

Focus on: Watershed Health Monitoring 2019



Why does it matter?

Water-dwelling species need healthy streams, rivers, and watersheds to thrive. Ecology's Watershed Health Monitoring program gathers information about their habitats to ensure their protection and recovery.

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Special accommodations

To request ADA accommodation, including materials in a format for the visually impaired, call Ecology at 360-407-6764 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Stream surveys in Eastern Washington during 2019

The Watershed Health Monitoring program assesses streams and rivers across the state to obtain a consistent, objective picture of habitat and biological conditions. The program tracks these conditions over time to answer important questions about the overall function and health of our watersheds.

Department of Ecology (Ecology) scientists determine watershed health by (1) measuring the physical, chemical, and biological components of Washington's streams and rivers and (2) analyzing the monitoring data to assess the key factors and conditions that affect the continued success of aquatic species.

Surveys cover biology, chemistry, and physical habitat

During our site visits, we collect information on fish, amphibians, macroinvertebrates, and algae. The status of these animals and their communities gives us insight into how the watershed is doing. We also gather chemical and physical habitat data to give us a complete picture of stream and riparian conditions.

Randomized sampling builds watershed-wide view

To be able to monitor the status and trends of an entire watershed, we use a statistical survey design that allows us to accurately describe large geographic regions. Instead of surveying *every* stream, we randomly choose sample sites that represent the overall stream network.

Project returns to the "Unlisted" Region in 2019

Ecology scientists sample eight regions across the state on a rotating basis. In 2019, we will collect samples at 30 streams and rivers in the





Many species inhabit streams, including the Columbia spotted frog (*Rana luteiventris*).

"Unlisted" Region between July 1 and October 15. We first sampled this region in 2010. The map below shows where we previously sampled.

Ecology field crews respect private property

Ecology staff always ask landowners for permission to access streams on their property. Our employees will not enter private lands unless landowners grant permission.

Watershed Health Monitoring since 2009

The Watershed Health Monitoring program was established in 2009 in order to meet goals of the state's *Comprehensive Monitoring Strategy for Watershed Health and Salmon Recovery*. Our monitoring program was designed with direction from Washington's Monitoring Forum, a multiagency group responsible for coordinating actions related to monitoring watershed health and recovery of aquatic species. You can learn more and find data at https://ecology.wa.gov/Research-Data/Monitoring-assessment/River-stream-monitoring/Habitat-monitoring/Watershed-health.

Map of Status and Trends Regions for Watershed Health Monitoring

