

Water Conservation & Drought Response

Q&A

Who is impacted by this Water Conservation & Drought Response Ordinance?

This ordinance applies to outdoor water use by customers within the City's retail water service area, including residential and commercial customers.

What about my trees & vegetable gardens?

The ordinance allows exemptions for both trees and vegetable gardens.

If our aquifer isn't at risk, why do we need to conserve?

Our water use increases drastically (4-5 times winter baselines) during the summer months – building our infrastructure (water towers, pipes, pump stations, etc.) to meet the capacity requirements of these summer months is not fiscally responsible.

In terms of our water resources (aquifer & river) being at risk, this is a very complex question. Spokane County is currently in a 'moderate drought' as we have not fully recovered from the 'exceptional drought' we experienced in the summer of 2021 ([Washington Drought Monitor](#)). Trends are showing more year-after-year droughts in our region, which creates multiple challenges for us. We are also experiencing increased population growth both in Spokane and Kootenai Counties -- the two counties dependent on our aquifer. In a 2010 report conducted by the County on Aquifer Demand Forecast numbers for the SVRP Aquifer (including Idaho) they determined that between 2020 and 2040, water demand would grow by 22.5 billion gallons (26%) on an annual basis. In a 2013 update which lists only the Washington side, they found that the SVRP Aquifer water demand will increase by 16% between 2020 and 2040. So, while the aquifer may not be at an immediate risk, we feel strongly that action needs to be taken today to protect the aquifer and the River as we expect to experience increased population and increased drought.

How does water use impact the River?

The River and the aquifer are hydrologically connected. There are locations along the River where the aquifer is putting water into the River (the gaining reach) and other locations where the River puts water into the aquifer (the losing reach).

Spokane River has two primary sources of water: Coeur d'Alene Lake and the Spokane Valley Rathdrum Prairie (SVRP) Aquifer. During the summer months, Avista maintains both instream flow minimums and lake height minimums as required by their federal license at Post Falls dam. During low-water years, Avista will restrict flows into the River per their federal licensing requirements. This leaves River flows more dependent on the aquifer recharge. Data from 2013 shows that City pumping depletes river flows by approximately 120 to 175 cubic feet per second during the summer low-flows. This depletion is

higher during drought years. We have failed to maintain state determined minimum flows in the River for four of the last ten years.

Human water use increases considerably in the summer, just when the River needs water the most – when stream flows are low during the summer, the aquifer contributions to the River are crucial.

Why are summer season restrictions important?

As mentioned above, our water use increases drastically (4-5 times winter baselines) during the summer months. Nearly all of our increased water use during summer is for landscaping. Much of that increased water use (up to 50%) can be attributed to waste – sprinklers over spraying into the streets and sidewalks, for example. When we water during warm temperatures, our plants are not receiving the benefit; water is lost to evaporation.

