

Oregon Water Data Portal Project Update

Thursday, Nov. 14



Presenters



Carrie Hertel, OSU
Director
Center for Applied
Systems & Software



Audrey Hatch, OWEB
Conservation Outcomes
Coordinator



Josh Weber, DEQ
Project Manager



Michele Martin, DEQ
Project Manager



Sarah Mattecheck, DEQ
Basin Coordinator



Lillian Watson, IoW
Policy Associate

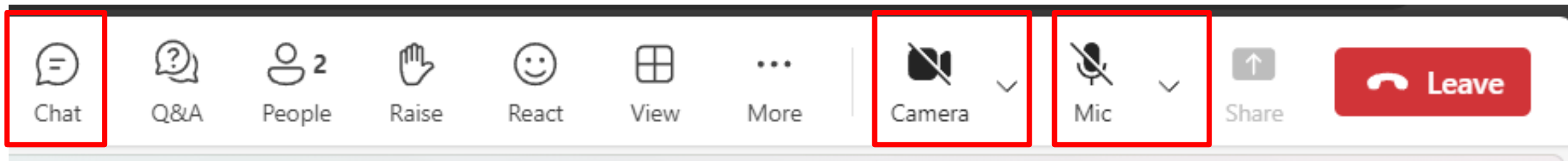


Ben Scandella, OWRD
Senior Groundwater Data
Developer



Agenda

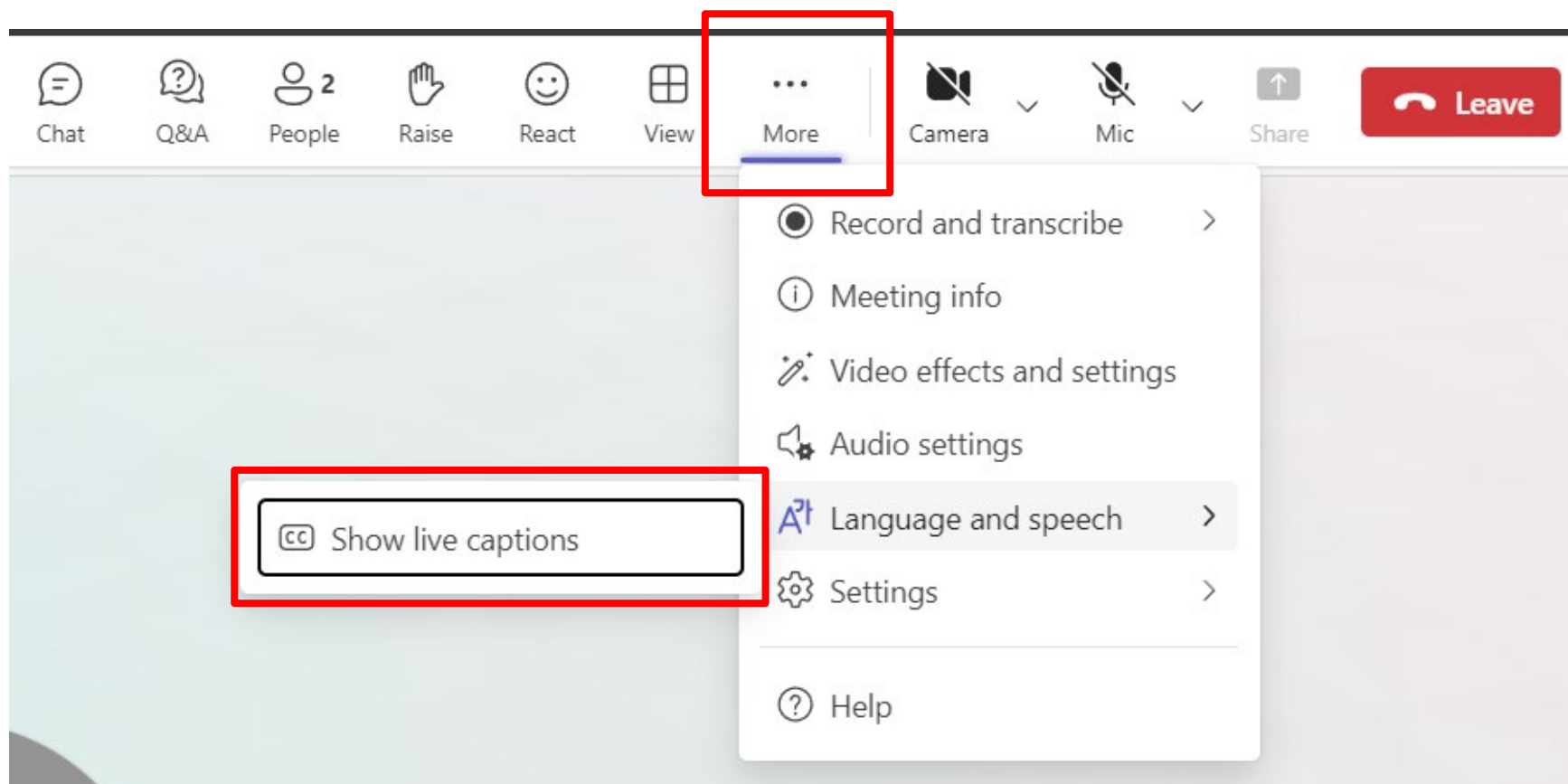
- Review accomplishments
- Lessons learned event with Texas, New Mexico, and Idaho
- Pilot portal development
- Data priorities and themes
- Governance plan recommendations
- Next steps for the Oregon Water Data Portal



