



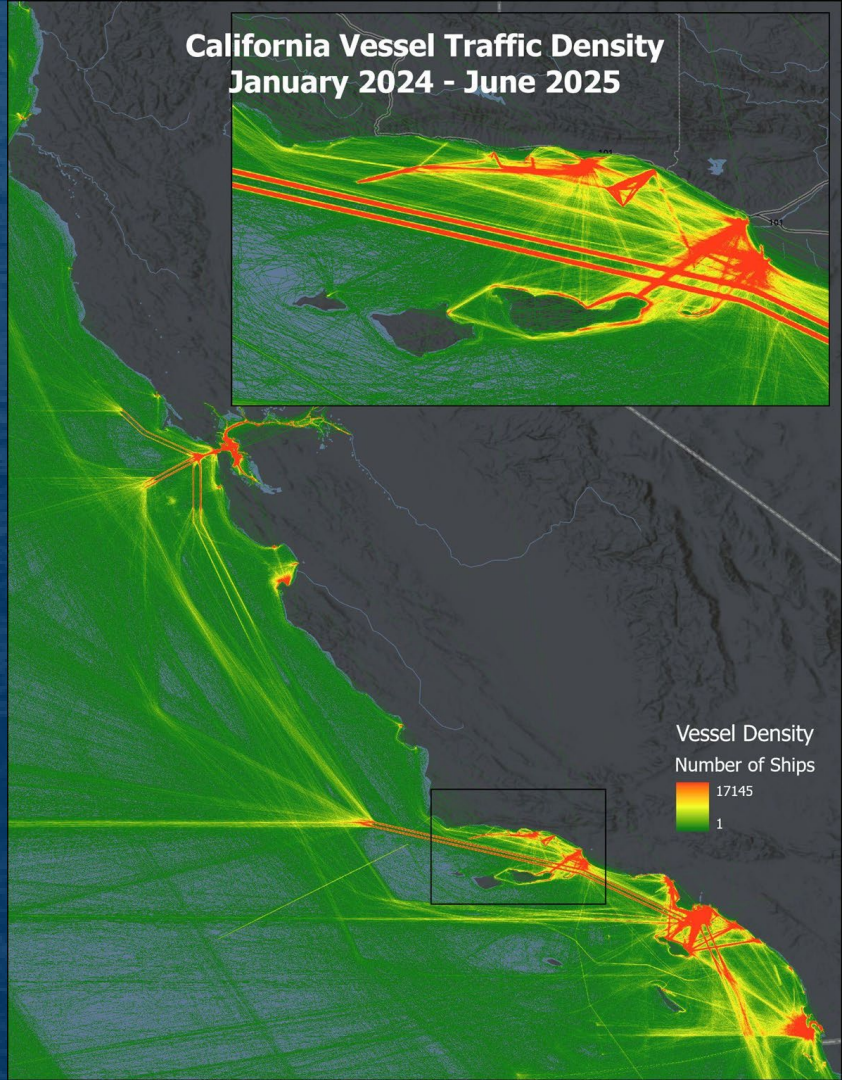
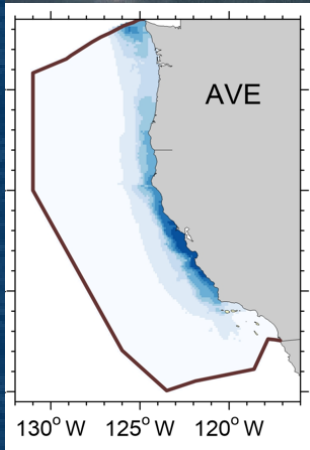
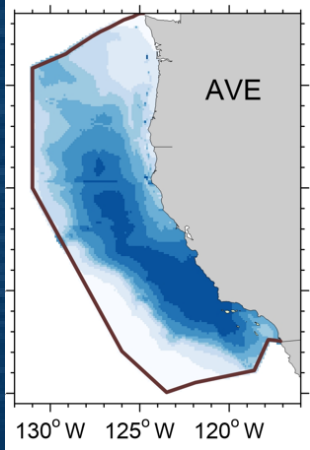
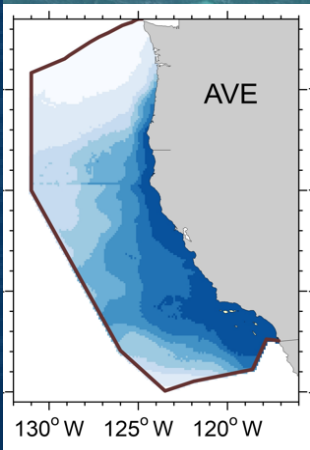
**National Seminar on Underwater Noise (URN) from Shipping and Recreational Boats**

# **Protecting Blue Whales and Blue Skies:**

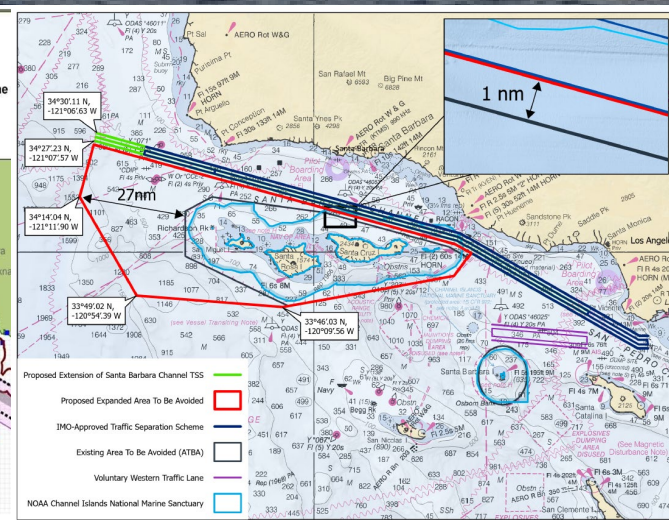
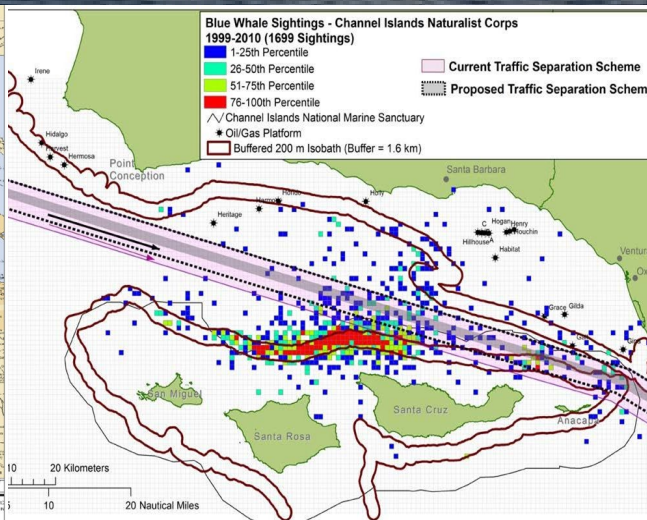
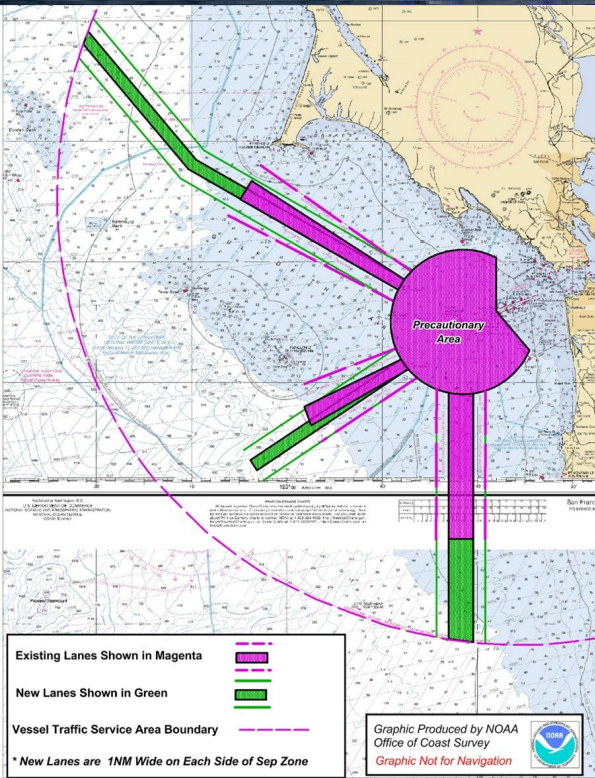
A collaborative partnership for safer whales, cleaner air, and a quieter ocean

**Jessica Morten**, California Marine Sanctuary Foundation





# Spatial Measures



Amendments to the Santa Barbara Channel Traffic Separation Scheme - 2013 (left) and 2023 (right)

NOAA worked with the U.S. Coast Guard and the U.S. delegation to the International Maritime Organization to reconfigure the shipping lanes to protect whales.

# VOLUNTARY VESSEL SPEED REDUCTION ZONES TO REDUCE IMPACT OF SHIP STRIKES ON WHALES

NOAA's Greater Farallones, Cordell Bank, and Monterey Bay National Marine Sanctuaries strongly recommend vessels 300 gross tons or larger transit the Monterey and San Francisco VSR zone at 10 knots or less and prioritize use of the western traffic lane when traveling in the San Francisco Offshore TSS from **May 1 - January 15, 2026**.

NOAA also strongly recommends vessels 300 gross tons or larger transit the Southern California Vessel Speed Reduction (VSR) Zone at 10 knots or less from **May 1 - January 15, 2026**. Vessels should transit outside of the Area To Be Avoided (ATBA) in the northern Channel Islands region to reduce the overlap of ships and endangered whales. Every effort should be made to comply with any instruction received from the Navy when transiting south of the Channel Islands.

These areas contain populations of endangered blue, humpback and fin whales which are federally protected under the Federal Endangered Species Act (16 USC 1538 et seq.), the Marine Mammal Protection Act (16 USC 1361 et seq.), and the National Marine Sanctuaries Act (16 USC 1431 et seq.).

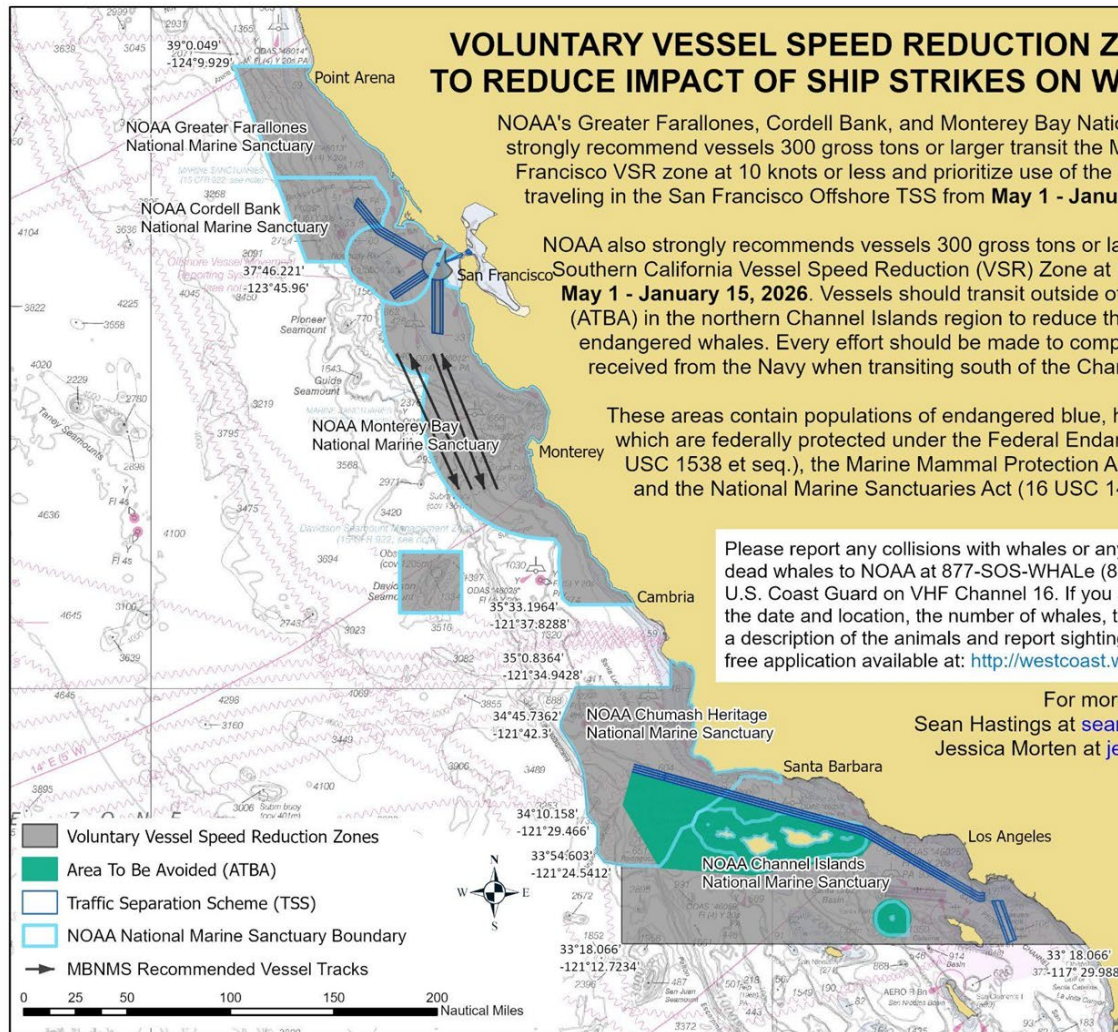
Please report any collisions with whales or any observed injured or dead whales to NOAA at 877-SOS-WHALE (877-767-9425) or to the U.S. Coast Guard on VHF Channel 16. If you see whales, please record the date and location, the number of whales, the species (if known) and a description of the animals and report sightings through WhaleAlert, a free application available at: <http://westcoast.whalealert.org>.

For more details, please contact:  
Sean Hastings at [sean.hastings@noaa.gov](mailto:sean.hastings@noaa.gov) or  
Jessica Morten at [jessica.morten@noaa.gov](mailto:jessica.morten@noaa.gov)

California, U.S.A.



