

## Killer Whale Research & Conservation 2019 Grant Slate

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### **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

### NATIONAL HEADQUARTERS

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Killer whales and boat traffic near the San Juan Islands

### **OVERVIEW**

The National Fish and Wildlife Foundation, SeaWorld Entertainment, Shell, U.S. Fish and Wildlife Service and the National Oceanic Atmospheric Administration announced a 2019-year round of funding for Killer Whale Research and Conservation projects. Six new grants totaling \$666,200 were awarded. The six awards announced generated \$610,600 in grantee matching contributions for a total conservation impact of more than \$1.2 million.

The following six projects address three threat categories that were prioritized by the Washington Governor's Orca Task Force in 2018: 1) prey availability, 2) vessel impacts, and 3) toxins/pollutants. A lack of available prey (Chinook salmon) in both the quantity and size needed to sustain the nutritional needs of the killer whale population. Four projects on the 2019 slate target this priority to better understand the prey tipping points and nutritional needs.

Sound and disturbance from large and small vessels are also known to further decrease killer whale feeding success through stress/disturbance and 'masking' of the echolocation they use to hunt. The Orca Task Force listed several recommendations to reach both the recreational, commercial and large vessel shipping industry to address these concerns and a 2019 project works directly to implement these strategies.

Finally, under the third category of toxins and pollutants the 2019 slate supports a project to increase understanding around emerging toxins that may be disrupting reproductive success of killer whales so that they can be managed if needed.

(continued)



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# Determining Whether the Salish Sea Northern Anchovy can be Alternative Prey for Chinook Salmon (WA)

Grantee: Kwiaht: Center for the Historical Ecology of the Salish Sea

Matching Funds:	
Total Project Amount:	3.431

Project Summary: Assess the role of northern anchovy in Chinook diets as a possible alternative to their declining prey base. Project will sample and monitor Chinook salmon and forage fish around the San Juan Islands to determine whether increasing stocks of northern anchovy are a viable prey alternative or a competitor to current prey biomass.

# Restoring Shorelines to Increase Prey Availability for Southern Resident Killer Whales (WA)

Grantee: Mid Sound Fisheries Enhancement Group
Grant Amount: \$141,020
Matching Funds: \$150,000
Total Project Amount: \$291,020

Project Summary: Engage Central Puget Sound residential landowners to restore forage fish and juvenile salmon habitat using innovative outreach strategies and technical and financial incentives. Project will focus on restoring beach habitat to increase the prey availability for Southern Resident killer whales.

# Monitoring the Nutritional Health of Southern Resident Killer Whales for Management (WA)

Project Summary: Use unmanned aerial systems to monitor the body condition, growth and pregnancy rates of Southern Resident killer whales. Project will relay nutritional health and effects on reproductive success to management to facilitate adaptive management of fisheries harvest, salmon restoration efforts, and medical interventions.

# Monitoring Distribution, Habitat Use, and Prey Selection of Southern Resident Killer Whales (WA)

Total Project Amount: \$428,291
Matching Funds:
Grant Amount:
Grantee: NMFS Northwest Fisheries Science Center

Project Summary: Conduct boat-based surveys for Southern Resident killer whales in the coastal waters of Washington. Project will determine whale distribution, habitat use, and prey selection to fill data gaps for managers about population use of this lesser understood coastal habitat.





Chinook salmon

## Modeling Movement and Distribution of Killer Whales in the Salish Sea (WA)

Grantee: The Whale Museum
Grant Amount: \$21,519
Matching Funds: \$31,903
Total Project Amount: \$53,422

Project Summary: Conduct analysis of 42 year dataset to establish models that relate Southern Resident killer whale movement to biotic and abiotic factors such as salmon returns, temperature and depth. Project will develop a baseline model of temporal and spatial killer whale use in the Salish Sea that can be used to overlay threats for improved management action.

## Bioaccumulation of Emerging Contaminants in Southern Resident Killer Whale Food Web (BC, Canada)

Grantee: Ocean Wise Conservation Association
Grant Amount:
Matching Funds:
Total Project Amount:

Project Summary: Analyze priority contaminants of concern data from sediment, salmon and killer whales to assess habitat quality, bioaccumulation and the relative health risks of Southern Resident killer whales. Project will inform chemical regulations and best practices to reduce the exposure of Southern Resident killer whales to contaminants.