

NOOKSACK/SAMISH - NOOKSACK COHO

STOCK STATUS

| 1992 STATUS | 2002 STATUS |
|-------------|-------------|
| Unknown | Unknown |

STOCK STATUS RATING DATA

Historical annual escapement estimations that have been generated for management purposes used undocumented methodologies, with unknown precision and accuracy. The utility of the estimates as either absolute escapement values or relative indices of escapement is unknown at this time. Stock status remains **Unknown** in 2002 due to the uncertainties associated with the historical escapement data for this basin.

STOCK DEFINITION

Nooksack coho were identified as a stock based on their distinct spawning distribution.

SPAWNING DISTRIBUTION: Spawning takes place in suitable and accessible habitat throughout the Nooksack River system.

SPAWNING TIMING: Spawning generally occurs from mid-October to mid-January.

GENETIC ANALYSIS: Microsatellite DNA analysis has been conducted on collections of adult coho spawning naturally in the Nooksack and Samish rivers and of adults returning to hatcheries in the Nooksack system (Small 2003). Comparisons were made among coho spawning just above RM 48 in the North Fork Nooksack, coho spawning above RM 61 in the North Fork Nooksack, coho at the Kendall Creek Hatchery (North Fork Nooksack RM 46), at the Skookum Creek Hatchery (South Fork Nooksack), and coho spawning in the Samish River at RM 10.5. Results of the analysis indicate that a genetically distinct, perhaps native, coho population exists in the upper North Fork Nooksack (>RM 61). Spawners sampled from just above RM 48 in the North Fork Nooksack were more similar to fish from the hatchery collections than they were to fish from the North Fork Nooksack above RM 61. Coho spawning in the Samish River also resembled Nooksack hatchery coho.

STOCK ORIGIN

This is a **mixed** stock with **composite** production. Various non-native hatchery-origin stocks, including Baker (Skagit), Skagit, Skykomish and Dungeness coho, were released into Kendall Creek on the North Fork Nooksack between 1952 and 1992. Non-native hatchery-origin coho from the Kalama, Samish, May Creek, Skagit, Clark Creek, and Skykomish systems were released from the Skookum Creek Hatchery into the South Fork Nooksack between 1974 and 1995. A native component may exist in the upper North Fork Nooksack (Small 2003).