Map source: Jess Morten/NOAA



# Vessel Speed Reduction (VSR) Measures Cooperation Results

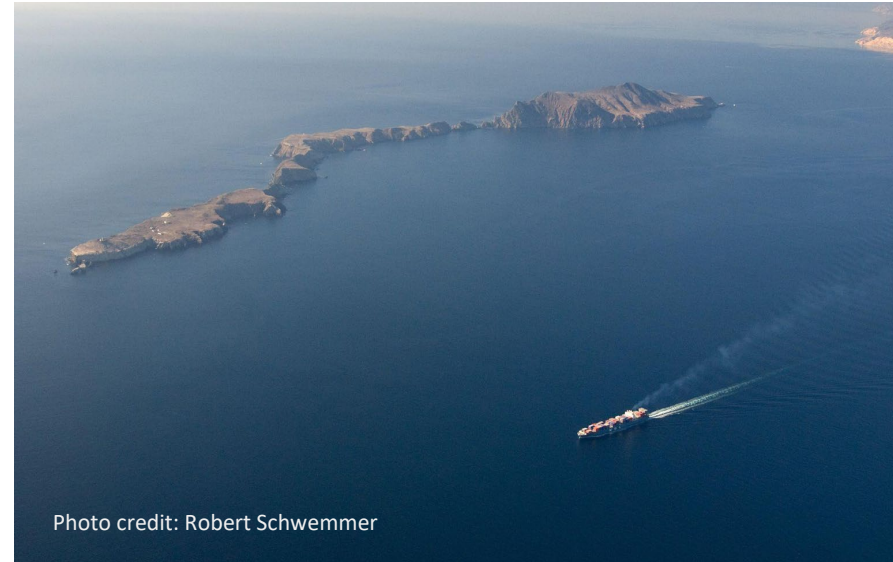
## % Cooperation from Vessels $\geq 300$ GT in VSR Zones, By Year

| VSR Region                        | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025       |
|-----------------------------------|------|------|------|------|------|------|------|------|------------|
| San Francisco and Monterey Region | 45%  | 45%  | 58%  | 64%  | 63%  | 61%  | 67%  | 72%  | <b>72%</b> |
| Southern CA Region                | 18%  | 23%  | 50%  | 54%  | 59%  | 60%  | 64%  | 67%  | <b>68%</b> |

# PROTECTING BLUE WHALES AND BLUE SKIES

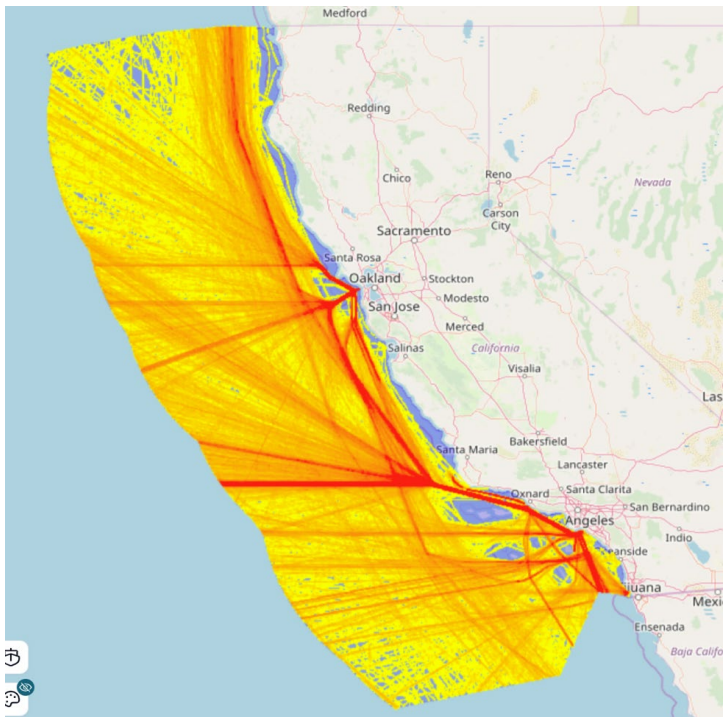




**Protecting Blue Whales and Blue Skies** is a voluntary Vessel Speed Reduction (VSR) verification and public recognition incentive program that works to reduce ship strike risk, underwater noise, regional greenhouse gas emissions, and air pollution.



# HOW WE DO IT

## BWBS uses AIS data to perform analyses and verifies shipping companies' cooperation rates with voluntary VSR requests



### Protecting Blue Whales and Blue Skies: [REDACTED] Monthly Report

Reporting Period: September 1 - September 30, 2025

**Quick Overview**  
From September 1 - September 30, 2025 across all VSR zones, [REDACTED] had:

- 14 vessels
- 5,692 nautical miles in VSR zones
- 98.5% of distance at 10 knots or less

Overall this season (beginning May 1), [REDACTED] is on track to qualify for **Sapphire** with 98% total distance travelled at 10 knots or less according to Whale Safe data.

This report provides a summary of whale and ship data for the **Protecting Blue Whales and Blue Skies (BWBS)** program in the voluntary Vessel Speed Reduction (VSR) zones of California. BWBS enrolled shipping lines receive recognition based on the percent of distance travelled at 10 knots or less through the zones. The three award tiers are **Sapphire** (90-100% of distance travelled in the VSR zones at 10 knots or less), **Gold** (70%-90%), and **Blue Sky** (50%-70%).

This report was provided by the **Benifit Ocean Science Laboratory's Whale Safe** tool that displays near real-time whale and ship data for the Santa Barbara Channel and waters off San Francisco. In addition, **Whale Safe North America** displays ship data for all ship-strike slow speed zones in North America. Vessel activity is derived from Automatic Identification Systems (AIS) and assigned to operators using data from IHS Markit.

