



Protecting Blue Whales and Blue Skies

**A Vessel Speed Reduction Verification and Recognition Program
for Cleaner Air, Safer Whales, and a Quieter Ocean**



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Ventura County APCD

PROGRAM OVERVIEW



- California Air Districts, National Marine Sanctuaries, Non-Profits, and Foundations
- Asks shipping companies to voluntarily slow ships down to 10 knots or less in specified vessel speed reduction (VSR) zones
- Verifies fleet cooperation rates and quantifies benefits
- Provides positive press and recognition of responsible shipping practices that help support and protect marine biodiversity, air quality, and coastal communities.
- Vessel Speed Reduction (VSR) Benefits:
 - Significant emission reductions (NOx, GHGs, Particulate Matter, Air Toxics)
 - Reduce risk of fatal ship strikes on whales
 - Reduce ocean noise



**Blue Whales
Blue Skies**

PROGRAM PARTNERS AND SUPPORTERS



air pollution control district
SANTA BARBARA COUNTY



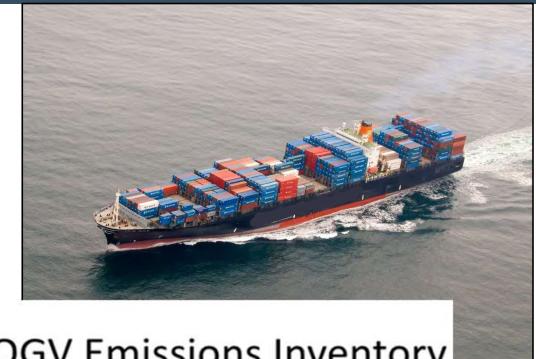
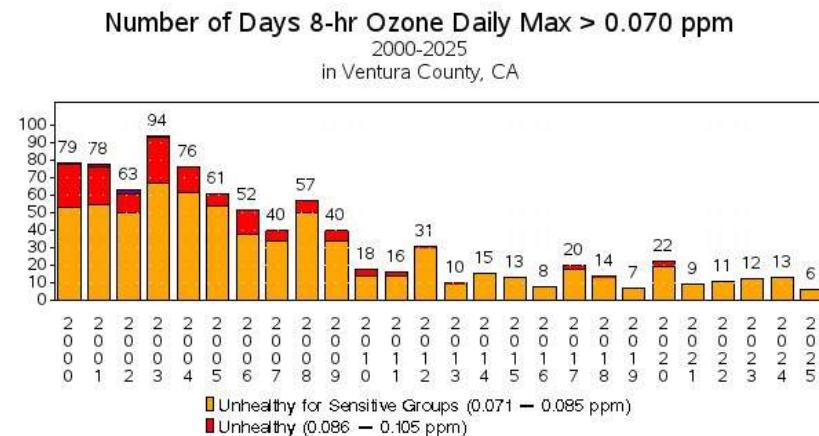
SONOS



BACKGROUND: SHIP EMISSIONS



- Ship emissions are the majority of NOx inventory for CA coastal counties between LA and Bay Area
- Endangered whales are along the CA coast in summer to feed, coinciding with ozone season



2020 OGV Emissions Inventory

Air District, Out to 100 nm	NOx	PM ₁₀
Bay Area AQMD	41.276	0.640
Mendocino County APCD	4.417	0.058
Monterey Bay Unified APCD	33.738	0.453
North Coast Unified AQMD	13.396	0.172
Northern Sonoma County APCD	2.573	0.034
Sacramento Metropolitan AQMD	0.075	0.001
San Diego County APCD	6.421	0.103
San Joaquin Valley APCD	0.051	0.001
San Luis Obispo County APCD	11.387	0.153
Santa Barbara County APCD	27.794	0.386
South Coast AQMD	30.215	0.651
Ventura County APCD	13.406	0.196
Yolo/Solano AQMD	0.046	0.001
Statewide Total	184.7942	2.8491

AMBASSADOR PROGRAM



BWBS Ambassador Program supports and **highlights companies that work with BWBS shipping lines** to advance responsible shipping to protect whales and coastal communities.

This also creates **customer pressure on shipping lines to participate and increase cooperation level.**

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10 YEARS OF RESULTS



Vessel Speed Reduction Program										
Program Year	2014	2016	2017	2018	2019	2020	2021	2022	2023	2024
VSR Zone	Santa Barbara Channel		Santa Barbara Channel & San Francisco Bay Region				Southern California & San Francisco Bay Region		+ Monterey Bay NMS	
Vessel Applicability	Containerships & Auto Carriers							+ Bulk & General	+ Tankers	
Program Duration	4 months	4.5 months			6 months			7.5 months		8 months
# Companies	7	10	11	12	15	16	18	23	33	49
# Vessels	14	25	44	295	349	482	545	671	709	743
Slow-speed Distance (nautical miles)	2,700	5,000	12,630	46,026	99,019	181,306	179,530	268,377	375,437	425,983
Overall Fleet Cooperation	--	--	--	36%	55%	60%	64%	78%	81%	85%
NOx Reductions (tons)	12.4	25.6	84	266	536	748	650	921	1,256	1,405
Regional GHG Reductions (metric tons)	535	1,005	2,630	8,668	17,026	24,258	22,201	32,604	45,784	49,945
Ocean Noise Reduction (dB / transit)	--	--	--	1.0	--	2.3	4.1	4.6	5.4	4.1 (38% source level reduction)
Fatal Ship Strike Risk Reduction *	--	--	--	--	--	35%	50%	44%	58%	50.1%

* Represents the proportional decrease in risk from participating vessels and not absolute estimates of mortality avoided.

2025 VSR SEASON (May 1 - Dec 31, 2025)



2025 Program Updates:

1. Added the recently designated **Chumash Heritage National Marine Sanctuary**.
2. Increased the **cooperation rates** needed to reach the **Award levels**.
3. Extended season to **Jan. 15, 2026** due to continued whale presence.

Recognition Award Levels

Sapphire	90 - 100%
Gold	70 - 90%
Blue Sky	50 - 70%

BWBS STATEWIDE EXPANSION



- Assembly Bill 14 (Hart) signed into law October 11, 2025
- Expands the voluntary Protecting Blue Whales and Blue Skies VSR program statewide



Photo credit: Asm. Hart's Office

Key Challenges



- Vessel Speed Reduction vs. Tier 3 Engine Emission Controls
 - Increasing number of ships with IMO Tier 3 marine propulsion engines
 - Tier 3 engines achieve optimal emission control at high engine loads
 - At 10 knots engines operate at low load and generate insufficient heat for NOx control systems (i.e., SCR) to function effectively
- Policy Challenge Created by Statewide Expansion
 - Additional port (San Diego), traffic patterns, etc.
 - Will more ships operating at sustained low-speed conditions require additional ships to carry same cargo in the same time?
 - Additional coastal air districts impacted
 - BWBS might expand beyond NOAA voluntary speed reduction request zone
- Consider adaptive implementation?
 - Flexibility rather than identical implementation everywhere
- Funding – current budget \$1.2 million/year (plus in-kind, pro bono)
 - SEP funds only enough to cover 2026
 - Exploring carbon credit monetization



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www.bluewhalesblueskies.org

Photo: Adam Ernster Wildlife