Water Use Measurement in Oregon





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Today's Discussion

- Current measurement programs
- Measurement challenges
- Strategies and improvements for future discussion



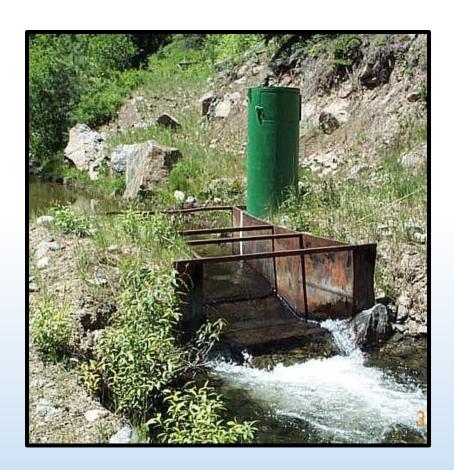
Integrated Water Resources Strategy

- Oregon's IWRS adopted in 2012; updated 2017
- Recommended actions include the need for better data and information
- Recommended Action 2.B calls for improving water-use measurement and reporting

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



- Water Use Reporting Program
- Commission's 2000StrategicMeasurement Plan
- Miscellaneous water use data





Water Use Reporting Program

- Close to 89,000 water rights issued in Oregon (surface water, groundwater, and storage)
- 14,800 (17%) are required to <u>measure and</u> <u>report</u> water use
- In 2016, the Department received water use data for ~10,200 water rights (11% of total water rights)



Water Use Reporting Program

 Water rights with permit conditions (early 1990s)

 Water rights held by a governmental entity (ORS 537.099), including state, federal, local, irrigation districts and water control districts

 Water rights in Serious Water Management Problem Area

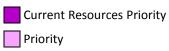


2000 Strategic Measurement Plan

- Strategy developed in 2000 for improving surface water measurement
- Aligned with Oregon Plan for Salmon and Watersheds (1997)
- Worked with ODFW to focus on high priority stream basins
- No additional resources provided

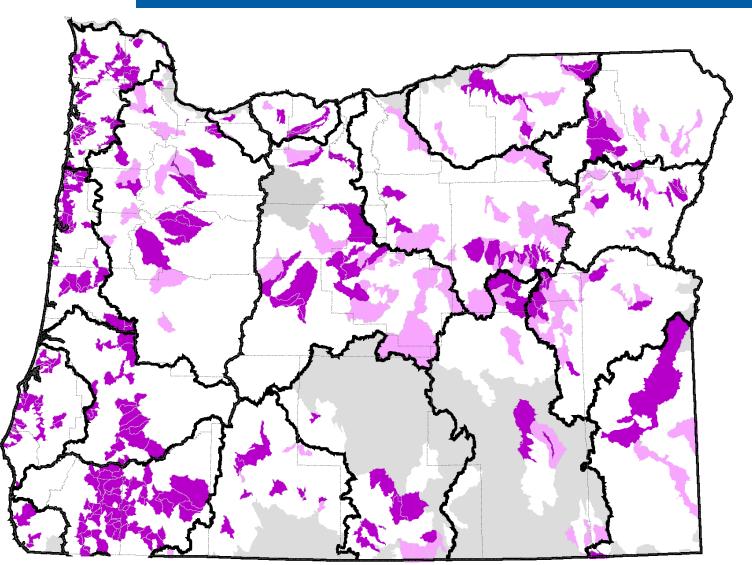


Streamflow Restoration Priorities



Not a Priority

Not Ranked





•A SigPOD is:

- Diversion required to measure through a water right condition; or
- Divert more than 5 cfs; or
- Divert more than 10% of lowest monthly 50% exceedance flow as per water availability model, and greater than 0.25 cfs



2000 Strategic Measurement Plan

- Developed preliminary list of 2,385 significant points of diversion (SigPODs)
- The 2,385 SigPODs are located in high priority water availability basins
- SigPODs in other basins not yet evaluated



•2000 Strategic Measurement Plan

- Watermasters assessed the SigPODs
- Water right research and field visits
- Database built to support program; improved in 2008



SigPOD Progress

- 1067 diversions have devices installed
- 672 diversions are inactive, leased or transferred instream
- 646 diversions need devices installed
- Key Performance Measure #8 tracks progress



SigPOD Challenges

- Definition misses large diversions made up of many small water rights
- Water right transactions create moving target in water right database (POD identifiers can change)
- Small PODs on ephemeral/seasonal streams
- PODs on streams with minimal watermaster presence



Miscellaneous Measurements

- Staff read and record hundreds of flow meter readings on wells and pumps around the state each year
- Captured in various databases
- Not tracked by Water Use Reporting Program or SigPOD program



Future Discussion Topics

Focus watermaster time on devices needed for management

Coordinate among data sets

 Authority to require water use reporting where needed



Future Discussion Topics

- Allow SigPODs to be removed from list
- Verify that SigPOD devices are still installed and operational; staff record and report water use

Measure groundwater use in vulnerable aquifer systems



Questions



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