

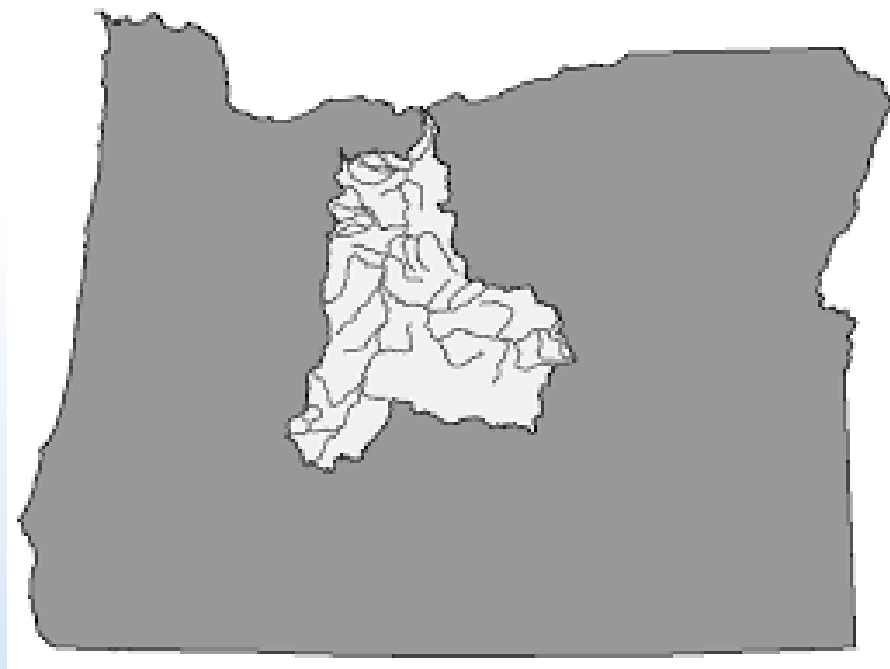


2023-2026 Deschutes Basin Workplan

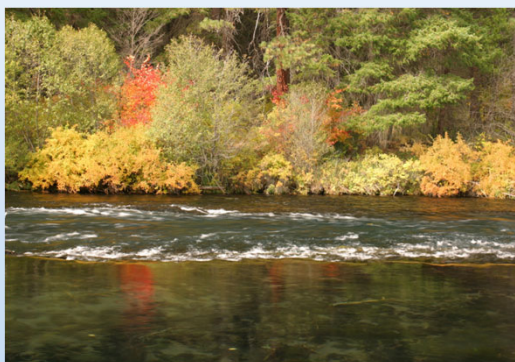
Update on Workplan Progress & Next Steps

Workplan Overview

- **Agency developed and led**
 - Situational assessment completed in 2022
- **3-year roadmap for agency**
 - Coordinates staff capacity
 - Communicates OWRD priorities
- **10 projects; 6 initiated in 2023**



Project: *Deschutes Basin
Groundwater Mitigation
Program Updates*



Purpose: Evaluate and potentially update the existing Deschutes Basin Groundwater Mitigation Program to ensure relevance and alignment with OWRD mission.

Estimated length: 3+ years, with 3 phases

Status: Phase 1 Complete, Phase 2 in progress

Purpose: Increase OWRD's ability to support water conservation priorities.

Project: *Piloting Integrated Water Conservation Strategies*

Estimated length: 1.75 years, with 2 phases

Status: Phase 1 Complete, Phase 2 in progress

Project: *Modernizing
Water Movement
Tracking & Accounting in
the Deschutes Basin*



Purpose: Increase OWRD ability to track water transactions and water conservation project outcomes

Estimated length: 2+ years, with 3 phases

Status: Phases 1 & 2 Complete



Project Updates

- Place-Based Planning Support for the Deschutes Basin Water Collaborative
- Increasing Agency & Tribal Coordination in the Deschutes Basin



Water Movement & Accounting Project

Overview of project and outcomes

Origins of the Deschutes Basin Storage Report

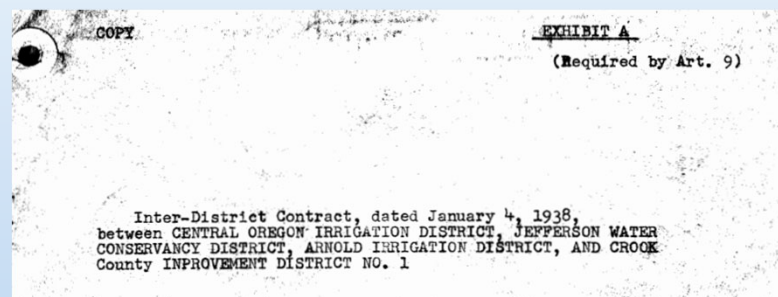
- **1913: Deschutes withdrawn from further appropriation**
- **3 reservoirs built in the upper basin**
 - Crane Prairie
 - Wickiup
 - Crescent Lake
- **1938 Inter-District Agreement**
 - BOR required regulation agreement
 - Determined order of fill and release per contract holder

Aubrey Perry (Watermaster 1933-1960) and Jack Frost (NRCS) measuring snowpack in Dutchman Flat area Circa 1940-1945.



