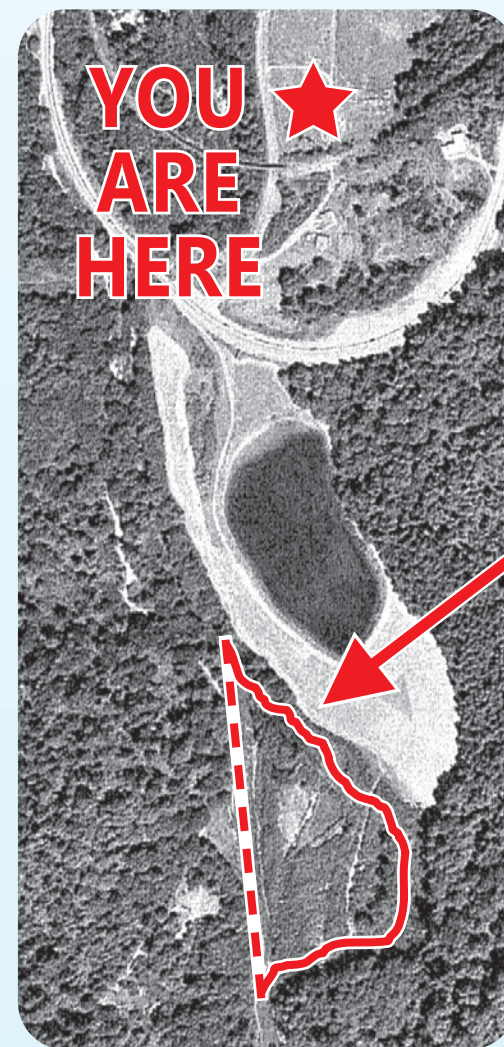


Restoring habitat for fish, wildlife & our community

Why did Morse Creek need a makeover?



In the 1960s a 1,900-foot meander of the Morse Creek channel was straightened and confined into 1,200 feet, causing higher water velocity.

Salmon need pockets of slow moving water to rest, gravel for spawning, and logs to hide under - unnaturally high water velocities in the straightened Morse Creek channel stripped these habitat elements away, leaving bedrock.

In 50 years, up to 8 feet of river bed was washed away!

Dike constructed in early 1960s to contain the straightened channel.

River gravels lost between 1960 and 2010.

Bedrock 2010 river bed



How was the creek returned to its historic channel?



The 2002 purchase of the parcel for conservation was the first step in moving Morse Creek back into its historic channel. The channel was overgrown, but its river gravels were found underneath the young forest.



The historic channel was cleared and 19 engineered log jams (ELJs) were installed to divert the water back to its old path and to help stabilize the 1,900 feet of newly constructed channel.



Thousands of fish had to be captured in the straightened channel and relocated upstream prior to diverting the flow into the new channel.

River flows dig pools at ELJ's upstream ends and have eddies that build riffles at their downstream ends. The pools are deep, quiet resting, hiding, and feeding areas. The riffles serve as salmon spawning areas. The ELJs catch and hold wood washing downstream, adding habitat diversity through the years.



What occurred once the creek flowed in its new channel?

During the winter floods, the newly constructed channel allowed the river to spread out into the forested floodplain. Here waters slow and juvenile salmon seek refuge and feed.



Salmon have moved into the project site in force. Snorkel counts indicate a 200% increase in juvenile fish numbers.

Fish monitoring shows that adult salmon are actively spawning in the new riffles.



Habitat surveys indicate a two fold increase in favored pools and a complete removal of rapids that are poor habitat for fish.



Counting fish, monitoring habitat and planting trees are just a few of the ways volunteers have enjoyed contributing to the restoration effort.



FLOOD PLAIN

- Straightened Channel
- Realigned Channel
- Pools for salmon
- ⌘ Engineered log jams (ELJs)
- Channels activated at high water only
- ↑ Downstream

1,200 FEET

1,900 FEET

flows to the Strait of Juan de Fuca

NOSC'S PROJECT PARTNERS:



Credits: All photos NOSC Archives except the juvenile salmon photo (Roger Peters, U.S. Fish and Wildlife Service). Graphic Design & Layout by Dave Shreffler (Shreffler Environmental) & Jessica Diewald (In Graphic Detail).



**For more information or to get involved:
Contact the North Olympic Salmon Coalition
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