

# LOWER COLUMBIA – WIND SPRING CHINOOK

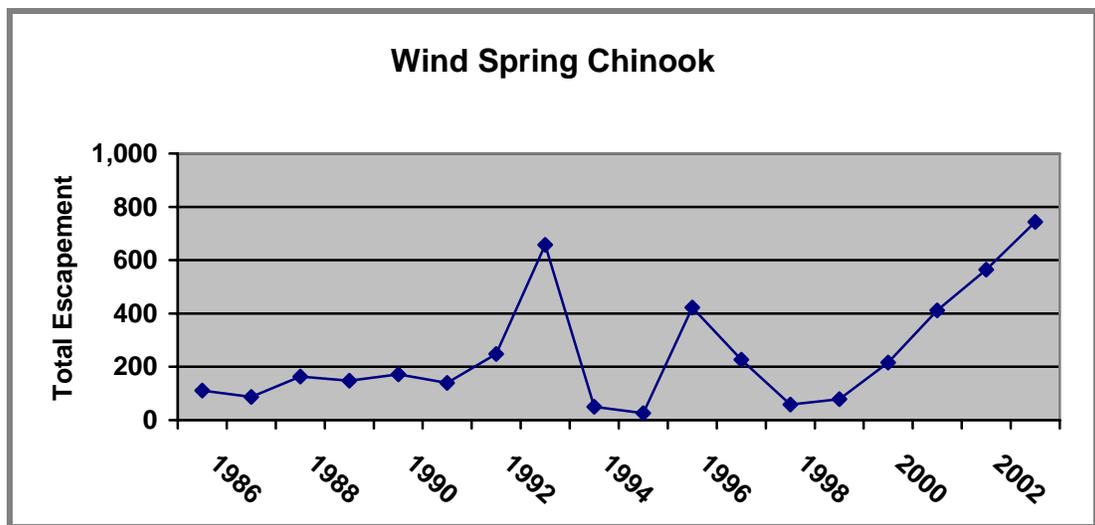
## STOCK STATUS

1992 STATUS <b>Depressed</b>	2005 STATUS <b>Not Rated</b>
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## STOCK STATUS RATING DATA

USEFULNESS FOR RATING STOCK STATUS: Poor

YEAR	TOTAL ESCAPEMENT	YEAR	TOTAL ESCAPEMENT
1986	111	1995	26
1987	87	1996	425
1988	164	1997	227
1989	157	1998	60
1990	173	1999	99
1991	141	2000	216
1992	248	2001	428
1993	657	2002	566
1994	50	2003	743



Data are total escapement estimates expanded from peak live plus dead spawner counts from foot surveys in the index area from the mouth of Paradise Creek (RM 25.8) downstream to Beaver Campground (RM 17.0).

Stock status is not rated in 2005 because natural production is extremely low. Substantial numbers of spring Chinook spawners are observed annually, however, we believe that spawner abundance is a reflection of the date when Carson National Fish Hatchery gates are closed each year, and hatchery-origin spring Chinook are no longer able enter the hatchery, rather than a reflection of the population abundance trend. Indications are that the productivity of these spawners is negligible, perhaps as low as two smolts per female (Dan Rawding, WDFW, personal communication).

## STOCK DEFINITION

# **LOWER COLUMBIA – WIND SPRING CHINOOK**

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Wind River spring Chinook were identified as a stock based on their distinct spawning distribution and early river entry timing (late March through June) and spawning timing.

**SPAWNING DISTRIBUTION:** Most spawning takes place in the mainstem Wind River above Shipherd Falls from about RM 15 upstream to the mouth of Paradise Creek.

**SPAWNING TIMING:** Spawning generally occurs from early August through mid-September.

**GENETIC ANALYSIS:** Allozyme analysis has shown that Wind River spring Chinook from the Carson National Fish Hatchery resemble upper Columbia spring Chinook stocks in the Wenatchee, Entiat and Methow basins (Marshall et al. 1995).

## **STOCK ORIGIN**

This is a **non-native** stock with **composite** production. There is no native spring Chinook stock in the Wind. Spring Chinook in the Wind River are Carson Hatchery fish that spawn naturally. The Carson stock is a mixture of spring Chinook from the Snake River and the mid- and upper Columbia that were collected at Bonneville Dam in the 1970s for use as broodstock at the hatchery.