

## Environmental sampling in the Upper Columbia River and Northeast Washington regions

The Washington State Department of Ecology (Ecology) will be collecting environmental samples in the Upper Columbia River and Northeast Washington regions during July through mid-October 2012.

This work is part of an environmental monitoring program called *Status & Trends Monitoring for Watershed Health and Salmon Recovery* (WHSR). It is part of a statewide habitat and biological monitoring strategy requested by the Monitoring Forum of Washington's natural resource agencies.

The Upper Columbia River and Northeast Washington regions are two of the eight regions where Ecology is conducting this habitat and biological monitoring (Figure 1). Ecology is monitoring eight regions statewide using four-year cycles. These regions roughly correspond to the Salmon Recovery Regions mapped by the Governor's Salmon Recovery Office.

The Upper Columbia and Northeast Washington regions are the last two regions to be sampled in the first four-year cycle which began in 2009. Using a randomized selection of sites, this monitoring work is designed to provide a consistent, objective picture of stream and river habitat and biological conditions as well as to detect trends.

The results will be used to choose the most important steps to take for improved watershed health and salmon recovery.

We will sample streams with these qualities:

- Fresh water, not marine
- Year-round flow
- Natural channel, not man-made
- Not a wetland or pond
- Flows above the surface, not underground
- Not owned by federal government
- Land owner has granted permission for the sampling

### Why does this sampling matter?

Sampling will provide objective descriptions of regional stream conditions. By comparing results over time, we can see if environmental health is improving.

### What is habitat and biological monitoring?

Habitat monitoring analyzes stream shape, bottom composition, shade, vegetation structure, water quality, and sediment chemistry.

Biological monitoring analyzes vertebrate and invertebrate species composition.

For a complete description of habitat and biological indicators, go to the web-sites listed on the back side of this focus sheet.

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### Special accommodations

If you need this document in a version for the visually impaired, call 360-407-6764. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

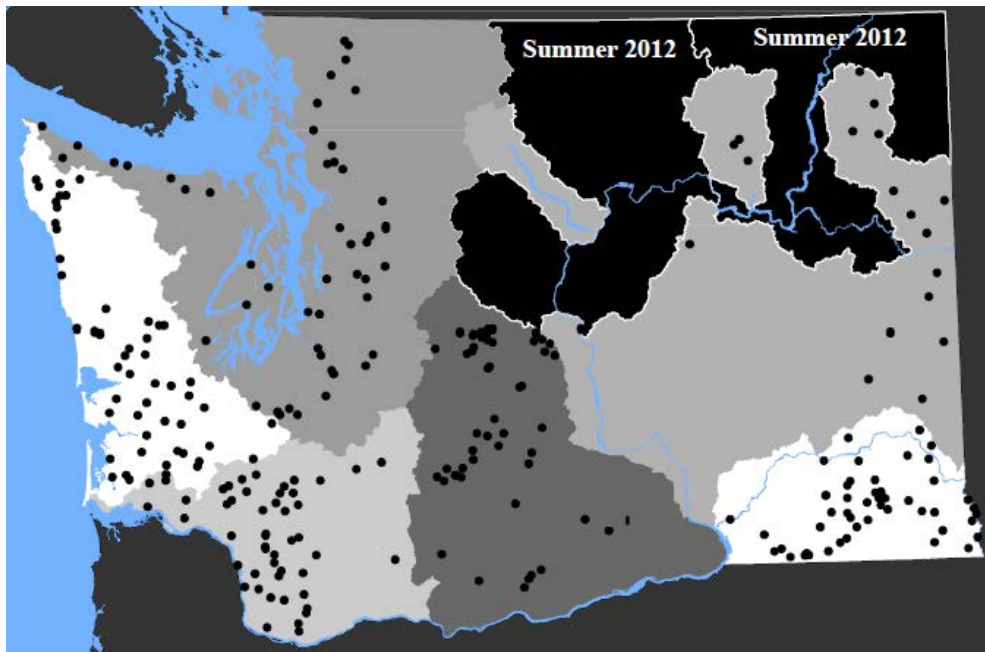


Figure 1. Dots signify locations of previous field sampling under the Status and Trends Monitoring for Watershed Health and Salmon Recovery Program.

*Dark areas will be sampled in 2012. The Upper Columbia River region is the dark area on the left, and the Northeast Washington region is the dark area on the right.*

Before Ecology field crews begin sampling, they will obtain permission from willing land owners. The crews' goal is to find 50 sites that fit Ecology's criteria per region. These sites will fall within 5 different stream sizes.

### **Reports**

Ecology will produce periodic reports which describe the monitored streams, assigning condition categories of good, fair, and poor for habitat and biological health.

### **Websites including field protocols**

Status and Trends Statewide Monitoring Framework  
[www.ecy.wa.gov/programs/eap/stsmf/](http://www.ecy.wa.gov/programs/eap/stsmf/)