- Chat: Use for technical issues or help
- Camera & Mic: Please keep your microphone on mute unless speaking

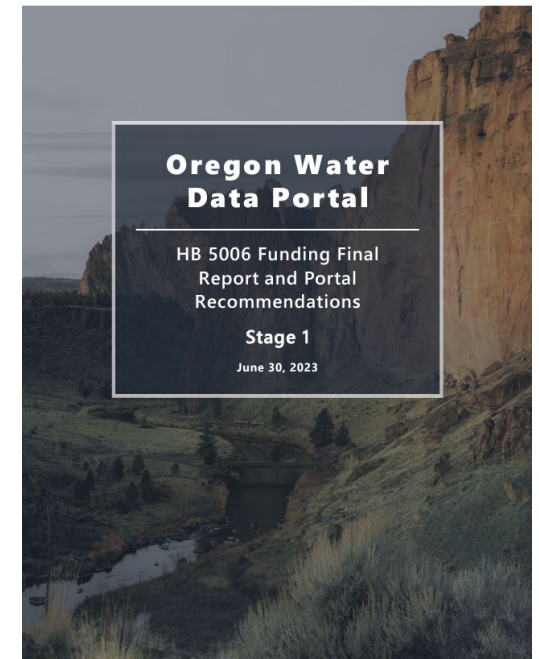
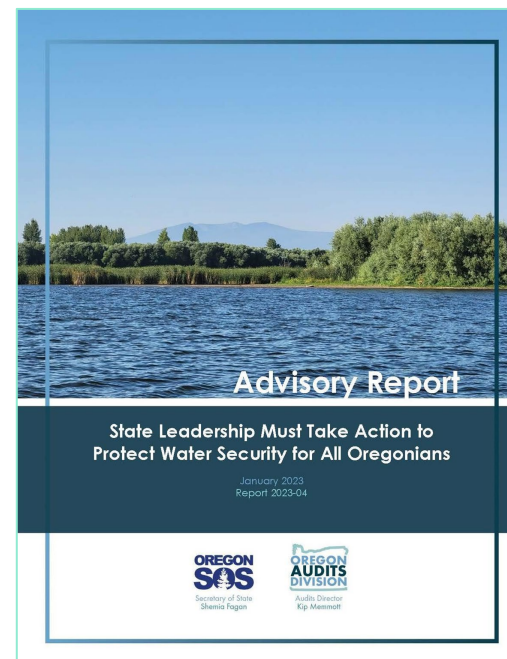
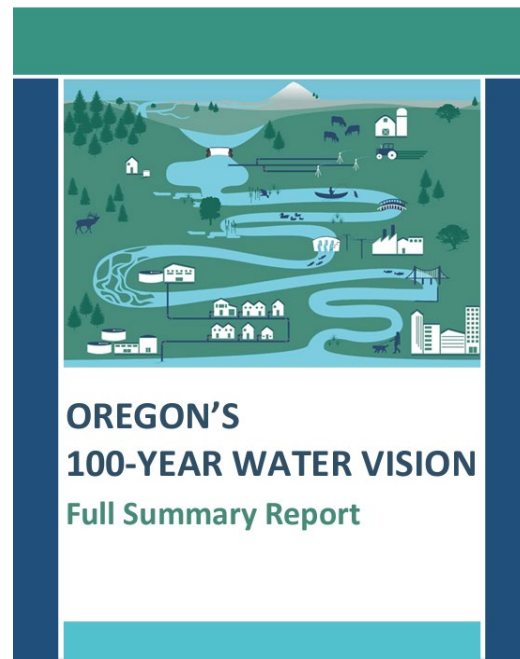
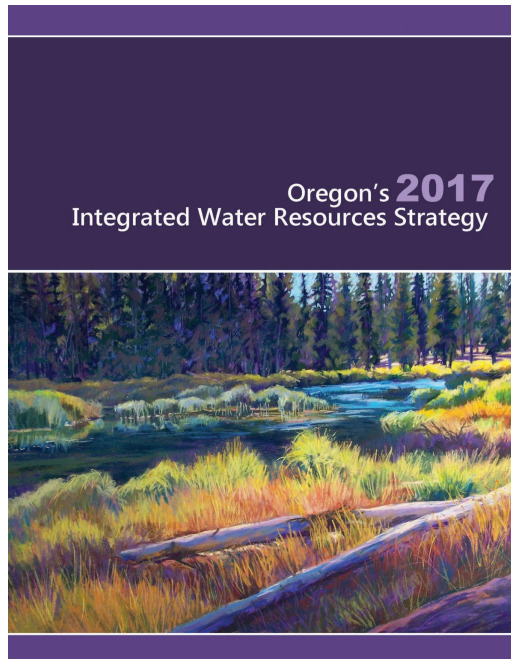
This session is being recorded.

