## PROTECTING BLUE WHALES AND BLUE SKIES A partnership for cleaner air, safer whales, and quieter oceans















Report on the
2018 Vessel Speed
Reduction
Incentive Program
in the Santa
Barbara Channel
and San Francisco
Bay Regions

In an initiative to cut air pollution and protect endangered whales, the partners continued to expand the voluntary Vessel Speed Reduction (VSR) incentive program for the Santa Barbara Channel Region and the San Francisco Bay Area in 2018. The National Oceanic and Atmospheric Administration's Channel Islands National Marine Sanctuary, Santa Barbara County Air Pollution Control District, Ventura County Air Pollution Control District, California Marine Sanctuary Foundation, and the Volgenau Foundation partnered with the northern California National Marine Sanctuaries and the Bay Area Air Quality Management District to promote a fourth season of VSR in the highly trafficked zones off the California coast. The program ran from July 1 - November 15, 2018, coinciding with peak ozone (smog) and whale feeding/migration seasons.

#### Highlights of VSR 2018

- Twelve global shipping companies participated.
- The program transitioned from incentivizing individual transits to a fleet-based approach, where each company's entire fleet was asked to slow down to 10 knots or less.
- 280 vessels slowed down, reducing the risk of fatal ship strikes on whales and the amount of fuel burned.
- Reductions from baseline emissions consisted of:
  - 266 tons of smog-forming nitrogen oxides (NOx), and
  - More than 8,600 metric tons of regional greenhouse gases.



#### Issue

Each year, hundreds 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 (NOx)
- greenhouse gases (GHG)
- sulfur dioxide
- particulate matter
- other toxic air pollutants

Many of the areas affected by these emissions do not meet state and/or federal air quality standards.

#### Whale Protection Laws

At least three endangered whale species feed and travel in and around these regions: Blues, Humpbacks, and Fins. These whales are protected under the Endangered Species Act, Marine Mammal Protection Act, National Marine Sanctuaries Act, and international treaties.



#### **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 reduces emissions of sulfur dioxide, particulates, and air toxics, but achieves minimal NOx reductions. Significant NOx reductions are not expected until clean-engine requirements for new ships are phased in, starting in the 2030s.

#### Climate Change

Climate change affects both air quality and marine mammals. Reducing vessel speeds has immediate, near-term benefits in cutting air emissions and protecting whales. A larger scale VSR program along the Pacific Coast could provide substantial benefits.







# For more information: www.OurAir.orq www.channelislands.noaa.gov

#### Did you know?

Endangered whales are often seen off the coast of California as early as May and as late as December. When endangered whales are present, the National Oceanic and Atmospheric Administration (NOAA) issues whale advisories and requests that all vessels 300 gross tons or larger transit at speeds of 10 knots or less. Slowing ship speeds reduces the risk of fatal ship strikes on whales.

#### Goals

- Achieve immediate air quality and whale protection benefits
- Engage the shipping industry to increase participation and cooperation
- Recognize companies based on the cooperation of their entire fleet

#### Criteria

- Vessels must slow down to 10 knots or less
- Only container ships and auto carriers qualify for incentives, as these are typically the fastest ships in the region
- Vessels must also participate in the VSR programs at the Port of Los Angeles or Port of Long Beach

### Twelve global shipping companies participated:













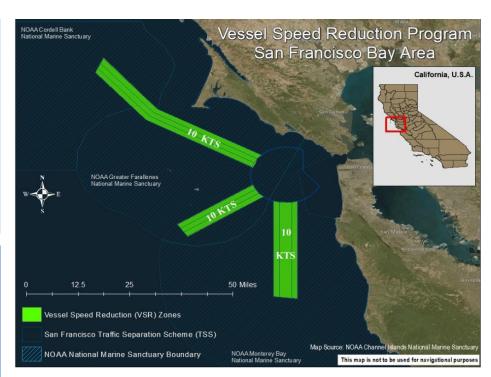


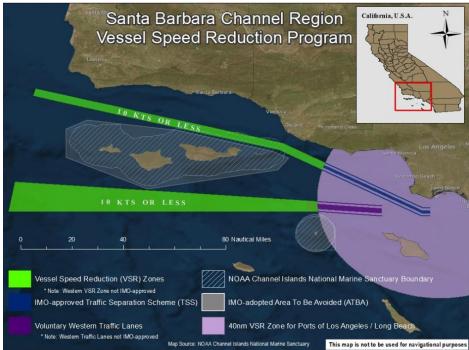
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#### **Fleet Compliance**

Companies received awards based on the percent of distance travelled by their fleet at 10 knots or less within the VSR zones.

| Award Tier | Fleet Compliance |  |
|------------|------------------|--|
| Sapphire   | 75 - 100%        |  |
| Gold       | 50 - 74%         |  |
| Silver     | 25 - 49%         |  |
| Bronze     | 10 - 24%         |  |

#### 2018 VSR Results

#### In the Santa Barbara Channel Region:

- Two companies earned the bronze award
- Four companies earned the silver award
- Four companies earned the gold award
- One company earned the sapphire award

#### In the San Francisco Bay Area:

- Five companies earned the silver award
- Five companies earned the gold award
- Two companies earned the sapphire award

Notably, the Mediterranean Shipping Company (MSC) achieved the sapphire award for slowing down more than 75% of their fleet in both the Santa Barbara Channel Region and in the San Francisco Bay Area. For their outstanding commitment, they earned a Whale Tail statue and a sapphire plaque.



MSC representatives Valerian Riviere and Stanley Kwiaton accepting their awards at the March 6, 2019 event recognizing the 12 shipping companies that participated in VSR 2018.

#### **Next Steps**

The 2018 VSR Program represented a significant advancement over previous programs and continued to build on a solid foundation to achieve a larger-scale program.

#### Ocean Resiliency Act (SB 69)

Introduced in January 2019, this draft legislation by state Senator Scott Weiner (CA Senate District 11) is a comprehensive bill that focuses on water protection. Further, it directs the California Air Resources Board, in coordination with affected coastal air districts and national marine sanctuaries, to develop a voluntary VSR program in the Santa Barbara Channel and San Francisco Bay regions.

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

In September 2017, Congressman Alan Lowenthal (CA-47) introduced in U.S. Congress the Blue Whales and Blue Skies Act, which called for a national program to recognize shipping companies that voluntarily slow down to reduce air pollution and impacts to whales related to ship strikes and noise. The Act also called for extending the program to all shipping channels along the U.S. Pacific Coast between Canada and Mexico.

#### 2019 VSR Program

Plans are under way to launch a 2019 program in May. For more information, see www.OurAir.org/air-pollution-marine-shipping

| Comparison with Previous VSR Programs |                               |  |   |                                    |
|---------------------------------------|-------------------------------|--|---|------------------------------------|
|                                       | 2014                          | 2016   | 2017  | 2018                               |
| Area                                  | Santa Barbara (SB)<br>Channel | SB Channel Region<br>(Channel & South of<br>Channel Islands) | SB Channel Region<br>& San Francisco (SF)<br>Bay Area | SB Channel Region<br>& SF Bay Area |
| # Companies                           | 7                             | 10   | 11  | 12                                 |
| # Vessels                             | 14                            | 25   | 44  | 280                                |
| Slow-speed<br>Distance                | 2,700 nautical miles (nm)     | 5,000 nm   | 12,630 nm   | 46,026 nm                          |
| Emission<br>Reductions                | 12.4 tons NOx<br>535 MT GHG   | 25.6 tons NOx<br>1,005 MT GHG                                | 83.5 tons NOx<br>2,630 MT GHG                         | 266 tons NOx<br>8,668 MT GHG       |