





MEMORANDUM

TO: Water Resources Commission

FROM: Ivan Gall, Field Services Administrator 
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SUBJECT: Agenda Item B, March 15, 2018
Water Resources Commission Meeting

Improving Water Use Measurement and Reporting

I. Introduction

Recommended Action 2.B of the Integrated Water Resources Strategy (IWRS) calls for improving water-use measurement and reporting. During this informational report to the Commission, staff will outline challenges and opportunities for improving water use measurement and reporting in Oregon.

II. Background

The 2017 Integrated Water Resources Strategy identifies a number of actions that could improve water use measurement and reporting, drawing upon analysis from the Department's 2016 *Monitoring Strategy*, the Secretary of State's December 2016 Audit Report, interviews of staff and customers, and a workgroup discussion that took place during the 2017 legislative session. IWRS Recommended Action 2.B focuses on: updating the Water Resources Commission's Strategic Measurement Plan (measuring significant diversions); improving coordination between the Commission's Strategic Measurement Plan and the Water Use Reporting program; improving the state's authority to require reporting of water use; and continuing to improve the software and tools used for water-use measurement and reporting.

III. Water Use Measurement Programs

A water right holder may be required to install a measuring device, measure and record water use, or report water use. As discussed in more detail below, the requirement may be the result of a water right condition, a statutory requirement, a critical groundwater designation, or a serious water management problem area designation. In addition, the watermaster may issue an order to require measurement, but not reporting of water use.

Water Use Reporting Program

Under the Department's Water Use Reporting Program, there are more than 14,800 water rights that are required to measure and report water use in Oregon. This constitutes about 17 percent of the 89,000 water rights in the state, and includes all public entities (see Oregon Revised Statutes 537.099), some private entities with permit conditions that require measurement and reporting, and some holders of water rights in Serious Water Management Problem Areas (SWMPAs) and Critical Groundwater Areas.

In 2016, the Department received water use data for approximately 10,260 water rights. Progress, tracked by Key Performance Measure #13, has shown a steady increase in compliance since the Water Use Reporting Coordinator position was reestablished in 2013. The Department has recently upgraded the on-line platform used to collect these data, and staff members continue to make improvements to the program to review and ensure high quality data.

Water Resources Commission's Strategic Measurement Plan

In 2000, the Water Resources Commission developed a strategic plan for improving surface water measurement statewide. The SigPOD program, short for significant point of diversion, focused on measurement of diversions with the greatest impact on streamflows in areas with the greatest needs for fish. The Department developed a statewide inventory of 2,385 "significant surface water diversions"¹ within 300 high priority watersheds across the state.

No additional staff resources were authorized to implement the plan; as a result progress over the years – tracked by Key Performance Measure #8 – has been slow. The number of SigPODs varied greatly across watermaster districts, with the Lower John Day having 16 and the South Coast having 332. Staff focused initially on inventorying each of the 2,385 SigPODs to identify which were abandoned and which had already installed measuring devices. A subset of the SigPODs had a permit condition requiring a measuring device, so watermasters focused on these first to ensure compliance. Watermasters take a collaborative approach to installation, offering cost share funding and technical expertise where appropriate, and ordering installation where necessary. Seventeen years after adoption, 1,059 of the significant diversions (SigPODs) have measuring devices installed and 673 are abandoned or inactive, leaving 653 diversions still needing measuring devices installed.

IV. Discussion

After years of implementing the SigPOD program, the Department has identified a need to evaluate its approach as it continues to work towards improved water use measurement. Specifically, the Department would like to consider and discuss the following strategies and improvements:

¹ Significant surface water diversions included: (1) water rights that were required by the Department to measure or report through a water right condition; and (2) rights without a condition that were greater than 5 cubic feet per second, or greater than 10 percent of the lowest monthly median natural flow and greater than 0.25 cfs.

1. *Updating the approach to SigPODs, allowing for diversions to be removed from the list if found to be abandoned or of little value to measure, while also accounting for the installation of measuring devices that do not qualify as a SigPOD, but are necessary for water management.* Staff have noted that for some SigPODs, little value would be gained by requiring a measuring device, as these PODs are seldom exercised, but do not meet the threshold of abandoned. Staff have observed that some large diversions made up of many small water rights were not captured in the SigPOD program, since none of the individual water rights by themselves met the SigPOD criteria. In cases like this, watermasters have required the large POD to install a measuring device. Similarly, watermasters have ordered measuring devices as necessary for water management. These additional actions to improve water use measurement in the state are not tracked or counted as part of the KPM measuring the Department's progress. Finally, implementation of water use measurement will continue to be slow with the existing workloads of staff. As a result, the Department is discussing a 2019 budget request to increase staff resources to work on water use measurement.
2. *Watermasters should continue to require measurement on surface water PODs and groundwater POAs where needed to more efficiently distribute and manage water.* The Department believes that watermaster needs for measurement should be accounted for in any future strategy, particularly given staff workloads and the need for efficient water distribution.
3. *Coordinating among data sets.* The current SigPOD database does not track type of device, when Department staff last visited, or whether cost-share funds were used, and it does not interact with other agency databases, such as the Water Use Reporting database. In addition to SigPODs, there are many other water rights in Oregon that have measuring devices installed, often requested by the watermaster for water management purposes. The Department does not have a tracking system or data on the number or location of these diversions that have a measuring device installed. Staff are evaluating options for a database that will allow the SigPOD and other water use data to interact with the Water Use Reporting and the Water Right Information System data. Additional information technology resources may be necessary, and the Department is currently considering a 2019 budget request.
4. *Verifying that SigPOD measuring devices still exist and are operational in areas where ongoing access to information is still needed.* While the KPM tracks progress on the installation of a new measuring device, there currently is no tracking of the last time the device was visited and whether it still exists.
5. *Improving the Department's authority to require water use reporting for surface water and groundwater.* The water use information from the SigPOD devices are typically not reported to the Department. Watermasters generally can require water measurement under ORS 540.310 for the purposes of water distribution and management, but they cannot require reporting of water use under this provision. One of the proposals discussed by the measurement workgroup during the 2017 legislative session was to allow the Department to require water use reporting where measurement is required.

V. Conclusion

The Department anticipates engaging with the Commission and stakeholders in discussions about water use measurement and reporting in the future. Given that the State has limited resources to invest in collecting and analyzing water use data, the Department has sought to prioritize its efforts in areas of highest need through targeted approaches.

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