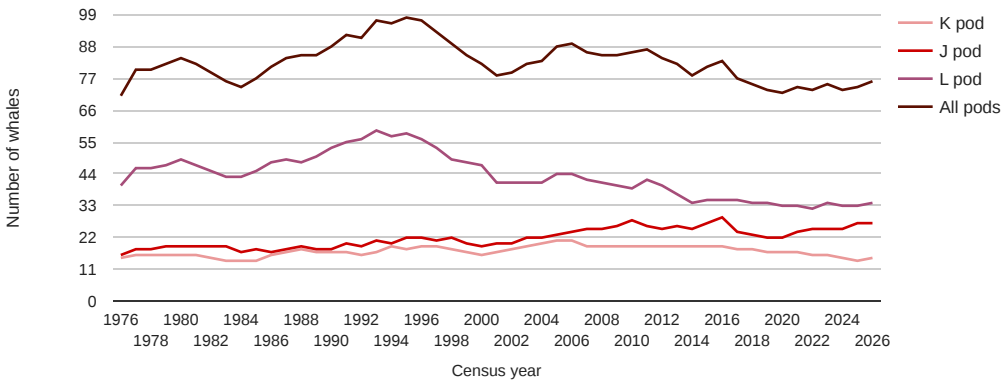
PUGET SOUND
VITAL SIGNS

INDICATOR
NUMBER OF SOUTHERN RESIDENT KILLER WHALES

Southern Resident killer whales are a unique population of orcas that ranges in the Salish Sea and along the West Coast of the U.S. and Canada. The population is composed of three main social units referred to as J, K, and L pods. They are fish specialists with a particularly strong reliance on salmonids, especially Chinook salmon. The population was severely reduced from live-capture fisheries in the 1960s and early 1970s. After a period of growth, the population experienced a dramtic decline starting in the late-1990s corresponding to a decline in prey availability. The primary threat identified by studies of their population dynamics and health is a reduction in the abundance and quality of prey, along with pressures from anthropogenic noise, toxicants, and inbreeding depression. As a result, they are federally listed as endangered.

Number of Southern Resident killer whales

By: Pods



Population size of Southern Resident killer whales on July 1st of each year between 1976 and 2026, based on the annual photographic identification census conducted by the Center for Whale Research. The Southern Resident killer whale population is comprised of three pods: J, K, and L pods.

Indicator Trend

NO TREND

Target Status

BELOW TARGET

Target

By 2030, increase the Southern Resident killer whale population from 74 individual whales in 2021 to 86 individuals.

By 2050, increase the population to 110 individuals.

Target fact sheet

Memo to Science Panel with rationale

Data Source

Annual Census as reported to National Oceanographic and Atmospheric Administration (NOAA) by the Center for Whale Research

Vital Sign Indicator Reporter

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Indicator Details

Click below for more information about this indicator, including Maps, Charts, Indicator Importance, Methods, Interpretation of Results, and Additional Resources.

Complete Indicator Report

Last Updated

11/05/2025

Key Vital Sign Indicator Results

The status of the Southern Resident killer whale population remains fragile. In 2010, the Partnership's baseline reference, the census reported 86 individuals. Every year since then the population size has been smaller, except in 2011.

As of July 1st, 2026, there were 76 southern resident killer whales remaining, significantly below the baseline reference and target values but above the previous year's count of 74 whales. This increase was due to the birth of four whales (J64, K47, L129, and L130), two of which survived to the census date (K47 and L130). Between the 2025 and 2026 census dates, K pod grew for the first time since 2004. L pod also grew, while J pod maintained its size.

Population size has largely plateaud over the last five years, changing from a low of 72 whales in 2020 to 76 whales in 2026, with most years of growth followed by years of decline. 2026 marks the first time since 2016 that the population has grown for two consecutive census periods. This previous period of growth, however, was followed by 4 years of decline.

As the population is small and has not shown significant decreases or increases over the last 5 years, we currently consider this indicator to be below target with no clear trend. The lack of recovery in this population can largely be ascribed to low recruitment compared to other killer whale populations. This low recruitment is likely due to a combination of failed pregnancies and early life mortality, with the majority of pregnancies never resulting in an observed calf and approximately 50% of calves dying in their first year.

CONTRIBUTING PARTNERS

Center for Whale Research

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE