

OREGON



WATER RESOURCES  
DEPARTMENT

# Overview of the Harney Basin and Agency Work in the Basin

Oregon Water Resources Commission

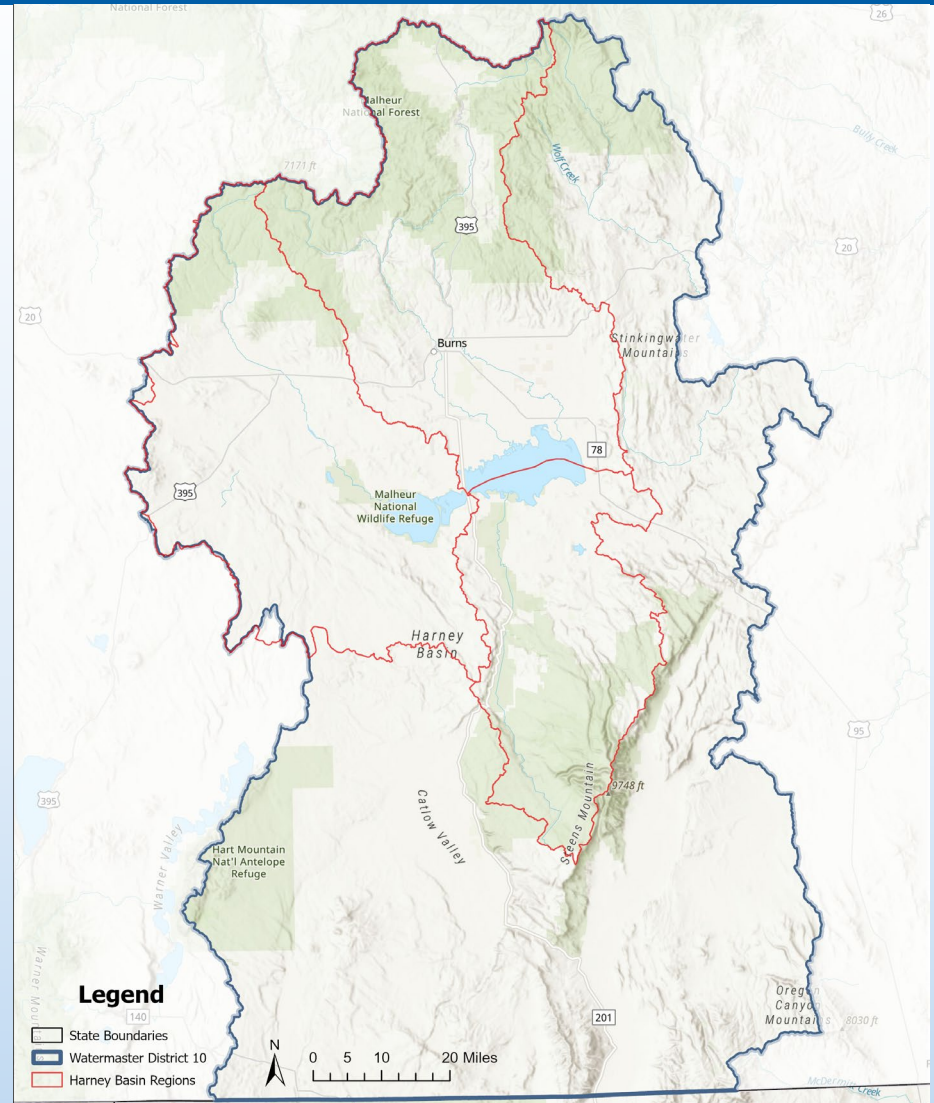
September 28, 2023

# Presentation Overview

- Surface Water Distribution and Regulation
- Groundwater Challenges in the Basin
- Dual Approach to Stabilize Groundwater Level Declines
- Harney Community Based Water Planning Collaborative
- Financial Assistance for Domestic Dry Wells

