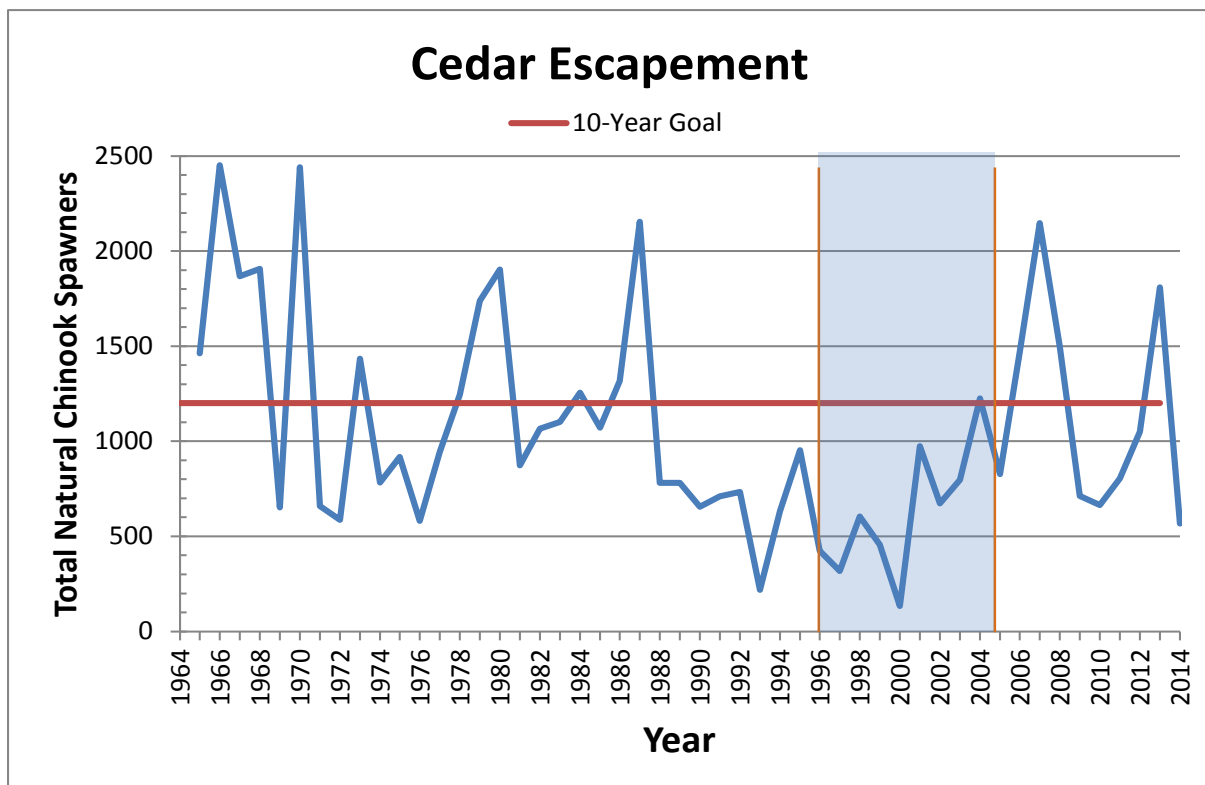


## Chinook Salmon Population Monitoring in the Lake Washington/ Cedar/ Sammamish Watershed

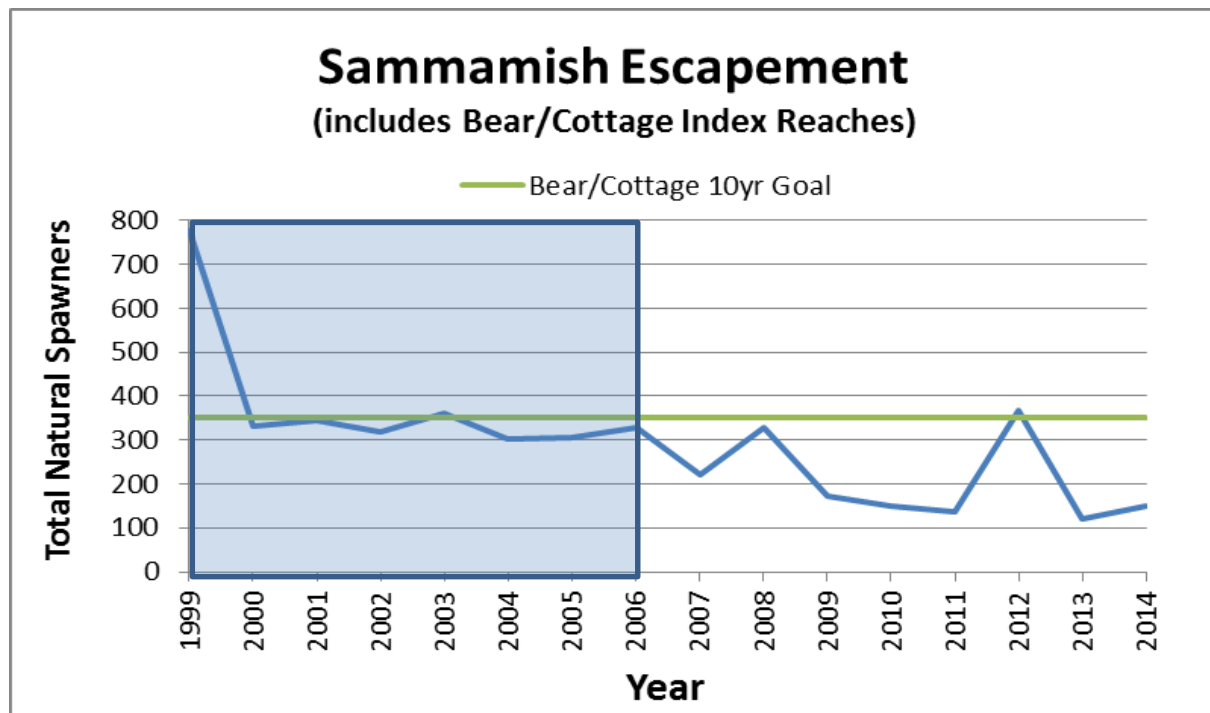
The Lake Washington/Cedar/Sammamish Watershed (WRIA 8) has placed a high priority on annually monitoring its two salmon populations: the Cedar population and the Sammamish population. Monitoring focuses on tracking the number of adult salmon coming back to the watershed each year to spawn and the number of juvenile salmon that hatch from eggs and survive to leave the watershed to become adults in Puget Sound and the ocean. While not a direct indicator of the relative effectiveness of habitat protection and restoration efforts, identifying trends in these data does help us understand how our fish are doing over time.

