

# Snake River – Snake Fall Chinook

## Stock Status

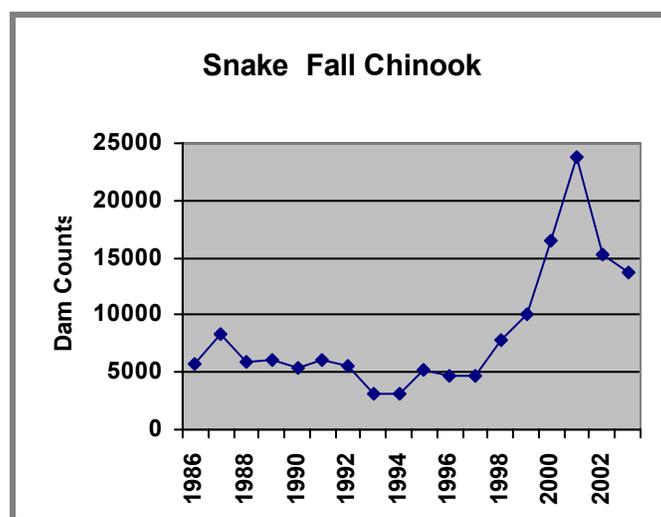
1992 STATUS  
Depressed

2002 STATUS  
Depressed

## Stock Status Rating Data

USEFULNESS FOR RATING STOCK STATUS: Good

YEAR	DAM COUNTS
1986	5,783
1987	8,412
1988	5,882
1989	5,990
1990	5,317
1991	6,026
1992	5,530
1993	3,137
1994	3,102
1995	5,202
1996	4,662
1997	4,621
1998	7,776
1999	10,112
2000	16,456
2001	23,826
2002	15,193
2003	13,796



# SNAKE RIVER – SNAKE FALL CHINOOK

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Data are video and visual counts of adult Chinook at Lower Monumental Dam on the Snake River. These counts include fall Chinook returning to the WDFW Lyons Ferry Hatchery.

Escapements from the 1970s through the 1990s were a fraction of the levels before the Snake River dams were constructed. Adult counts increased in 1999 through 2001, probably because of improved ocean conditions and increased hatchery production. These counts may not be sustained. Adult numbers have generally not met the Lower Snake River Compensation Plan annual goals of 18,300 hatchery-origin adults and 14,360 natural-origin adults returning to the Snake River. The NOAA Fisheries interim recovery goal is 2,500 natural-origin spawners above Lower Granite Dam (Glen Mendel, WDFW, personal communication). Stock status remains **Depressed** in 2002 because of **chronically low** adult counts.

## STOCK DEFINITION

Snake fall Chinook were identified as a stock based on their distinct spawning distribution, appearance (an upriver bright fall stock with chrome-bright skin and red flesh on freshwater entry) and genetic composition.

**SPAWNING DISTRIBUTION:** Most spawning takes place from Hell's Canyon Dam to downstream to the town of Asotin on the mainstem Snake River. Spawning also takes place in tributaries such as the Clearwater and Salmon rivers in Idaho and the Grande Ronde and Imnaha rivers in Oregon. Within Washington waters, spawning takes place in the lower reaches of the Tucannon, Palouse and Grande Ronde rivers and in the mainstem Snake upstream from Asotin. Some spawning also takes place in the tailrace areas below some of the Snake River dams.

**SPAWNING TIMING:** Spawning generally occurs from mid-October to mid-December.

**GENETIC ANALYSIS:** Allozyme analysis has shown that Snake fall Chinook are genetically distinct from all other Chinook stocks in the Columbia and Snake basins (Marshall et al. 1995).

## STOCK ORIGIN

This is a **native** stock with **composite** production. Snake fall Chinook are supplemented by a large program at the Lyons Ferry Hatchery which releases 450,000 yearlings and 200,000 subyearlings into the lower Snake River at Lyons Ferry. Eyed eggs from Lyons Ferry are also transferred to the Idaho Fish and Game Department's Oxbow Hatchery for release into the upper Snake River. Subyearling and yearling smolts are transferred to the Nez Perce Tribe for release into the Snake and Clearwater rivers (Idaho) above Lower Granite Dam. Since 1999, WDFW and the Nez Perce Tribe have released up to 2.4 million subyearlings above Lower Granite.