

OREGON



WATER RESOURCES  
DEPARTMENT

# Groundwater Allocation Meeting

Oregon Water Resources Department

Facilitated by Jamie Damon, Kearns & West

September/October 2022

# Virtual Attendees



Please mute yourself when not speaking



Use the "Raise your hand" button or press \*9 on your phone



Use the chat to request technical assistance and ask questions



Use webcam as much as you are comfortable

# Agenda

Time	Topic
2:00 p.m.	Welcome and Introductions
2:10 p.m.	Oregon's groundwater allocation process
3:45 p.m.	Public Input Session <ul style="list-style-type: none"><li>• Clarifying Questions</li><li>• Share your Ideas</li></ul>
3:50 p.m.	Next Steps
4:00 p.m.	Adjourn

# Meeting Guidelines

In an effort to be respectful of everyone's time, we ask the following:

- Honor the agenda.
- Participate actively and respectfully.
- Be mindful of your speaking time.
- Respect differences of opinion and perspectives.
- Stay on mute when you're not speaking.
- Refrain from sidebar conversations.
- Provide input via the online survey, verbally at meetings, or via the survey form.





# OWRD and Kearns & West

## OWRD

### **Ivan Gall**

Interim Deputy Director

### **Annette Liebe**

Technical Services Division

Administrator

### **Justin Iverson**

Groundwater Section Manager

## Kearns & West

### **Jamie Damon**

Vice President/Facilitator

### **Bianca Valdez**

Associate

# Allocation Process Update

## Will:

- Update the assessment of water availability for new/future groundwater rights
- Protect existing users and improve groundwater sustainability

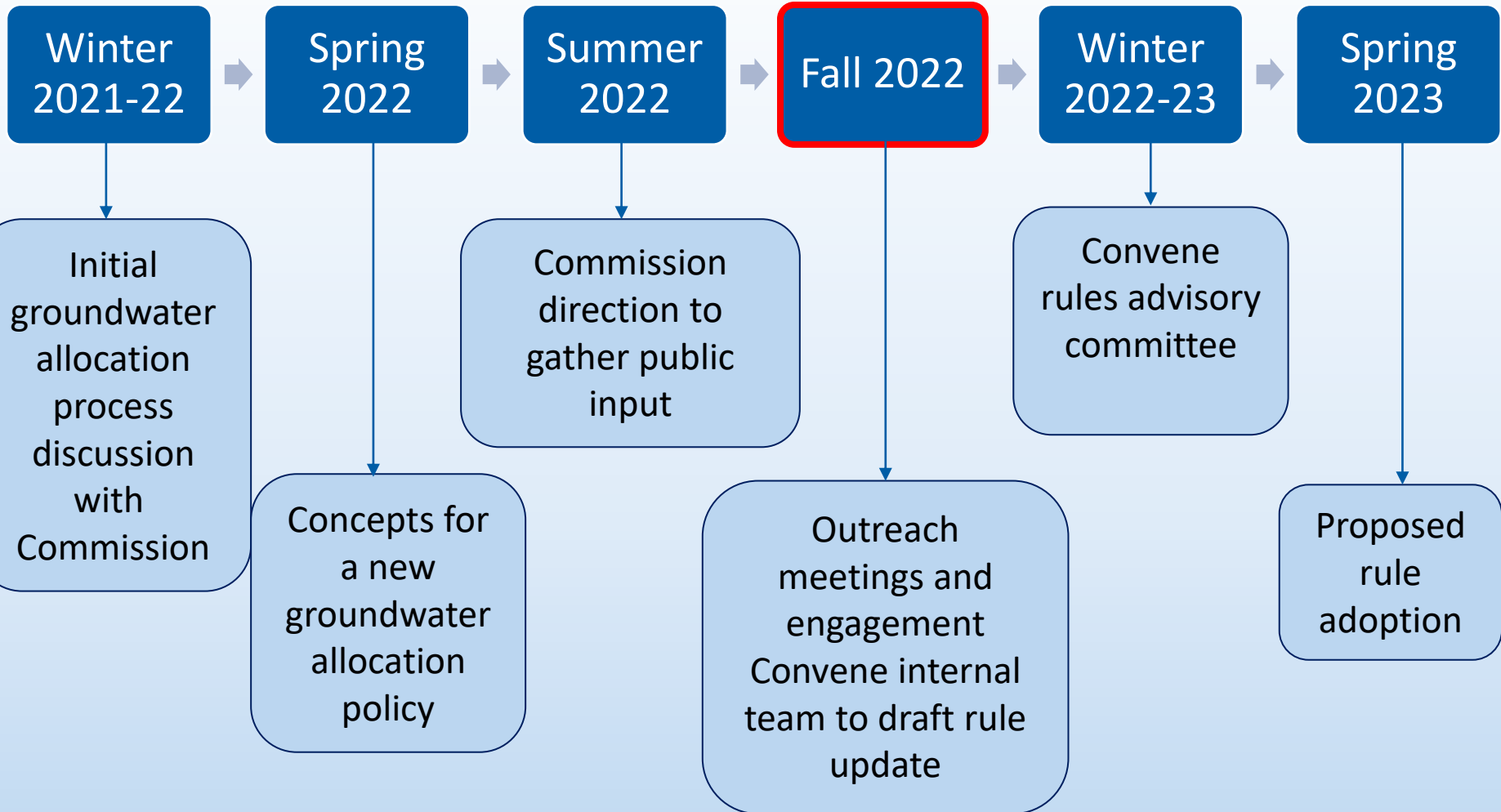
## Will Not:

- Affect exempt groundwater use or exempt use wells
- Affect regulation of existing water rights
- Affect the water right transfer process

# Exempt Groundwater Uses

- 15,000 gallons per day (gpd) single or group domestic
- 5,000 gpd industrial or commercial
- Stockwater
- Irrigation up to one-half acre of lawn or non-commercial garden
- 3 other seldom-used exemptions

# Timeline for Updating Groundwater Allocation Approach





# Background Concepts

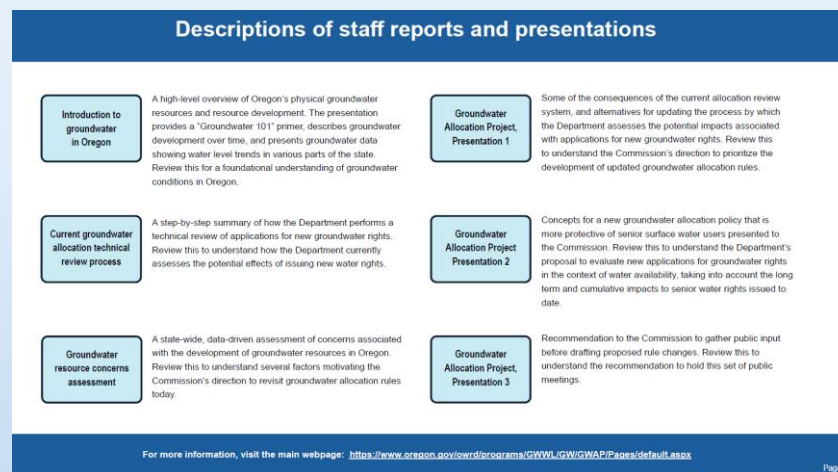
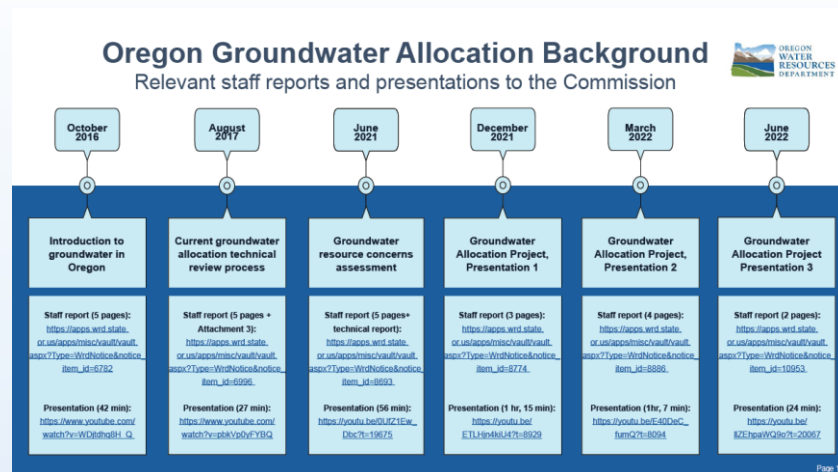


## Groundwater Systems and Water Right Allocation Past and Future

Justin Iverson, Groundwater Manager  
September/October 2022

Building on several past Commission topics; summarized tonight in two parts:

1. Key groundwater concepts
2. Allocation issues and proposed solutions





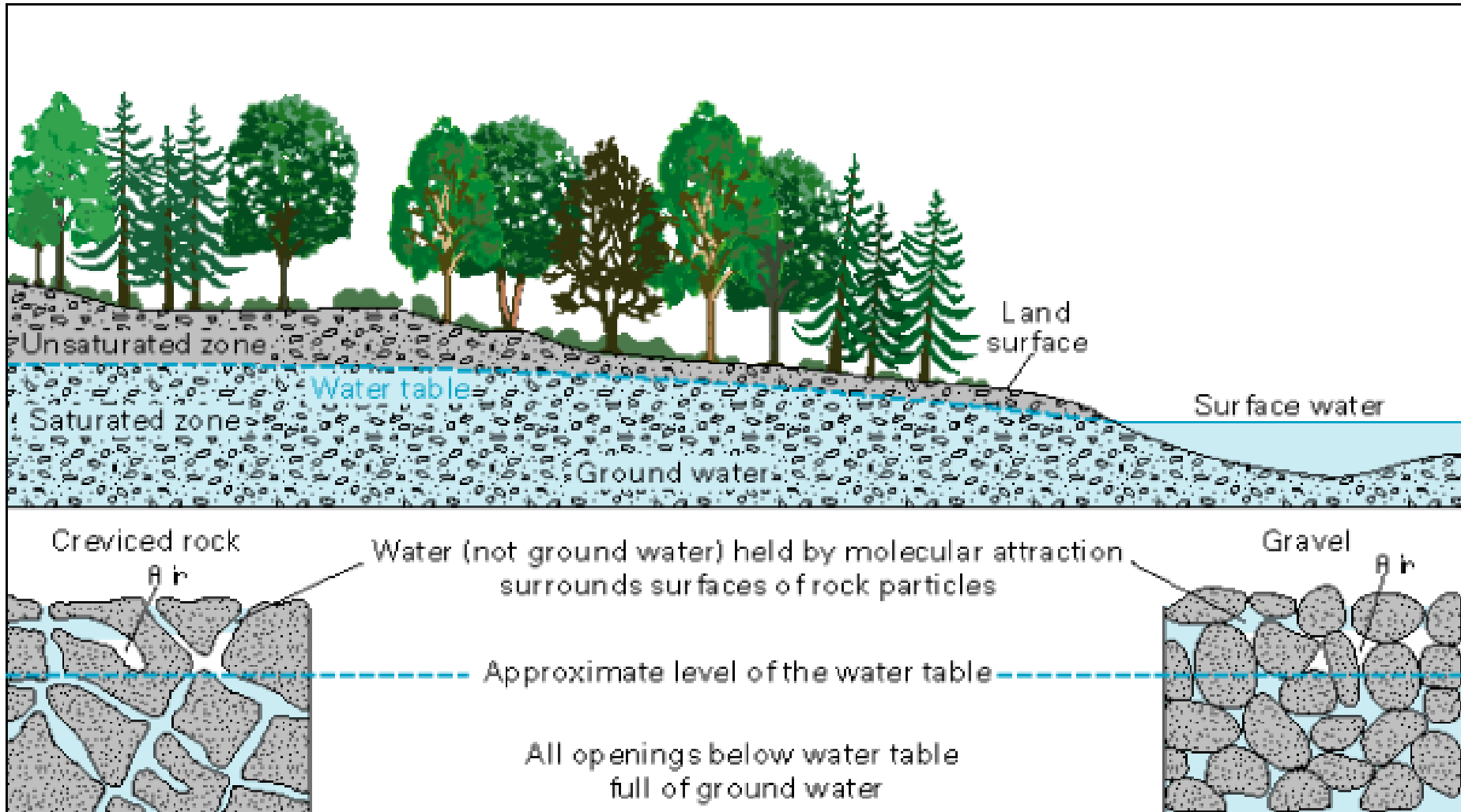
# Key Groundwater Concepts

# Section Roadmap

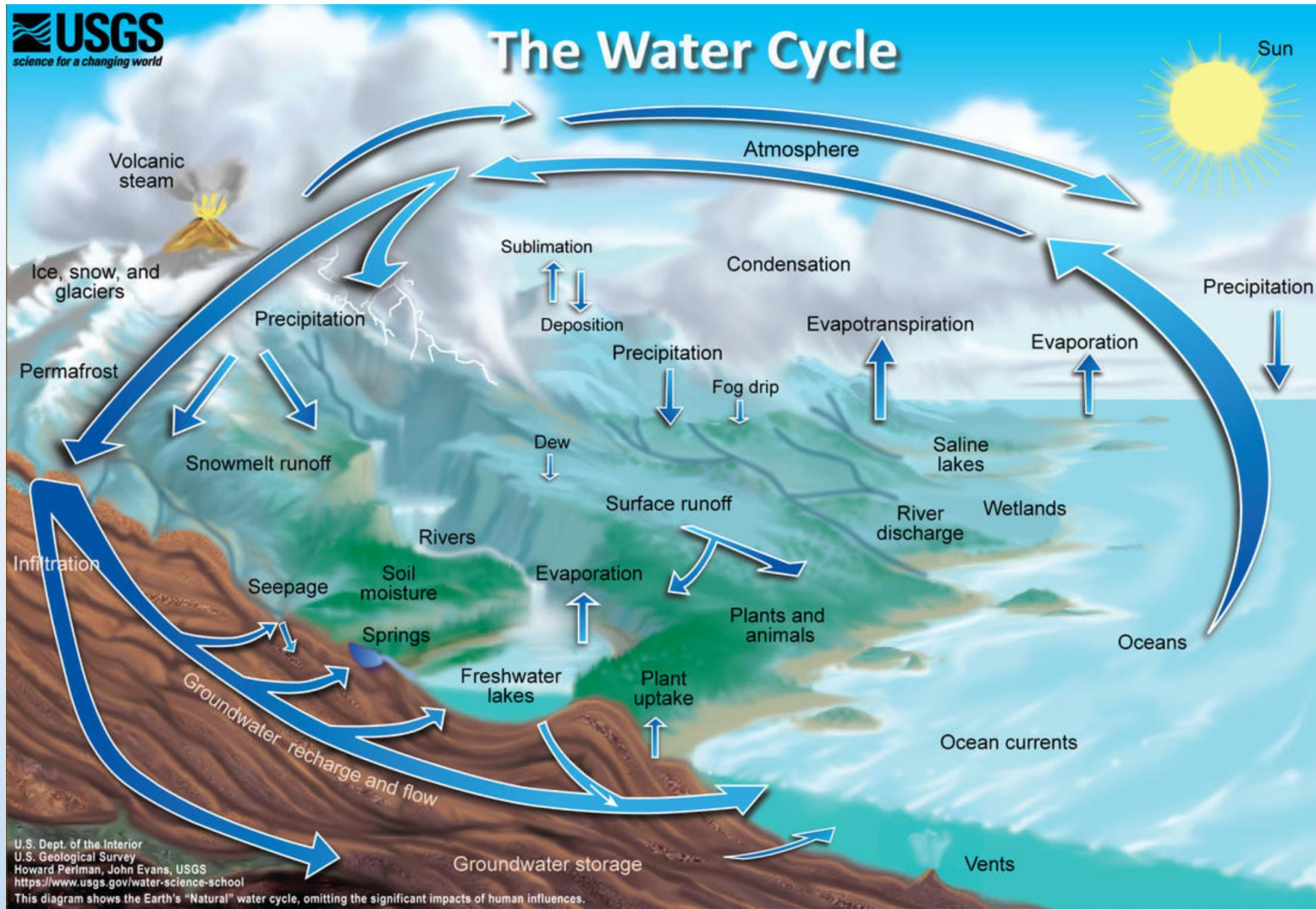
- What is Groundwater
- Groundwater in the hydrologic cycle
- The source of groundwater to wells



# What is Groundwater?

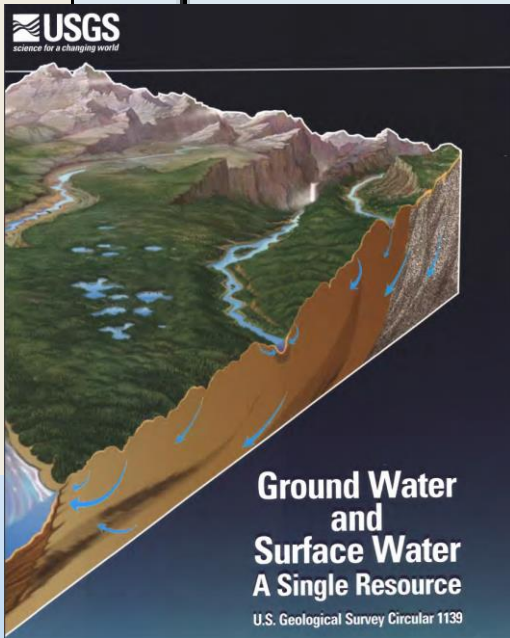
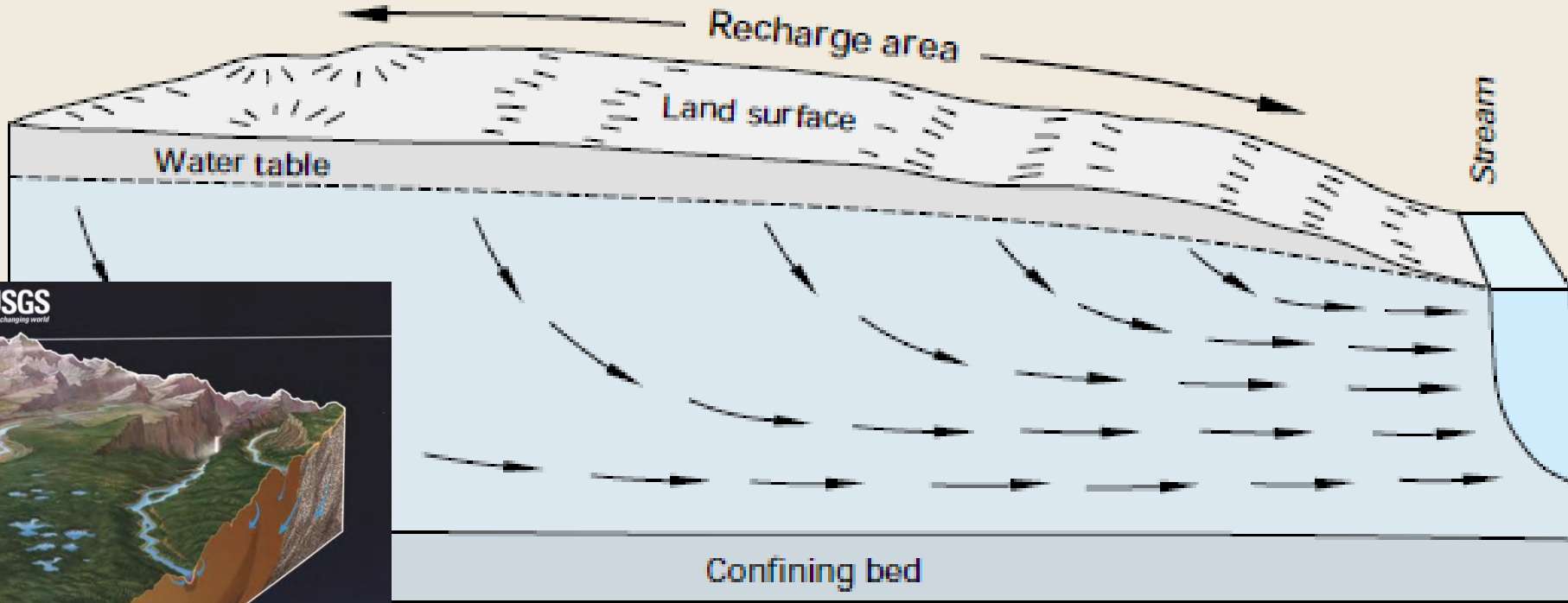