### Cedar River Population



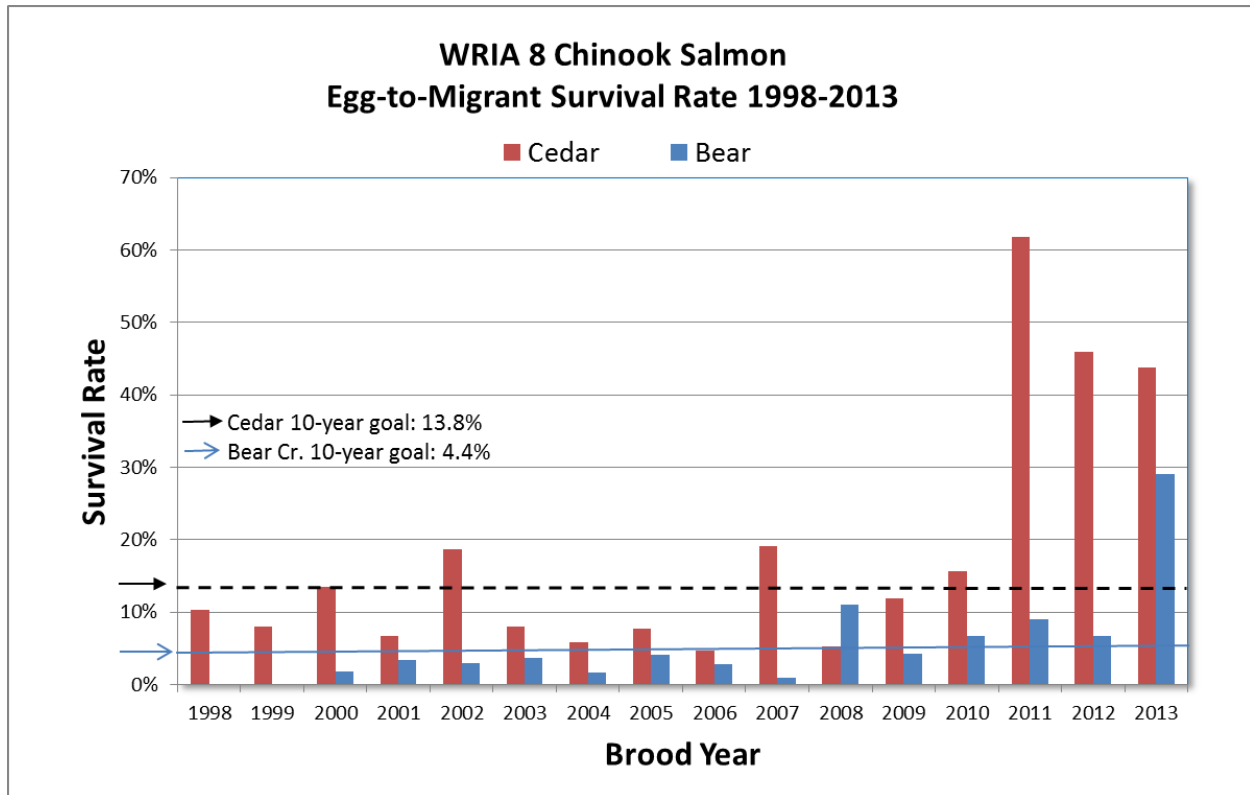
- Cedar River population spawns in the Cedar River and its tributary streams.
- Ten-year goal is at least 1200 adults returning per year.
- Considered most at risk of extinction, of the two WRIA 8 populations.
- 73% increase in Cedar River Chinook abundance during last 8-year period (compared to prior 9 year period).
- However, 2014 was a 'down' year for adult returns: 568.
- Overall juvenile outmigration numbers have been increasing (see accompanying bar chart).

## Sammamish River Population



- Sammamish population spawns in Issaquah Creek and Bear/Cottage Lake Creek, as well as North Creek and Little Bear Creek. Bellevue's Kelsey Creek is considered part of the Sammamish population.
- Ten-year goal is 350 spawners in Bear/Cottage Lake Creeks
- Though numbers (on Bear/Cottage Lake Creek) are lower than Cedar population, the Sammamish population is supported by Issaquah Hatchery returns.
- 48% decrease in Sammamish Population Chinook abundance during last 8-year period (compared to prior 9 year period).
- 2014 returns: 150 adults.
- New habitat in upper Issaquah Creek opened by removal of Issaquah Hatchery Diversion Dam (since 2014) – anticipate overall adult return numbers to go up over time.
- Overall juvenile outmigration numbers have been increasing (see accompanying bar chart).

## Juvenile Production (both populations)



### Total juvenile Chinook migrants: 1998-2006 vs. 2007-2014

- Cedar: 205% increase.
- Bear/Cottage: 86% increase.
- The number of juveniles surviving to leave the watershed is the best measure of the success of habitat protection and restoration efforts, since we have more control over the factors affecting juvenile salmon survival (i.e., the amount and function of available freshwater habitat), than we do the factors affecting the number of adults returning from year to year (i.e., ocean conditions, marine mortality, harvest).
- Since implementation of the WRIA 8 Chinook Conservation Plan began in 2006, the Cedar population and Sammamish populations have met their 10-year goals (black dotted line and blue line, respectively) in five out of eight years.