

# STRAIT OF JUAN DE FUCA – MORSE CREEK/INDEPENDENTS WINTER STEELHEAD

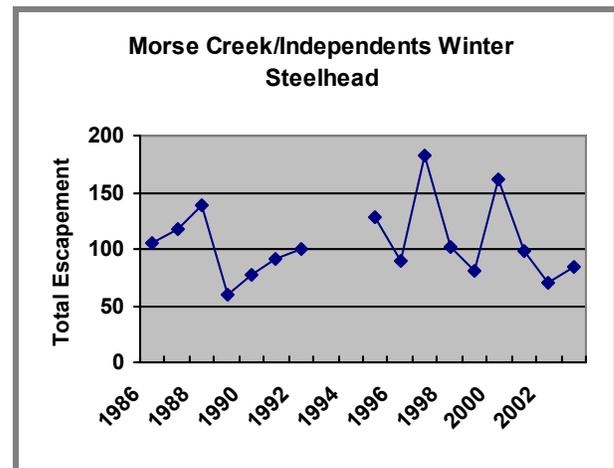
## STOCK STATUS

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

**USEFULNESS FOR RATING STOCK STATUS:** Fair

YEAR	TOTAL ESCAPEMENT
1986	105
1987	118
1988	138
1989	60
1990	78
1991	91
1992	100
1993	No data
1994	No data
1995	128
1996	89
1997	183
1998	102
1999	81
2000	162
2001	99
2002	71
2003	84



Data are total escapement estimates based on redd counts in the entire anadromous zone of Morse Creek from RM 0.0 to 4.7. Total escapement estimates based on redd counts in the index areas of McDonald Creek (RM 0.0 to 5.4) have been made for 1998, 1999, 2000 and 2001. The estimates are 306, 217, 251 and 143, respectively.

Stock status is rated **Depressed** in 2002 due to **chronically low** escapements. The average escapement has exceeded the Morse Creek multiple sustained harvest (MSH) escapement objective of 120 spawners only four times since 1986. Stock status for McDonald and Siebert creeks cannot be determined at this time.

## STOCK DEFINITION

Morse Creek/Independents winter steelhead were identified as a stock based on their distinct spawning distribution.

# **STRAIT OF JUAN DE FUCA – MORSE CREEK/INDEPENDENTS WINTER STEELHEAD**

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**SPAWNING DISTRIBUTION:** Spawning takes place in the Morse, Siebert and McDonald creeks.

**SPAWNING TIMING:** Spawning occurs from mid-February to early June.

**GENETIC ANALYSIS:** No genetic analysis has been done on Morse Creek/Independents winter steelhead.

## **STOCK ORIGIN**

Stock origin and production type are **unresolved** by the state and tribes.