Live Captioning



HB 5006 (2021) – Water Data

“ ...there is appropriated to the Department of Environmental Quality, for the biennium beginning July 1, 2021, out of the General Fund, the amount of \$350,000, to begin initial scoping and design of a database framework of water and infrastructure data. ”



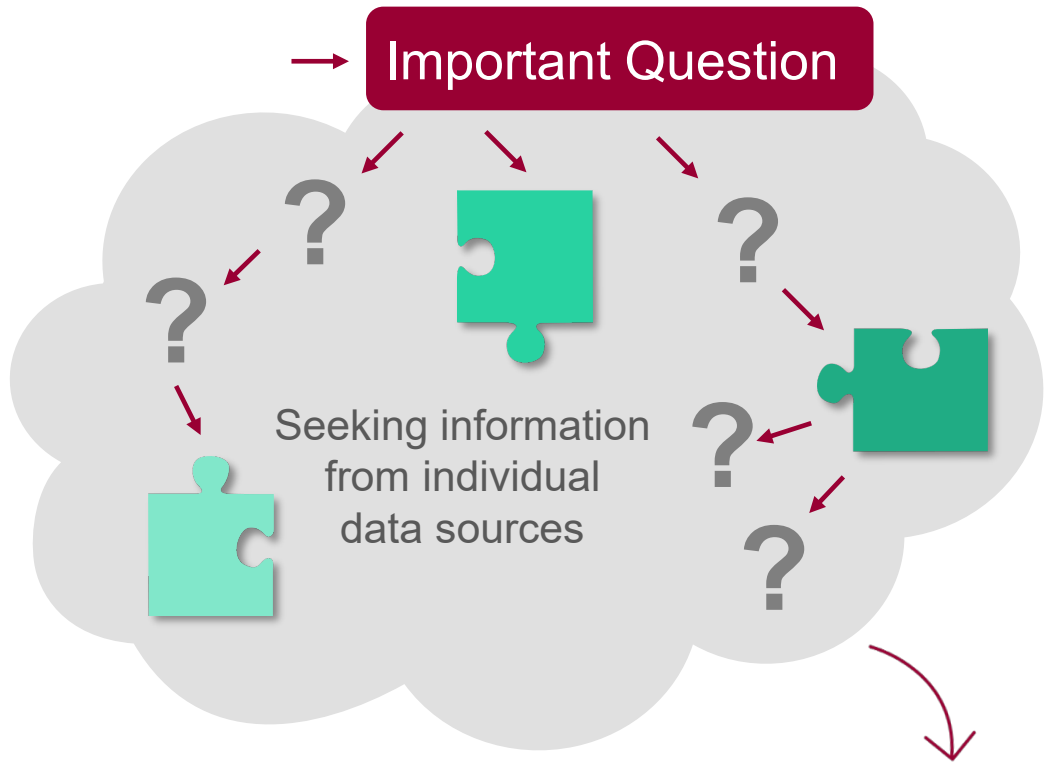
Oregon Water Data Portal - Project Phases

