

Agenda Item: G-3

Agenda Date: June 26, 2025 Agenda Placement: Regular Estimated Time: 15 minutes Continued Item: No

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

CONTACT: Alex Economou, Planning Division Manager, (805) 979-8333

SUBJECT: Update on the Vessel Speed Reduction Program

RECOMMENDATION:

Receive and file a presentation on the Vessel Speed Reduction (VSR) program.

BACKGROUND:

Large ocean-going vessels that travel along the California coastline and into California's ports are a major source of air pollution, as they emit significant amounts of nitrogen oxides (NOx) – which is an ozone precursor – and other pollutants. Over the long term, international rules will require cleaner engines on newly built vessels, which will reduce NOx emissions from this sector. However, fleet turnover in this industry does not happen quickly, and it is expected to take at least 10 more years to significantly phase out the older, dirtier engines. In the meantime, the marine shipping sector continues to be the largest source of ozone precursor emissions in Santa Barbara County.

Since 2014, the District and partners have implemented the Protecting Blue Whales and Blue Skies (BWBS) vessel speed reduction program for immediate air quality and whale protection benefits. This voluntary program asks operators to decrease their vessel speeds to 10 knots or less within the VSR zones in Southern California, the San Francisco Bay Area, and the Monterey Bay. Vessel speed reduction increases the fuel efficiency of most vessels and reduces emissions of multiple air pollutants, including NOx, greenhouse gases (GHGs), particulate matter (PM), and toxic air contaminants. Reducing NOx emissions through voluntary incentives is a critical part of the District's strategy to help prevent exceedances of the state and federal ozone standards. Reducing vessel speeds also lowers the risk of fatal ship strikes on endangered whale populations and reduces ocean noise that can interfere with whale communication, navigation, and feeding.









DISCUSSION:

The following topics related to the District's Protecting Blue Whales and Blue Skies Program will be covered in this section:

- 2024 BWBS Program Results;
- 2024 BWBS Program Recognition and Outreach;
- 2025 BWBS Program Launch; and
- Assembly Bill 14 Protecting Blue Whales and Blue Skies Program.

2024 BWBS Program Results

The 2024 BWBS Program was implemented successfully from May 1 to December 31, 2024, which is the time period that coincides with peak ozone levels as well as the presence of blue, humpback, and fin whales near the California coast. The program continues to focus on large container ships and auto carriers since these ships have higher speeds and generate more emissions, but bulk vessels and tankers are also invited to participate. In 2024, participation included 743 vessels operated by 49 different shipping companies. These companies account for 78% of all containership traffic and 97% of all auto carrier traffic that passes through the region.

All participating vessel operators were asked to voluntarily slow to 10 knots or less in the VSR zones, and Automatic Identification System (AIS) receivers were used to track the speeds of each vessel during the season. Depending on the company's level of cooperation (calculated as the percent of distance travelled at 10 knots or less for their entire fleet), companies were ranked in award categories. For the 2024 Program, 23 companies achieved the Sapphire award level (85-100% cooperation), 18 companies achieved Gold (60-84% cooperation), and 8 companies achieved Blue Sky (35-59% cooperation). The shipping companies that participated in the 2024 Program and their award levels are listed below in Figure 1:



Figure 1: Company Awards for the 2024 BWBS Program

As detailed in Attachment A, the 2024 results show that the 10th anniversary of the BWBS Program was the most effective year to date, with an overall cooperation rate of 85% from these shipping companies. The AIS data is also used to help quantify the environmental benefits for the marine environment and coastal California communities. In total, the shipping companies reduced smog-forming NOx emissions by over 1,400 tons, diesel PM emissions by 8 tons, and greenhouse gases by nearly 50,000 metric tons along the California coast in 2024. These numbers represent an approximate 27% reduction in pollution from the participating ships, as compared to baseline conditions. For comparison, the 2024 NOx reductions are equivalent to converting 1.1 million passenger vehicles to zero-emission for a single year. As for the marine benefits, program partners have quantified the whale protection and noise reduction metrics for the 2024 Program. Point Blue, a conservation science institute, estimated that the risk of fatal ship strikes was reduced by 50%, and the Scripps Whale Acoustics Laboratory estimated a reduction in ocean noise by 4.1 decibels per transit (equivalent to a 38% source level reduction).

