



Human Ecology

Field Project

July 5, 2007

Canyon Creek Restoration

SERVICE OBJECTIVES:

- Support restoration of a Canyon Creek, a tributary to the Snoqualmie River that combines with the Skykomish River to become the Snohomish River.
- Assist Stilly-Snohomish Fisheries Enhancement Task Force with stream surveys, cross sections and longitudinal profile to collect pre-LWD installation data on stream geometry.
- Assist with invasive species vegetation control in the Canyon Creek watershed at Aldarra Golf Course.

LEARNING OBJECTIVES:

- Describe the significance of riparian zones to the ecosystem (including humans) of Western Washington.
 - Review identification of native plants and their primary uses from the previous field projects.
 - Explain the social and ecosystem services provided by native plants as opposed to non-native species.
 - Describe the expected impact of riparian zone restoration on salmon populations.
- Identify and assist a non-profit organization (Stilly Snohomish Fisheries Enhancement Task Force) involved in salmon stream restoration.
 - Familiarize yourself with Stilly Snohomish Fisheries Enhancement Task Force. Pay special attention to the Snoqualmie watershed and its relationship with the Stillaguamish and Snohomish rivers.
 - Identify actions that you as a citizen can take to leave a lighter footprint on your environment.
- Use quantitative and qualitative measures to evaluate a stream profile prior to the installation of large woody debris.
 - Measure width and depth of stream at periodic intervals.
 - Identify and measure examples of large woody debris along a section of the stream.
 - Use data from measurements to graph a stream profile.

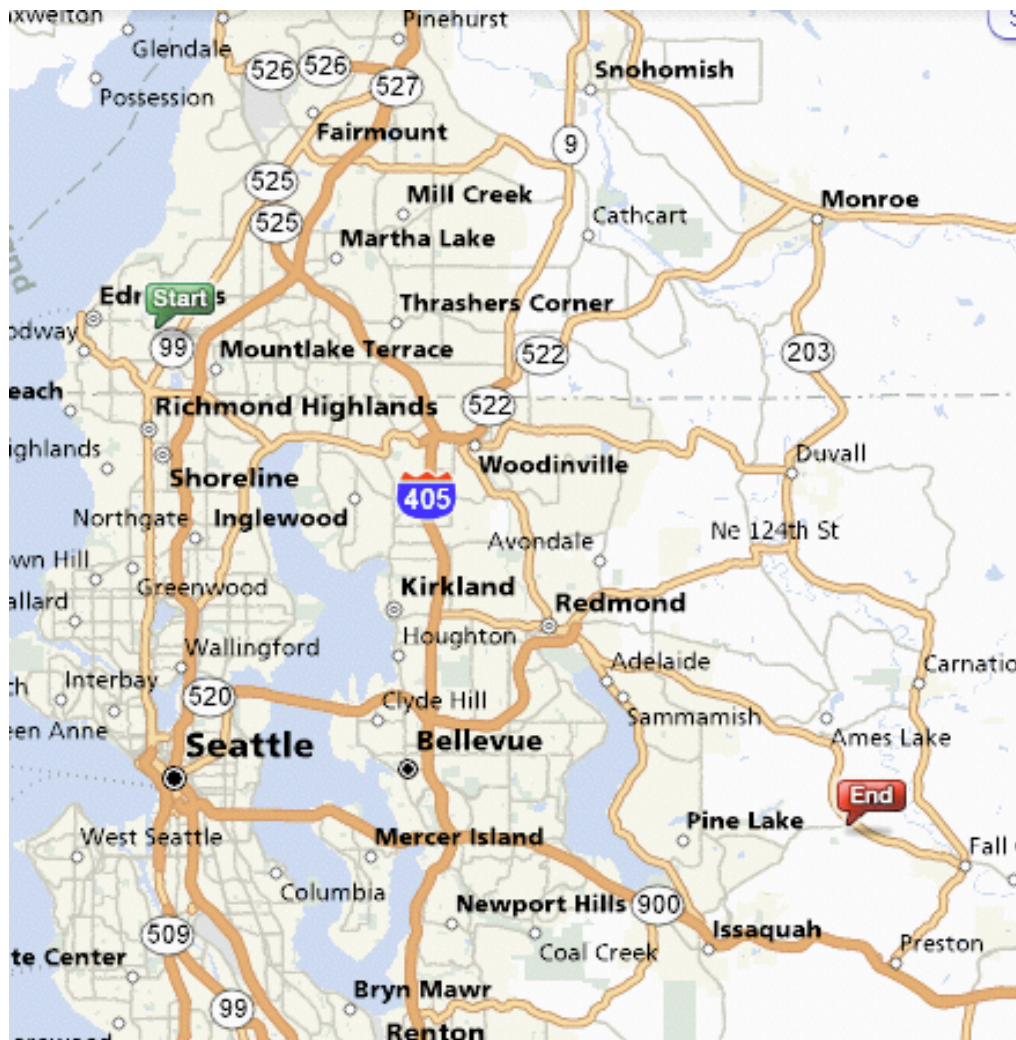
- Identify features of a stream profile that indicate healthy human-ecosystem interactions.
 - Identify features of a stream profile that indicate unhealthy human-ecosystem interactions.
 - Outline a brief history and summarize the ecology of the Aldarra site on Canyon Creek. The statement below from Jason Anderson provides a brief overview.
 - The Members Club at Aldarra is a private golf club. It is built on an old farm that was once owned by the Boeing family. With that in mind, many of the same issues and themes that we discussed about human alteration to stream channels at Portage Creek will be revisited at Canyon Creek. The stream was ditched and still remains in a fairly straight line configuration. Wood and other habitat structures in the channel were removed to increase conveyance. The end result was simplified aquatic habitat with limited habitat available (both in terms of quantity and quality) for salmonids.
 - Again, similar to Portage, Canyon supports a relatively healthy coho run as well as resident cutthroat and rainbows. SSFETF restoration project objectives for this site include: restore the riparian forest along Canyon Creek to buffer against adjacent land use, improve aquatic habitat for juvenile salmonids (rearing habitat) by placing large wood in the channel (construction begins late July/early August 2007), improve fish passage at a low-head concrete dam near the golf maintenance buildings by cutting a notch in the concrete (August 2007).
 - Maintain field notes recording your activities at Canyon Creek.
 - Start a new page of field notes for each day of service. Do not remove pages. If you make an error, cross it out, and proceed.
 - Include the following information for each service project:
 - Description of project.
 - Date and time of day.
 - Weather conditions.
 - Latitude, longitude, and altitude of one or more reference points. Include a description of the reference point(s) and relationship(s) to the work site.
 - Names of other volunteers with whom you worked.
 - Two to three page description of the day's activities and how they helped you meet the objectives outlined above.
 - Carpool information.
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DESCRIPTION AND LOCATION:

The map and directions below, edited from <http://www.mapquest.com>, will take you from Edmonds Community College to Canyon Creek.

- Take 200th St SW to the Lynnwood Park and Ride.
- Exit via carpool ramp to I-5 north.
- Follow to I-405 North.
- Take the WA-908 E exit- EXIT 18- toward REDMOND.
- Turn SLIGHT RIGHT onto NE 85TH ST / WA-908. Continue to follow WA-908.

- Turn RIGHT onto W LAKE SAMMAMISH WAY NE / WA-901. Continue to follow WA-901.
- Merge onto WA-520 E toward FALL CITY / NORTH BEND / WA-202.
- Merge onto WA-202 E toward FALL CITY / NORTH BEND.
- Turn RIGHT onto 292ND AVE SE.
- Stay STRAIGHT to go onto SE DUTHIE HILL RD.
- End at Members Club At Aldarra:
- 29125 Se Duthie Hill Rd, Fall City, WA 98024, US



TRANSPORTATION:

In the interest of minimizing pollution and enhancing your learning experiences we recommend traveling to and from the site in pre-arranged carpools. Carpools will depart at **8:00 am** from the south entrance to Snohomish Hall. If you miss your carpool it is your responsibility to get to and from the site on your own.

In an emergency you may contact Thomas Murphy via cell phone at 425-478-5567.

WHAT TO BRING:

You should bring your field manual (including this field packet) in a three-ring binder, “Rite in the Rain” All-Weather Spiral Notebook and a fine pointed permanent marker. You may leave the binder in the vans but should keep the notebook and marker with you.

Please come prepared to get dirty, rain or shine. Bring the following items.

- One pair of leather gloves.
 - One pair of rubber-palmed gardening gloves.
 - Water-resistant coat and pants (if raining).
 - Chest waders (recommended).
 - Boots or sturdy shoes.
 - Hat (recommended).
 - Pojar & Mackinnon’s *Plants of the Pacific Northwest Coast* (recommended).
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PRE-FIELD ASSIGNMENTS:

- Read this field packet.
- Visit Stilly Snohomish Fisheries Enhancement Task Force’s home page:
<http://www.stillysnofish.org/>.