1 **July 2021 – June 2023** Plan project 

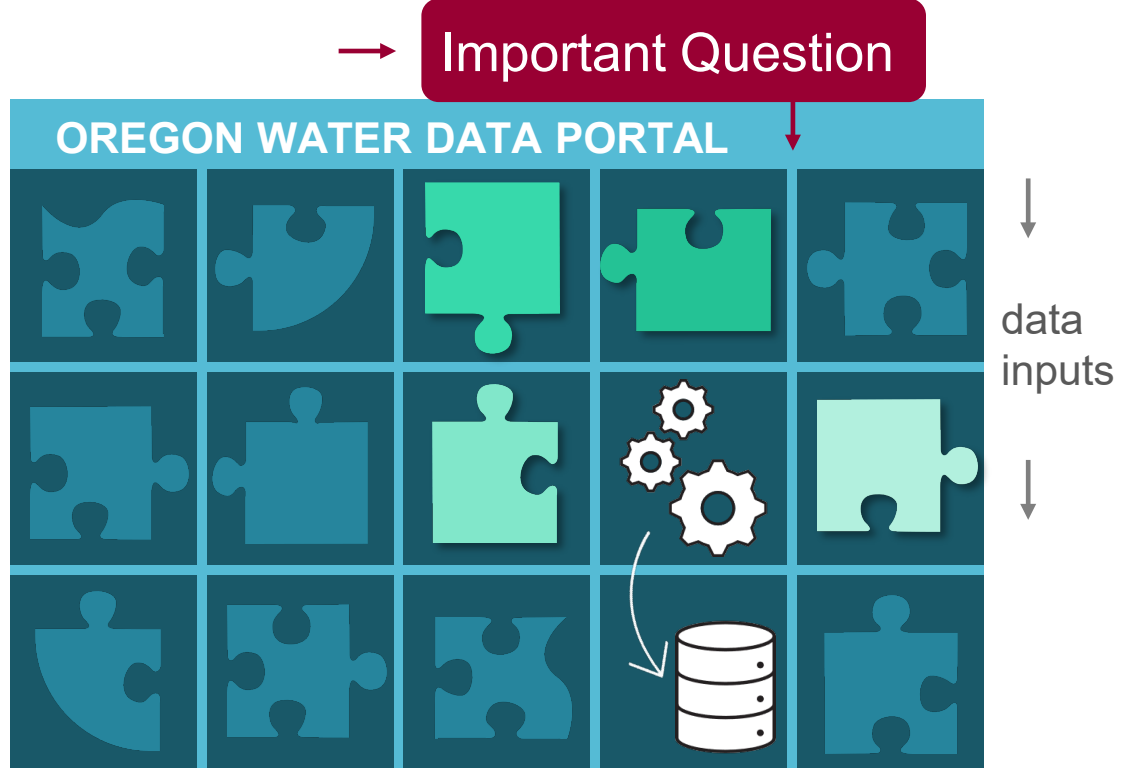
2 **July 2023 – June 2025** Pilot project 

3+ **July 2025 and future phases**
Agency data projects and establishing a portal based on the pilot portal 

OWDP Vision: Efficient and Effective Information Accessibility

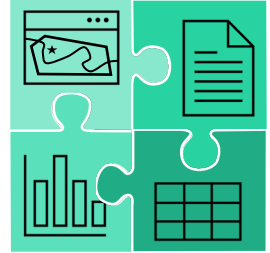


= incomplete, time-consuming answer

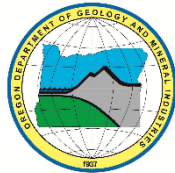


= complete, timely answer

- **Efficient** for those asking questions
- **Effective** for finding legitimate answers
- **Modernize** agency processes & infrastructure



