

SOUTH SOUND– CHAMBERS CREEK COHO

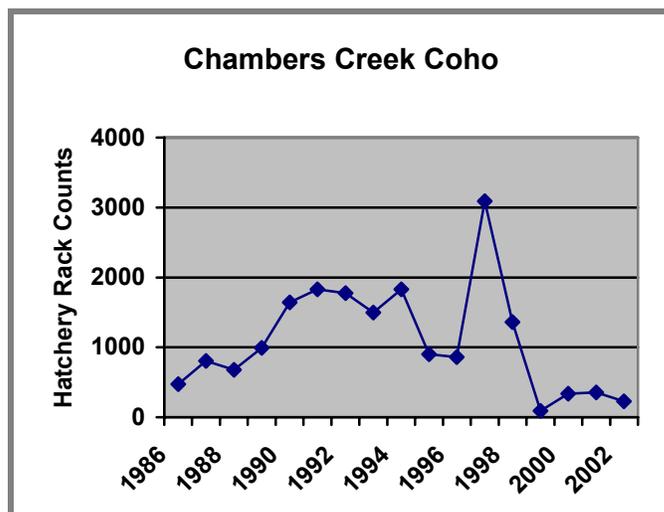
STOCK STATUS

| | |
|-------------------------------|---------------------------------|
| 1992 STATUS Healthy | 2002 STATUS Depressed |
|-------------------------------|---------------------------------|

STOCK STATUS RATING DATA

DATA QUALITY: Good

| YEAR | HATCHERY RACK COUNTS |
|------|-------------------------|
| 1986 | 473 |
| 1987 | 804 |
| 1988 | 677 |
| 1989 | 991 |
| 1990 | 1,641 |
| 1991 | 1,828 |
| 1992 | 1,775 |
| 1993 | 1,497 |
| 1994 | 1,830 |
| 1995 | 899 |
| 1996 | 859 |
| 1997 | 3,089 |
| 1998 | 1,359 |
| 1999 | 90 |
| 2000 | 338 |
| 2001 | 355 |
| 2002 | 227 |



Data are adult coho rack passage counts at the Chambers Creek Hatchery rack.

Stock status is rated **Depressed** in 2002, based on the **short-term severe decline** in escapements from 1999 through 2001. A marked drop in escapements and run sizes occurred in this and all other South Sound coho stocks in mid- to late 1990s, largely the outcome of a precipitous plunge in South Sound coho marine survival rates that started with the late 1980s brood years. Large numbers of hatchery-origin strays, primarily from the Lake Sequalitchew and Fox Island net pen programs formerly contributed to the Chambers Creek natural coho escapement. Since the elimination of these programs, total coho returns to Chambers Creek have decreased dramatically. The stock does not meet the strict definition of a short-term severe decline in escapement, because escapement in only one year, 1999, if the most recent five years including 2001, is at or below the previous low of 285 in 1985. However, given the low fishery exploitation rates in this time period, total stock productivity was probably among the worst for this stock, and a Depressed rating is warranted.

STOCK DEFINITION

Chambers Creek coho were identified as stock due to their distinct spawning distribution.

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SPAWNING DISTRIBUTION: Spawning takes place throughout the Chambers Creek drainage.

SPAWNING TIMING: Spawning timing is unknown, but coho arrival at the Chambers Creek hatchery rack peaks in mid- to late October and trails off in late December.

GENETIC ANALYSIS: No genetic analysis has been done on Chambers Creek coho.

STOCK ORIGIN

This is a **mixed** stock with **composite** production. Various non-native hatchery-origin coho have been released into the Chambers Creek basin, and adult strays from the Fox Island net pen program also contributed to the Chambers Creek coho spawning population. The elimination of the Fox Island and Lake Sequalitchew programs will probably reduce escapement of hatchery strays into Chambers Creek.