2024 BWBS Program Recognition and Outreach

The 2024 Program continued to focus on positive recognition incentives for the participating companies instead of providing financial incentives (e.g. \$2,000 - \$20,000 per company depending on the award tier and fleet size). This approach was initiated in 2023 due to the majority of the financial incentives being generously declined by the companies in order to help maintain the program and recognition efforts. Even without the financial incentives, the program continues to grow as it focuses on the value of positive media coverage and marketing campaigns for participating companies, as well as drawing industry and public awareness to the BWBS Program.

Outreach for the 2024 Program included various news releases issued by the partners, social media posts, a program fact sheet that highlights the participating companies, and articles and advertisements in trade and business journals. On April 16, 2025, an award ceremony for the 2024 BWBS Program was held at AltaSea at the Port of Los Angeles. Physical awards were handed out to the companies that attended the event and the remaining awards were mailed to the participating companies that weren't able to attend. Photos from the awards ceremony will be shown during the staff presentation and will be used in future recognition materials. The BWBS partnership also staffed a booth at the Santa Barbara Earth Day Festival on April 26 and 27 to help conduct outreach on the program to the general public and local organizations.

Since 2022, the program has maintained a Brand Ambassador component. Any company that ships with one or more of the BWBS Program participants is eligible to become a Brand Ambassador. Ambassadors help advocate for more sustainable shipping and are committed to reducing air pollution, regional GHGs, underwater noise, and ship strikes on endangered whales. To date, 23 companies and the Port of Hueneme have become Brand Ambassadors for this program.

2025 BWBS Program Launch

The 2025 BWBS program launched on May 1 and will run through December 31, 2025. The 2025 Program will be similar to prior years, except for two key changes. The first change is that the VSR zone has expanded to include the waters within the recently designated Chumash Heritage National Marine Sanctuary, as shown below in Figure 2. The second key change is that the cooperation rates to meet the award tiers have increased (i.e. Sapphire Award starts at 90%

instead of 85% cooperation, Gold starts at 70% instead of 60%, and Blue Sky starts at 50% instead of 35%).



Figure 2: BWBS Program VSR Zones

As of June 17, 32 shipping companies have enrolled in the program, showing that the companies continue to participate in a larger VSR zone without the financial incentives. Additional information and materials related to the 2025 BWBS Program, as well as the previous programs, are available on the BWBS Program's website at www.bluewhalesblueskies.org.

Assembly Bill (AB) 14 – Protecting Blue Whales and Blue Skies Program

AB 14 was introduced in December 2024 by Assemblymember Gregg Hart. This bill would codify the state legislature's support for the existing Protecting Blue Whales and Blue Skies Program - which is a partnership between coastal California air districts, national marine sanctuaries, marine sanctuary foundations, and several other nonprofit organizations and environmental groups - and set a path for its expansion to a statewide voluntary VSR program along the entire California coast. If passed, the bill would build upon the existing Protecting Blue Whales and Blue Skies Program in order to reduce air pollution, the risk of fatal vessel strikes on whales, and harmful underwater acoustic impacts.

The District has been working with the Protecting Blue Whales and Blue Skies Program partners to help urge the passage of AB 14, as it would provide additional support for continuing and expanding the emission-reduction impacts from the current vessel speed reduction program. The bill has unanimously passed through the Assembly Committee on Water, Parks, and Wildlife, the Assembly Committee on Natural Resources, the Assembly Committee on Appropriations, the Assembly Floor, and is currently in the Senate where it has unanimously passed through the Senate Natural Resources and Water Committee and has been referred to the Senate Environmental Quality Committee on July 2.

FISCAL IMPACT:

District staff time spent implementing the 2024 BWBS program was included in the District's adopted budget for Fiscal Year (FY) 2024-25 and staff time spent implementing the 2025 BWBS Program is included in the District's proposed budget for FY 2025-26. The District receives compensation for staff time spent implementing the BWBS Program through a California Air Resources Board Supplemental Environmental Project (SEP) Oversight Agreement managed by Ventura County Air Pollution Control District. The SEP program allows community-based projects to be funded from a portion of the penalties received during settlement of state enforcement actions. The approximate revenue for the District's portion of the 2024 BWBS Program is \$70,520 and the budgeted revenue for the 2025 BWBS Program is \$70,520.

ATTACHMENT:

A. BWBS Program Summary: 2014 to 2024.

ATTACHMENT A

BWBS Program Summary: 2014 to 2024

June 26, 2025

Santa Barbara County Air Pollution Control District Board of Directors

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Vessel Speed Reduction Program

Program Year	2014	2016	2017	2018	2019	2020	2021	2022	2023	2024
VSR Zone		Barbara annel	Santa Barbara Channel & San Francisco Bay Region			Southern Californ San Francisco Bay I			+ 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%