Statewide Collaboration

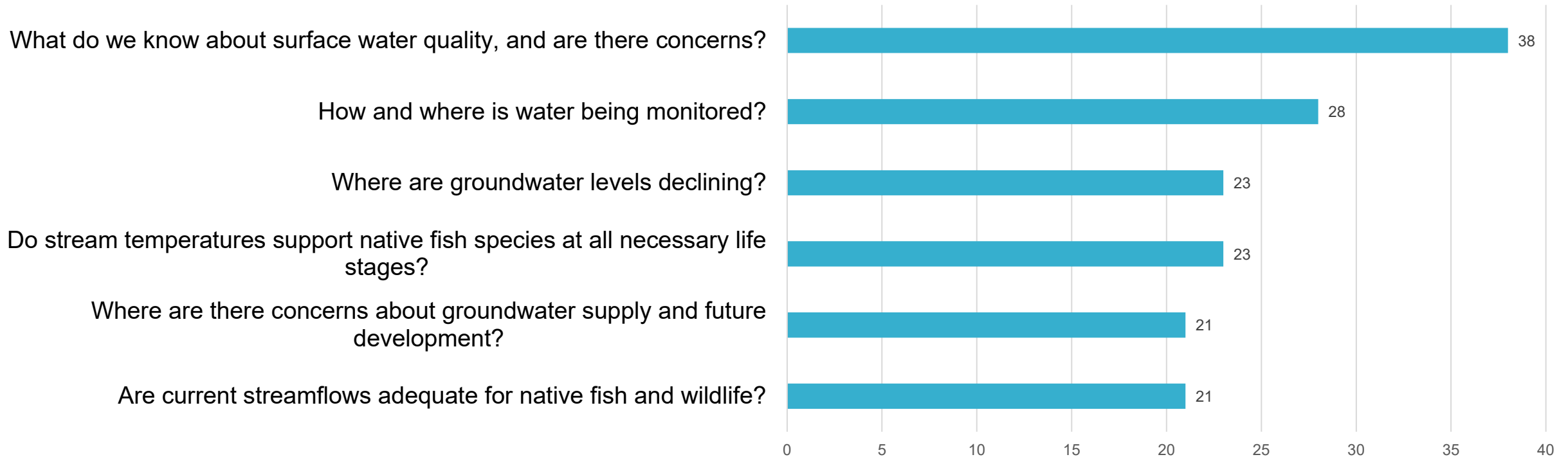


Water Data Portal Listening Sessions and Previous Engagement

- OWDP Listening sessions, 2022: Water Associations, Water Data, and Users Tribal Engagement
- Built on Water Data Technical Workshop, 2019 (Water Vision)
- Polls, breakout discussions, surveys: your questions and needs drive this portal



2022 Listening Session: Important Questions



Oregon Water Data Portal report engagement summary page 41:

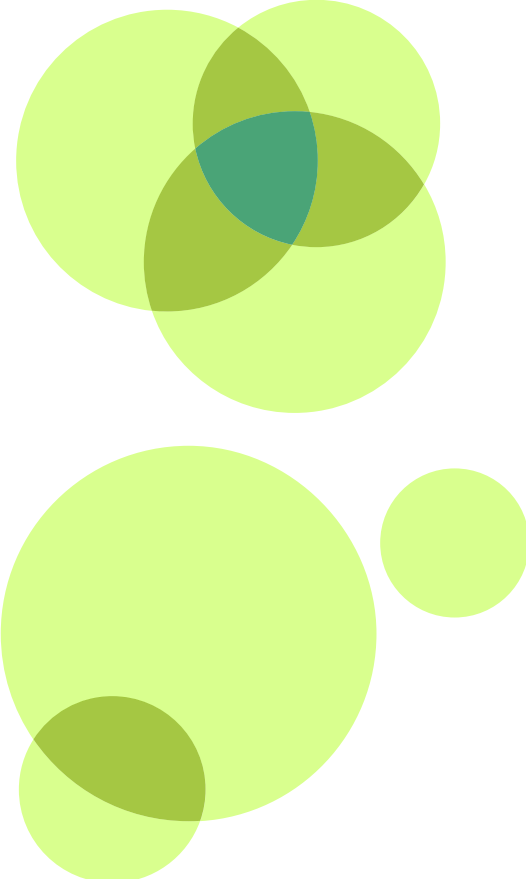
<https://www.oregon.gov/deq/wq/Documents/OregonWaterDataPortal-FinalReport.pdf>

Example Questions: State Datasets and Readiness

Question	Supporting data types	Data status	Ready for Data Portal?
Where have watershed restoration projects occurred?	Project inventory	Ready	Pilot portal ready
Where and when is water available for additional allocation? Allow prospective applicants to pre-screen major criteria.	Location-specific rules	Ready	Pilot portal ready, with limits
	Surface water availability	Available across most of the state	
	Groundwater level trends	Available but requires additional analysis	
	Groundwater connection to streams	Available but requires additional analysis	
What is the groundwater budget for my aquifer?	Water right allocations	Needs analysis and geographic association	Long-term project
	Groundwater recharge	In progress at basin scale	
	Aquifers and their budgets	Basin Assessments proposed to begin 2026	
		Processing reports from Groundwater Basin Studies (not underlying datasets)	
		Statewide aquifer budgets not yet planned	