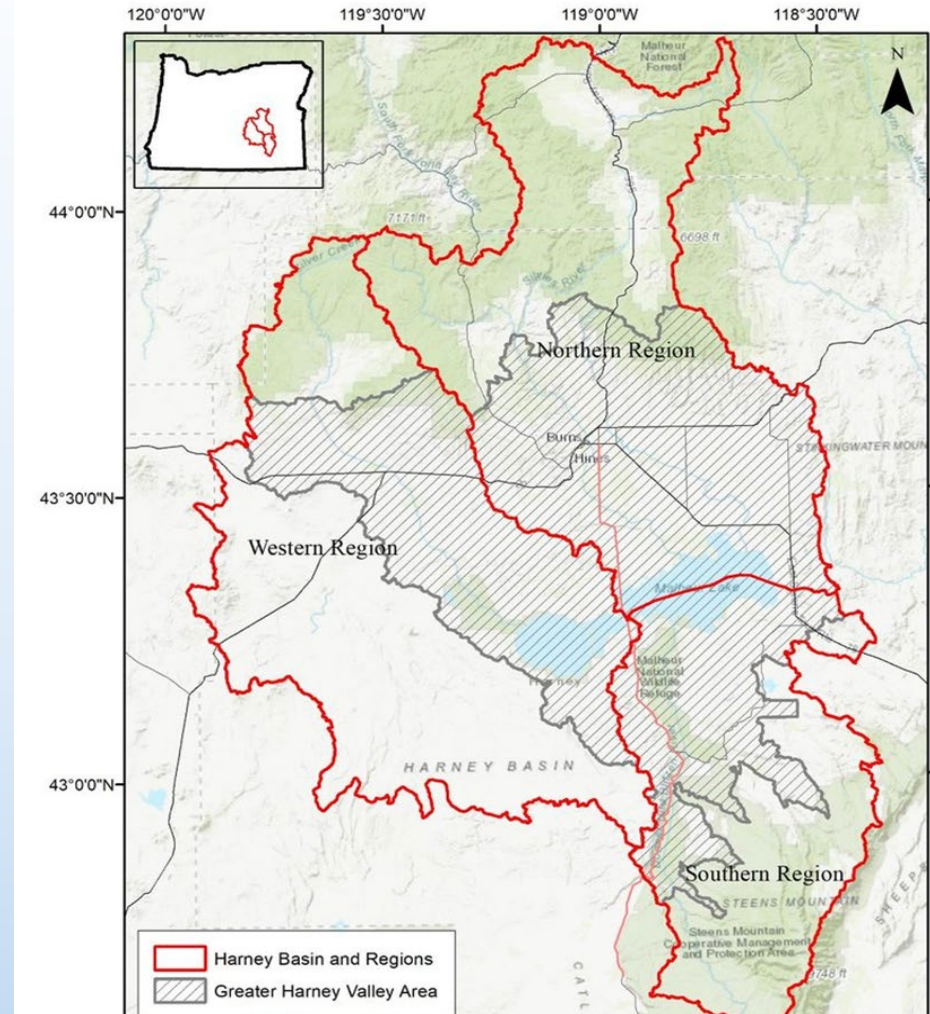
# Watermaster District 10

- Malheur Lake Basin
- Borders Nevada to the South and Malheur Basin (District 9) to the East.
- Largest Watermaster District in Oregon (11,700 Square Miles)



# The Harney Basin

- Located in southeastern Oregon in the Northern Great Basin
- Closed basin
- GHVGAC Designation
- Malheur and Harney Lakes lie in the center of the basin and receive water from all the streams in the basin

