



# Hands-on Science, Hands-on Learning

Education programs at the Stilly-Snohomish Task Force build on ecological research methods and findings to broaden students' understanding of how the environment and how human activities influence aquatic ecosystems and affect salmon.

**All programs are free-of-charge, and funding for buses can often be provided.**

## Hands-on Approach to Science

With the Task Force, students learn about environmental science by doing it. They participate in authentic salmon restoration activities, such as planting streamside trees. They design and conduct experiments, including field investigations at their restoration site. They record observations of fish and wildlife at nearby streams, create keys to local plants, test how trees affect erosion, or analyze water quality using stream bugs. For all ages of students and levels of interest, our programs bring ecology home.

## Classroom and field-based lesson opportunities:

Join us for a fieldtrip, or we'll come to your classroom, for lessons on:

- Salmon ecology and conservation
- Watersheds and water quality
- Tree plantings along local salmon streams
- Using and creating keys to local plants or invertebrates
- In-class investigations with small animals or plants
- Field-ecology investigations (including setting up experiments, data collection, and/or data analysis)
- Erosion
- Tree and stream interactions
- Schoolyard ecology
- Exploring and measuring biological diversity
- Habitats and adaptations

## Restoration Ecology for Young Stewards (REYS)

**REYS curriculum available for download:**  
<http://www.stillysnofish.org/review/edgrant.htm>

REYS offers an integrated series of 8 lessons, for grades 5-10, about habitat restoration, ecology, and salmon conservation. The curriculum includes 2 field-based and 6 in-class lessons.

Students begin by collecting observational data and performing simple experiments: In lessons 1 - 3, they learn about salmon life-history and habitat requirements, tour their watershed, and test how trees affect soil erosion. In lessons 4 - 6, students progress to designing and conducting their own controlled scientific investigations in ecology: Students plan and implement a stream restoration project that includes an experimental component.

In the final lessons, students communicate their learning by creating interpretive signs for their restoration site, plus improve analytical skills by using and creating keys for local plants and bugs.

The Task Force's education programs provide research-based information and experiential learning experiences about salmon conservation and other current, complex environmental issues. Programs align with state science standards and many are inquiry-based. All programs can be tailored to specific needs of teachers and students.



Students help restore local salmon habitat by planting trees



Recording observations and testable questions



Creating and investigating watershed models