# Groundwater in the Water Cycle



# Groundwater to Surface Water

A



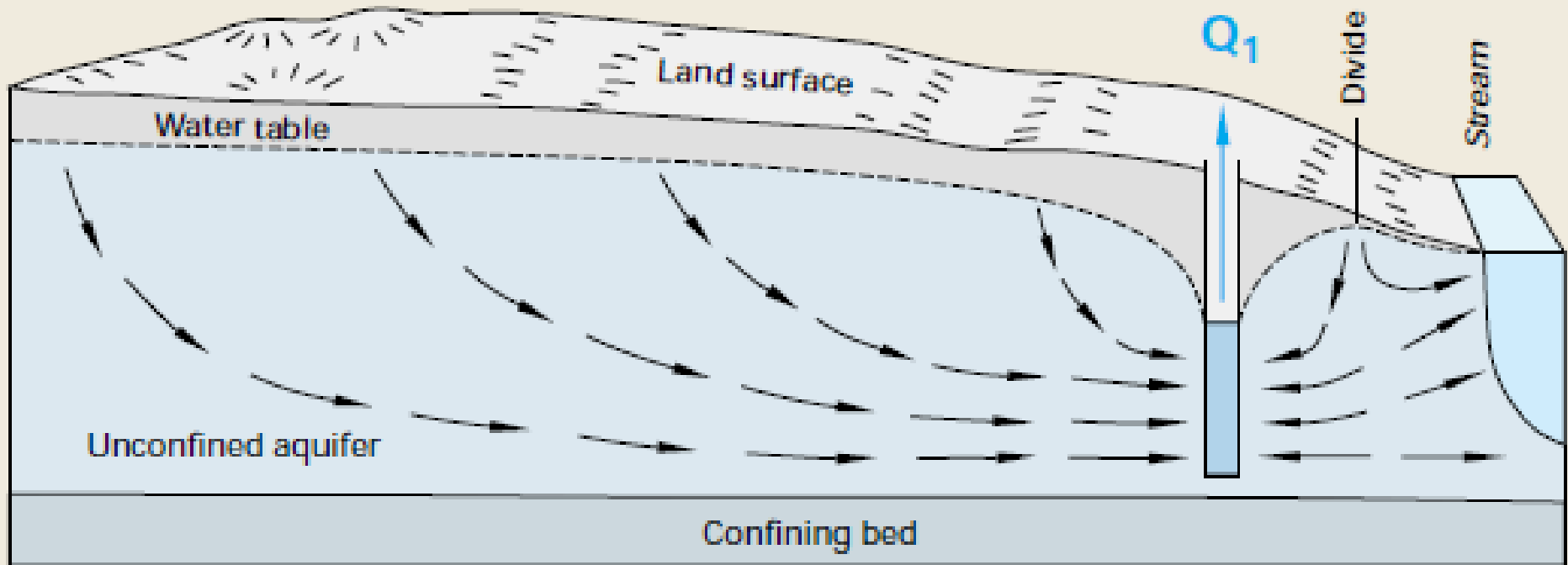
# Baseflow is Groundwater





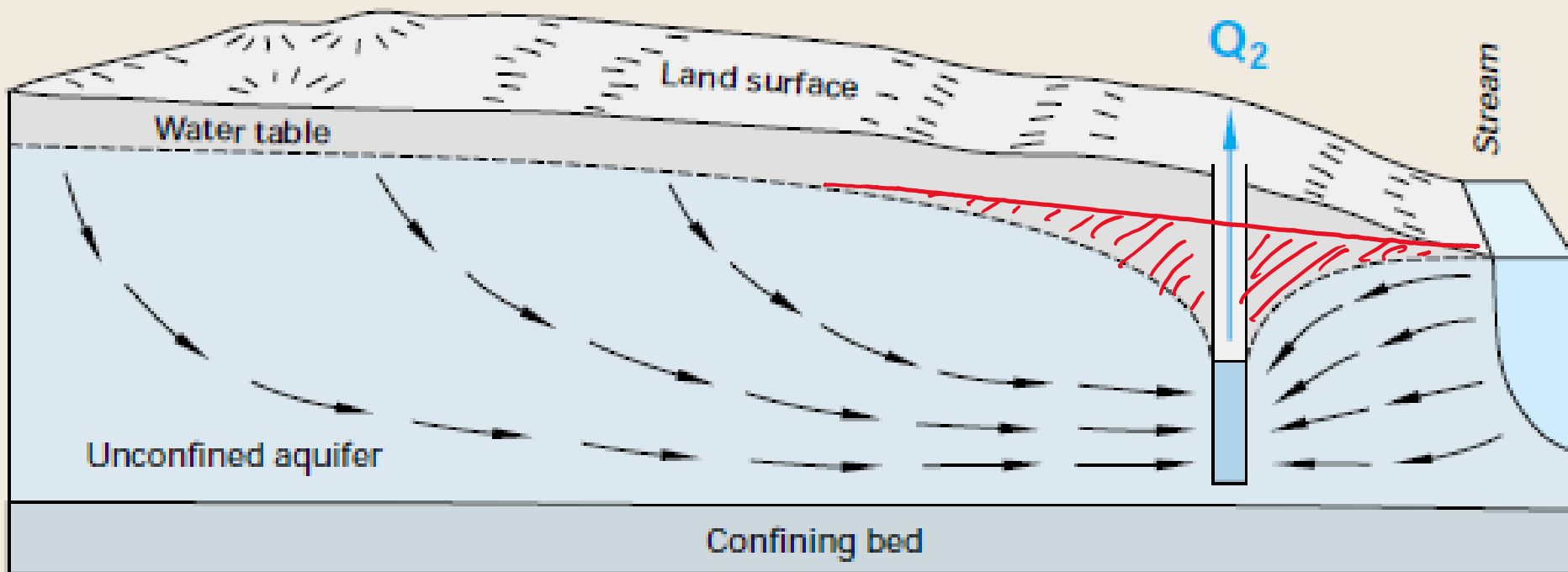
# Groundwater From Wells

**B**



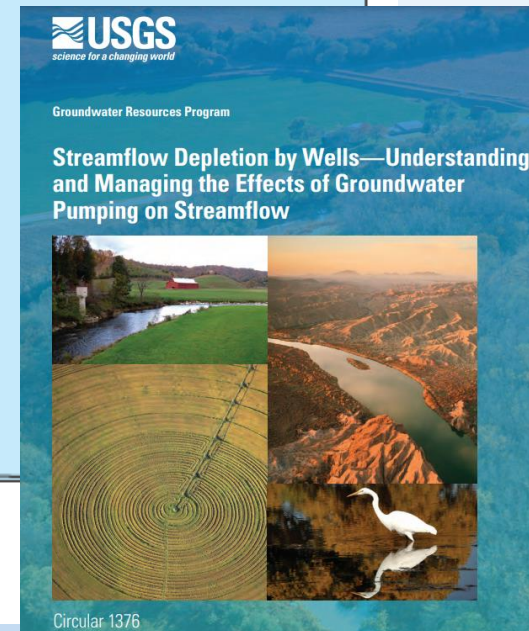
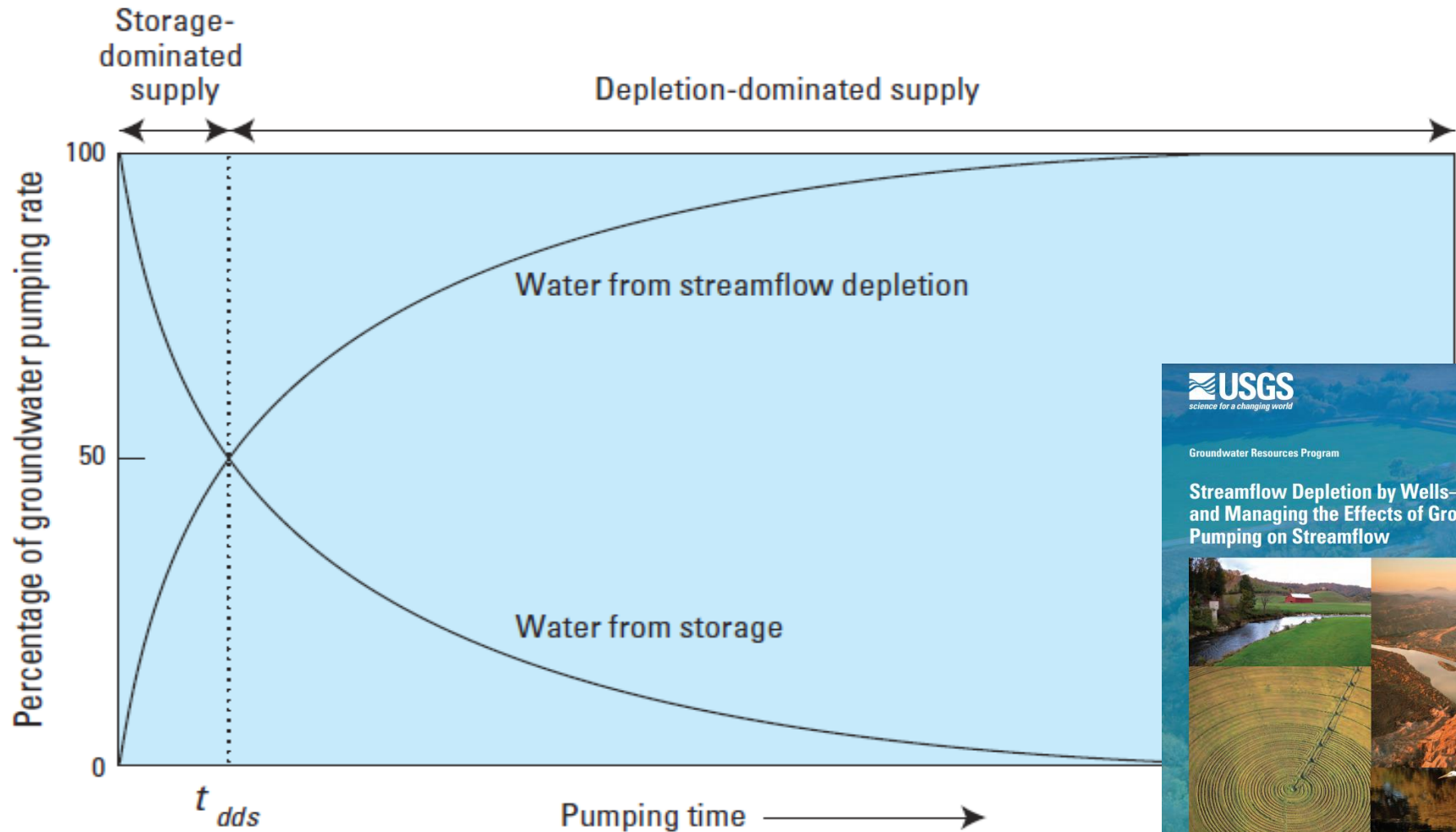
# Streamflow Capture

C



Groundwater removed from storage (drained pore space) at early pumping time.

# The Source of Water to Wells



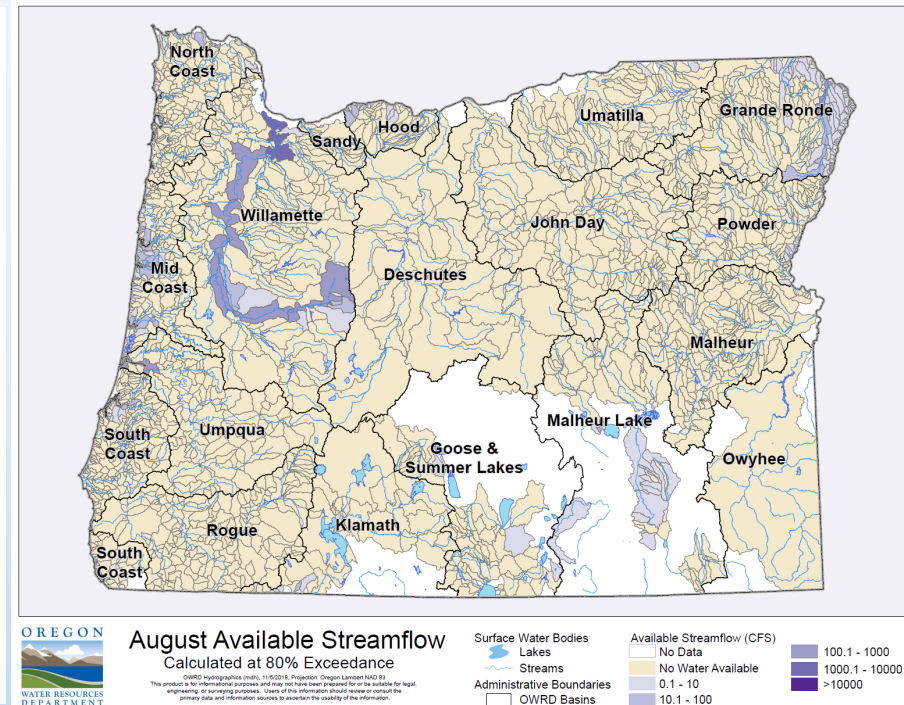
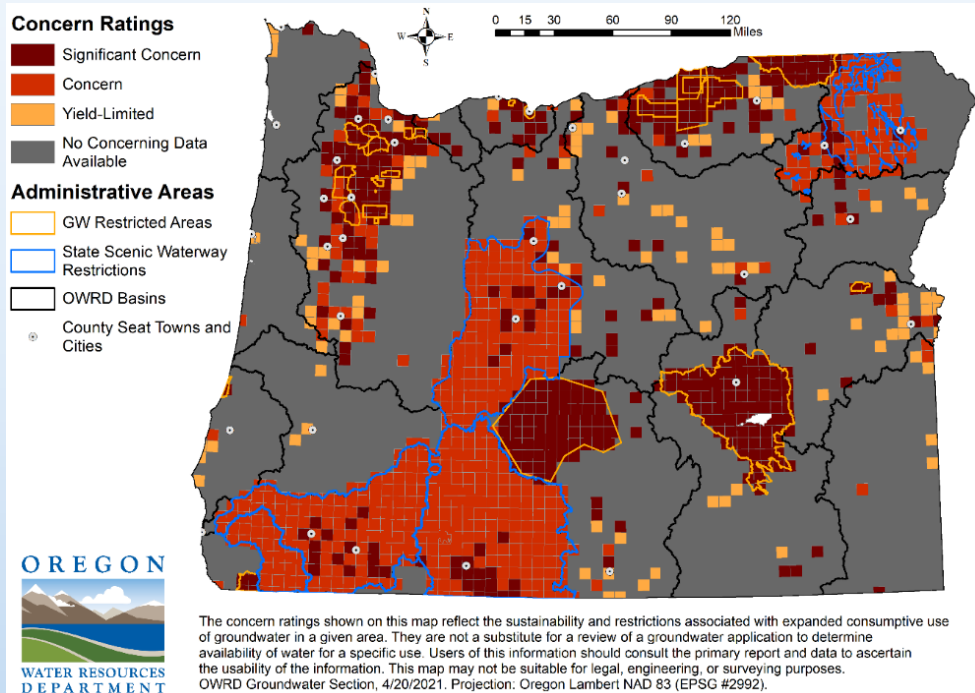
# Groundwater From Wells

“From the standpoint of groundwater conservation and statutory or other regulation, the following point should be emphasized: All water discharged by wells is balanced by a loss of water somewhere.”

- C.V. Theis, 1940: The Source of Water Derived From Wells

# New Groundwater Allocation has Impacts

Groundwater allocation over the past 65+ years has contributed to reduced surface water baseflow and groundwater level declines; both at the expense of existing users.



