House Bill 2018 Update

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House Bill 2018 (2021)

- Develop groundwater budgets for all major hydrologic basins in Oregon
- Publish statewide recharge study
- Report on statewide consumptive water use and evaporation
- Expand the ground water level monitoring network
- Help the public better understand and engage with water data development efforts

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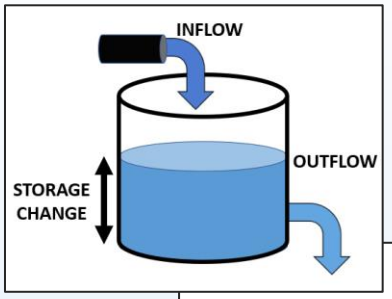
Components of a Groundwater Budget

Examples



Change in Groundwater Storage = Inflow (Recharge) – Outflow (Discharge)

Recharge:

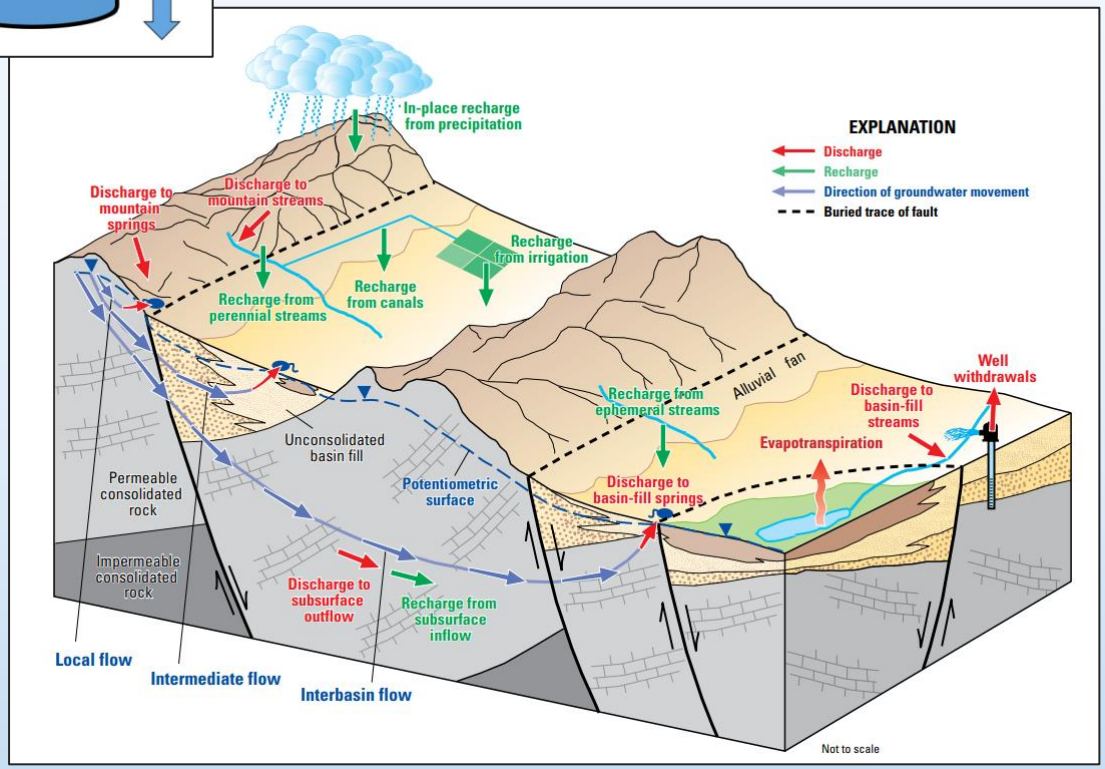
- Precipitation and infiltration

Discharge:

- Rivers & Springs
- Groundwater use

Change in Groundwater Storage:

- Well level declines



Diagrams: USGS

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Statewide Recharge Project

Phased cooperative study with USGS to model components of groundwater budget

Groundwater discharge (baseflow):

- >3000 water chemistry samples collected; collection ongoing
- Report by March 2026 (Phase I)

Recharge:

- Modeled estimates of flow into the groundwater system by 2030 or sooner (Phase II)

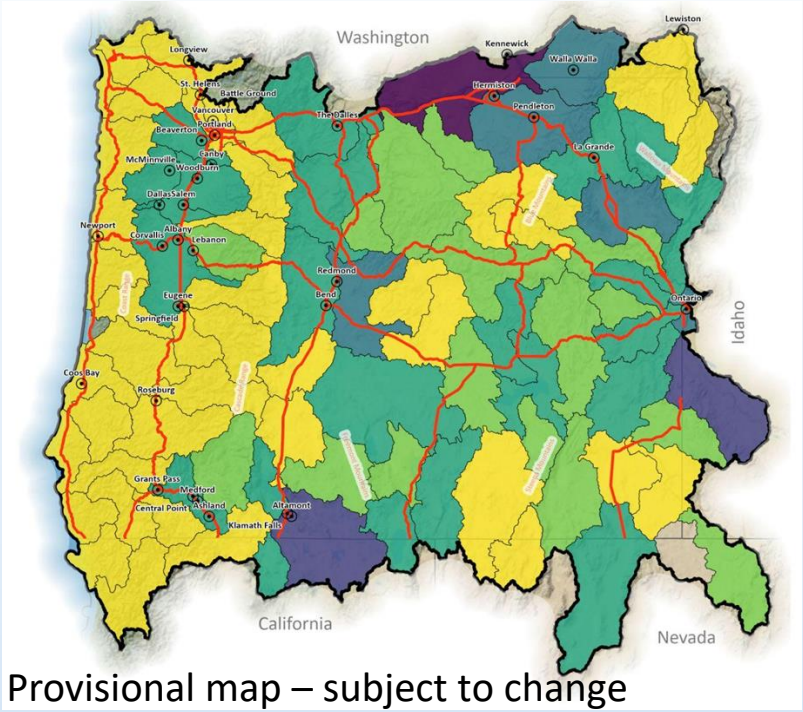
Water chemistry samples

Catherine Creek at Union gage

Statewide ET Project

- Statewide database (1985-2022)
  - Field-scale consumptive use from irrigated ag
  - Watershed summaries
  - Open Water Evaporation
- Draft Statewide Consumptive Water Use Report
- Trainings for staff

