



**NOAA
FISHERIES**

**West Coast
Region**

Saving Southern Resident Killer Whales

NOAA Fisheries research, recovery actions, and partnerships to recover a keystone species



Southern Resident killer whales are unique and iconic to the West Coast. They are also among the most endangered marine mammals in the world. NOAA Fisheries named the whales a national Species in the Spotlight and adopted an aggressive action plan to help recover them. We are also working closely with Canada, the State of Washington, tribes, and interest groups to further step up our actions.

We are targeting the three main threats to the whales:

- Availability of prey: improving Southern Resident access to their preferred prey, Chinook salmon.
- Vessel noise and traffic: reducing vessel interference in Southern Resident foraging and other activities.
- Chemical pollutants: cutting exposure to and contamination by pollution that threatens their health and reproduction.



In 2018, we are forging ahead on three primary fronts--research, recovery actions, and partnerships--to address these threats. Here are some highlights of our comprehensive recovery program.

RESEARCH

We know much more about the Southern Residents now than we did only a few years ago, which better positions us to support their recovery.

- We are combining our data on Pacific salmon and Southern Residents to develop food-web models and identify specific salmon stocks and hatchery programs that the whales rely on for food.
- We are collecting and analyzing photos from drones and biological samples, like fecal samples, to track the health of individual Southern Residents in different seasons. This helps us understand the condition of each whale, as well as trends or factors affecting the population as a whole.
- New research funded by the National Fish and Wildlife Federation (NFWF) will examine whale breath, feces, and skin to identify harmful microbes from urban wastewater that may affect the whales so that we do not miss what could be an important emerging threat.



Photos from top: Southern Residents in Puget Sound, photo: NOAA; Migrating Chinook salmon in a fish ladder, photo: Lance Kruzic, NOAA Fisheries; Photogrammetry image of Southern Resident and calf, photo: NOAA Fisheries/Vancouver Aquarium; NOAA research boat and Southern Resident, photo: NOAA



RECOVERY ACTIONS

We are translating our growing knowledge into action that will help protect and stop the decline of Southern Residents in the short term and promote recovery in the longer term.

- Using individual health profiles for Southern Residents, we are tracking the condition of each whale to spot specific risk factors and target actions to increase survival and reproduction.
- We are prioritizing and implementing actions to strengthen and potentially increase critical salmon prey that provide the greatest benefit to the whales, including new opportunities to coordinate with salmon recovery efforts. Actions include leveraging salmon habitat restoration and exploring adjustments to hatchery programs to benefit the whales while still protecting vulnerable salmon and steelhead populations.
- Following a recent review of current vessel regulations, we are supporting increased enforcement presence on the water and focusing new education efforts for recreational boaters who frequently violate distance rules meant to protect the whales from disturbance.

PARTNERSHIPS

Only through strong partnerships can we make enough progress, fast enough, to save the Southern Residents. We rely on our partners to help raise awareness, fill data gaps, identify priorities, and take actions.

- Grants from NOAA Fisheries support Washington Department of Fish and Wildlife enforcement of vessel regulations, which a recent review showed has reduced disturbance to Southern Residents.
- We are expanding partnerships with conservation groups such as NFWF, who committed more than \$800,000 in 2017 for research and salmon recovery actions that support Southern Resident recovery. The grants will generate \$1.3 million in matching contributions for a total conservation impact of more than \$2 million.
- NOAA Fisheries' Pacific Coastal Salmon Recovery Fund (PCSRF) supports partnerships with states, tribes and local groups to restore habitat for native salmon that Southern Residents rely on.

Photos from top: Southern Resident and Washington State Ferry, photo: NOAA; Migrating salmon, photo: PCSRF; Volunteers monitoring vessel traffic in Puget Sound when Southern Residents are present, photo: SoundWatch/The Whale Museum; Salmon habitat restoration, photo: PCSRF

