



Protecting Blue Whales and Blue Skies Program Update

South Central Coast
Basinwide Air Pollution Control Council Meeting

December 21, 2023



Agenda

- Purpose and History
- 2022 Benefits
- 2023 Program
- 2024 and Beyond
- Questions/Discussion



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Purpose



Photo courtesy Cascadia Research – John Calambokidis



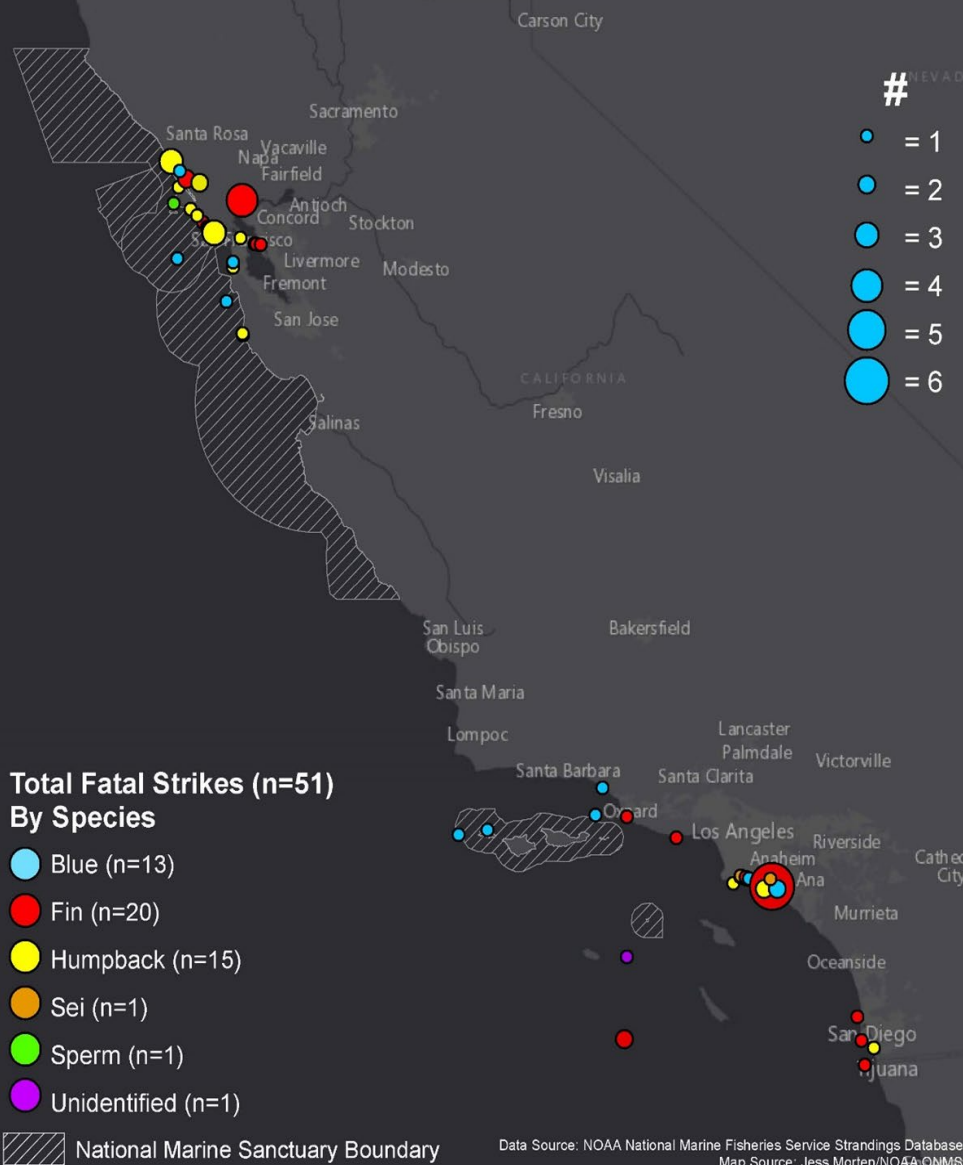
Photo courtesy of NOAA Channel Islands National Marine Sanctuary



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Recorded* Fatal Ship Strikes on Endangered Whales California, 2007-2021

*Note: Recorded ship strike totals are considered to be minimum values, as carcass recovery rates for endangered large whale species are low across regions (<1% to 17%) and comparisons of average vessel strikes recorded versus estimated totals from recent modeling work indicate that the rate of reporting for some species is approximately 10%.