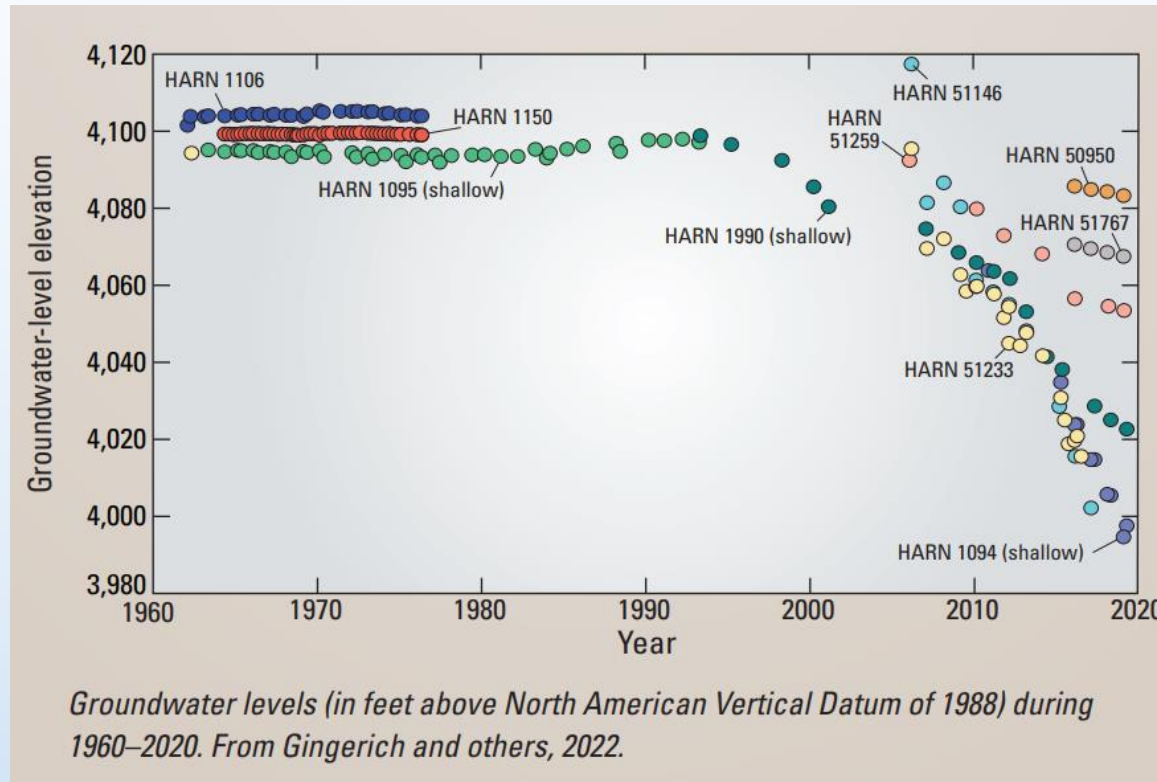


# Allocation Issues and Potential Solutions



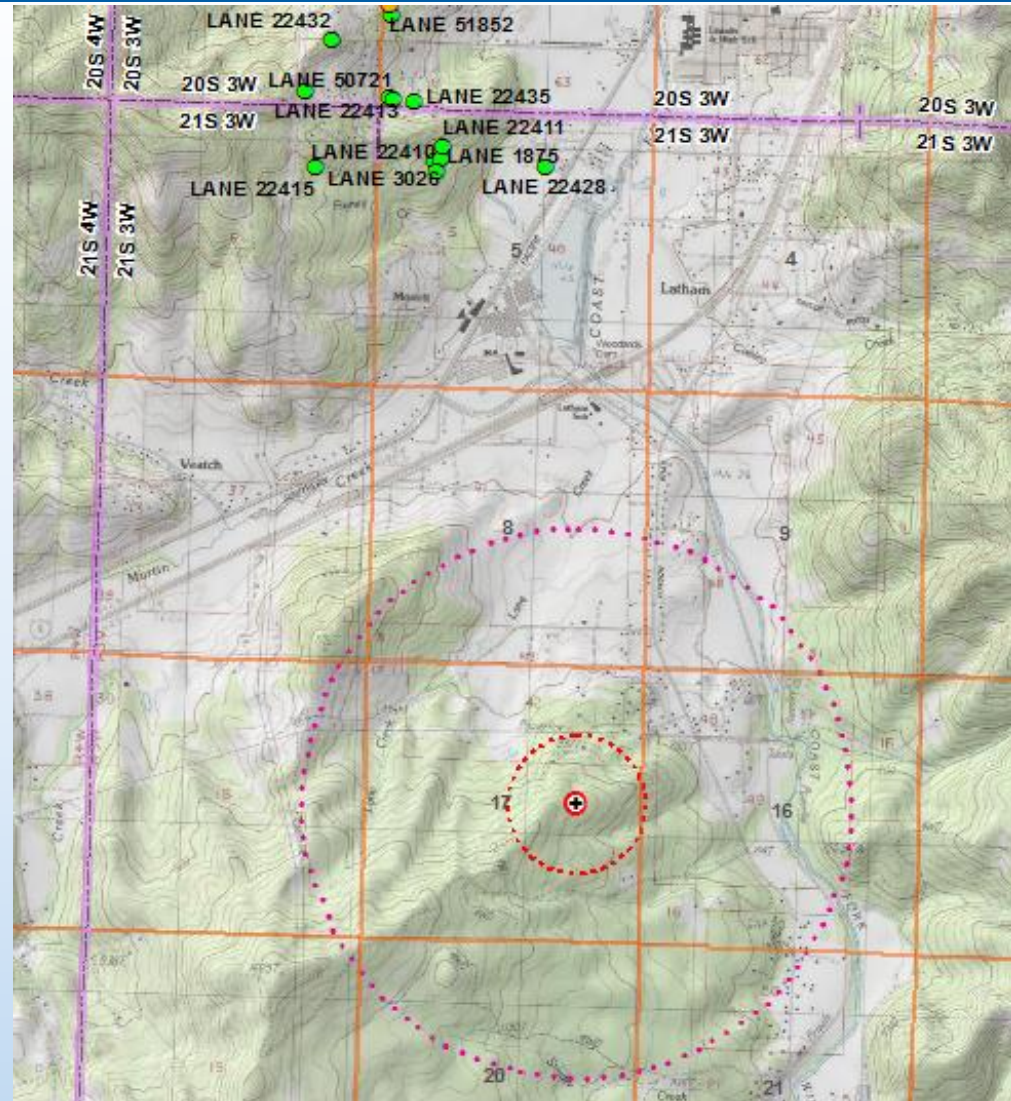
# Section Roadmap

- Issues arising from existing allocation process
- Initial ideas for updating the allocation process



# Existing Allocation Process

- Short-term, acute impacts to surface water are avoided, while cumulative impacts have likely developed over the longer term
- Data must exist to indicate over-appropriation





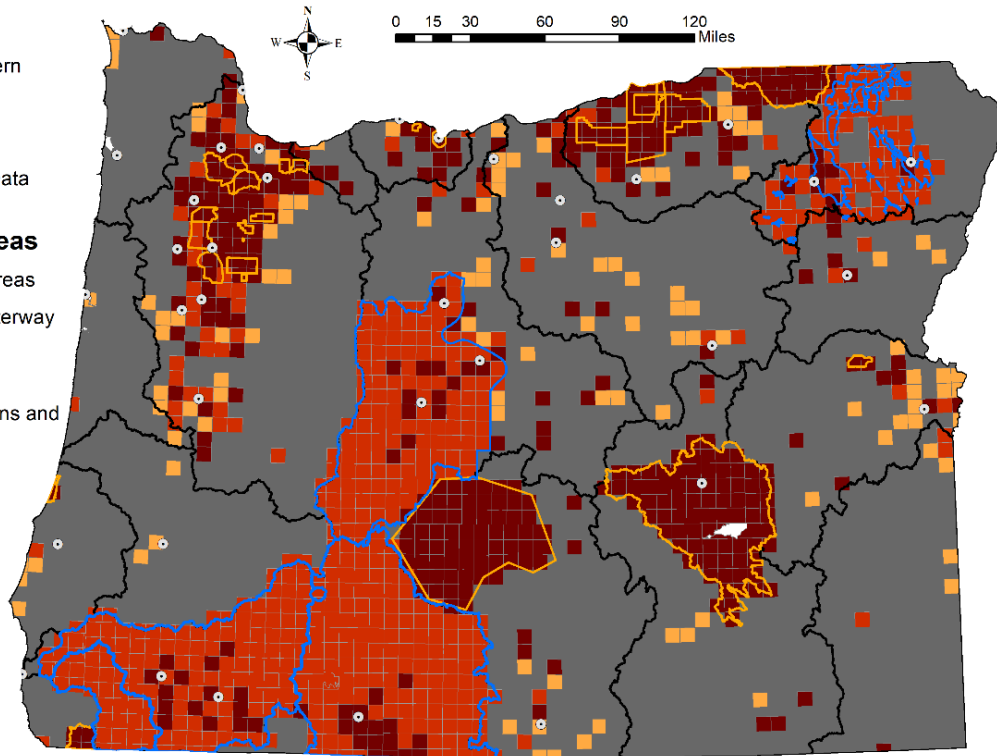
# Existing Allocation Process

## Concern Ratings

- Significant Concern
- Concern
- Yield-Limited
- No Concerning Data Available

## Administrative Areas

- GW Restricted Areas
- State Scenic Waterway Restrictions
- OWRD Basins
- County Seat Towns and Cities