Identifying Gaps and Prioritizing Questions

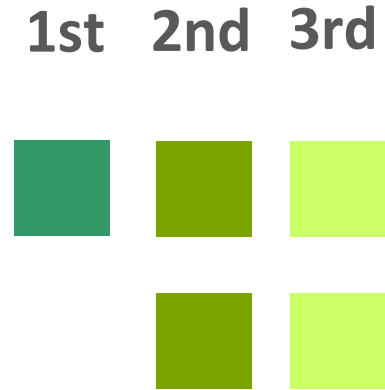
Water Concerns and Questions



Agency Water Data Collected and Evaluated



Prioritize Questions



OWDP Identifies Gaps and Needs



Internet of Water Technology Adoption Program

- **What is TAP?**

An in-situ training program to help public agencies modernize their water data through technological and organizational change.

- **TAP in Oregon**

In April 2024 we held the second annual TAP workshop for the OWDP project.

- **Participants**

Agency leadership, staff, and subject matter experts

Representatives from New Mexico, Texas, and Idaho who shared lessons learned from similar projects

TAP Insights - Informal Dinner



Trust Building



Diverse Funding
Strategies



Risk Of
Inaction

TAP Insights - Portal Interface & Use Cases



Interface
Flexibility



Graceful
Degradation
across Devices



Clear
Communication
of Data
Limitations



Early
Engagement
with Tribal
Nations



Integration of
Dynamic User
Feedback

TAP Insights - Long-term Sustainability



Standardized
Data Formats



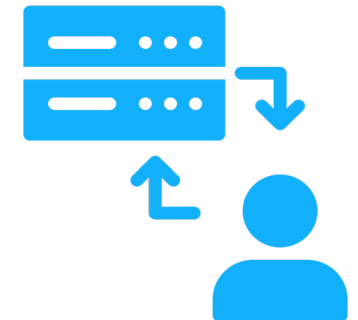
Clear
Governance
Structures



Organizational
& Cultural
Change



Data Privacy
& Security



User-Centered
Design

TAP - Minimum Viable Product & Next Steps

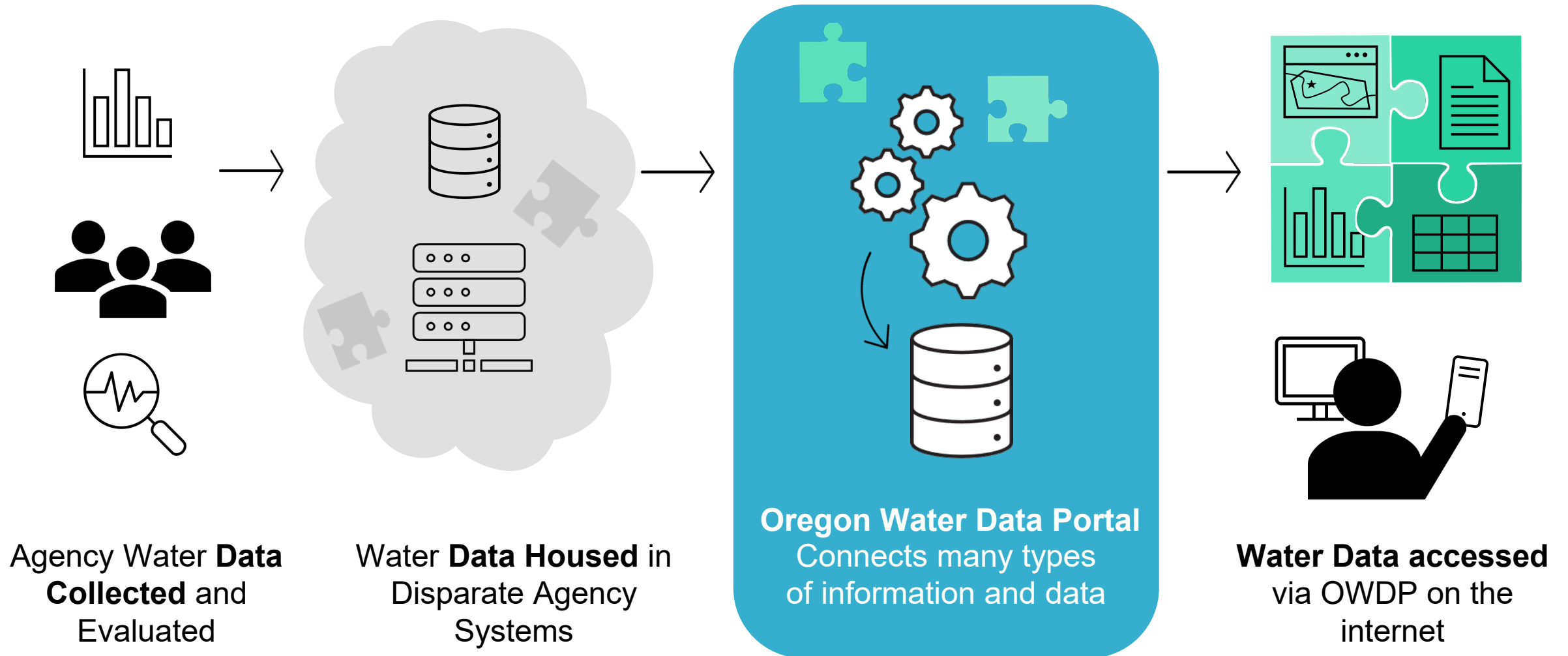
Minimum Viable Product: a pilot data portal that harvests continuous temperature data and other datasets from state agencies and:

1. Shows data in a single location
2. Allows users to download data in a machine-readable format

Immediate Next Steps:

1. Propose a governance structure for the OWDP implementation phase that specifies decision-making authority on each team.
2. Select two additional areas of focus for the pilot portal, identify relevant datasets, and assign readiness categories to each dataset.

Water Data Portals



Pilot Portal Plan



Build the pilot portal website & infrastructure



Prepare "Seed" data



Preliminary data standardization and integration

Implementation
Aug – Nov 2024



Testing
Dec 2024



Available for
Showcase
Jan 2025



Continued
Improvement
Jan – June 2025

Supported by Internet of Water Coalition & OSU's Institute for Natural Resources



CENTER FOR
**GEOSPATIAL
SOLUTIONS**

Lincoln Institute of Land Policy



INSTITUTE FOR
NATURAL RESOURCES



**Oregon State
University**

☰ 🔍 New ▾ 🔔 👤 Carrie ▾

Pilot Oregon Water Data Portal [Home](#) [Catalog](#) [Water Categories](#) [Maps & Tools](#) [Resources](#)

PILOT OREGON WATER DATA PORTAL






A collaborative effort to share and integrate Oregon's water data

🔍 Search

Pond: Courtesy Oregon Statewide In

Water Categories

Explore essential aspects of Oregon's water resources. Select a category below to dive deeper into Oregon's water data and discover resources for each specific area.

-  [Groundwater](#)
-  [Surface Water](#)
-  [Water Quality](#)
-  [Water Quantity](#)
- 

**Pilot portal draft,
subject to change**

Pilot Oregon Water Data Portal

Home Catalog Water Categories Maps & Tools Resources

Search Search

All (45) Data (19) Documents (20) Apps & Maps (6)

Filters Reset 1 - 12 of 19 Relevance

Location

Find address or place

Results: 19

Portland

Filter as map moves

Source

Filter options

- State of Oregon (6)
- Robert Harmon, GISP, Oregon Water Resources Dept., GIS Coordinator (2)

Dataset

[Oregon Wetland Database](#)

State of Oregon

The Oregon Wetlands Database is a key component of the Oregon Wetland Explorer data portal, and is intended to (1) serve as a framework for storing and disseminating information on the state's wetlands, an...

Type: Feature Service Date updated: 4/30/2024

Tags: Bioscience, Wetlands, BioscienceFramework, Orego... Categories: Bioscience, Land Use Land Cover, Hydrography

Dataset

[Water Rights](#)

Robert Harmon, GISP, Oregon Water Resources Dept., GIS Coordinator

Points of Diversion (POD): Water right surface Points of Diversion (POD) and groundwater Points of Appropriation (POA) locations in the state of Oregon. They are collectively referred to as PODs. ----- Places...

