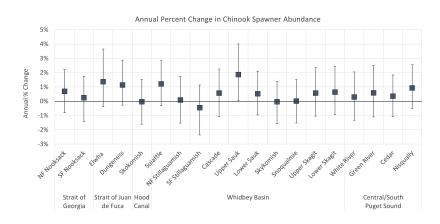
# PUGET SOUND VITAL SIGNS

#### **INDICATOR**

## NUMBER OF NATURAL-ORIGIN CHINOOK SALMON ON SPAWNING GROUNDS

This indicator evaluates the abundance values and their trends of the 22 Chinook salmon populations from five Puget Sound regions as measured by the number of natural-origin adult fish on the spawning grounds. Abundance estimates here do not include hatchery-origin fish (with few exceptions) or Chinook taken in harvest or by predators like orcas. The indicator is intended to reflect the goal of achieving wild population recovery of Puget Sound Chinook, which are federally listed as threatened.



Annual percent change in spawner abundance from 1999 to 2021 for each Puget Sound Chinook salmon population, shown by geographic region. 19 of 22 populations are shown; abundance data were not available at the necessary spatial scale for three populations (Mid-Hood Canal, Puyallup River, and Sammamish River). The lines show the 25<sup>th</sup> to 75<sup>th</sup> credibility intervals (CIs). CIs represent a range of values the true annual percent change likely falls within. CIs for all populations, except Upper Sauk, contain zero suggesting little to no change in spawner abundance from 1999 to 2021 for most populations.

## **Key Vital Sign Indicator Results**

- There is little to no sign of recovery of Puget Sound Chinook populations in each biogeographic region. On
  the other hand, no populations have decreased significantly in abundance since the time Chinook salmon
  were listed as threatened under the Endangered Species Act in 1999. Therefore, our conclusion about
  progress of the populations of Puget Sound Chinook salmon is "No Trend."
- Estimates of population spawner abundance of the 22 Puget Sound Chinook populations have changed very little since the baseline reference period when the populations were listed in 1999.
- While most populations remain far below their recovery planning targets adopted by NOAA Fisheries, some
  are doing better (see the indicator map). For instance, the recent 5-year abundance geomean for Suiattle
  River spring Chinook salmon is greater than its low productivity planning target for abundance. Upper Sauk
  River spring Chinook salmon and Upper Skagit River summer Chinook salmon are at 45% and 36%,
  respectively, of their low productivity planning targets.
- The Puget Sound Partnership recently set a recovery target for all Chinook salmon populations to increase and at least half of the populations to reach their recovery goals by 2050.

Indicator Progress Target Status





#### **Target**

By 2050, all Chinook salmon populations increase, and at least 50 percent of the populations reach their recovery goals.

Target fact sheet

#### **Data Source**

Washington Department of Fish and Wildlife (WDFW), Salmon Population Indicators (SPi) abundance data

Northwest Fisheries Science Center. 2015. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest.

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#### **Last Updated**

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### **CONTRIBUTING PARTNERS**



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