

# SOUTH SOUND – DYES INLET/LIBERTY BAY FALL CHUM

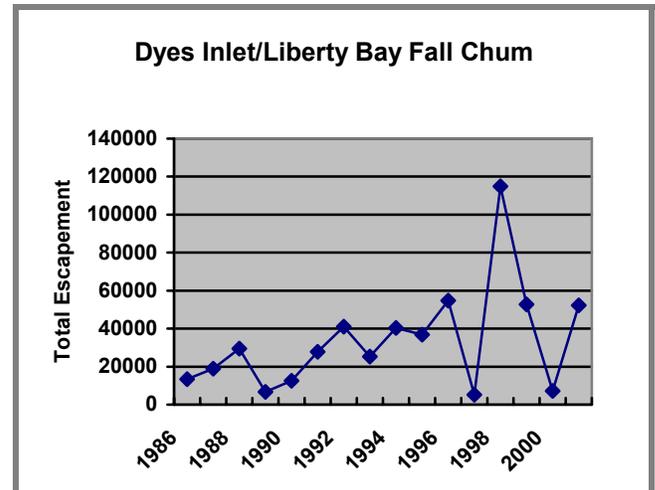
## STOCK STATUS

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

**USEFULNESS FOR RATING STOCK STATUS:** Good

| YEAR | TOTAL ESCAPEMENT |
|------|------------------|
| 1986 | 13,398           |
| 1987 | 18,933           |
| 1988 | 29,484           |
| 1989 | 6,691            |
| 1990 | 12,537           |
| 1991 | 27,841           |
| 1992 | 40,965           |
| 1993 | 25,222           |
| 1994 | 40,296           |
| 1995 | 36,790           |
| 1996 | 54,797           |
| 1997 | 5,266            |
| 1998 | 114,936          |
| 1999 | 52,693           |
| 2000 | 7,138            |
| 2001 | 52,215           |



Data are total escapement estimates based on live spawner counts in Chico, Barker, Dogfish, Clear, Steele and Scandia creeks.

Stock status is rated **Healthy**. Although the 1997 and 2000 escapements of this salmon stock were low, 5,038 and 7,191 spawners respectively, (orcas took about 18,000 fish in Dyes Inlet in 1997), other recent escapements have been higher than the normal range for this stock.

## STOCK DEFINITION

Dyes Inlet/Liberty Bay fall chum were identified as a stock based on their distinct spawning distribution and spawning timing, which is earlier than that of other East Kitsap fall chum.

**SPAWNING DISTRIBUTION:** Most spawning takes place in the Chico Creek system and in nearby independent tributaries such as Barker, Dogfish, Clear, Johnson and Scandia creeks.

**SPAWNING TIMING:** Spawning generally occurs in November.

**GENETIC ANALYSIS:** Allozyme analysis has shown Dyes Inlet/Liberty Bay fall chum collected from Chico Creek to be genetically similar to Gorst Creek chum (Sinclair Inlet) (Phelps et al. 1995).

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### **STOCK ORIGIN**

This is a **native** stock with **composite** production. The tributaries of both Dyes Inlet and Liberty Bay have historically had significant hatchery plants from the Suquamish Tribe's Cowlings Creek Hatchery. The origin of the Cowlings Creek hatchery stock was Chico Creek fish, so this hatchery stock is considered a native stock within Dyes Inlet. Releases of the Cowling Creek hatchery stock into the tributaries of Liberty Bay have probably established a mixed stock with native remnant components.