Type: Feature Service Date updated: 9/16/2024

Tags: places of use, points of diversion, water rights, Oreg... Categories: Hydrography

Dataset

Pilot portal draft, subject to change

Pilot Oregon Water Data Portal

Surface Water Drinking Water Source Areas

✓ Authoritative

OR FRAMEWORK
State of Oregon

Summary

This layer was developed in order to spatially reference the watersheds that supply drinking water to surface water intakes for Public Water Systems (PWS) within the state of Oregon. Source water assessments were completed for these PWS's in accordance with the 1996 Amendments to the Safe Drinking Water Act and Oregon's 1999 Source Water Assessment Plan. The original list of PWSs was generated in 1999, however additional PWSs may be added

[Read More](#) ▾

[View Full Details](#)

[Download](#)

Details

- Dataset**
Feature Layer
- Unknown**
Info Updated: June 28, 2023
- As Needed**

I want to use this >

Records: 261

Esri, HERE, Garmin, USGS, EPA, NPS | All original surface water source area files and combined GIS spatial data

Pilot portal draft,
subject to change



New ▾



Carrie ▾

Water Categories

Explore essential aspects of Oregon's water resources. This page provides a gateway to critical water data categories, helping you understand and access information on groundwater, surface water, water quality, water quantity, and infrastructure. Select a category below to dive deeper into Oregon's water data and discover resources for each specific area.



Groundwater

Data and insights on Oregon's groundwater resources.

[Learn more](#)



Surface Water

Information on lakes, rivers, and streams across the state.

[Learn more](#)



Water Quality

Explore water quality metrics and initiatives.

[Learn more](#)



Water Quantity

Data on water supply, usage, and conservation.

[Learn more](#)



Infrastructure

Details on water infrastructure projects and maintenance.

[Learn more](#)

OGC SensorThings API Docu x HubKit in a box - Home x +

localhost:8999

Internet of Water COALITION

SETTINGS

HOME SERVICES WIS2BOX DOCUMENTATION

HONEY CR NR PLUSH, OR

Observed Property

- Mean daily flow
- Stage instantaneous
- Flow instantaneous

PLOT TABLE X

Mean daily flow

Date	Mean daily flow
Aug 25, 2024	0.4
Sep 1	1.3
Sep 8	0.2
Sep 15	0.2
Sep 18	2.3
Sep 22	0.4
Sep 29	0.2
Oct 6	0.3

Powered by [hub2box-ui](#) 1.0.0

Pilot portal draft,
subject to change

What will the pilot portal include?

Current pilot content

- Surface water temperature data
- Foundational water datasets
(includes but not limited to)
 - Watersheds and waterways
 - Management boundaries
 - Environmental features
- Includes data from 5 state agencies and the USGS

Potential future content

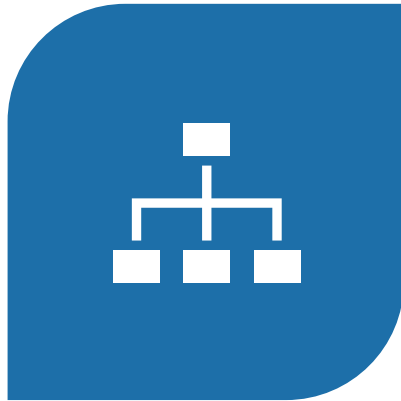
- Additional water quality parameters
- Water quantity data
- Water funding opportunities

The team is currently evaluating these data areas based on data availability and applicability to user needs

Current Governance Structure



Future Governance Plan



Project plan, structure, and oversight



Engagement and feedback from portal users



Incorporating additional data sources along with Oregon data agency work

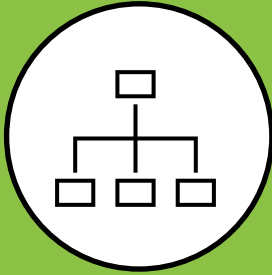
Taking us to the end of Phase 2



**Develop
legislative
report**



**Complete
and release
pilot portal**



**Refine the
governance
draft plan**



**Prepare for
the next
project team**



**Develop
phase 3
project plan**



**Evaluate
inventory of
data sets**

A sunset scene over a body of water. The sun is low on the horizon, casting a bright orange glow across the sky and reflecting on the water. Silhouettes of trees and a building are visible against the bright sky. In the foreground, there are dark, out-of-focus branches with leaves.

Questions?



Contacts

Project Email

OWDP@deq.oregon.gov

Josh Weber, OWDP Project Manager,

Joshua.Weber@deq.oregon.gov

GovDelivery for future notifications

https://public.govdelivery.com/accounts/ORDEQ/subscriber/new?topic_id=ORDEQ_706