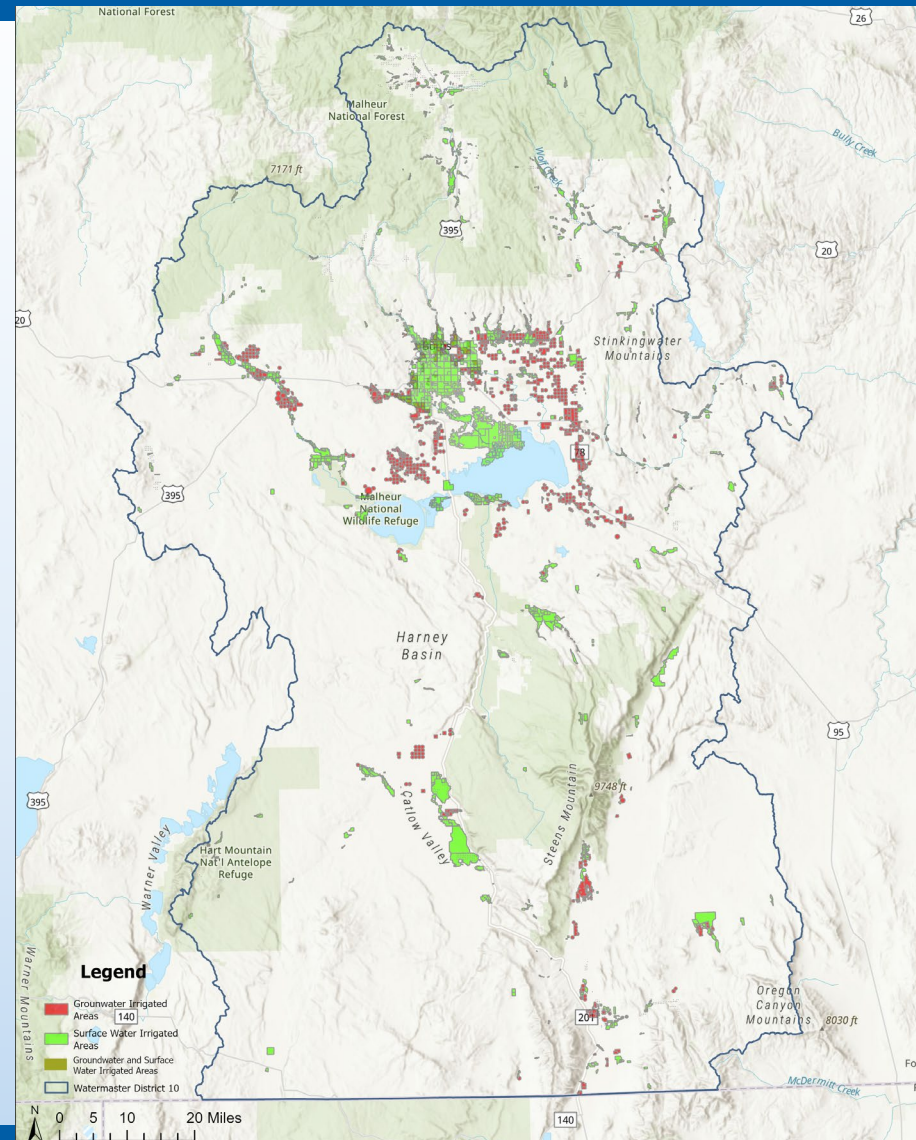




# Surface Water Distribution and Regulation

# Irrigation in District 10

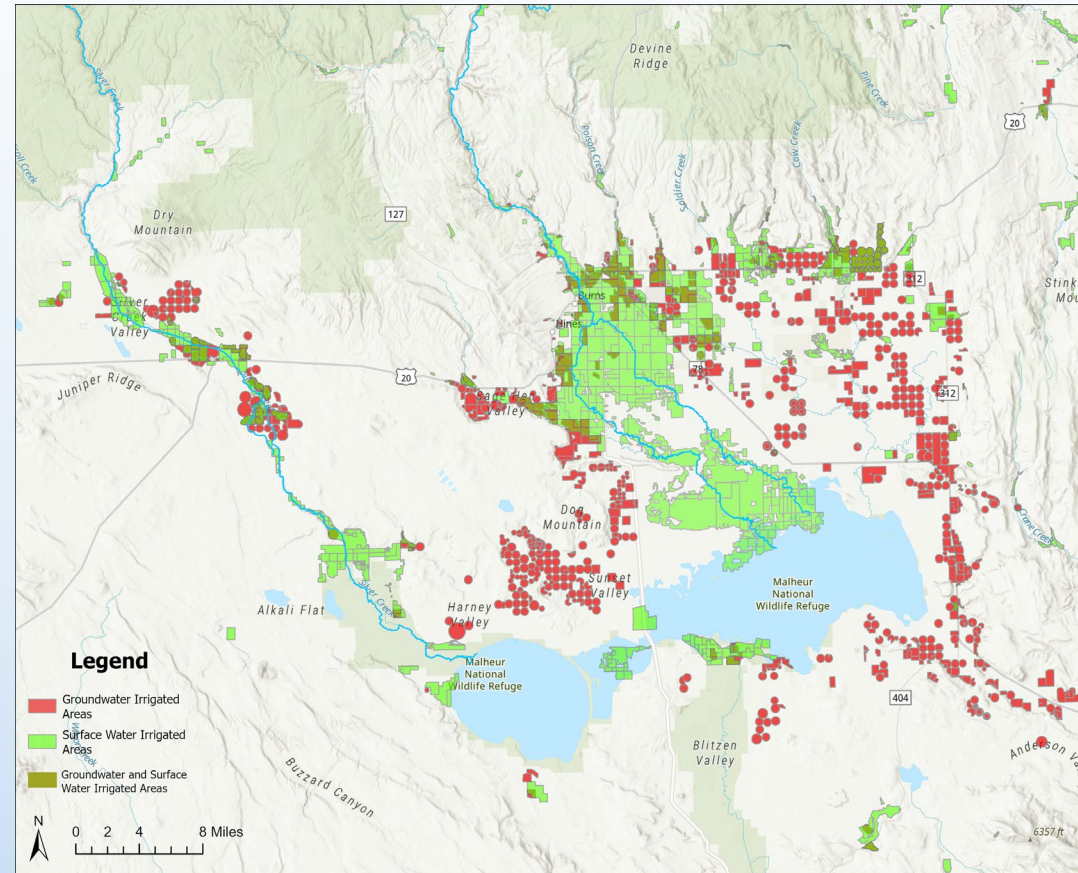
- Major surface water sources: Silvies River, Silver Creek, Donner Und Blitzen River, and N.F. Malheur River (Malheur Basin)
- Regulation occurs primarily on Silvies River and Silver Creek early in the year, then N.F. Malheur mid-summer



# District 10 - Regulation

Watermaster Staff have been working with local stakeholders to improve regulation/distribution on the system including:

- 1) Additional Measurement Devices
- 2) Infrastructure Improvements
- 3) Increased Communication with users.
- 4) Proposed Additional gage on the Silvies R.
- 5) Monitoring for unauthorized groundwater use