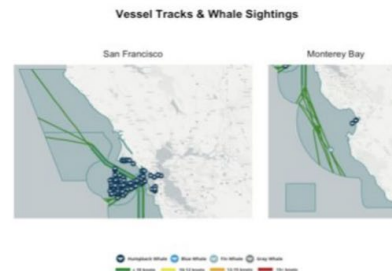
If you have questions about BWBS please contact Jessica Morten, [jessica.morten@noaa.gov](mailto:jessica.morten@noaa.gov) or if you have modifications to this vessel list shown in this report or would like more frequent reports, please contact Rachel Rhodes on the Whale Safe team, [rachelrhodes@ucsb.edu](mailto:rachelrhodes@ucsb.edu).



See below for detailed breakdowns by region and vessel (Northern Zone page 2 and Southern Zone page 4).

**Northern Zone**  
From September 1 - September 30, 2025, [REDACTED] had:

- 9 vessels
- 1,237 nautical miles in VSR zones
- 98.4% of distance at 10 knots or less

There were 344 sightings of blue, fin, or humpback whales in the VSR zones and San Francisco Bay, and 20 days with a whale presence rating of "very high" or "high" during that time.



**Individual Vessel Table** Summary of total nautical miles traveled and cooperation rate by vessel.

| WMSI       | Ship Name | Total NM Traveled | Total NM 510 knots | Cooperation Rate |
|------------|-----------|-------------------|--------------------|------------------|
| [REDACTED] |           | 117               | 117                | 100%             |
|            |           | 182               | 179                | 98.4%            |
|            |           | 246               | 244                | 99.2%            |
|            |           | 216               | 214                | 99.1%            |
|            |           | 191               | 149                | 78.0%            |
|            |           | 126               | 133                | 98.0%            |
|            |           | 77                | 75                 | 97.4%            |
|            |           | 57                | 53                 | 93%              |
|            | 58        | 53                | 91.4%              |                  |



# HOW WE DO IT

## BWBS quantifies the environmental benefits of the accomplishments of participants in the program

### Why Speed Reduction Matters

When vessels 300 GT and larger travel at 10 knots or less, impacts to the environment are significantly reduced regarding risk of fatal ship strikes to endangered whales, underwater noise, air pollution, and greenhouse gas emissions.

Photo: Gabriel Dizzi

Tap or hover on the cards to learn more.



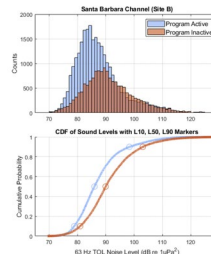
Reducing Ship Strikes



Reducing Air Pollution & GHGs



Reducing Underwater Noise



3820 Cypress Drive #11, Petaluma, CA 94954  
T 707/781-2555 | F 707/765-1688

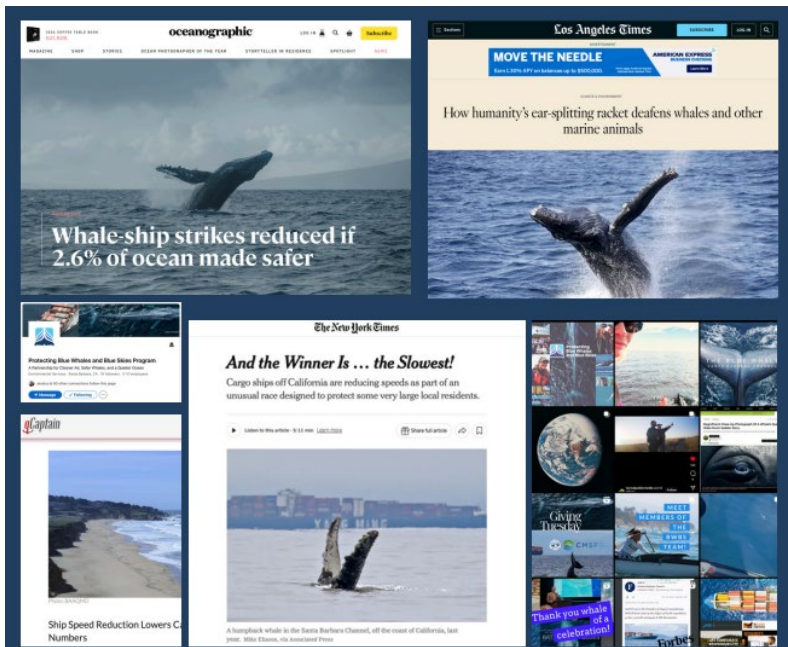
Estimated effect of the 2024 California vessel speed reduction incentive program on ship strikes to whales

