## **BEST PRACTICES**



### Water Update: Did the Heavy Spring Rains Make Up for the Lack of Winter Rains?

How When people think of Washington they often think of rain. It usually rains about nine months out of the year here in Western Washington. What you may not realize is that the timing of our heavy rains matters for streams, salmon and us.

#### **Spring Rains Equal Warmer Temperatures**

We usually get the bulk of our rain during our coldest months—October through March. Rain during these months is colder than rain that falls during spring or summer. That means that groundwater supplied by fall and winter rains is colder than from spring or summer rains.

Groundwater keeps our streams flowing during our hot, dry summer months. Salmon need cool water temperatures to thrive, so it's important that cool water flows into our streams.

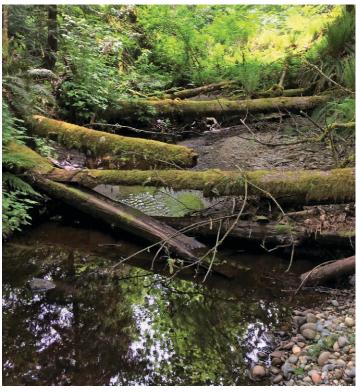
# **Spring Rains May Not Help Refill Groundwater Supplies**

Springtime brings spring flowers, green leaves and renewed growth in shrubs and trees. Spring and summer also bring warmer temperatures. Due to the warmer air temperatures, more water evaporates from spring and summer rains than from fall or winter rains.

Plants need a lot of water to fuel their growth in the spring and summer. During the growing season their roots pull water out of the soil before it can soak down into groundwater aquifers. In the fall and winter, plants use much less rainwater because they either slow down or stop growing.

2019 WY*	2008 – 2018 WY
36.65 inches	52.64 inches







### Warmer Water Temperatures Equal More Algae Growth

Warmer water temperatures affect more than salmon. Warmer water temperatures fuel the growth of algae, which can lead to toxic algae blooms. Algae need sunlight and nutrients, such as nitrogen, phosphorous and potassium, to grow. Some algae, such as blue-green algae, can be toxic to people and dogs.

During toxic algae blooms it is not safe to fish or swim in lakes or drink the water. It's also not safe for dogs or livestock to swim in or drink the water. For more information on toxic algae blooms or for algae monitoring in Thurston County, visit <a href="https://www.co.thurston.wa.us/health/ehadm/swimming/blue\_green\_algae.html">www.co.thurston.wa.us/health/ehadm/swimming/blue\_green\_algae.html</a>.

Last summer at least three lakes in Thurston County experienced toxic algae blooms. Last year was also one of our driest years. The average rainfall last water year was 15 inches less than the average rainfall from 2008 – 2018!

### 5 Things You Can Do to Help Streams & Salmon and Prevent Toxic Algae Blooms

- 1. Plant native trees along streams to cool the water.
- 2. Aerate your lawn to help more water soak in.
- 3. Mulch around plants to conserve water in soil.
- 4. Use a slow-release fertilizer to prevent nutrients from running into lakes and streams.
- 5. Inspect and maintain your septic system to keep nutrients from running into lakes and streams.

Source: Stream Team News, Fall 2020

