



## NOAA FISHERIES SERVICE

### West Coast Region

# Vessel Regulations Prove Effective for Endangered Killer Whales

## Five-year review shows rules reduced impacts while tourism continued to grow

NOAA Fisheries has completed a technical memorandum evaluating the effectiveness of regulations adopted in 2011 to help protect endangered Southern Resident killer whales from the impacts of vessel traffic and noise. The memo finds that the regulations have benefited the whales by reducing impacts without causing economic harm to the commercial whale-watching industry or local communities. The authors also find room for improvement in terms of increasing awareness and enforcement of the regulations, which would help improve compliance and further reduce biological impacts to the whales.

The review provides an important check-in on the effectiveness of existing regulations and includes a list of actions to strengthen partnerships that contribute to the recovery of the Southern Residents.

### Addressing threats to the whales

Research has found that killer whales spend less time foraging and more time traveling in the presence of vessel traffic and that vessel noise may cause them to expend more energy to communicate and echolocate to find food. Vessel traffic and noise has been identified as one of three main threats to the Southern Resident population, in addition to the accumulation of chemical contaminants and reduced availability of their favored prey, salmon. Given poor compliance with earlier voluntary vessel guidelines designed to protect the whales, NOAA Fisheries in 2011 issued federal regulations, which limited vessel traffic within 200 yards of the whales and 400 yards of their apparent path. We committed to review the effectiveness of the regulations after they had been in effect for five years.



Above: Soundwatch volunteers monitor boat traffic around the Southern Resident killer whales. Photo: Soundwatch/The Whale Museum

Right: NOAA Fisheries has designated Southern Resident killer whales a "Species in the Spotlight," one of eight species nationwide at high risk of extinction, and has developed an action plan to address threats to the whales. Photo: NOAA Northwest Fisheries Science Center



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Soundwatch volunteers provide information to boaters watching the whales.  
Photo: Soundwatch/The Whale Museum

The review assessed research and data comparing the five-year period prior to adoption of the regulations to the five-year period afterwards. The review examined five measures of progress: education and outreach, enforcement, vessel compliance, biological impacts and economic impacts. NOAA Fisheries also commissioned an economic study to evaluate concerns that the regulations would negatively affect the commercial whale watching industry and local communities that rely on tourism.

## Improving awareness and compliance

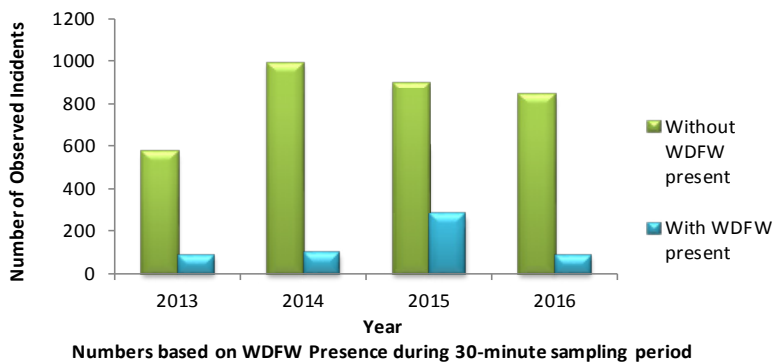
The analysis showed that education and outreach has improved awareness of and compliance with the regulations. Commercial whale watching operators complied with the regulations much more reliably than recreational boaters. Surveys showed that roughly half of recreational boaters said that they were aware of and understood the regulations.

NOAA Fisheries will continue to work with partners to build awareness of the regulations, especially among recreational boaters. The presence of law enforcement vessels in the area also improved compliance and we recommend continued support for enforcement. The average distance between vessels and whales has significantly increased since the regulations have been codified, reducing impacts on the whales. However, some boaters continue behaviors that put the whales at risk.

Finally, an economic study found no evidence of economic harm to the commercial whale watching industry or local tourism revenues, both of which have experienced substantial growth since the regulations took effect.

## Soundwatch Observed Incidents 2013-2016

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**Compliance is much greater with WDFW law enforcement vessels present.**

“Incidents” are instances of vessels not following the *Be Whale Wise* guidelines, including staying at least 200 yards from the whales and keeping their speed under 7 knots.

**Technical Memorandum: Evaluating the success of regulations adopted in 2011 to help protect endangered Southern Resident killer whales**  
[www.westcoast.fisheries.noaa.gov/protected\\_species/marine\\_mammals/killer\\_whale/vessel\\_regulations.html](http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/vessel_regulations.html)

**Be Whale Wise Guidelines and Federal Regulations**  
[www.bewhalewise.org](http://www.bewhalewise.org)

**Southern Resident killer whales: 10 Years of Research and Conservation**  
[www.nwfsc.noaa.gov/news/features/killer\\_whale\\_report/](http://www.nwfsc.noaa.gov/news/features/killer_whale_report/)

**Southern Resident killer whale Recovery Plan**  
[www.nmfs.noaa.gov/pr/pdfs/recovery/whale\\_killer.pdf](http://www.nmfs.noaa.gov/pr/pdfs/recovery/whale_killer.pdf)

# Be Whale Wise