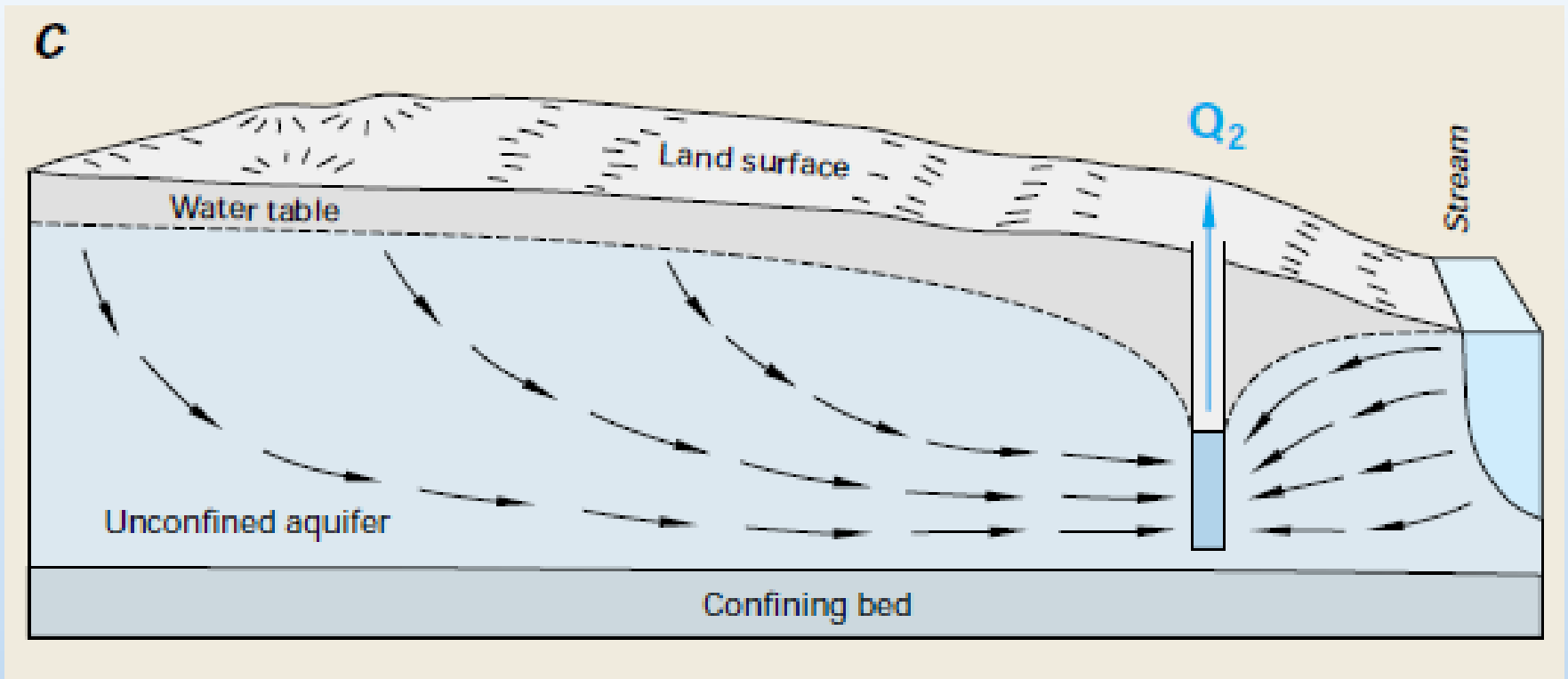


The concern ratings shown on this map reflect the sustainability and restrictions associated with expanded consumptive use of groundwater in a given area. They are not a substitute for a review of a groundwater application to determine availability of water for a specific use. Users of this information should consult the primary report and data to ascertain the usability of the information. This map may not be suitable for legal, engineering, or surveying purposes. OWRD Groundwater Section, 4/20/2021. Projection: Oregon Lambert NAD 83 (EPSG #2992).

- More than 70% of groundwater applications result in a permit
- Approx. 80% of applications in “Areas of Concern” receive permits

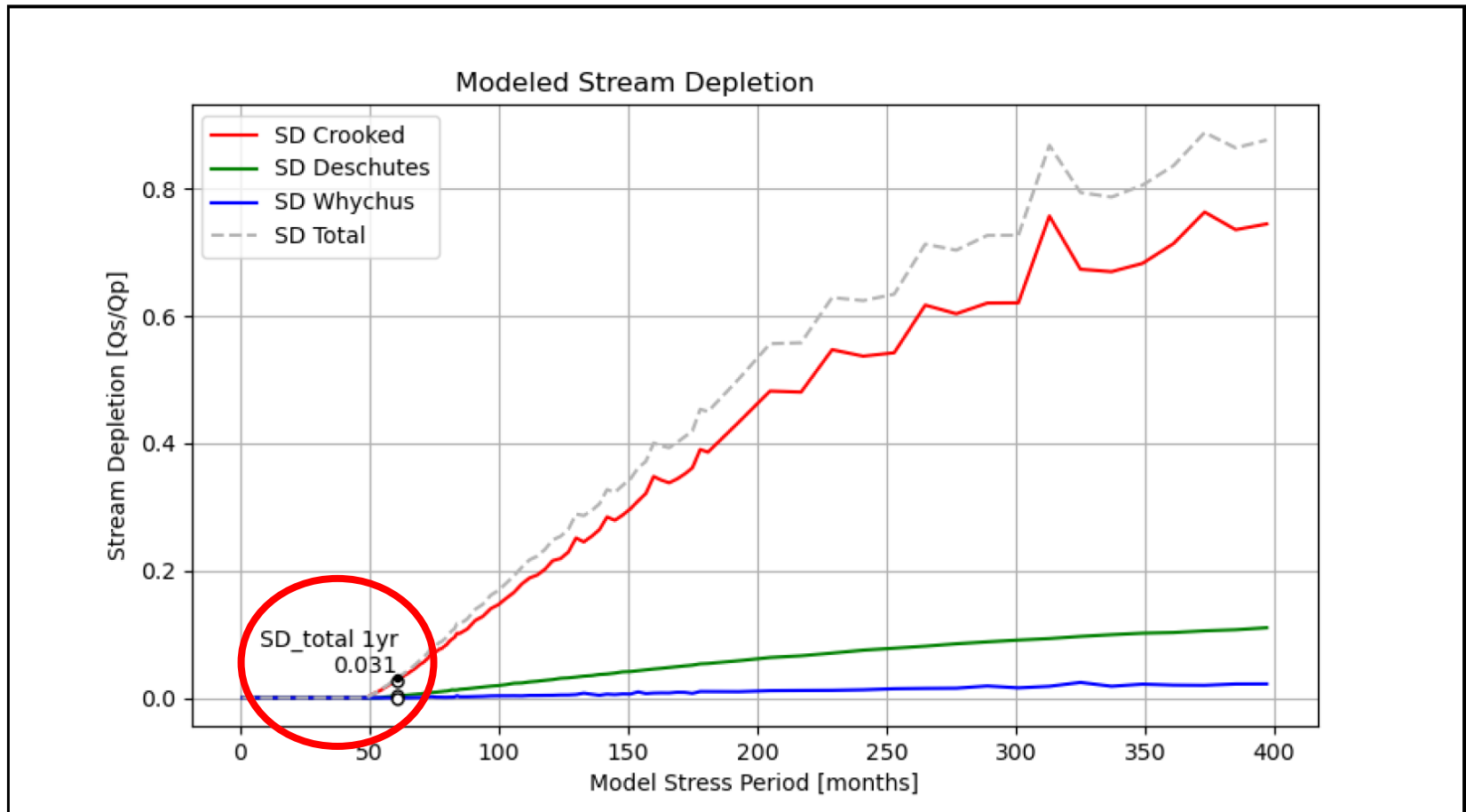
# Concepts 1 & 2 – SW Availability

Over-appropriation defined in Div 400(11)(a)“(B) ... or results in the further depletion of already over-appropriated surface waters.”

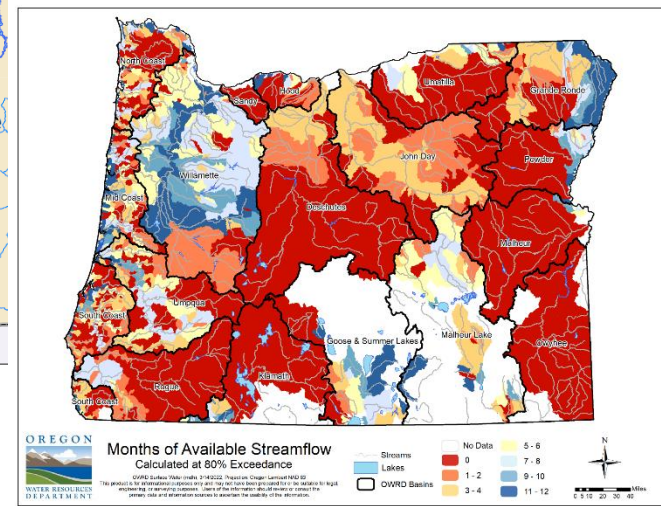


# Concepts 1 & 2 – SW Availability

Figure 1: Stream-depletion curve, pumping starts at month 49 and continues at a constant rate for 29 years until the end of the model scenario (month 397).

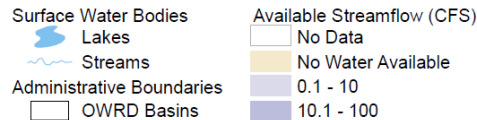


# Concept 1 – SW Availability



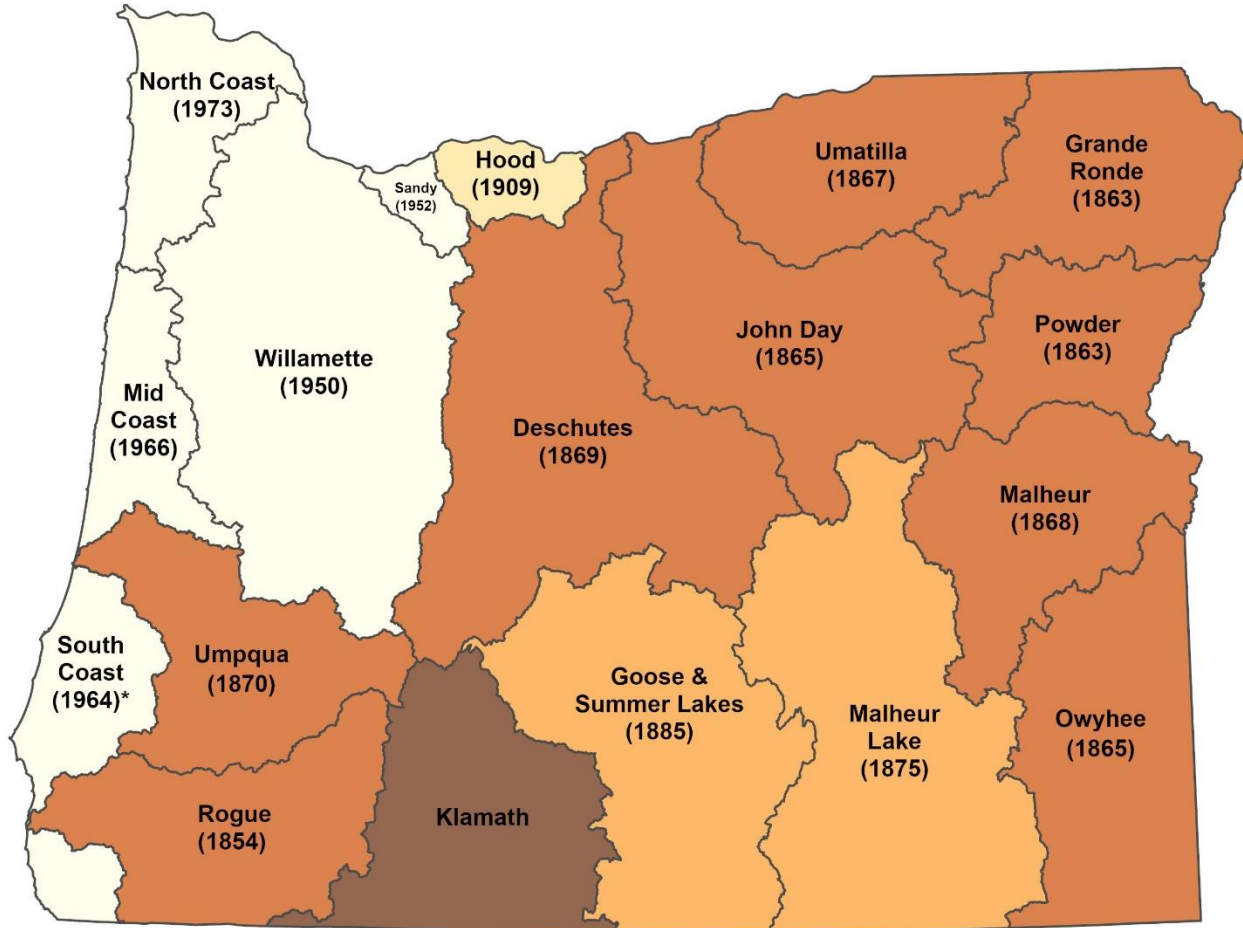
## August Available Streamflow Calculated at 80% Exceedance