Table 7: Summary of BWBS Air Emission Reductions – By Year

| VSR Season    | Duration   | Basis   | # Vessels    | Emission Reductions |             |                |                            |
|---------------|------------|---------|--------------|---------------------|-------------|----------------|----------------------------|
|               |            |         |              | NOx (tons)          | SOx (tons)  | DPM (tons)     | CO <sub>2</sub> E (tonnes) |
| 2014          | 4 months   | Transit | 14           | 12                  | 0.4         | 0.1            | 537                        |
| 2016          | 4.5 months |         | 25           | 26                  | 0.7         | 0.3            | 1,007                      |
| 2017          |            |         | 44           | 84                  | 1.9         | 1.1            | 2,630                      |
| 2018          | 6 months   | Fleet   | 295          | 266                 | 6.0         | 2.6            | 8,668                      |
| 2019          |            |         | 349          | 536                 | 12          | 4.8            | 17,026                     |
| 2020          |            |         | 482          | 748                 | 16          | 4.8            | 24,258                     |
| 2021          | 7.5 months | Fleet   | 545          | 650                 | 15          | 2.7            | 22,201                     |
| 2022          |            |         | 671          | 921                 | 22          | 4.7            | 32,604                     |
| 2023          | 8 months   | Fleet   | 709          | 1,256               | 30          | 6.3            | 45,784                     |
| 2024          |            |         | 743          | 1,405               | 33          | 8.4            | 49,945                     |
| <b>Total:</b> |            |         | <b>5,903</b> | <b>137</b>          | <b>35.6</b> | <b>204,661</b> |                            |

# HOW WE DO IT

BWBS provides **transparency** on responsible shipping practices, and **recognition for industry** leadership around efforts that help protect marine biodiversity, and air quality.



