

HOOD CANAL – HAMMA HAMMA WINTER STEELHEAD

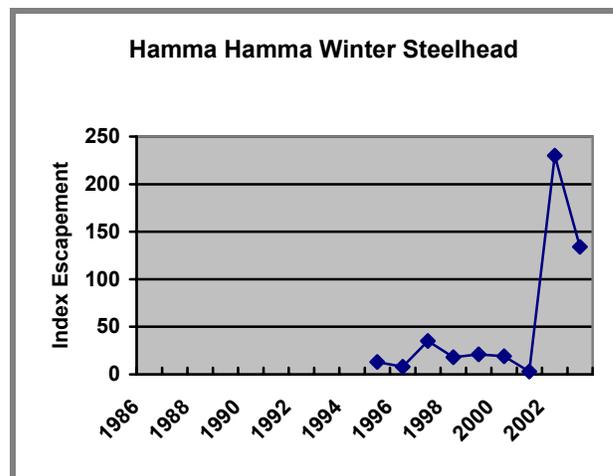
STOCK STATUS

1992 STATUS Unknown	2002 STATUS Depressed
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STOCK STATUS RATING DATA

USEFULNESS FOR RATING STOCK STATUS: Fair

YEAR	INDEX ESCAPEMENT
1995	13
1996	8
1997	35
1998	18
1999	21
2000	19
2001	3
2002	230
2003	134



Data are index escapement estimates based on redd counts in the Hamma Hamma River (RM 0.3 to 1.8).

Stock status is rated **Depressed** in 2002 based on **chronically low** escapements. In all years surveyed, escapement has been lower than expected based on available habitat. Using WDFW methodology (Gibbons et al. 1985) the escapement goal would be 91 wild adults in index areas. However the state and Treaty Tribes have not agreed to the goal or the method used to derive it.

In 1998 a steelhead supplementation program was initiated in the Hamma Hamma River in cooperation with the Hood Canal Salmon Enhancement Group and Long Live the Kings. The program goal is to rebuild the native population through use of conservation hatchery protocols. A research program led by NMFS has been designed to evaluate the demographic and genetic effects of the supplementation program. Initial results are encouraging as the program contributed significantly to the 230 winter steelhead that spawned in the Hamma Hamma and John Creek (a lower Hamma Hamma tributary) in 2002 and 134 adults in 2003.

STOCK DEFINITION

Hamma Hamma winter steelhead were identified as a stock based on their distinct spawning distribution.

SPAWNING DISTRIBUTION: Most spawning takes place in the lower two miles of the Hamma Hamma River.

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

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GENETIC ANALYSIS: Allozyme and DNA analyses have been done on Hamma Hamma winter steelhead, but no comparisons with other Hood Canal steelhead have been made. The analyses have shown significant differences between resident rainbow parr and anadromous parr, which both reside in the Hamma Hamma (Berejikian et al. 2002)

STOCK ORIGIN

This is a **native** stock with **wild** production.