

Watershed Detectives 2014-2015



Funders

Outdoor Youth Connections The Mountaineers Foundation **Puget Sound Energy Foundation** Aquatic Lands Enhancement Account

Expenses

Total Program costs

\$17,190

2+

29

hours of instruction to each student

classes

900+ 732

Trees planted

students





Watershed Detectives 2014-2015

SSS believes that thoughtful, natural resource management starts with educating youth — the future stewards of tomorrow. Many resources, including, clean water and abundant fish populations, are invaluable to Washington's ecology, economy and culture. Through our education programs, we instill environmental values and knowledge in youth through experiential education.

In the 2014-2015 School year, **SSS reached a total of 732 students through the Watershed Detectives Program**. Through the program, students participated in a variety of lessons. Students tested for dissolved oxygen, temperature and turbidity in local streams and learned how those parameters are good indicators of water quality. Some students also sampled for benthic macroinvertebrates and learned how these bugs can tell us a lot about water quality and ecosystem health. During the majority of the outdoor fieldtrips students participated in hands-on service learning by picking up a shovel and some gloves to get a little dirty and plant some trees. In addition to outdoor fieldtrips, many students modeled erosion processes in-class and witnessed first-hand the value that trees provide in terms of reducing erosion.

Throughout every lesson, students learned that trees provide a number of benefits to salmon including cooling shade, leaf litter to feed the macroinvertebrates, and large woody debris recruitment to provide ecosystem complexity. In total, **students planted over 900 trees** in riparian corridors. These trees will grow and mature and create habitat not just for salmon but for birds, squirrels and other wildlife as well.

All student participants received an introduction to three easy best management practices that they can implement at home. First of all, they learned it's important for their families to use appropriate amounts of fertilizer, since excess fertilizer can leach into creeks and cause algal blooms which ultimately consumes dissolved oxygen when



Schools Reached:

Cascade High School, Everett
Everett High School, Everett
Fryelands Elementary, Monroe
Jackson High School, Everett
Liberty Elementary, Marysville
Monte Cristo Elementary, Granite Falls
Odyssey Elementary, Mukilteo
Pioneer Elementary, Arlington
Sky Valley ESS, Monroe

the plants decay. Students learned the best place to wash a car is at a car wash because it prevents chemicals and high-phosphate soap from running into local creeks. They learn that soap can also wash off the slime on fish, which is an important protective coating for the fish. They also learn that if they must wash the car at home, washing the car on the lawn is better than the driveway since some of the chemicals and nutrients will be absorbed and filtered by the lawn. Finally, students learned that picking up dog waste can help reduce nutrient inputs in the local creeks, as well as reduce the levels of



dangerous fecal coliform bacteria. Usually, creeks students tested had high levels of phosphate; these behaviors enable students to start to make a difference even from a young age.

Thanks to generous support from **Outdoor Youth Connections**, the **Mountaineers Foundation**, the **Puget Sound Energy Foundation**, and the **Aquatic Lands Enhancement Account**, SSS was able to conduct these lessons at a greatly reduced cost to students, in fact, in most cases lessons were completely free.

SSS believes not only in educating youth stewards, but also in training adults. Through the Watershed Detectives program SSS trained two new environmental educators that will continue to provide high quality education through SSS and other partner organizations. Watershed Detectives will have a lasting impact on water quality and stewardship for years to come.