

# HOOD CANAL – QUILCENE LATE FALL CHUM

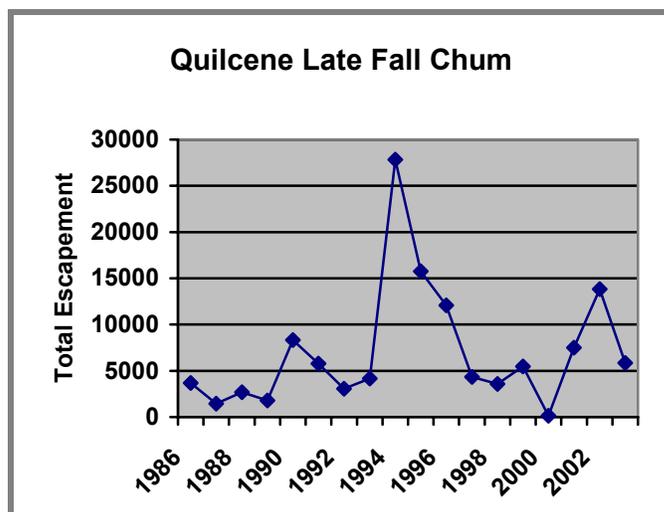
## STOCK STATUS

|                |                |
|----------------|----------------|
| 1992 STATUS    | 2002 STATUS    |
| <b>Healthy</b> | <b>Healthy</b> |

## STOCK STATUS RATING DATA

USEFULNESS FOR RATING STOCK STATUS:  
Fair

| YEAR | TOTAL ESCAPEMENT |
|------|------------------|
| 1986 | 3,696            |
| 1987 | 1,455            |
| 1988 | 2,682            |
| 1989 | 1,798            |
| 1990 | 8,335            |
| 1991 | 5,778            |
| 1992 | 3,056            |
| 1993 | 4,155            |
| 1994 | 27,840           |
| 1995 | 15,768           |
| 1996 | 12,061           |
| 1997 | 4,340            |
| 1998 | 3,561            |
| 1999 | 5,456            |
| 2000 | 148              |
| 2001 | 7,492            |
| 2002 | 13,834           |
| 2003 | 5,865            |



Data are total escapement estimates based on live spawner counts in index areas on the Big Quilcene and Little Quilcene rivers and on Spencer and Jackson creeks, two independent streams.

Quilcene late fall chum escapements increased through the 1990s. The status of the stock is Healthy since thousands of fish spawn in these streams each year.

## STOCK DEFINITION

Quilcene late fall chum were identified as a stock based on their distinct spawning distribution and somewhat late return and spawning timing.

**SPAWNING DISTRIBUTION:** Most spawning takes place in lower two miles of the Big Quilcene and Little Quilcene rivers. Spawning also takes place in Walcott Slough and the lower reaches of Jackson and Spencer creeks.

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**SPAWNING TIMING:** Spawning generally occurs from November through early January. Earlier spawners may be hatchery-origin fall chum from the Quilcene and Walcott National fish hatcheries. The late-spawning component has have allowed the stock to remain viable since commercial fisheries target earlier-returning Hood Canal hatchery-origin fall chum.

**GENETIC ANALYSIS:** Allozyme analysis has shown that there is considerable genetic variation within Hood Canal fall chum stocks. Pairwise comparisons of Quilcene and Walcott National Fish Hatchery fall chum with other Hood Canal stocks do not always show significant differences (Phelps et al. 1995).

## STOCK ORIGIN

This is a **mixed** stock with **composite** production. Spawners include hatchery-origin chum from the Quilcene National Fish Hatchery on the Big Quilcene River.