

BEST PRACTICES

Wildfires & Water Quality

Historic Fire Season

2020 was historic for more than one reason and unfortunately one of those reasons was the wildfires. Across the US, 59,000 fires burned over 10 million acres, the most annual acreage burned since 1960.

Smokey the Bear taught us that “only you can prevent wildfires” and we know that when fires happen, we lose forests, homes and even lives. While wildfires impact human health and property, they can also affect water quality.

What happens to local water bodies after a fire?

Burned areas lose their dense vegetation and are more likely to suffer soil erosion. Stormwater runoff can carry dirt from burned areas into nearby waterways. Ash and contaminants settle onto surface waters (likes lakes & rivers). Solids, nutrients, metals, fire retardants and other fire-fighting chemicals accumulate, especially after rain events. The long-term water quality effects are still not fully understood, but we might be able to lessen the impact by reestablishing vegetation as soon as possible, even with temporary cover crops.

How do wildfires impact stormwater?

Stormwater can carry dirt and debris from wildfire areas into stormwater pipes or filters. The dirt and debris can cause blockages in the pipes and filters. Cities & counties can prepare and respond by scheduling clean-outs and performing routine maintenance before fire season. Some cities monitor their drinking water supplies if a wildfire burns through dense urban areas to ensure the water pipelines are not damaged.

Effects of Climate Change on Wildfires

The University of Washington Climate Impacts Group published a detailed report on the state of science on climate change and its effect within our region. The evidence suggests that long-term climate change will have a measurable impact, raising the risk of wildland fires for the Puget Sound lowlands. Increasing air temperatures are



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projected for all seasons, especially in summer, leading to longer, drier, warmer summers. This is why we can expect even more wildfires as regional summer temperatures get drier and hotter. Learn more by visiting cig.uw.edu and watch our Climate Conversations: Wildfires in Western Washington presentation at youtu.be/M1OSNI2zoDo.

Did you know...

Over 2,700 wildfires have been documented in Thurston County since 1972; an average of 63 fires per year.

Wildfire Prevention Checklist

- Check for fire bans in your location before you burn.
- Build your campfire in an appropriate fire pit cleared of all vegetation.
- Never leave a fire unattended, especially overnight.
- Completely douse with water and smother with dirt before leaving fire.
- Never start a fire on a windy day. Save it for another time.
- Dispose of used matches or cigarette butts in a closed container or cup of water.
- Keep lighters and matches out of reach of children.
- Never burn treated wood, plastics or other garbage.

Remember these tips to help prevent wildfires, which in turn, protects our local water quality!

Source: Stream Team News, Summer 2021