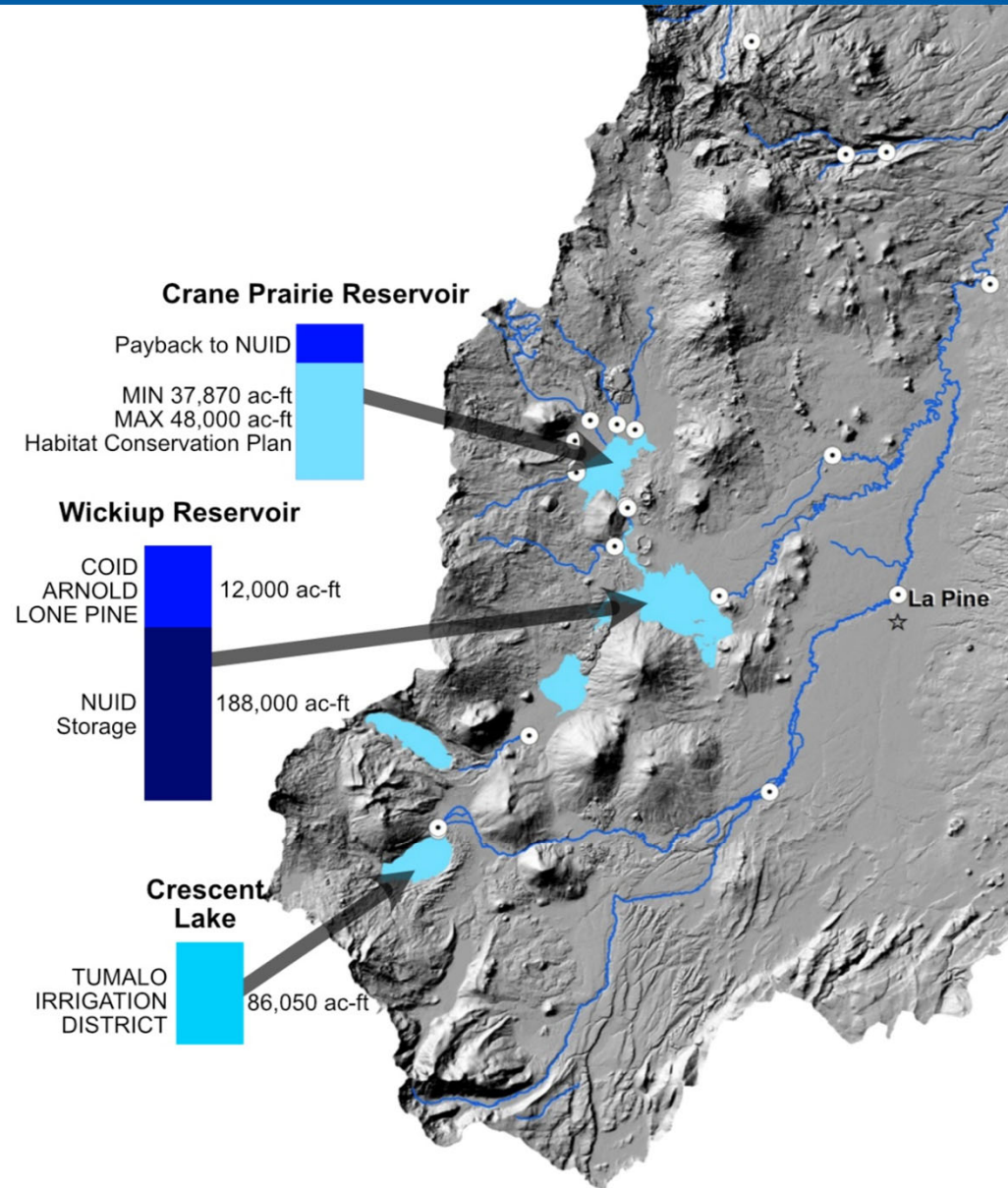
Origins of the Deschutes Basin Storage Report

- Deschutes Storage Report created to account for water usage throughout the irrigation season
- The Deschutes River is not regulated on a daily basis
 - Diversions, natural flow and storage use reconciled at the end of month
- Water accounting has run smoothly for over 60 years
 - Recent changes in basin have required updates in process and philosophy