OWRD Hydrographics (msh), 11/5/2018. Projection: Oregon Lambert NAD 83  
This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.





# Concept 2 – SW Regulation History



**Earliest Priority Date to Which Surface Water Rights Regulated (2018 - 2020)**



Surface Water regulation by administrative basin

- 1854 - 1870
- 1871 - 1885
- 1886 - 1912
- 1913 - 1976
- Time Immemorial (most senior water right)

0 10 20 30 40 50 Miles  
Oregon Lambert Coordinate Reference System (EPSG #2992)

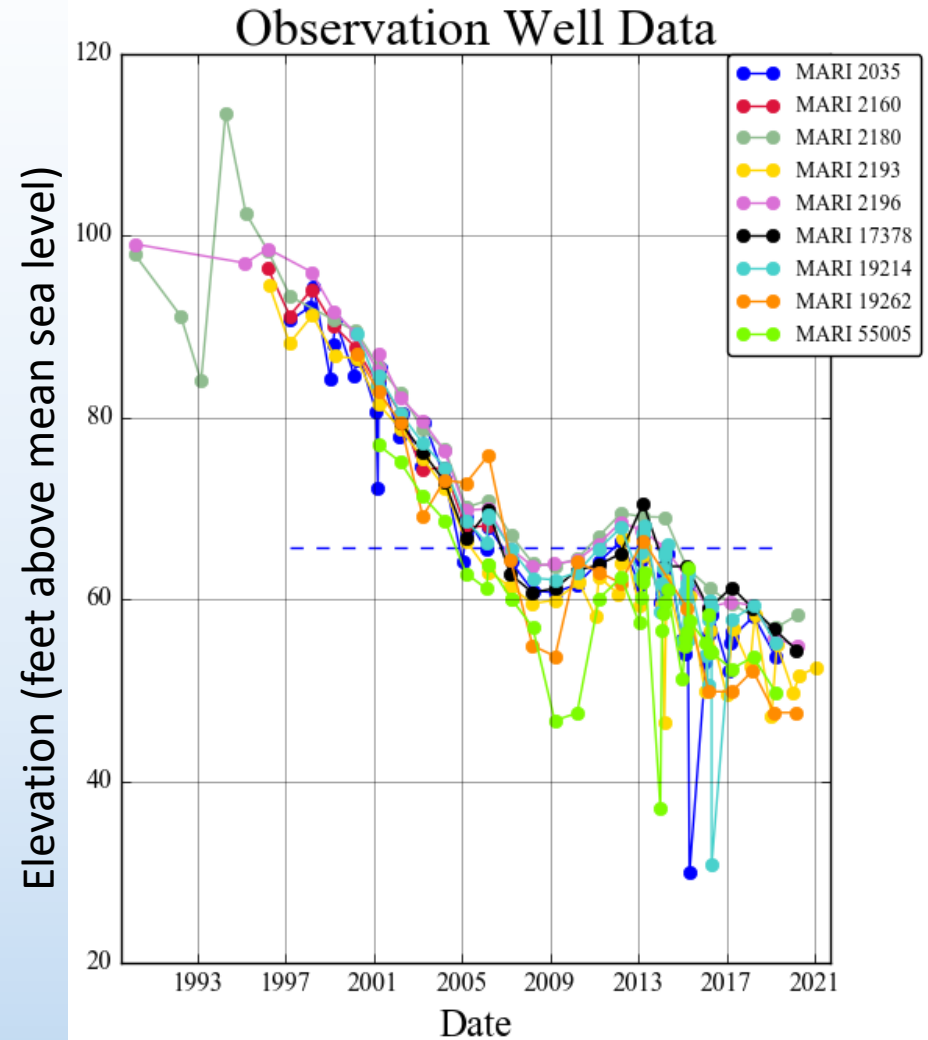
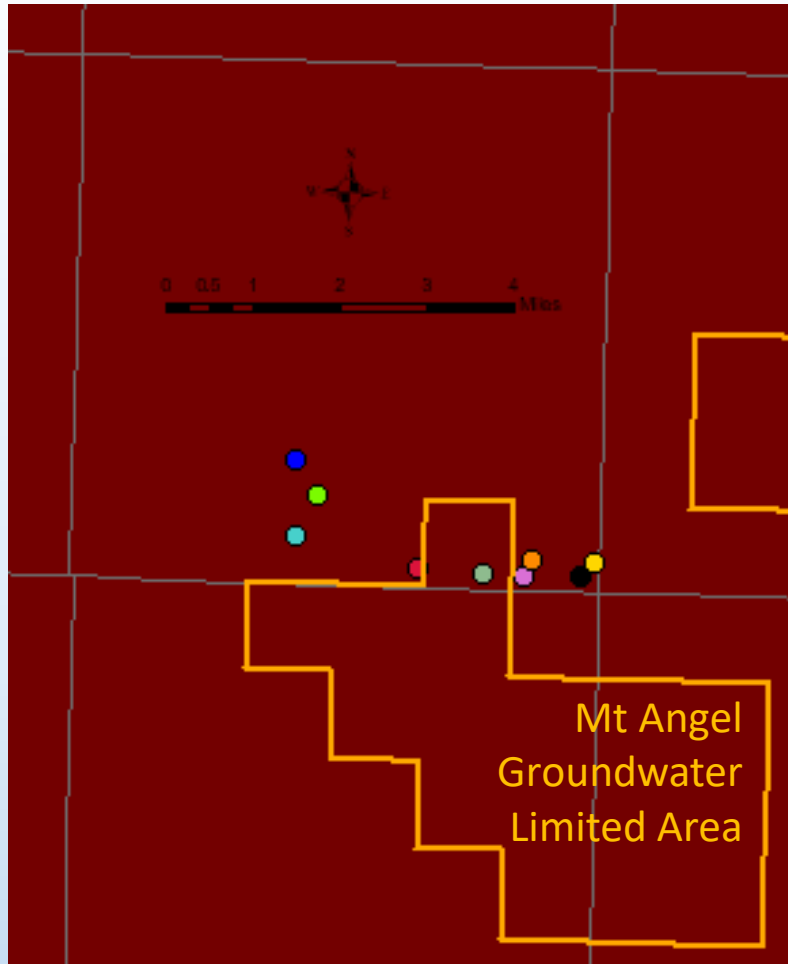
\*Regulatory years fall outside standard years selected for this map.

Map prepared by OWRD GIS (rh), 9/26/2022  
(state\_2022\_SWregulationdatebyAdminBasin.aprx)

