

Allocation of Water in Oregon

The hot dry summer of 2015 was a reminder that even in the Willamette Valley, water is a limited resource. This month's everymember material is intended to provide new update on some local water issues and to highlight the role of our watermaster, the local representative of the state Water Resources Department (WRD).

First, some background. Under Oregon law, all water is publicly owned. With some exceptions, cities, farmers, and other water users must obtain a permit or water right from the WRD to use water from any source, whether it is underground or in lakes or streams. Generally speaking, landowners with water flowing past, through, or under their property do not automatically have the right to use that water without a permit from the department.

The fundamental provisions of Oregon water law are

- The holder of the oldest water right prevails in times of shortage. In other words, even if a junior user needs water, the senior user can demand all the water specified in his or her right.
- The water right is attached to the land and goes with the land to a new owner.
- Water may be legally used only for a beneficial purpose without waste.
- Once established, a water right must be used at least once every five years.

The Role of the Watermaster

Michael Mattick has served the WRD as District 2 Watermaster since 1998 and is responsible for a majority of Lane and Linn Counties and a small portion of Benton County. Besides enforcing Oregon Water Law and settling water disputes, his responsibilities include: measuring and monitoring spring flow for management and planning; maintaining records and information for the public; inspecting dams for safety violations; and protecting ground water resources through enforcement of standards for well construction, maintenance, and abandonment. Watermasters monitor water quantity, not quality, which is monitored by the Department of Environmental Quality (DEQ). (Interview with Michael Mattick on February 5, 2016)

Every summer as streamflows drop, the watermaster must regulate junior users to provide water to more senior users. On some streams, by the end of summer there is only enough water to supply users with rights dating back to the 1800s. Watermasters work with all of the water users on a given water system to ensure that the users voluntarily comply with the needs of more senior users. Occasionally, watermasters take more formal actions to obtain compliance from unlawful water users or those who are engaged in practices that "waste" water. The waste of water means the continued diversion of more water than is needed to satisfy the specific beneficial use for which the right was granted. Permits are monitored by the WRD, and local enforcement is administered by each of the state's twenty district watermasters.

An interesting example of a watermaster using this authority occurred in 2015, when the city of Westfir declared a water emergency that prohibited outdoor uses of water, including watering

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lawns, washing cars and filling pools. The declaration came as officials warned of a record-low snowpack in the Cascade Range. The city draws its water from the North Fork of the Middle Fork of the Willamette River and serves more than 110 homes and small businesses. The city drew its water from the river based on a water right issued in 1986. However, that right was junior to a right for an in-stream flow to protect fish. Michael Mattick ordered the City of Westfir to limit residents to domestic use of water only.

(<http://www.bendbulletin.com/3079882-151/westfir-declares-water-emergency#>, accessed 2/16/2016.)

Several weeks after the water emergency declaration, the City of Westfir was able to provide documentation to the state watermaster verifying a senior water right held by the city, which is dated 1924. The right had been transferred from the original Western Lumber Company down through the years, and eventually to the city. The watermaster lifted the restriction on Westfir's water rights after reviewing the documents. (http://www.westfir-oregon.com/?page_id=452, accessed 2/16/2016.)

Oregon Water Law

Oregon law bases water rights on historical uses, and the current claims for water rights may actually exceed the available supply. (LWVOR Water Study, 2009, p.3)

Oregon's water laws are based on the principle of prior appropriation. This means the first person to obtain a water right on a stream is the last to be shut off in times of low stream flows. In water-short times, the water right holder with the oldest date of priority can demand the water specified in his or her water right without regard for the needs of junior users. If there is a surplus beyond what is necessary to fulfill the senior right, the water right holder with the next oldest priority date can take what is available to satisfy needs under his or her right. This continues down the line until there is no surplus or until all rights are satisfied. The date of application for a permit to use water usually becomes the priority date of the right.

Generally, Oregon law does not provide a preference for one kind of use over another. If there is a conflict between users, the date of priority determines who may use the available water. If the rights in conflict have the same date of priority, then the law indicates domestic use and livestock watering have preference over other uses. However, if a drought is declared by the Governor, the Department can give preference to stock watering and household consumption purposes, regardless of the priority dates.

