



Hatcheries

Purpose of Hatcheries

A hatchery is a place where fish are bred and raised. The purpose of some hatcheries is to produce fish for harvest; in these cases, the hatchery operations are being modified to reduce negative interactions with ESA listed fish. Other hatcheries are operated with the goal of helping to recover wild fish populations, using local brood stock and deliberately releasing the hatchery fish into local streams and rivers, as described above, to speed up the recovery of a wild spawning population. Still others try to achieve both of these purposes.

Salmon raised in hatcheries often differ from wild salmon in their genetics and behavior. The negative effects of hatcheries on wild populations are being debated. For example, hatchery fish that originated from a distant river may interbreed with local wild salmon, or compete with them for food and habitat. Various hatchery reforms are underway including the development of hatchery and genetic management plans to guide hatchery operations and prevent negative impacts to ESA listed salmon species.

Hatcheries in WRIA 1

There are currently seven salmon and trout hatcheries in WRIA 1: Lummi Bay Sea Ponds (Lummi Nation); Maritime Heritage Hatchery (Bellingham Technical College); Bellingham Hatchery (WDFW); Lake Whatcom/Brannian Hatchery (WDFW); Skookum Hatchery (Lummi Nation); and Kendall Hatchery (WDFW). A few are raising fish solely for harvest, but most are intended to both supplement the natural fish population and provide for recreational and commercial harvest.

The ways that the hatcheries are managed are described in a report called the Equilibrium Brood Document, prepared by the WRIA 1 co-managers (Lummi Nation, Nooksack Indian Tribe, and WDFW). The Equilibrium Brood Document is modified annually by a Future Brood Document.

In addition, hatcheries that have the potential to affect ESA-listed salmon are required to develop hatchery and genetic management plans and/or acquire the proper federal permits for the hatchery operation.

In WRIA 1 hatcheries affect threatened chinook runs in several ways:

- Potential for negative spawning ground interactions between native chinook and hatchery-origin Nooksack/Samish mainstem fall chinook.
- Undemonstrated but potential negative predator/prey interactions between hatchery coho and juvenile chinook.
- Potential for impacts on the genetic integrity of naturally spawning, North Fork spring (early) chinook by fall chinook that were historically, but no longer, produced at the Kendall Creek hatchery.
- Potential impacts on the genetic integrity of naturally spawning South Fork early chinook by fish straying from the North Fork, where the hatchery is helping supplement production of the native genetic stock, and by the fall chinook historically produced by the hatchery.