

# PROTECTING BLUE WHALES AND BLUE SKIES



A partnership for cleaner air, safer whales, and quieter oceans



## Report on the 2017 Vessel Speed Reduction Incentive Program in the Santa Barbara Channel and San Francisco Bay Regions

The partners in an initiative to cut air pollution and protect endangered whales continued to expand the Vessel Speed Reduction (VSR) incentive program in 2017, including speed-reduction zones in the San Francisco Bay area for the first time, as well as in the Santa Barbara Channel Region. The partnership of NOAA Channel Islands National Marine Sanctuary, Santa Barbara County Air Pollution Control District, Ventura County Air Pollution Control District, National Marine Sanctuary Foundation and Volgenau Foundation expanded to include the northern California National Marine Sanctuaries as well as the Bay Area Air Quality Management District. The program was in effect July 1 - November 15, 2017, coinciding with peak ozone (smog) and whale seasons. The program built on the foundation of the 2014 VSR Trial, the 2015 Marine Shipping Working Group process, and the 2016 VSR Program.

### Highlights of VSR 2017

- Eleven global shipping companies participated
- Slowed 143 ship transits to  $\leq 12$  knots (with 66% to  $\leq 10$  knots)
- Reductions from baseline emissions for participating vessels of:
  - 83.5 tons of smog-forming nitrogen oxides (NOx)
  - More than 2,600 metric tons of regional greenhouse gases
- Slower speeds reduced the risk of fatal ship strikes on whales
- For the first time, studied ship speeds along the central coast between the two VSR regions, as compared with historical speeds in that area



## Issue

Each year, thousands of large container ships going to and from the Ports of Los Angeles, Long Beach and Hueneme, and the Port of Oakland, travel through the Santa Barbara Channel, or around the Channel Islands, and through the shipping lanes near the entrance to the San Francisco Bay.



### ***Air emissions***

In coastal communities, these vessels are a significant source of:

- smog-forming nitrogen oxides
- sulfur dioxide
- greenhouse gases
- diesel particulate matter
- other toxic air pollutants hazardous to human health

### ***Fatal Ship Strikes***

At least three endangered whale species feed and travel in and around these regions:

- Blues, Humpbacks, Fins

Slowing ship speeds reduces the risk of fatal ship strikes on whales.

### ***International Shipping Rules***

The area up to 200 nautical miles off the coast of North America has been designated by the International Maritime Organization as an Emission Control Area. Ships are required to use lower-sulfur fuel, which greatly reduces emissions of particulates, air toxics and sulfur dioxide, but only achieves small NOx emissions reductions. Significant NOx reductions are not expected until clean-engine requirements for new ships are phased in; this is estimated to occur starting in the 2030s.

### ***Whale Protection Laws***

Blue, Humpback and Fin whales are protected under the Endangered Species Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, and international treaties.



For more information:

[www.OurAir.org](http://www.OurAir.org)

[www.channelislands.noaa.gov](http://www.channelislands.noaa.gov)

### **2017 Program Highlight**

Shipping companies that were slowing ships in both regions were asked not to speed up over historical speeds in the area in between the two VSR Zones (200 nautical mile distance).

A study conducted by the partners showed:

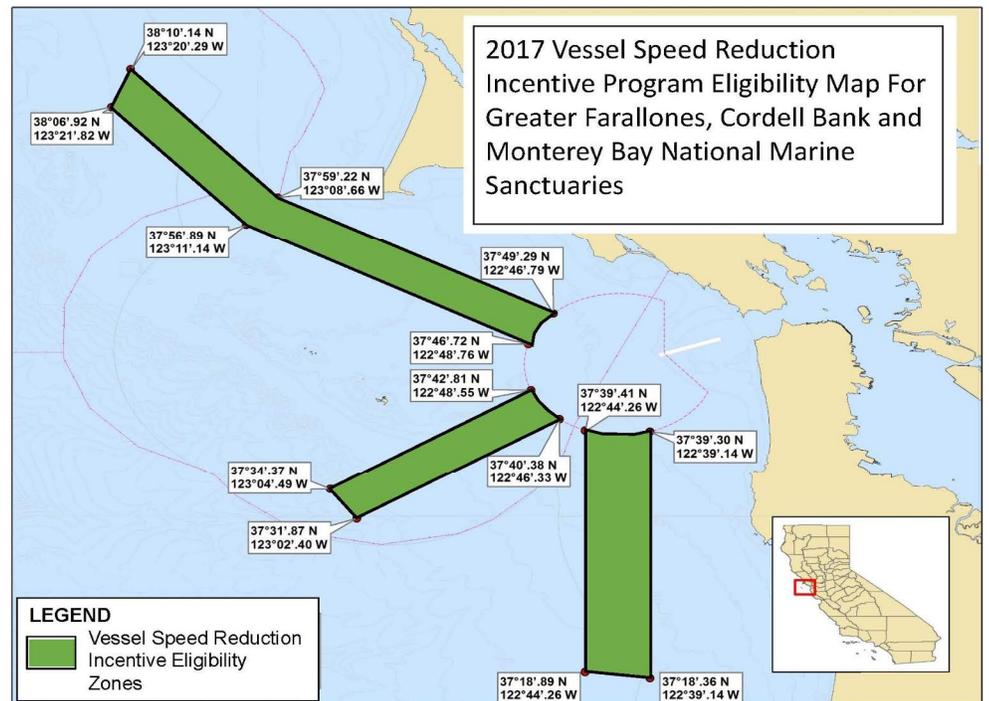
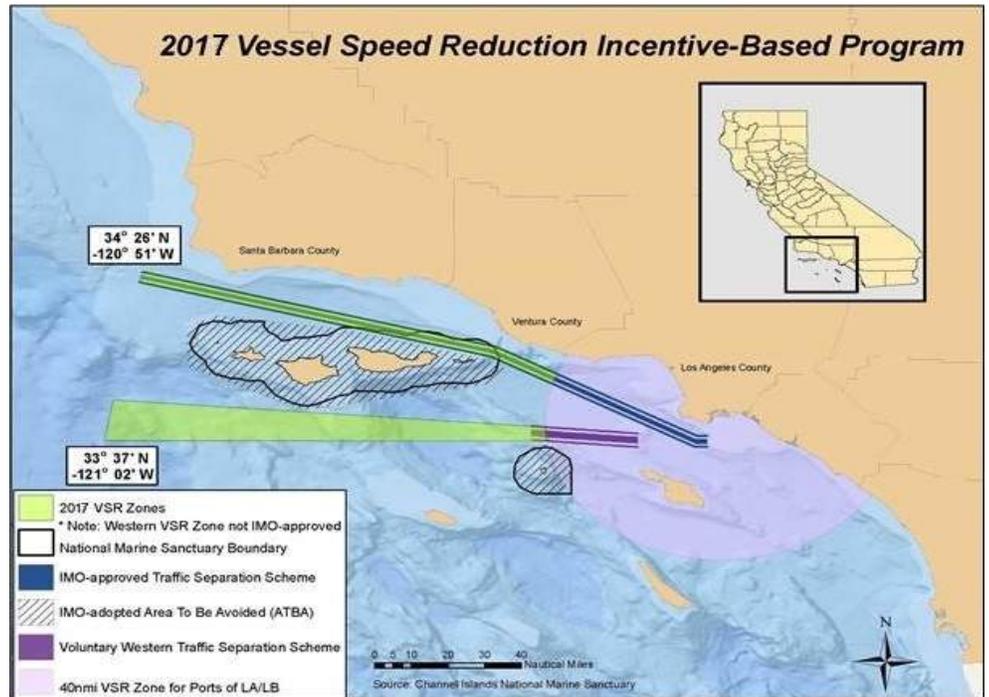
- 60% of the transits that slowed in both VSR Zones slowed down in the area in between, as compared with historical speeds
- 15% traveled at historic speeds
- **75% either slowed down or did not speed up in this area**

## Goals

- Achieve immediate air quality and whale protection benefits
- Engage the shipping industry's participation
- Test ability to expand the program
- Ask companies not to speed up in the region in between the two VSR zones and study results

## Criteria

- Vessels must have a documented speed of 14 knots or higher in previous trips through the two regions
- Vessels must be participating in one of the VSR programs at the Ports of Los Angeles and Long Beach



## Eleven global shipping companies participated:



## Program Implementation

The 2017 program was funded by the three air districts and two foundations.

### National Clean Air Award

The Protecting Blue Whales and Blue Skies partners were recognized in 2016 with a National Clean Air Excellence Award from the U.S. Environmental Protection Agency for the 2014 VSR program, and the 2015 efforts through the Marine Shipping Working Group of the Channel Islands National Marine Sanctuary Advisory Council.



## Next Steps

The 2017 VSR Program represented a significant advancement over previous VSR programs and continued to expand on the solid foundation for establishing a larger-scale program.

### Blue Whales and Blue Skies Act (HR 3682)



*U.S. Congressman Alan Lowenthal discusses Blue Whales and Blue Skies Act at March 1, 2018 event recognizing the 11 shipping companies that participated in VSR 2017.*

In September 2017, Congressman Alan Lowenthal (CA-47) introduced in U.S. Congress the Blue Whales and Blue Skies Act calling for the establishment of a national program to recognize shipping companies that voluntarily slow down in the Santa Barbara Channel region to reduce air pollution, the risk of fatal ship strikes on whales and harmful underwater acoustic impacts. The Act also calls for consideration of extending the program to encompass all shipping channels along the U.S. Pacific Coast between Canada and Mexico. Congressional co-sponsors include Representatives Carbajal (CA-24), Brownley (CA-26), Rohit Khanna (CA-17) and Barragán (CA-44).



### Climate Urgency

Climate change effects on both air quality and marine mammals underline the importance of VSR's immediate, near-term benefits in cutting air emissions and protecting whales. A large-scale program along the California coast or the Pacific Coast could provide substantial benefits.

2014	2016	2017
Santa Barbara (SB) Channel	SB Channel and South of Channel Islands	SB Channel, South of Channel Islands & <b>San Francisco Bay Area</b>
7 Shipping Lines  <b>27 ship transits</b> incentivized	10 Shipping Lines  <b>50 ship transits</b> incentivized	11 Shipping Lines  <b>143 ship transits</b> incentivized
Emission Reductions:  <b>12.4 tons NOx</b>  <b>500+ metric tons Green House Gases (GHG)</b>	Emission Reductions:  <b>25.6 tons NOx</b>  <b>1,000+ metric tons GHG</b>	Emission Reductions:  <b>83.5 tons NOx</b>  <b>2,630 metric tons GHG</b>