Irrigation Water in the Upper Deschutes

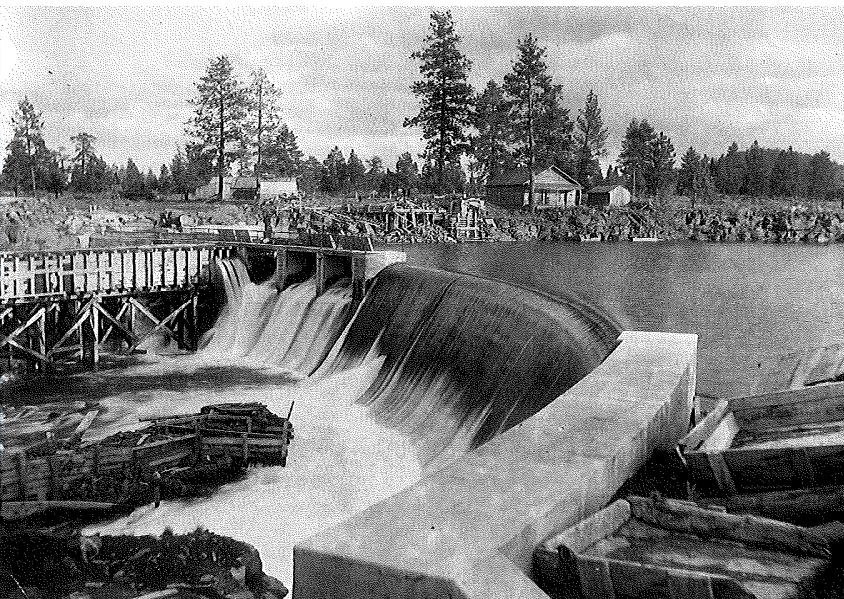
- Gages collect real-time stream flow data
- Data combined with reservoir levels are utilized to capture water inputs and determine losses
- Gages on district canals in Bend are used to determine outputs of the total hydrologic budgets



Storage Report Basics

- **Report Frequency**

- 1/month April 1- Nov 1
- 2/month May and September



North Canal Dam, Northside of Bend, 1912

- **Field Staff Workload (monthly/bi-monthly measurements and data collection)**

- 11 river gages
- 3 reservoirs
- 8 canals
- Evaporation data
- Pump data
- Instream leases and water rights accounting

- **DRC (1996)**
 - Led efforts to restore flows
 - Leases
 - Instream Transfers
 - No protected flows below Bend in the early 2000s
 - Today, ~130 cfs protected instream during irrigation season
- **HCP**
 - Required releases out of Wickiup during non-irrigation season
- **Alternative ACW Pathways**

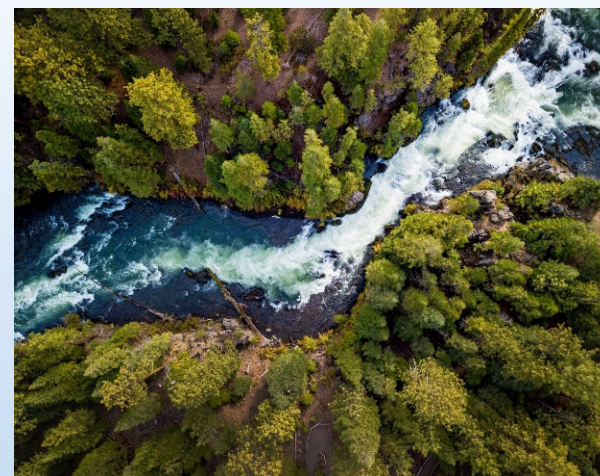
Recent Accounting Updates

• Updates for 2024

- Creation of HCP account
- Removal of carry water from instream leases/rights
- Tracking of alternative ACW pathways
- Data collection
 - Installed telemetry at strategic sites
 - Automation of incoming data
- Evaporation Data

• Results

- More accurate, scientific, legally sound accounting
- Decrease in staff time gathering and inputting data
- Decrease data input error





Upcoming Accounting Updates

- Loss Factors
- Incorporation of HCP flow requirements
- Tracking methods for CW flows
- Alignment with New 1938 Inter-District Agreement
- Additional telemetry installation at key gage sites
- Evaluation of mass balance accounting approach out of Crane Prairie



Opportunities for the Future of Water Accounting

- **Need for a Near Real Time accounting**
 - OWRD: Bi-monthly accounting for the 2024 irrigation season
 - Districts: DRiFT
- **Need for user-friendly, state-wide tools**
 - Others using or developing storage accounting tool
 - Umatilla, Willamette
 - Alignment on best practices
 - Flexibility per basin needs
 - Public transparency

Phase 3 Scoping

- Researching new online tools
- Anticipating future functionality needs
- Estimating capacity and resources
- Aligning with statewide needs

Timeline

- Fall 2024

Workplan Next Steps

- Continue implementing suite of projects
- Adaptively manage workplan
 - Incorporate and adjust for additional priorities

OREGON



WATER RESOURCES
DEPARTMENT