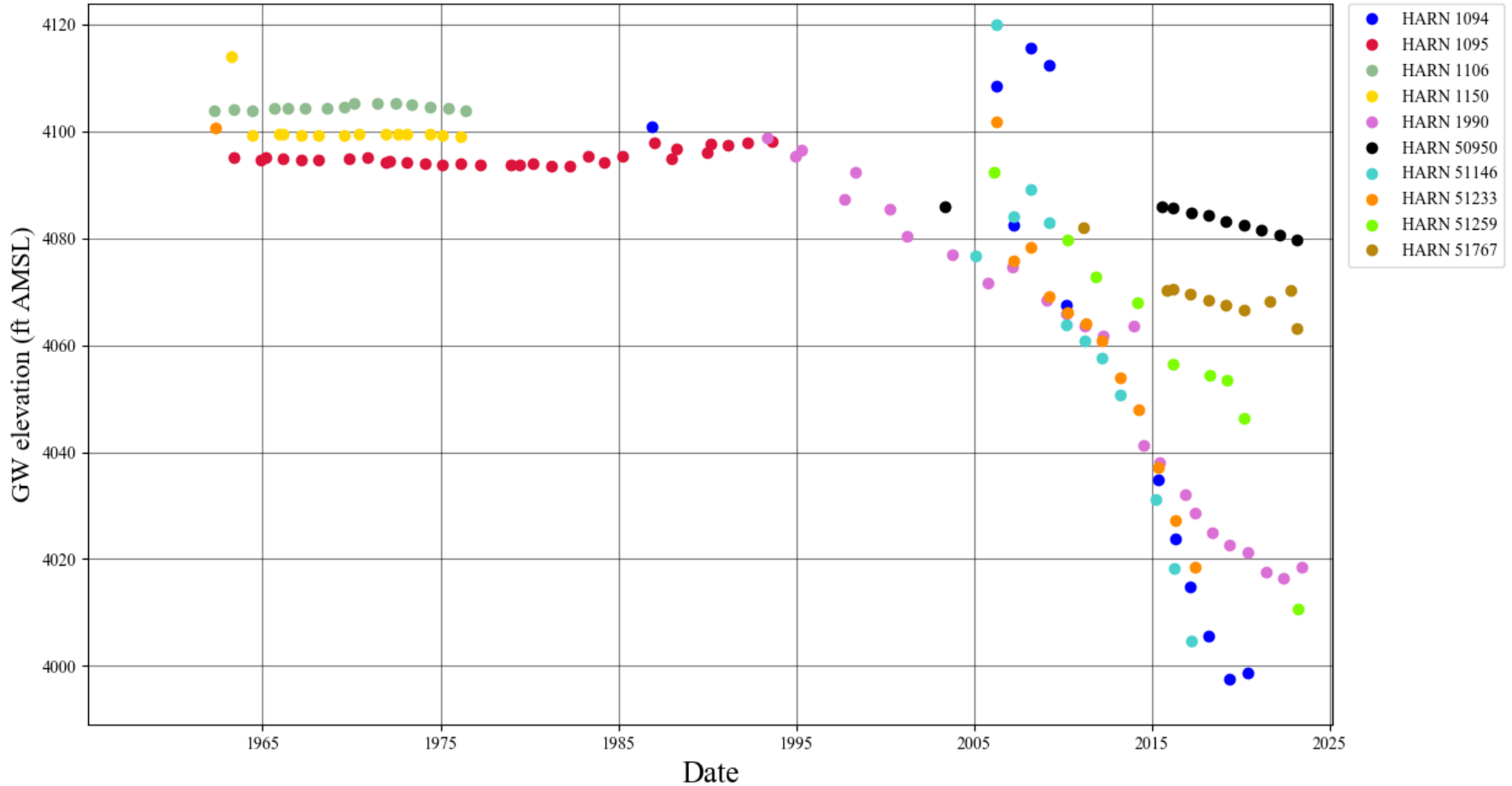
A stylized landscape illustration. The top half shows brown mountains with white snow-capped peaks under a blue sky with white clouds. The bottom half shows rolling green hills with a light beige path or road winding through them. A solid blue horizontal band is positioned between the mountains and the hills, containing the title text.

# Groundwater Challenges in the Basin



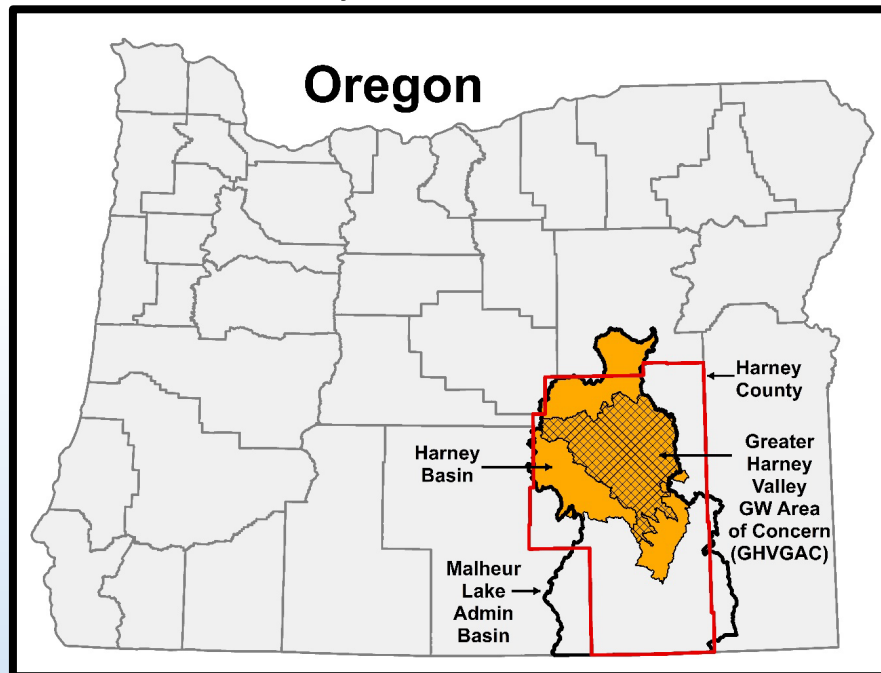
# Why a Groundwater Study?

