

Overview of Water Law

Under Oregon law, all water belongs to the public. With some exceptions, cities, irrigators, businesses, and other water users must obtain a permit or license from the Water Resources Department to use water.

Most water rights are obtained in a three-step process. The applicant first must apply to the Department for a permit to use water. Once a permit is granted, the applicant must construct a water system and begin using water. After water is used, the permit holder must submit specific information to the Department detailing how and where water has been applied. If water has been used according to the provisions of the permit, a water right certificate is issued.

Water Use Measurement and Reporting Requirements

Below, the Department has outlined its most common authorities related to water use measurement and reporting.

Measuring and Reporting Water Use

Currently, there are about 15,000 water rights that are required to measure and report water use. This is about 16 percent of the total number of water rights in the state. In 2017, the Department received water use data for approximately 12,000 water rights. Water right holders may be required to both measure and report water use as specified below:

- Pursuant to ORS 537.099, Oregon requires governmental entities such as irrigation districts, state or federal agencies, and municipal water providers to measure and report water use.
- Starting in the early 1990's, the Department began adding water measurement and/or reporting conditions to new permits, based on the size of the water right. Smaller water rights may have a condition stating that "water measurement may be required," while larger permits may have a condition that "water measurement and reporting is required."
- Water users in a Serious Water Management Problem Area (SWMPA) or in a Critical Groundwater Area may be required to measure and report water use. Currently, there is one established SWMPA in the Walla Walla sub-basin, and there are seven Critical Groundwater Areas.

Measuring Water Use – Water Distribution

In instances where water use measurement and reporting are not required as discussed above, the watermaster generally can require water *measurement* under ORS 540.310 for the purposes of water distribution and management. Under this provision, *there is no authorization to require reporting of water use.*

Measuring Water Use – 2000 Strategic Measurement Plan

In 2000, the Water Resources Commission developed a strategic plan for improving surface water measurement in areas with the greatest impact on streamflows with the greatest needs for fish. The Department developed a statewide inventory of 2,385 "significant surface water diversions" within 300 high priority watersheds across the state. Significant surface water diversions included: (1) water rights that are required by the Department to measure or report through a water right condition; and (2) significant diversions in high priority watersheds. As of December 2018, 1,084 of the significant diversions had measuring devices installed and 696 were inactive, leaving 611 diversions still needing measuring devices installed. In recent years, the Department has identified a need to revisit its 2000 Strategic Measurement Plan to better address high-priority water management and policy needs for both surface and groundwater.

Use of Data

Water measurement can help the Department to protect existing water right holders, facilitate planning for future water supplies, maximize the beneficial uses for both instream and out-of-stream users, and prevent time-consuming and costly conflicts over water use. Water measurement data are used in the following areas:

- **Science:** Water use data is utilized in basin groundwater studies to assist with characterizing the aquifers and in long-term management of aquifers, including critical groundwater areas. Additionally, this data is used to help refine the Department's surface water availability model, which is used to evaluate whether new water rights can be issued.
- **Water Management and Distribution:** Water measurement information aids watermasters in efficiently distributing and regulating water use for the protection of senior water rights, resolving disputes among water users, and ensuring use is within the limits of the water rights.
- **Review of Water Right Transactions:** Water use measurement data provide evidence of use for water right permit holders to prove up and obtain a water right certificate. Historical water use data assists in injury determinations for water right transfers, permit amendments, exchanges, and voluntary instream leases. Water use information supports water use efficiency projects and conservation projects.
- **Management by Water Users:** For water users, measurement information increases awareness of the amount of water they use and provides a basis for self-regulation. Measurement data also helps water users identify system inefficiencies, track stored water, reduce power costs, measure conservation benefits, develop improvements in their business operations, and plan for future needs. In addition, water use data provides evidence for a water right holder to prove up on a water right, rebut allegations of forfeiture for non-use, or demonstrate the validity of water rights to potential buyers. Governmental entities also use this information in developing agricultural and municipal water management and conservation plans.

Measurement Challenges

When analyzing water use measurement data supplied by the water right holder, the Department reviews the quality of the data and utilizes only data that it has a reasonable confidence in its accuracy. Accurate water use data is beneficial to water managers as well as water users; however, properly collecting water use data can be challenging. To ensure data are accurate, the correct device must be properly installed according to the engineering specifications and some devices must be periodically calibrated. Once installed, the device must be maintained in good working condition, which can be hampered by natural conditions such as sand, ice, debris, or algae. The water user must also read and report the data accurately, including correctly identifying the points of diversion/appropriation, and the associated water rights. The Department frequently works with water users to address these challenges and improve data accuracy.

The cost of measuring devices can also be a challenge for water users, with devices costing several hundred to several thousand dollars. The Legislature's continued capitalization of the cost-share measurement program has allowed the Department to provide funding to assist water users with installing or replacing water measurement devices on surface water diversions, reducing users' concerns about the cost of installing these devices.

Targeted Water Use Measurement Efforts

Oregon's Integrated Water Resources Strategy provides a blueprint for meeting Oregon's instream and out-of-stream water needs. The need for better data and water use measurement is highlighted throughout many actions of the Strategy.

Given that the State has limited resources to invest in collecting and analyzing data, the Department has sought to prioritize its data collection efforts in areas of highest need through targeted approaches.

Legislative Contact

Racquel Rancier, Senior Policy Coordinator, racquel.r.rancier@oregon.gov