- There have been 52 recorded ship strike fatalities on endangered whales in California from 2007-2022.
- That comes out to 3.5 recorded ship strike fatalities on endangered whales in California per year that we see and document.
- Modelers estimate that ~80 endangered whales are killed by ship strikes each year along the U.S. west coast.
- Losing a few of these whales each year to ship strikes can have catastrophic impacts on the sustainability of their populations into the future.



Purpose

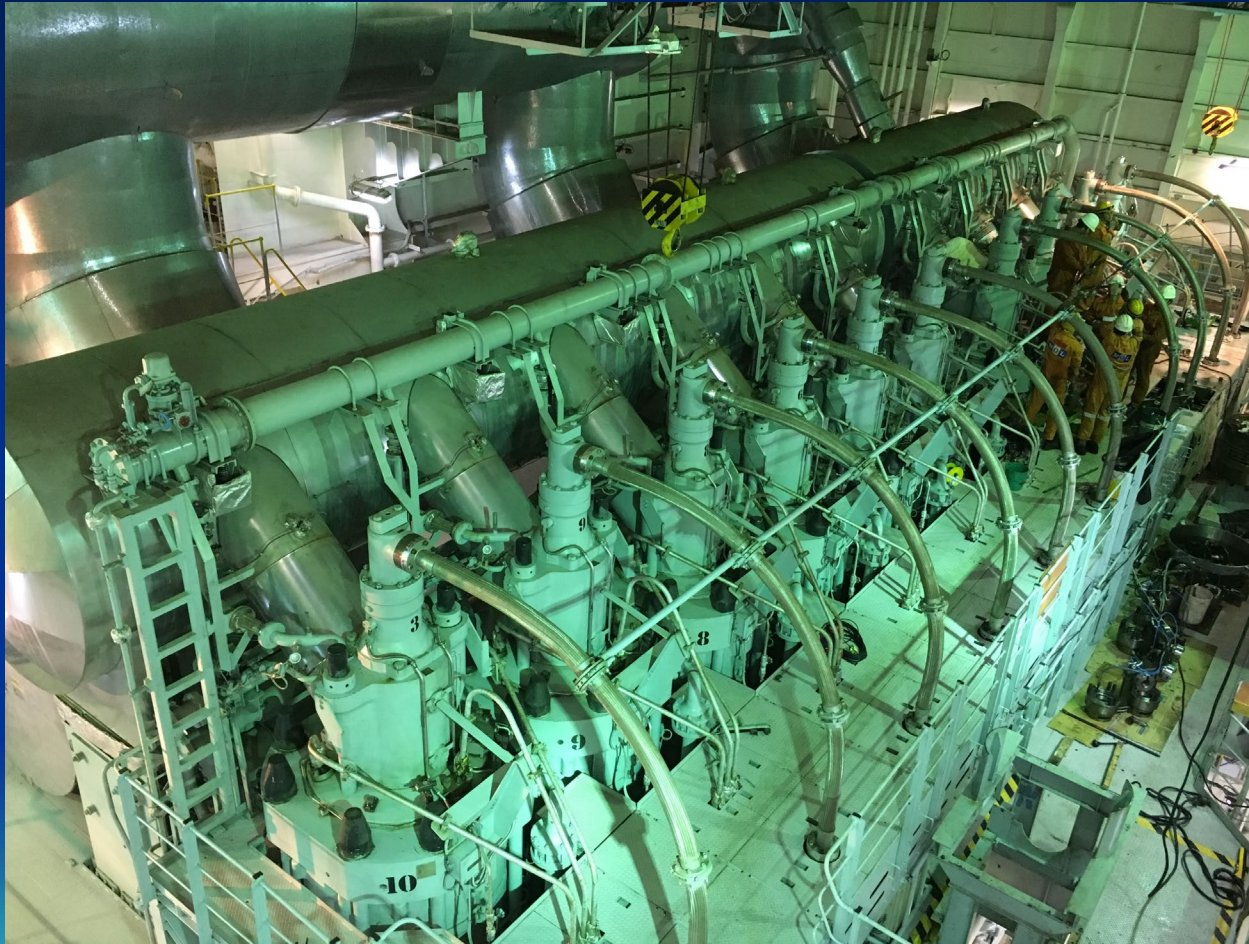
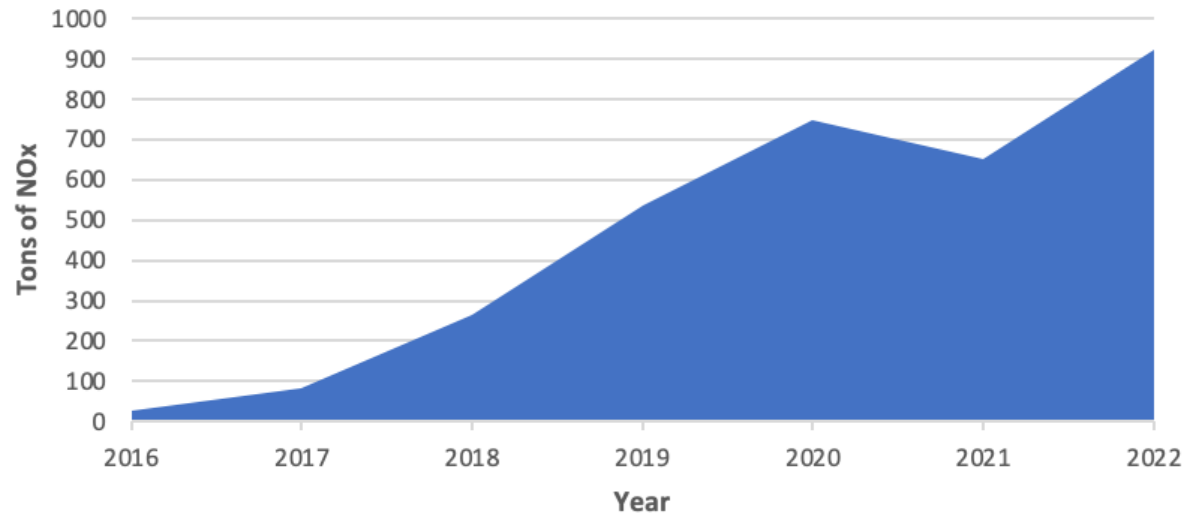