## 2025 Season Cooperation

Sapphire  
90%+



Gold  
70-89%



Blue Sky  
50-69%

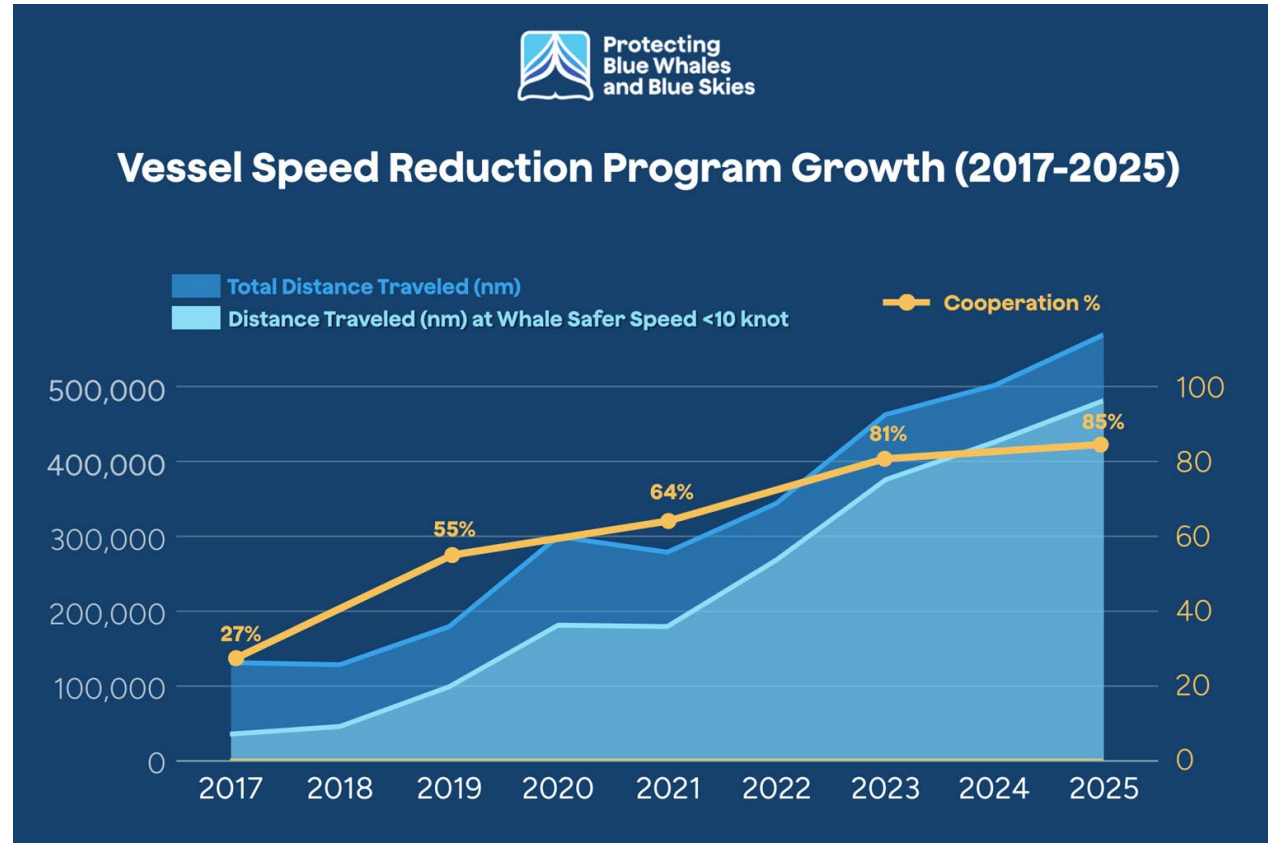


# RESULTS - Program Growth

**2014:** 7 shipping lines participated and reduced speeds for **2,700nm**

**2023:** 33 shipping lines participated and reduced speeds for **375,000+ nm**

**2025:** 44 shipping lines participated and reduced speeds for **480,000+ nm**



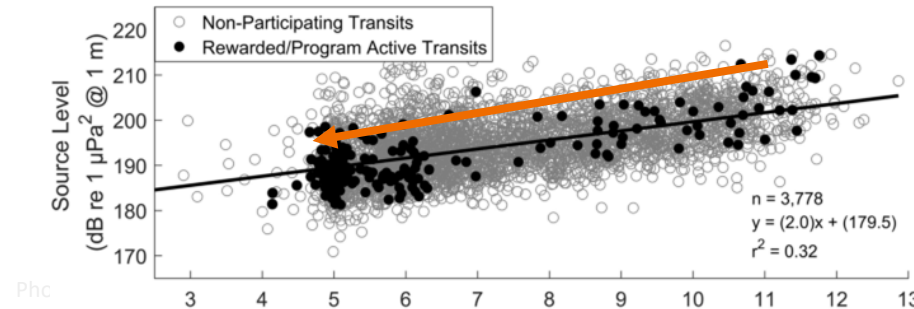
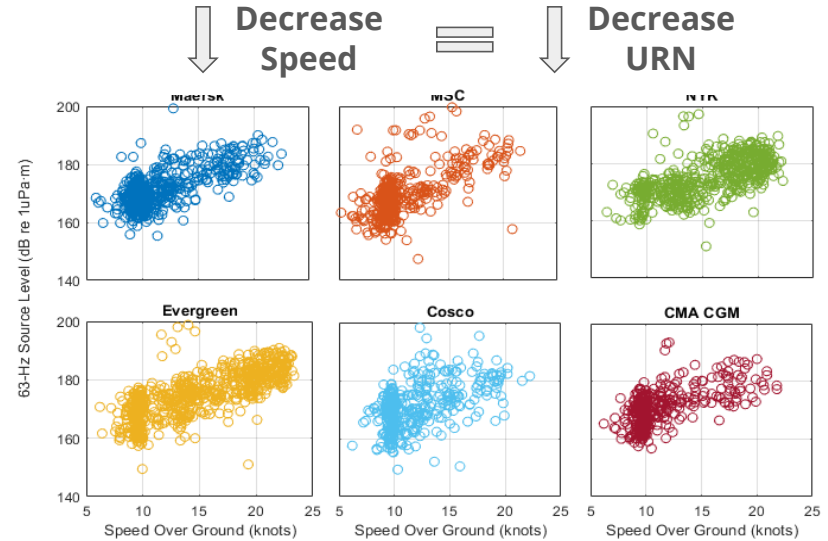
# RESULTS - Whale Protection Benefits

## 2025 Ship Strike Risk Benefits

- Participating vessels posed **42% lower strike risk** to whales in VSR season than non-participating vessels

## 2025 Underwater Noise Benefits

- Mean Underwater Radiated Noise (URN) levels were reduced by **5.2 dB**, equating to a **45%** reduction in sound pressure amplitude and a **70%** reduction in acoustic intensity.

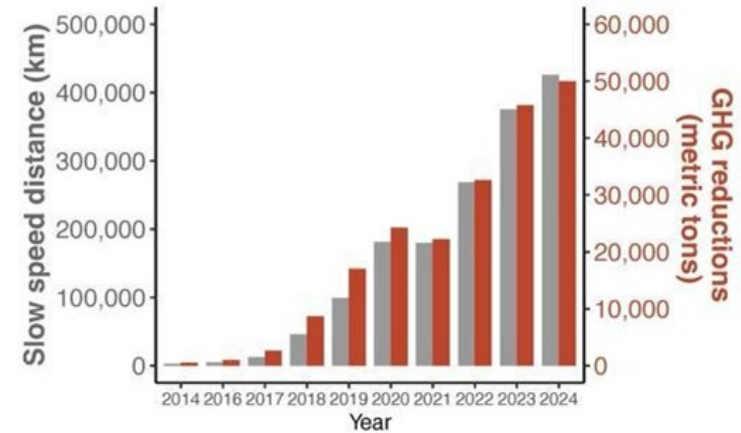


# RESULTS - Emissions Benefits

## Emissions Reductions Benefits

The 2024 program resulted in estimated reductions of:

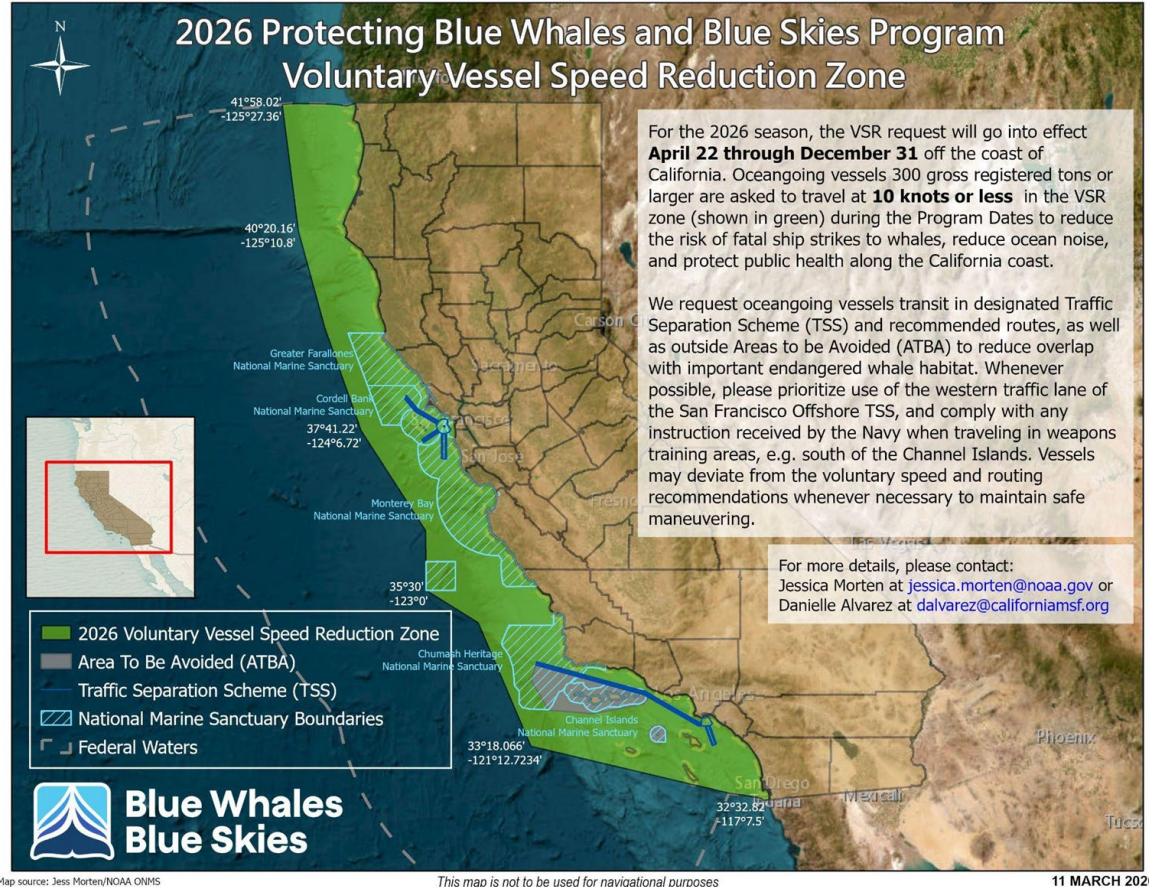
- **1,405 tons** of oxides of nitrogen (**NOx**)
- **33 tons** of oxides of sulfur (**SOx**)
- **8.4 tons** of diesel particulate matter (**DPM**)
- **49,945 metric tons** of regional greenhouse gases (**GHGs**)



# Looking Ahead - 2026 Season

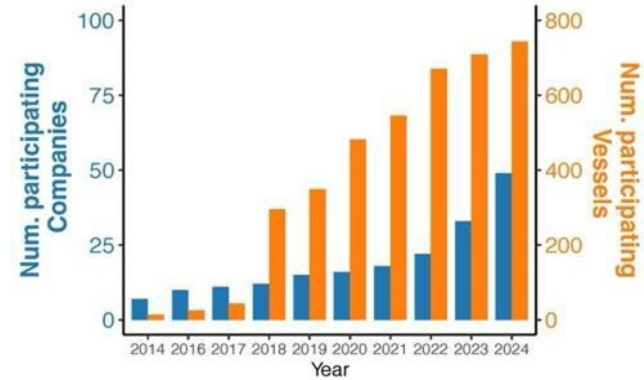


**Geographic expansion in 2026 to cover more critical whale habitat**



# KEY TAKEAWAYS

- Enrollment in this verification and recognition program **continues to grow** every year
- 10 knot or less speed reduction measures provide **meaningful reductions in URN, emissions, and ship strike risk**
- Verification of performance paired with **public recognition and positive press** incentives serve as **powerful motivators** for behavior change
- Shipping line participants (and their cargo owner customers) are eager to demonstrate their **commitments to sustainable shipping practices and biodiversity protection**
- Voluntary programs like these are **flexible and scalable** to new regions



**Jess Morten**

**Director of Marine Resource Protection  
California Marine Sanctuary Foundation**

[jessica.morten@noaa.gov](mailto:jessica.morten@noaa.gov)

[jess@californiamsf.org](mailto:jess@californiamsf.org)

[bluewhalesblueskies.org](http://bluewhalesblueskies.org)



**Protecting  
Blue Whales  
and Blue Skies**