Consumptive Use Volume Map



Provisional map – subject to change

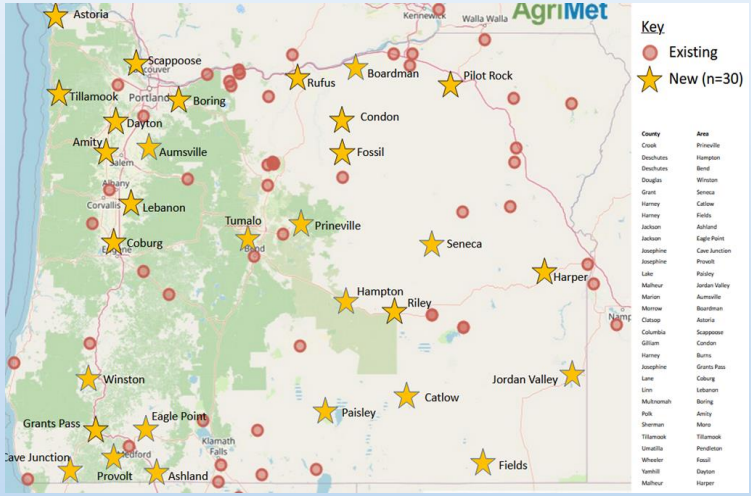
1985-2022 Average Annual ET Volume (acre-feet)

- <20,000
- 20,000 - 50,000
- 50,001 - 100,000
- 100,001 - 300,000
- 300,001 - 600,000
- >600,000

Collaborating for ongoing ET estimates and outreach

Leveraged investment in ET data to partner with OSU on:

- 30 new AgriMet stations
- Continued ET data production from OpenET
- Engage with OSU on ET Technical Advisory Group



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Observation Well Network Expansion

- 5 new wells drilled since 2021 (~$1M)
  - Rogue, Umatilla, and Walla Walla basins
- 3 retrofits, repairs, or cleanouts (~$25K)
  - Willamette, Rogue, Harney
- Evaluating 7 additional projects
- Ongoing challenges:
  - High cost ($500+ per foot for new wells)
  - Lack of driller availability
  - Limited to no response to RFPs

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Recent Public Engagement

- Hired three engagement coordinators
- Listened, developed relationships, started engagement
- Example outcomes:
  - Siting of new Agrimet Stations and some stream gages
  - Groundwater study events in the Walla Walla basin
  - Informational sessions, radio appearances, place-based planning, and more in the Harney Basin
  - Draft best practices for community engagement

Picture: Agrimet installation near Grants Pass, confluence of the Applegate and Rogue Rivers

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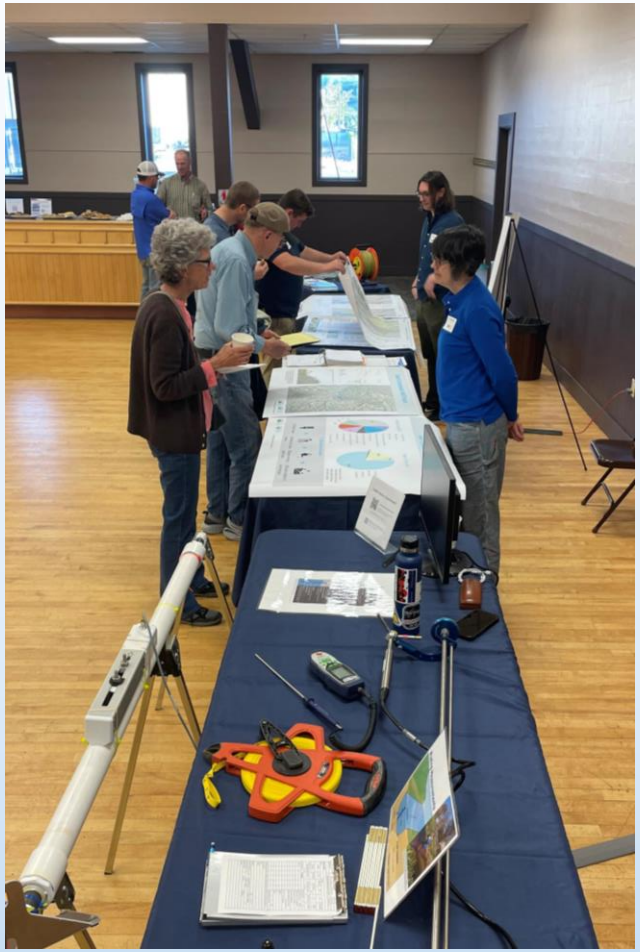
Public Engagement to Come



- Continue current engagement efforts
- Co-design regional events/meetings with local leaders
  - Convene 2-3 initial meetings in late 2024 and early 2025
  - Glean lessons from initial meetings
  - Expand meetings statewide, but tailored to the specific needs and interests of the region

Picture: May 2024 Groundwater study event in Milton-Freewater

Thank you

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