

# GRAYS HARBOR – CHEHALIS COHO

## STOCK STATUS

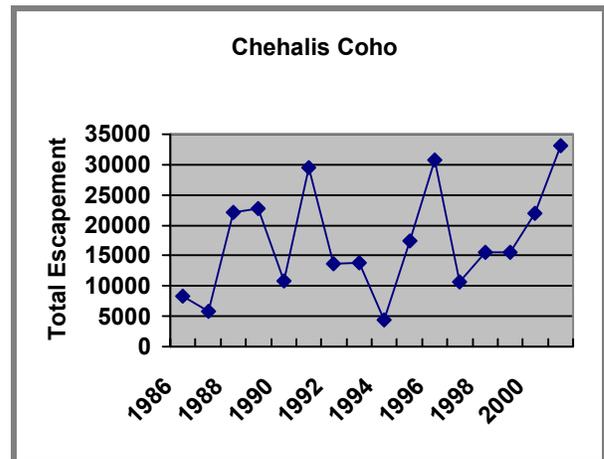
<b>1992 STATUS</b> Healthy	<b>2002 STATUS</b> Healthy
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## STOCK STATUS RATING DATA

### USEFULNESS FOR RATING STOCK STATUS:

Good

YEAR	TOTAL ESCAPEMENT
1986	8,357
1987	5,803
1988	22,108
1989	22,824
1990	10,768
1991	29,519
1992	13,584
1993	13,734
1994	4,442
1995	17,364
1996	30,695
1997	10,609
1998	15,493
1999	15,475
2000	21,968
2001	33,166
2002	Not yet available
2003	Not yet available



Data are total escapement estimates based redd counts within intensive and supplemental index areas expanded to basin-wide totals. Index areas surveyed include the mainstem Chehalis River (RM 103.7 to 106.2), Fry Creek (spawn pad at RM 1.4), Mill Creek (RM 1.0 to 1.1), Delezene Creek (RM 3.2 to 4.0), Cloquallum Creek (RM 3.5 to 6.0), Rock Creek (RM 0.0 to 1.0), East Fork Wildcat Creek (RM 4.8 to 6.4), Mox-Chehalis (RM 9.5 to 10.1), Porter Creek (RM 2.6 to 3.1), Cedar Creek (RM 5.9 to 7.9), Waddell Creek (RM 6.8 to 7.2), Scatter Creek (RM 0.4 to 3.2), Skookumchuck River (RM 21.3 to 21.9), Hanaford Creek (RM 10.8 to 11.3), Thompson Creek (RM 5.0 to 5.7), South Fork Newaukum Creek (RM 27.3 to 29.6), Kearney Creek (RM 1.4 to 2.6), South Fork Chehalis River (RM 25.9 to 27.0), Hanlan Creek (RM 1.0 to 2.0), South Fork Lincoln Creek (RM 13.1 to 14.6), Dillenbaugh Creek (RM 4.3 to 6.0), Smith Creek (RM 0.3 to 1.4), Swem Creek (RM 0.0 to 1.5), Big Creek (RM 0.0 to 1.0) and George Creek (RM 0.0 to 1.0). In 1999, fifty-six supplemental surveys were conducted that also included Black and the East Fork Chehalis rivers, Camp, South Fork Porter, Garrard, Bloomquist, Mima, Blooms Ditch, Salmon, Stony, Keller, Berwick, Sterns, Ripple, Bunker, Hope, Jones and Crim creeks. Adults trapped and placed upstream at the Elk Creek trap are included in the escapement estimate.

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Escapements have been reasonably large from the mid 1980s to early 1990s. Recent year escapements are adequate from both genetic conservation and stock productivity standpoints and measured smolt production is consistently substantial. Stock status is again rated **Healthy** in 2002.

## STOCK DEFINITION

Chehalis coho were identified as a stock based on their distinct spawning distribution and spawning timing. There has been considerable discussion whether the late-spawning component (January-February) represents a separate stock or a continuation of a single stock.

**SPAWNING DISTRIBUTION:** Most spawning takes place in over 195 mainstem rivers and tributaries scattered throughout the Chehalis basin. Spawning takes place in accessible tributaries such as Delezene, Cloquallum, Mox-Chehalis, Mima, Waddell, Scatter, Hanaford, Lucas, Kearney, Stillman, South Fork Lincoln, Smith and Swem creeks. Spawning also occurs in the upper mainstem and the east fork of the Chehalis River, Skookumchuck River and Newaukum River.

**SPAWNING TIMING:** Spawning generally occurs from November through February.

**GENETIC ANALYSIS:** Allozyme analysis of samples collected from the upper Chehalis River from 1994 to 1996 show that considerable genetic heterogeneity exists in the upper watershed (David Teel, NOAA Fisheries, pers comm.).

## STOCK ORIGIN

This is a **mixed** stock with **composite** production. Releases of hatchery-reared coho yearlings were continuous from 1950 to 1970. In the late 1970s and through the 1980s, a large-scale fingerling release program was carried out utilizing stocks from Soos Creek, Samish, Dungeness, Satsop, Minter Creek, Sol Duc and Humptulips hatcheries. As a result of the historical movement of stocks and the size and frequency of hatchery releases, this stock is no longer considered to be native.