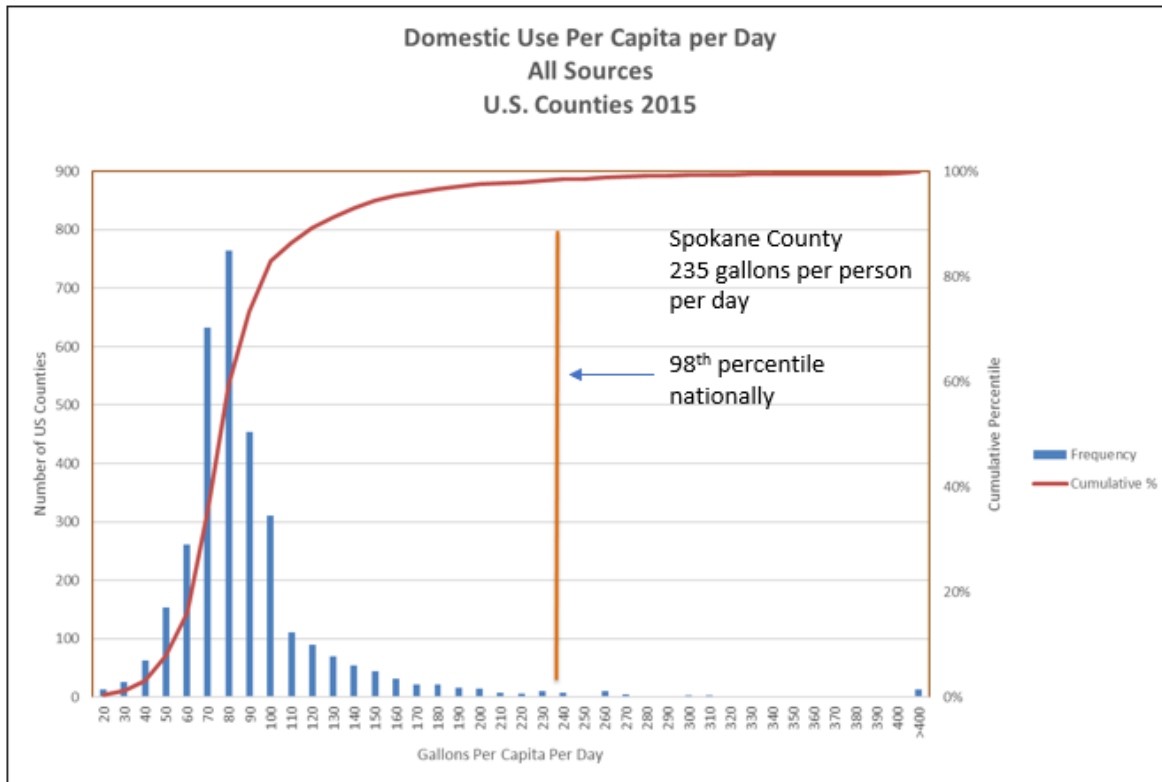
How does Spokane water use compare to other communities?

Overall, City of Spokane residents use more water per capita (per person/per day) than 97% of Americans, if we look at Countywide data, Spokane County residents use even more at 98%. This data is from the US Geological Survey which evaluates water use across the U.S. (see graph below or you can find the raw data [here](#))

Water is a shared resource. The aquifer provides drinking water for nearly 600,000 people in Kootenai and Spokane Counties as well as habitat and drinking water for our native plants & animals. The City of Spokane is not the first to ask its residents to restrict their outdoor water use. Post Falls, Airway Heights, Cheney, and Medical Lake all have laws that restrict water use during summer with additional measures during drought years.

In summary:

- Spokane residents use more water per capita (per person/per day) than 97% of Americans – we can do better
- Our water use increases drastically (4-5 times winter baselines) during the summer months – we are building our infrastructure to meet the capacity requirements of these summer months which is not fiscally responsible.
- Nearly all of our increased water use during summer is for landscaping
- Much of that increased water use (up to 50%) can be attributed to waste – sprinklers over spraying into the streets and sidewalks, for example.
- When we water during warm temperatures, our plants are not receiving the benefit; water is lost to evaporation
- Our water use increases considerably, just when the River needs it the most – when stream flows are low during the summer, the aquifer contributions to the River are crucial.
- This new policy is simply asking Spokane residents to consider their impact on the River during the summer low-flow season.



Source: Version 2.0: Dieter, C.A., Linsey, K.S., Caldwell, R.R., Harris, M.A., Ivahnenko, T.I., Lovelace, J.K., Maupin, M.A., and Barber, N.L., 2018, Estimated use of water in the United States county-level data for 2015 (ver. 2.0, June 2018): U.S. Geological Survey data release, <https://doi.org/10.5066/F7TB15V5>.

This graph illustrates per capita water use throughout the U.S. Per capita water use is a measure of how many gallons each person uses daily, on average.

The axis on the bottom indicates the per capita daily water use in gallons.

The left axis shows frequency, or the number of counties that fall into a particular per capita use. The blue bars show the number of counties in each per capita water use range. The most common water usage is 80 gallons of water per person per day. The second most common water use average is 70 gallons per person per day. In other words, people in the U.S. use 80 gallons of water per day, on average.

Spokane County per capita water use is 235 gallons per person per day. Within the city of Spokane, people use, on average, 202 gallons per day.

The cumulative percentages on the right, where the orange line and red line cross, indicates that residents of Spokane County use more water than 98% of the country, and 155 gallons more per day per person than the national mean.