



NFWF

Killer Whale Research & Conservation 2017 Grant Slate

NFWF CONTACTS

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FUNDING PARTNERS



ABOUT NFWF

The National Fish and Wildlife Foundation (NFWF) protects and restores our nation's fish and wildlife and their habitats. Created by Congress in 1984, NFWF directs public conservation dollars to the most pressing environmental needs and matches those investments with private funds. Learn more at www.nfwf.org

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Killer whale

OVERVIEW

The National Fish and Wildlife Foundation (NFWF), in partnership with SeaWorld Entertainment, Shell Oil Company and the U.S. Fish and Wildlife Service, announced a third year of funding for Killer Whale Research and Conservation projects. Nine grants totaling \$888,000 were awarded, generating \$1.29 million in matching contributions providing a total conservation impact of \$2.18 million.

The Killer Whale Research and Conservation Program seeks to advance the knowledge and conservation of killer whales, with a primary focus on activities that aid in the recovery of the Southern Resident killer whale distinct population segment. This year's awards continue an emphasis on filling research gaps and taking priority actions across the primary threats that experts think may be preventing recovery: lack of prey availability, habitat stressors such as ship traffic, sound and persistent organic pollutants, and a lack of understanding of critical habitat.

The following nine projects address critical gaps in knowledge around these primary threats, both in the impacts of each threat and on the population and the relationship between threats to each other. For example, poor availability of forage fish in Puget Sound may be leading to reduced sized Chinook in the waters where killer whales are feeding, and increased vessel noise may interfere with the echolocation, making smaller sized fish less "visible" to whales.

(continued)



Salish Sea coast

Winter Prey Use and Growth of Blackmouth Chinook Salmon in the San Juan Islands (WA)

Grantee: Kwiaht: Center for the Historical Ecology of the Salish Sea
 Grant Amount: \$35,700
 Matching Funds: \$35,970
Total Amount: \$71,670

Kwiaht: Center for the Historical Ecology of the Salish Sea will collect data from hatchery-marked resident blackmouth chinook salmon to study annual variations in prey availability and survival in the Salish Sea. The project will engage recreational anglers to improve understanding of this salmon population, which has experienced significant decline and which may have historically been an important component of the Southern Resident killer whale diet.

Restore Chinook Salmon Rearing Habitat in the Skagit Forks Britt Slough (WA)

Grantee: Skagit Fisheries Enhancement Group
 Grant Amount: \$97,058
 Matching Funds: \$97,058
Total Amount: \$194,116

Skagit Fisheries Enhancement Group will reconnect 7.9 acres in the Skagit River floodplain to restore high quality chinook salmon rearing habitat. The project will restore the outlet of Britt Slough to its historic path by clearing invasive weeds and replanting native vegetation.

Chinook Salmon Habitat Protection and Restoration in the Northwest Straits of Puget Sound (WA)

Grantee: Northwest Straits Marine Conservation Foundation
 Grant Amount: \$138,031
 Matching Funds: \$138,500
Total Amount: \$276,531

Northwest Straits Marine Conservation Foundation will increase prey availability of chinook salmon for Southern Resident killer whales in the Northwest Straits of the Puget Sound. The project will restore and protect nearshore habitat for juvenile chinook salmon and implement priority actions of the Puget Sound Partnership Action Agenda.

Use Passive Acoustics to Monitor Southern Resident Killer Whale Distribution and Habitat Use (WA)

Grantee: NOAA Fisheries, Northwest Fisheries Science Center, Conservation Genetics Program
 Grant Amount: \$132,400
 Matching Funds: \$157,991
Total Amount: \$290,391

NOAA Fisheries, Northwest Fisheries Science Center and Conservation Genetics Program will determine distribution and habitat use of Southern Resident killer whales along coastal Washington. The project will conduct passive acoustical monitoring of whale populations and evaluate distribution changes over time and in relation to prey availability.

Assessing the Impacts of Noise Exposure on Southern Resident Killer Whale Foraging Efficiency (WA)

Grantee: Oceans Initiative
 Grant Amount: \$124,592
 Matching Funds: \$150,219
Total Amount: \$274,811

Oceans Initiative will quantify the relationship between noise exposure and foraging efficiency of Southern Resident killer whales to improve the quality of hunting habitat. The project will combine two existing datasets to explore how mitigating noise could increase the frequency and efficiency of killer whale foraging behavior and the



Chinook salmon

possible impacts of sound to the size of prey available to the population.

Evaluating Exposure of Southern Resident Killer Whales to Microbial Pathogens (WA)

Grantee: NMFS Northwest Fisheries Science Center
 Grant Amount: \$135,120
 Matching Funds: \$135,120
Total Amount:..... \$270,240

NMFS Northwest Fisheries Science Center will assess Southern Resident killer whale vulnerability to infection using molecular screening of microbial pathogens. The project will inform stormwater management of microbial pathogens in terrestrial runoff and sewage effluent that are showing up in killer whales to help prioritize mitigation.

Health Monitoring of Southern Resident Killer Whales Using Aerial Photogrammetry (WA)

Grantee: SR3 SeaLife Response, Rehabilitation and Research
 Grant Amount: \$140,000
 Matching Funds: \$500,000
Total Amount:..... \$640,000

SR3 SeaLife Response and Rehabilitation and Research will use aerial photogrammetry to monitor the health and nutritional status of individual Southern Resident killer whales across key habitats and foraging seasons. The project will help prioritize prey species management and restoration efforts to meet nutritional requirements and bolster recovery.

Advancing Dietary Estimation Tools for the Southern Resident Killer Whale Population (FL)

Grantee: Hubbs-SeaWorld Research Institute
 Grant Amount: \$60,365
 Matching Funds: \$75,233
Total Amount:..... \$135,598

Hubbs-SeaWorld Research Institute will develop new tools to assess the diet of wild killer whale populations during the under-studied winter months to inform prey management. The project will use existing blood samples from SeaWorld San Diego for amino acid compound specific stable isotope analysis to estimate diet and foraging habitats of Southern Resident killer whales during winter months, when field work is most difficult.

Convene Experts from the Killer Whale and Salmon Communities to Prioritize Future Investments (WA)

Grantee: NFWF
 Grant Amount: \$25,000
 Matching Funds: \$0
Total Amount:..... \$25,000

NFWF will convene a body of Canadian and United States scientists, managers and other experts to report on new knowledge available for key actions in the Southern Resident Killer Whale Recovery Plan. The project will support a two-day, state-of-the-science report-out and prioritization meeting to inform future investments of the NFWF Killer Whale Research and Conservation Program.