted groundwater development on:
 - scenic waterways
 - senior water rights, including instream
- Program is working as intended
- OWRD focus for improvement
- Limited capacity to address other concerns

Top Concerns From Comments Rcvd.

- Allocation cap status / modification
- Zonal mitigation and impacts
- Water accounting and impacts of climate change
- Impacts during the non-irrigation season
- Permits prior to mitigation rules (7J)
- Exempt wells
- Impacts to springs

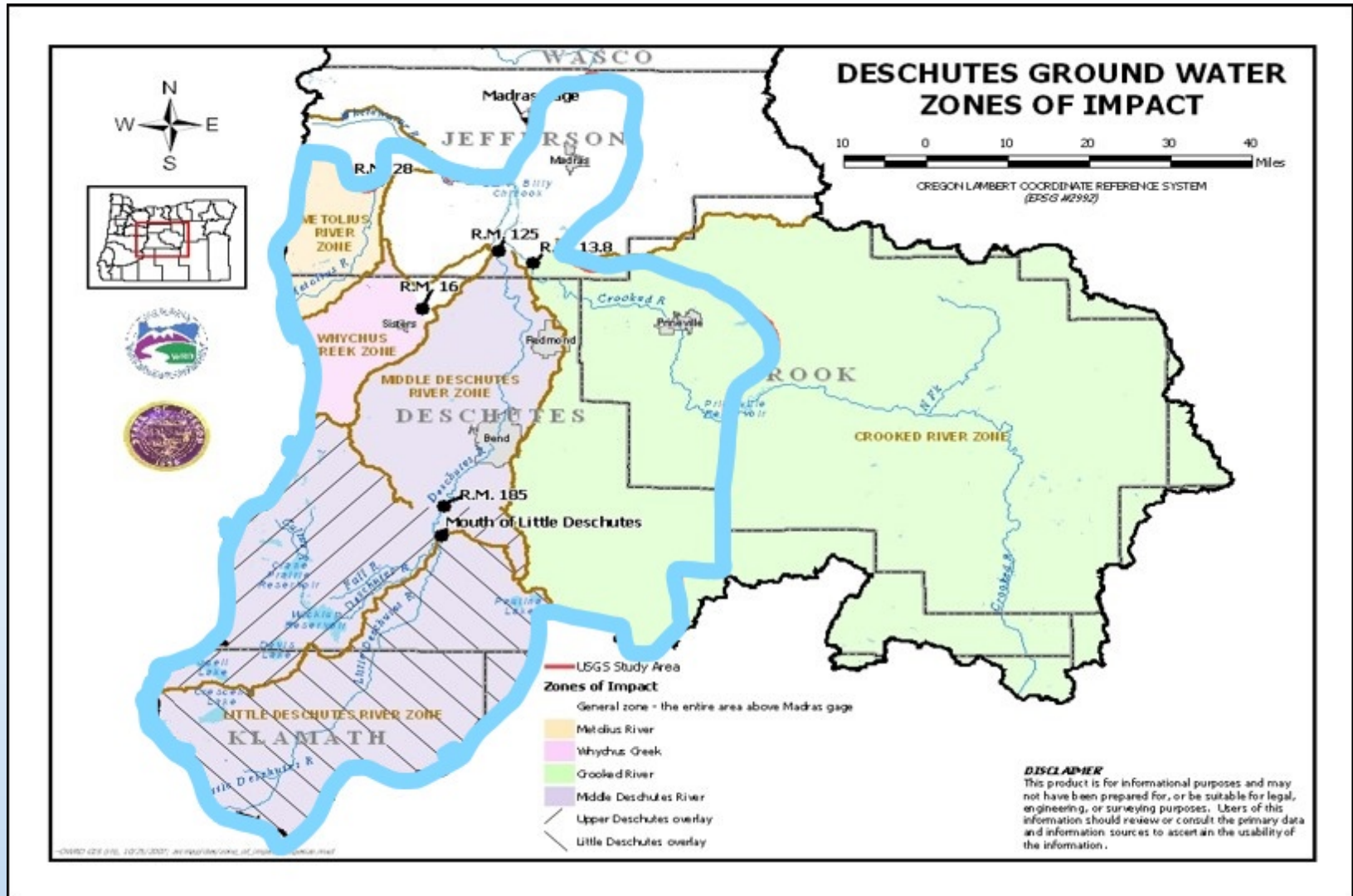
Allocation Cap Status - End of 2019



- Concerns raised in comments:
 - Large zones of impact vs. more localized zones
 - OWRD existing method of identifying mitigation zones
- Modification would require
 - Restructuring sub-zones, study needed
 - Rulemaking



Zones of Impact



- Streamflow modeling program (computer program)
- Base period of 1966 to 1995 at selected gaging stations
- Considers mitigation projects on streamflows (credits)
- Considers new groundwater permits (debits)
- Does not consider:
 - Canal piping/lining
 - Restoration instream transfers, riparian enhancement
 - Climate change
 - Winter releases to protect the ESA-listed Oregon spotted frog

Non-Irrigation Season Impacts

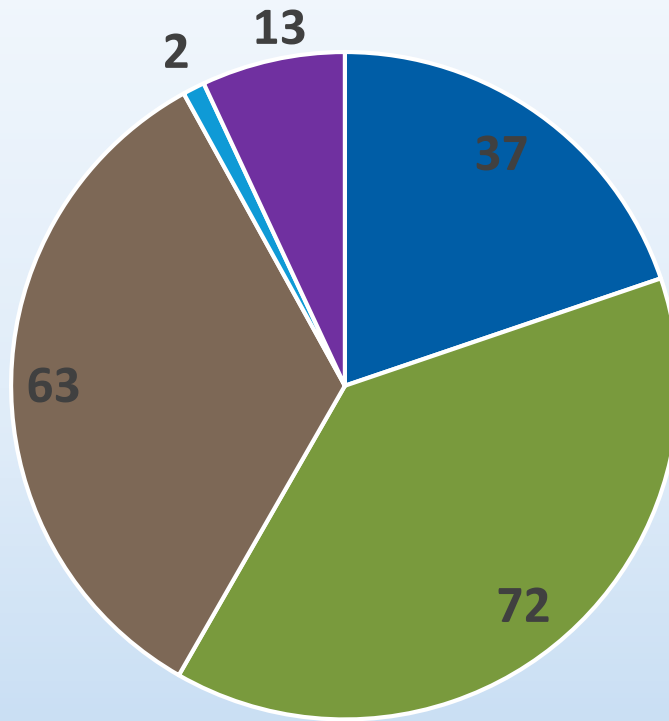
- Mitigation Projects instream during the irrigation season
- New groundwater permits assumed to have year-round impact
- Model results show increased streamflows during the summer months and decreases during the winter
- Model does not account for current reservoir operations or climate change

Impacts to Springs

- Jointly secure funding to study impacts to springs
- Develop monitoring program of key springs
- Install observation wells

7J Permits (Pre-Program Rules)

Water Rights (187)



Status & CFS

- Cancelled (28.998)
- Certificated (91.9972)
- CBU Rcvd (34.128)
- C-Date Expired (0.75)
- C-Date in Future (21.217)

Exempt Wells

- Comments suggest requiring mitigation for exempt wells that are junior to the instream water rights
- Current rules do not address use of water from exempt wells as part of the Deschutes Basin Groundwater Mitigation Program

OWRD Suggested Improvements

- Consider possibility of modifying allocation cap as part of work to be prioritized with Basin stakeholders
- Explore the feasibility of making changes to the rules to require mitigation on 7J permits when needing extension
- Explore the feasibility of partnering with ODFW/DEQ to study springs and spring complexes

Thank you – Questions?



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