Skagit Fish and Watershed Overview
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Skagit River Basin

Largest watershed in Puget Sound (3200 square miles).

Historically, glaciers have left a large geological imprint.

Gathers water from the Cascade, Sauk, Suiattle and Baker Rivers.

Has three operating dams in the upper Skagit and two in the Baker River.
Only river in Puget Sound that is home to all 5 species of wild pacific salmon, steelhead and cutthroat trout.

Puget Sound chinook and steelhead are listed as threatened under the Endangered Species Act.
Factors Affecting Salmon Populations

Hydro-electric dams

Harvest

Hatcheries

Habitat condition

Ocean survival
Recent Skagit salmon and steelhead spawner numbers

Chinook: fair
Coho: good
Sockeye: good
Steelhead: fair
Chum: poor
Pink: good
Land Use in the Skagit
Land Use Impacts on Fish and Fish Habitat

- Increased sediment delivery
- Reduction in wood recruitment to streams
- Fish blocking structures on roads
- Destabilization of stream banks
- Elevated stream temperatures
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*Forest Practice Rules are in place to minimize these impacts*
Water Typing

Stream Classifications:

Type S – Shorelines of the State
Type F – Fish bearing water
Type NP – Non fish bearing and year round flow
Type NS – Non fish bearing and seasonal flow
Buffer widths

- 200 feet
- +130 feet (Site III)
- 50 feet x half length
- None - ELZ only
Water Typing Challenges

- Mismatched streams
- Mistyped streams
- Unmapped and un-typed streams
- Seasonal streams
Is the stream fish bearing or non-fish bearing?

Is there access for fish?

Is it over 2 ft wide and less than 20%?

Protocol electro-fish surveys
Fish Use in Small Streams And Wetlands
Off Channel Habitat Types

Small streams
Wetlands
Springs
Seasonal streams
Coho

Cutthroat
Summer months
Winter, Spring
Juvenile Salmonid Freshwater Habitat Requirements

- Low velocities as found in off-channel habitats and tributaries
- Abundant habitat cover including cobbles, boulders, wood, and vegetation
- Cool water temperatures
- Abundant invertebrate food supply
Fish blocking culvert
Family Forest Fish Passage Program

Get advice and financial assistance to help restore fish populations by removing fish passage barriers on your forestland. This program pays 75 percent to 100 percent of the cost to replace a fish barrier with a fully passable structure.

Outfall drop may create a passage barrier for both adult and juvenile fish.

Proper fish passage structures should maintain natural streamed materials and gradient through the culvert.

DNR staff work with local sponsors to replace undersized culverts with fish passable structures.

Skilled contractors work to create a fish friendly passage.
Thanks!