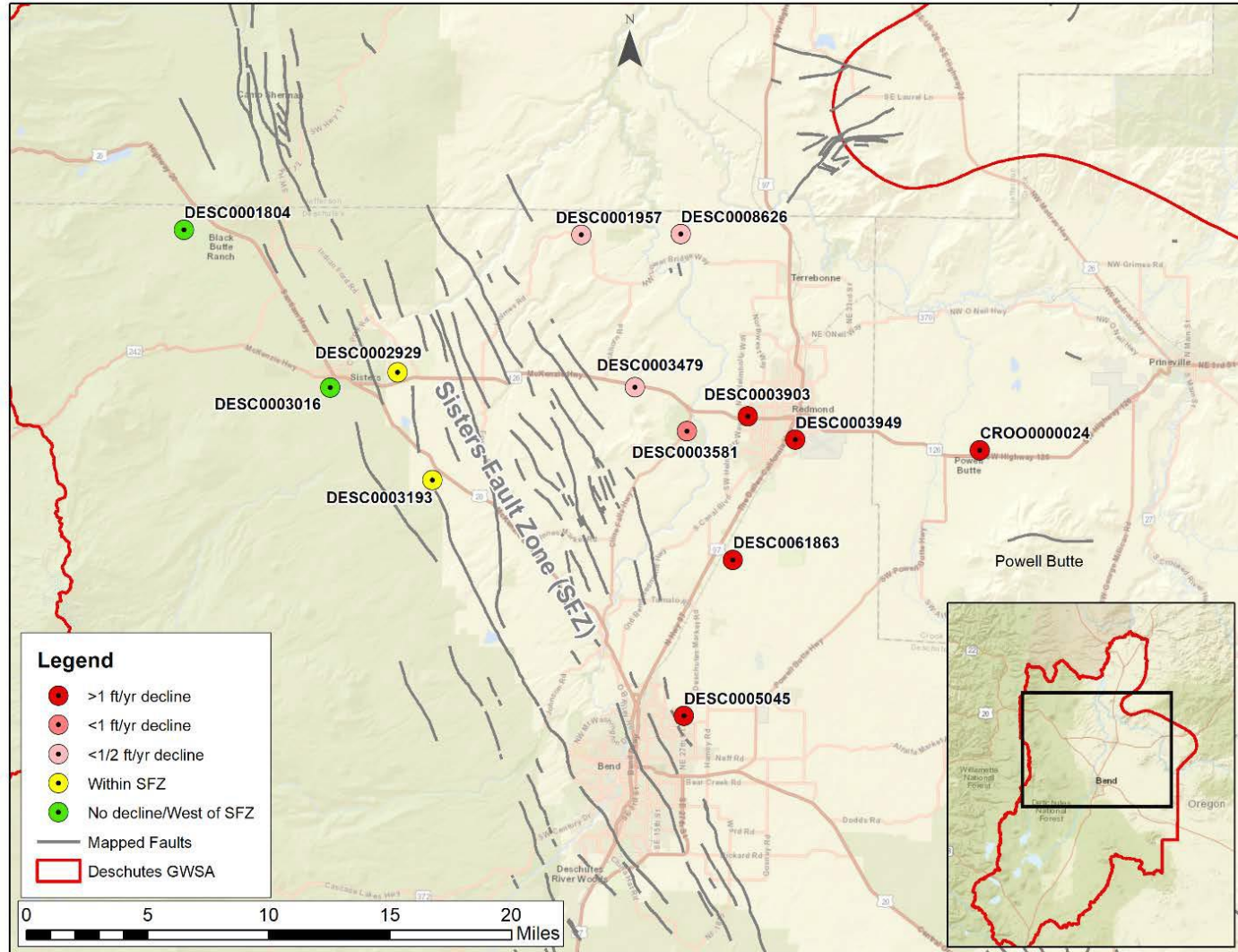
**DISCLAIMER**  
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# Concept 3 – Reasonably Stable

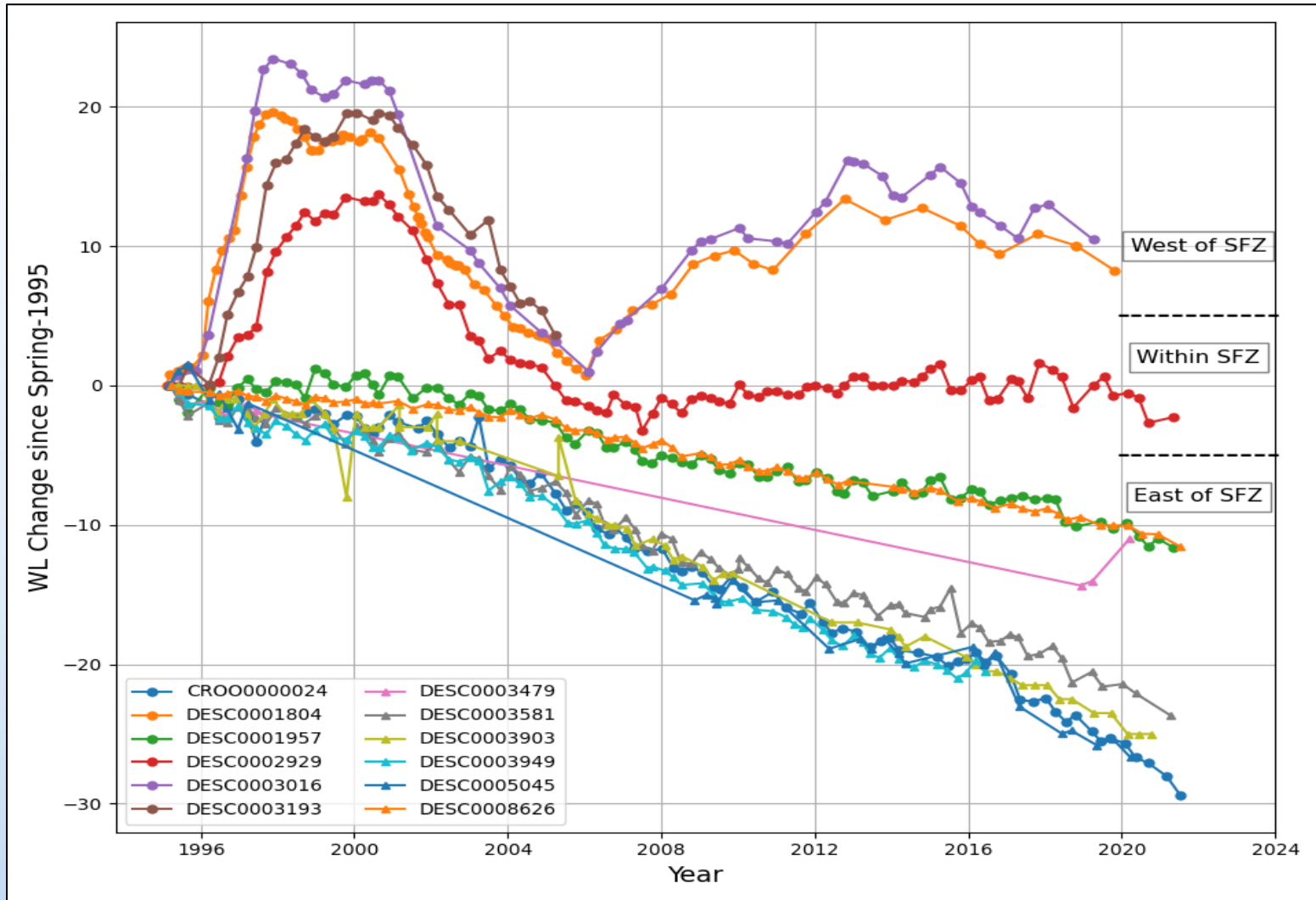


# Concept 3 – Reasonably Stable



Source: O  
Committee

# Concept 3 – Reasonably Stable






# Feedback Sought

How can we evaluate applications for new groundwater rights to be more protective of:

- Existing users
- The resource and its sustainable use into the future





Public Input Session  
Clarifying questions  
&  
Share your ideas

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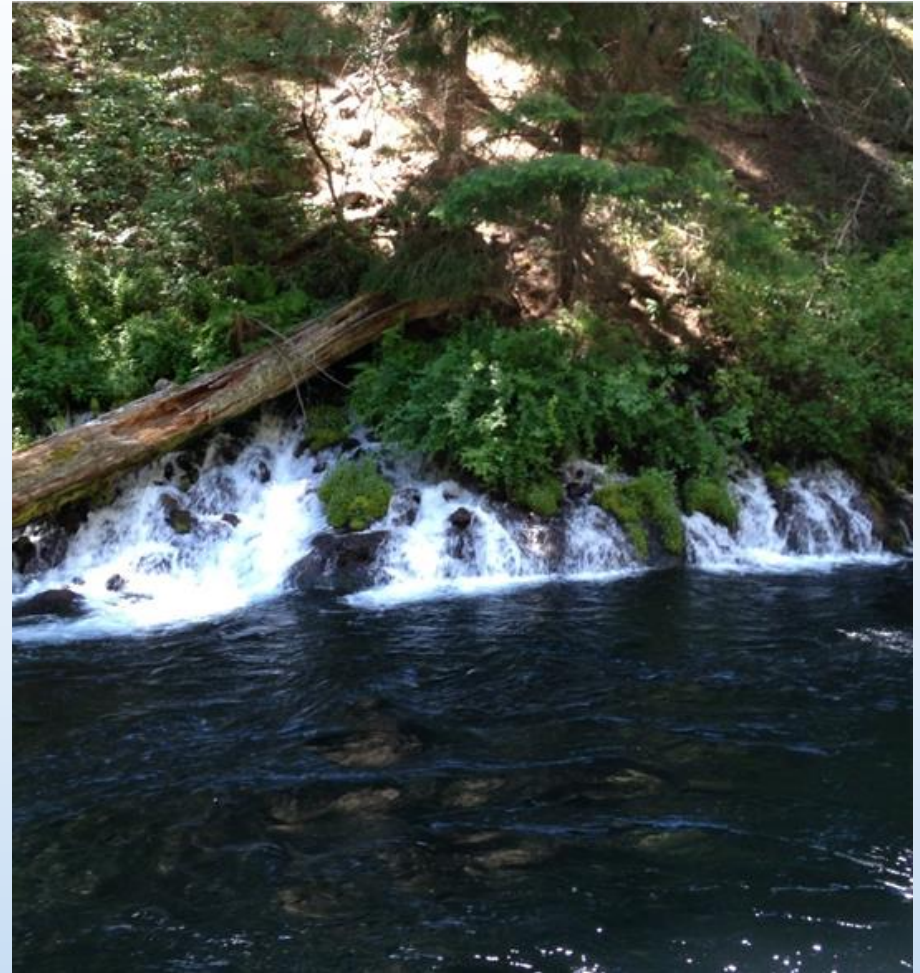
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# Your Questions and Ideas

- Clarifying questions
- Share ideas on the criteria regarding how to protect senior water right holders.
- What timescale is sustainable for managing groundwater resources?



# Next Steps

- We will post a meeting report and recording.
- Please submit public input by end of day **October 19** at <https://bit.ly/owrd-gwasurvey-virtualmtg>

# Next Steps

Convened internal team to draft rule update

- Fall 2022

Convene rules advisory committee

- Late 2022

Proposed rule adoption

- Spring 2023

Integrated Water Resources Strategy | Oregon's **2017**



Oregon Water  
Resources  
Department  
Strategic Plan  
2019-2024



Thank you.

