

# WILLAPA BAY – NASELLE FALL CHINOOK

In 1992 this stock was part of the Willapa Bay fall Chinook stock.

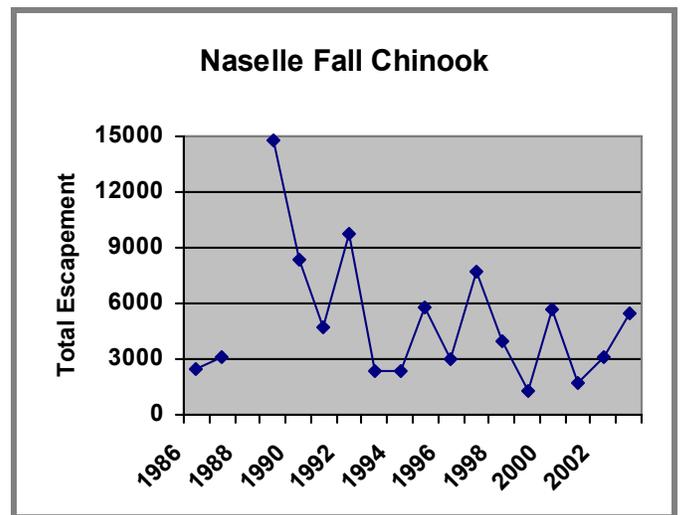
## STOCK STATUS

<b>1992 STATUS</b> Not rated	<b>2002 STATUS</b> Depressed
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## STOCK STATUS RATING DATA

**USEFULNESS FOR RATING STOCK STATUS:** Fair

YEAR	TOTAL ESCAPEMENT
1986	2,470
1987	3,105
1988	No data
1989	14,761
1990	8,337
1991	4,712
1992	9,703
1993	2,380
1994	2,346
1995	5,825
1996	3,011
1997	7,682
1998	3,925
1999	1,320
2000	5,650
2001	1,685
2002	3,076
2003	5,438



Data are total escapement estimates based on redd counts in index areas within the Naselle River.

Stock status is rated **Depressed** in 2002 due to **chronically low** escapements. Stock production does not meet expected levels based upon available habitat. The escapement in 1989 was exceptionally high; escapements since that time have declined with a historic low escapement value of 1,320 fish in 1999.

## STOCK DEFINITION

Naselle Chinook were identified as a stock based on their distinct spawning distribution.

**SPAWNING DISTRIBUTION:** Most spawning takes place in the mainstem Naselle and the North and South Fork Naselle rivers. Some spawning also occurs in Alder and Brock creeks.

**SPAWNING TIMING:** Spawning generally occurs from late September to mid-November.

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**GENETIC ANALYSIS:** No genetic analysis has been done on naturally spawning Naselle fall Chinook. Naselle Hatchery fall Chinook, sampled in the late 1980s and in 1990, are genetically distinct from all other Washington Chinook stocks examined (Marshall et al. 1995).

## **STOCK ORIGIN**

This is a **mixed** stock with **composite** production. The Naselle Hatchery fall Chinook stock was derived from brood stock at the Nemah and Willapa hatcheries. The majority of the naturally spawning Chinook in the Naselle River are likely non-native hatchery fish.