Some uses of surface water are exempt from the requirement to obtain a permit: natural springs, stock watering, salmon egg incubation projects under the Salmon and Trout Enhancement Program, withdrawal of water for emergency, forest management (such as slash burning and mixing pesticides), rainwater collection and use of water from an artificial impervious surface like a parking lot or a building's roof, and certain land management practices where water use is not the primary intended activity.

Some uses of ground water are also exempt from the requirement to obtain a permit: stock watering, lawn or noncommercial garden watering of not more than one-half acre, domestic purposes (not exceeding 15,000 gallons per day), industrial or commercial purposes (not

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exceeding 5,000 gallons per day), watering school grounds (for schools ten acres or less, located within a critical ground water area), and down-hole heat exchange uses (heating individual homes, schools and smaller apartment complexes, with heat removed from geothermal water). (<http://www.geothermal-energy.org/pdf/IGAstandard/EGC/szeged/O-7-08.pdf>)

While these water uses do not require a permit, their use is only allowed if the water is used for a “beneficial purpose without waste” and may be subject to regulation in times of water shortage.

With improved technology and distribution methods, water users are now able to do the same work with much less water than was required in the past. However, the water saved by improved technology and efficient practices cannot automatically be put to uses beyond those specified in the water right.

Examples of Water Allocation

1. Eugene -Water Rights Do Matter

The Eugene Water and Electric Board(EWEB), a municipal corporation, has two water rights that are fully used. Under the 1925 water right, EWEB draws 17.5 million gallons each day (mgd) from the McKenzie River, and the 1946 water right allows an additional 59.1 mgd. Both are fully used. EWEB applied for a third right in 1961 for 118.2 mgd but is not using the full amount and could lose part or all of that right, which was intended to meet water demands of Eugene’s future growth.

In May of 2010 Veneta requested to purchase six million gallons/month of EWEB water that would be delivered by a ten-mile pipe financed by City of Veneta using federal grants. Five wells from a shallow aquifer provide Veneta’s domestic water. To provide for future growth would require 18 new wells, but the water is high in iron and requires expensive treatment. Other water sources are not available.

The City of Eugene filed a lawsuit against EWEB in Lane County court, claiming that selling water to the City of Veneta violated Eugene’s City Charter. In October 2010, a Lane County Circuit Court ruled that EWEB does not need the City Council’s approval to sell surplus water wholesale to Veneta. The City appealed the ruling to the Oregon Court of Appeals, which ruled in May 2012 that EWEB’s contract was valid.

Veneta began receiving water from EWEB in September 2013. The cost of the pipeline and water was considered preferable to digging and treating less desirable well water. EWEB viewed the sale of water as a way to maintain its claim to the third water right and viewed the cost of additional water treatment as minimal.

The quest for water reliability

EWEB’s elected commissioners are taking action to improve the reliability of the water system. In the current situation during summer months there is only a one or two-day supply of water if something were to seriously disrupt the drinking water system.

There are several emergencies that could result in a water supply shortage: earthquake, forest

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fire in our watershed, severe flood, catastrophic mechanical failure, or a chemical spill into the McKenzie River, EWEB's only source of water. While natural disasters and other emergencies may be unavoidable, strategic investments could improve the water system's reliability under these difficult circumstances. The goal is to minimize community-wide service disruptions longer than 72 hours.

Looking ahead to a new water source

Today, all of EWEB's drinking water is produced at the Hayden Bridge filtration plant on the McKenzie River. In the future, the Willamette River will augment the primary source, reducing the inherent risk of relying on a single supply of drinking water. Diversifying the water supply also provides greater flexibility to take existing facilities off line for maintenance and upgrades.

EWEB Commissioners have established a dedicated reserve fund to help pay for the initial stages of this investment to reduce financing costs as well as rate impacts. Although customers will see small annual rate increases over the next 10 years, the goal is to keep rates affordable while making timely investments to enhance the security of water supplies and meet long-term community needs. Even with the planned increases, EWEB's water rates will continue to be comparable to other Oregon water utilities.

Willamette River filtration plant

Having received state approval to use its water rights on the Willamette, EWEB is working to acquire a site for the new water filtration plant. EWEB secured a permit to withdraw water from the Willamette River upstream from Eugene and Springfield. The new intake will be downstream of the Buford Park/Mt. Pisgah Natural Area, at the confluence of the river's Coast and Middle Forks. Testing since April 2013 confirms the water quality at this Willamette River location is similar to the McKenzie River intake.