Observation Well Data

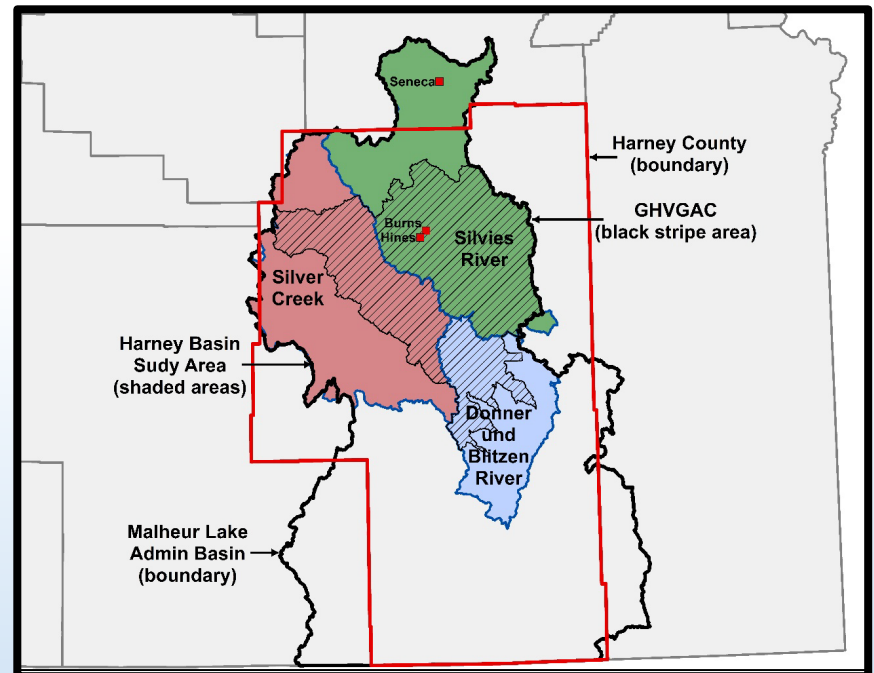


# Groundwater Study Area

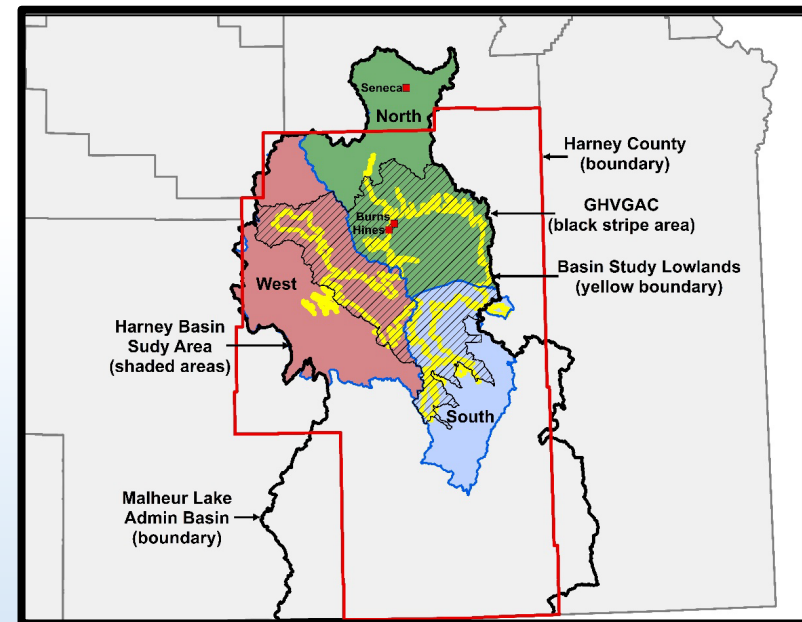
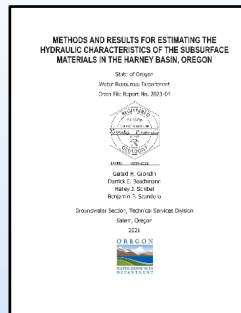
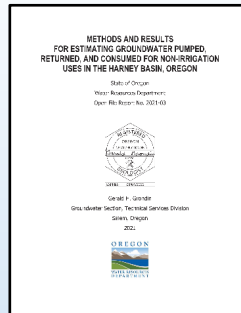
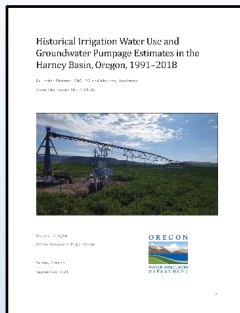
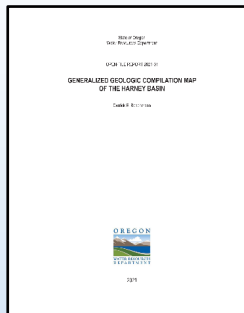
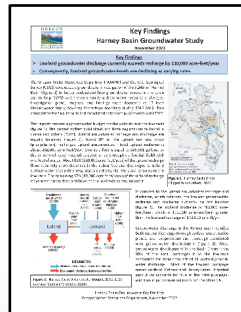
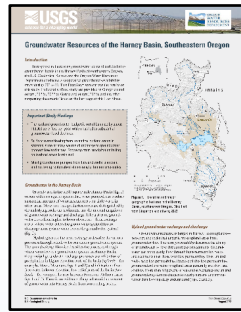
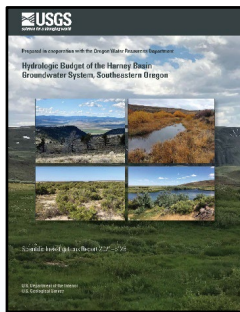
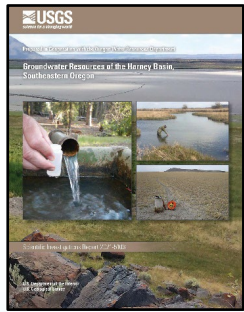
## Harney Basin Groundwater Study Area 5,243 mile<sup>2</sup>



## Harney Basin Watersheds Oregon Water Resources Board (1967)



## Groundwater Reports (6) & Fact Sheets (2) Harney Basin Groundwater Study Area Published 2021-2022 Water Budget Regions & Lowlands



Work in Progress: USGS Groundwater Model & Reports

## Key Takeaways

1. Most Harney Basin groundwater is ancient (recharged 5,000 to 30,000 years ago), and modern groundwater (recharged after 1953) is limited to a thin, shallow zone beneath recharge areas
2. Harney Basin groundwater flows in a single, hydraulically connected system
3. Harney Basin groundwater budget balances in the uplands; it does not balance in the lowlands (deficit of 110,000 acre-feet/year)

The background features a stylized landscape. At the top, there are brown mountains with white snow-capped peaks under a light blue sky with a few white clouds. Below the mountains is a solid blue horizontal band. At the bottom, there are rolling green hills with light tan outlines.

