

Spokane and Troutlodge Fish Hatchery PCB Evaluation

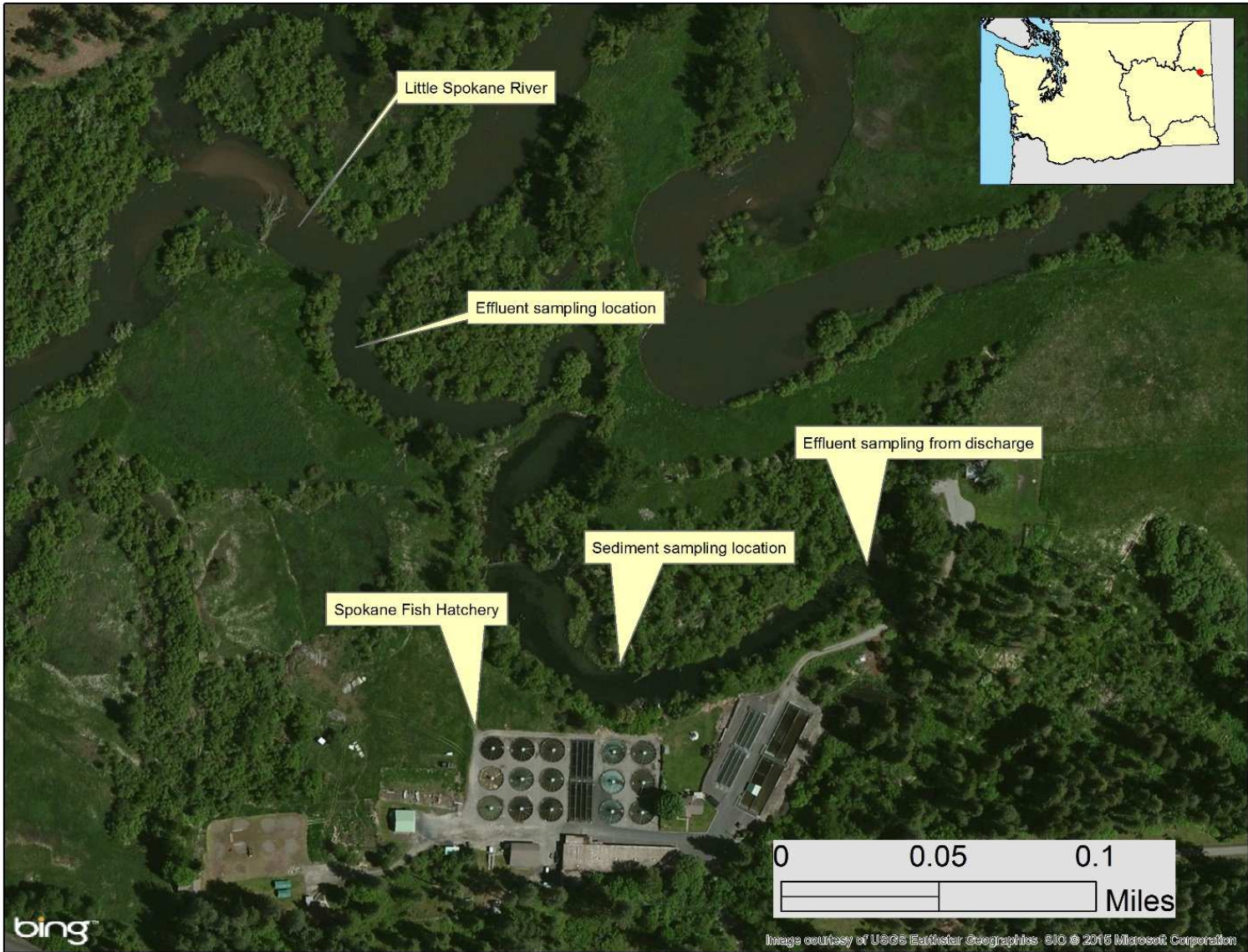
A 2006 Ecology study evaluated PCB concentrations in Rainbow trout fillets from Troutlodge and Spokane fish hatcheries. Fish tissue concentrations were 6.5 ug/kg and 14.4 ug/kg, respectively.

This study will evaluate current PCB concentrations in whole fish from the two previously mentioned hatcheries, which produce the fish that are stocked annually to the Spokane River.

The goal of this project is to estimate the PCB load contributed to the Spokane River by effluent from the Spokane fish hatchery and fish planted from both the Troutlodge and Spokane hatcheries.

Project Objectives

- Analyze PCBs in whole fish from the Spokane fish hatchery and the Troutlodge fish hatchery.
- Analyze PCBs in effluent collected from the discharge from the Spokane fish hatchery and the end of the slough that drains effluent to the Little Spokane River.
- Analyze PCBs in fish food and TOC and TSS in water to evaluate potential differences in PCB concentrations in hatchery effluent.
- Analyze PCBs in sediment collected from the slough that drains effluent from the Spokane fish hatchery to the Little Spokane River.
- Calculate an annual PCB load in hatchery effluent and fish.



Sampling Schedule-

2015 fish samples already collected by SRRTTF

2016 fish samples will be collected just before planting to Lake Spokane

Fish feed samples collected to represent the month preceding effluent sampling

Seasonal Sampling- Spring and Summer

Collect whole water samples directly from discharge pipes during raceway cleaning (2.36 L)

Obtain discharge estimate from hatchery personnel for load calculation

Collect whole water samples from drainage slough that connects to Little Spokane River (2.36 L)

Measure slough discharge for load calculation

Fall Sampling

Collect “baseline” water samples- effluent collected during normal hatchery operations (not during raceway cleaning)

Collect representative sediment sample from drainage slough or settling pond

**Method 1668C Chlorinated Biphenyl Congeners in Water,
Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS**