(<http://www.eweb.org/public/documents/water/DrinkingWaterSavvyApril2015.pdf>, accessed 2/19/2016)

2. Springfield

The Springfield Utility Board (SUB) was founded in 1949 and is an independently operated municipal electric and water utility governed by a locally elected board. In 1960 SUB bought the McKenzie Highway Water District including the well fields that tap groundwater underlying the Willamette and McKenzie rivers. Currently the system serves about 20,000 customers. The average daily water use is 7.96 million gallons. Approximately 90% of Springfield's drinking water comes from a system of seven wellfields that tap groundwater from a vast aquifer. Ten percent comes from the Middle Fork of Willamette River and is processed through a slow sand filtration plant.

Plans for future growth include expanding production from the wells and the slow sand filtration plant. The McKenzie River will be the third source. (<http://www.subutil.com/>, accessed 1/26/2016)

The Rainbow Water District provides drinking water from wells and emergency response services to Lane County residents living primarily north of Hayden Bridge Road and west of

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Aspen Street. They also supply water for other north Springfield homes and businesses through a wholesale contract with SUB. (www.rwdonline.net)

3. Cottage Grove

The Dorena Reservoir serves as the main source of drinking water for Cottage Grove and Creswell. The Dorena Reservoir and Dam were constructed in 1949 to control flooding. The Row River, approximately twenty miles long, originates on the western face of the central Cascades and flows into the Dorena Reservoir, ultimately joining the Coast Fork of the Willamette River.

In 1977 Cottage Grove obtained a water right permit authorizing the diversion of 6.2 cubic feet per second from the Row River for municipal use. The permit required all water works to be constructed by 1979 and to apply water to beneficial use in 1980. The city was granted a number of extensions, ending in 1999. A municipality must obtain a water right permit from WRD before it can divert and use surface water or groundwater. Once the municipality receives a permit, it has 20 years to complete construction of the necessary facilities and use the water for authorized uses. Once the municipality submits evidence showing the water has been used in compliance, WRD issues a water right certificate and the municipality has a vested water right.

In 2007 Cottage Grove enlarged its water treatment plant and applied for an extension of time to perfect its water right. Prior to being granted the necessary extension, the city applied the full amount of water allowed under its permit to beneficial use. The WRD thereafter approved the extension. WaterWatch, citing a lack of a water conservation plan and requirements for fish protection, sought judicial review of the approval. The Court of Appeals agreed with WaterWatch.

The Cottage Grove case is the first in a number of municipal extension judicial review cases. The decision will affect numerous Oregon municipalities and require them to implement water conservation management plans and protect the fish species when conducting staged water development that requires extensions of time. This will make staged development of water resources for municipal uses more challenging.

(<http://www.water-law.com/Oregon-court-of-appeals-decides-cottage-grove-case/>, accessed 2/29/2016)

Water Quality

During the early years in Oregon, water was seen as an infinite resource that would always remain clean and usable. As population grew, the water quality deteriorated due both to industrial discharges, chiefly from pulp and paper mills, and to domestic wastewater discharge. Early in the twentieth century, the population became alarmed that water quality was decreasing. Much of the concern focused on the Willamette River, which served as a center for population and industry. (League of Women Voters of Oregon Water Study Part 1, February 2009, p. 15)

Testing water quality for both naturally occurring and other contaminants requires very specific

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sampling protocols. The Environmental Protection Agency (EPA) recommends that well water be tested annually for nitrates/nitrites and coliform bacteria. Other contaminants, such as arsenic, should be tested on a less frequent or as-needed basis. The presence of a contaminant is not always a threat to health or a serious nuisance. (Water Well Owner's Handbook, Oregon Water Resources Department, March 2010, p. 23).

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***Bring your water bill to unit meeting to use as a tool for discussion.**

Discussion Questions:

- What's the average daily usage of water per person?
- What are you paying for in your water bill?
- How do you personally practice water conservation?
- What is your public utility doing to promote water conservation?
- What are the reasons for EWEB building another water filtration plant?