# **Approach to Stabilize Groundwater Level Declines**

# Dual Approach



**REGULATORY**



**VOLUNTARY**

# Regulatory – Division 512 Rulemaking Overview



Rulemaking Advisory Committee RAC # 1



Develop Initial Draft Rules



**Rules Advisory Committee RAC(s) #2 - #5**



Public Comment Period & Hearing(s)



Staff Recommendation & Commission Decision

# Regulatory – Division 512 Rules Advisory Committee

## 32 RAC Members that Represent:

Domestic Well Users

Irrigators

Citizens/Landowners

Local and County Government

Conservation Groups

Tribes

Soil Water Conservation District and Watershed Council

Well Drillers

Federal Agencies

Local Businesses



# Regulatory - Division 512 Rulemaking Timeline



## To address groundwater issues WRD has 3 tools available:

- Critical Groundwater Area designation and curtailment
- Serious Water Management Problem Area (SWMPA) designation
- Classification

# Voluntary Agreements

## What is a Voluntary Agreement?

- A voluntary tool to curtail groundwater use
- Described generally in statute (ORS 537.745)
- Agreement among groundwater users
- Requires approval by the Water Resources Commission
- Has not been used before in Oregon to manage groundwater

## Moving Forward with Voluntary Agreements

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OWRD develops guidance/rules



Division 512 RAC discusses information needed



Groundwater users identify scope, interest, and capacity to develop a voluntary agreement

# Voluntary Program – CREP

- Payment for voluntary cancellation of groundwater rights
- Incentives for environmentally sensitive areas and well abandonment
- Establishes conservation land and allows for future grazing
- Enrollment scheduled fall 2023



The background features a stylized landscape. The top half shows a range of mountains in shades of brown and tan, with white snow-capped peaks. A large, white, fluffy cloud is positioned in the upper center. The bottom half of the image consists of rolling green hills with light tan outlines, set against a solid blue background.

# Harney Community Based Water Planning Collaborative

# Harney Community Based Water Planning Collaborative

- **Final GW Portion of Plan – Complete**
- **Surface Water Step 2 + 3 Reports Review – Complete** (18 documents ~220 pages)
- **Continued input and technical assistance** will be provided on process design and surface water plan development
- **Step 5 Report Review – Expected in Spring 2024**





# Financial Assistance for Domestic Dry Wells





# Two Financial Assistance Programs

	Well Abandonment Repair and Replacement Fund	Harney Well Fund
Authorized	HB 2145 (2021)	HB 3092 (2021)
Geographic Scope	Statewide	Greater Harney Valley Groundwater Area of Concern
Max Grant Award	\$40,000	\$13,500 (per statute)

# Statewide Well Abandonment, Repair and Replacement Fund (WARRF)

Assists households impacted by drought or wildfire to repair or replace and abandon a dry or severely declining well that is no longer sustaining their household.



# Statewide Well Abandonment, Repair and Replacement Fund (WARRF)

## Since June 2022:

- Received 300 applications from 21 counties
- Approved 180 grants
- Restored water to 127 households

Category	Dollar Amount
Authorized by Legislature	\$5,400,000
Awarded as Grants	\$4,762,742
Reimbursed	\$3,311,537
Available to Award	\$637,258

# Harney Domestic Well Remediation Fund

- Authorized by HB 3092 during 2021 session
- Financial assistance for replacing, repairing or deepening domestic personal use wells
- Affected wells within the Greater Harney Valley Groundwater Area of Concern
- Prioritize grants for wells:
  - Owned by or serving persons of lower or moderate income
  - Based on the severity of changes and declines in ground water

# Harney Domestic Well Remediation Fund

## Fall 2023:

- Establish fund criteria and requirements
- Determine prioritization process
- Stakeholder outreach
- Establish processes and develop application materials

## Early 2024:

- Launch the fund

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