Photo by Tyler Harris. Thanks to Mitsui O.S.K. Lines, Ltd. (MOL) for ship tour and photo authority.

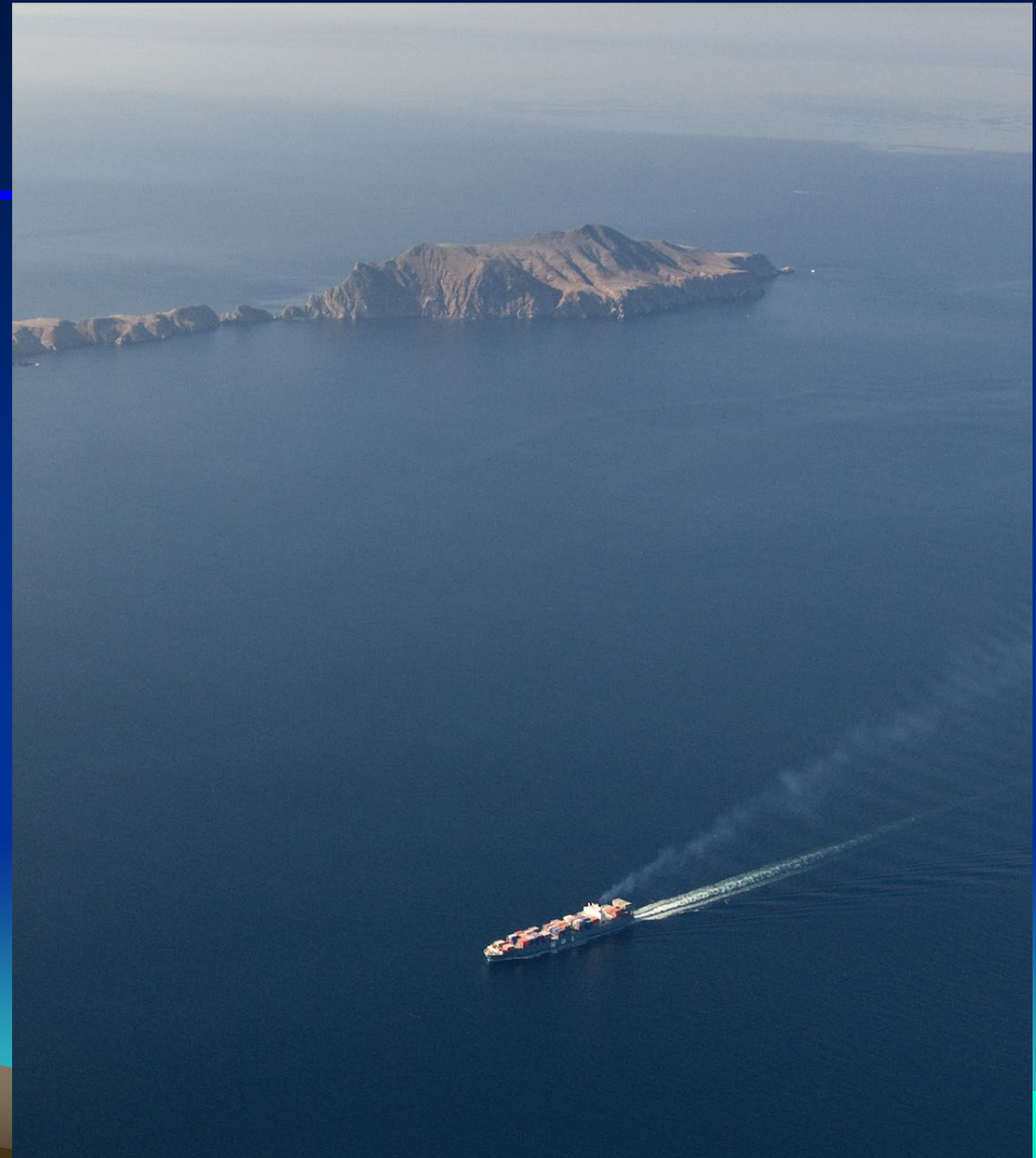
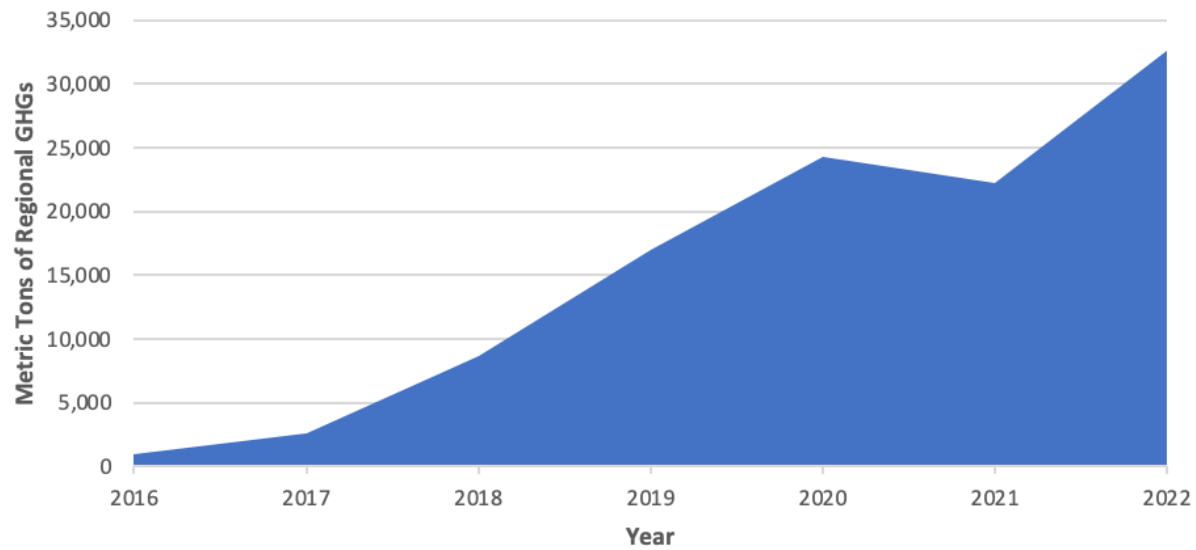


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NOx Emission Reductions, By Program Year



Greenhouse Gas Emission Reductions, By Program Year



Historical Results

“Protecting Blue Whales and Blue Skies” Vessel Speed Reduction Program

Program Year	2014	2016	2017	2018	2019	2020	2021	2022
VSR Zone	Santa Barbara Channel Region		Santa Barbara Channel Region & San Francisco Bay Region			Southern California Region & San Francisco Bay Region		
# Companies	7	10	11	12	15	16	18	23
# Vessels	14	25	44	295	349	483	545	684
Slow-speed Distance (nautical miles)	2,700	5,000	12,630	46,026	99,019	181,306	179,530	266,148
Overall Fleet Cooperation	--	--	--	36%	55%	60%	64%	78%
NOx Reductions (tons)	12.4	25.6	84	266	536	748	650	921
Regional GHG Reductions (metric tons)	535	1,005	2,630	8,668	17,026	24,258	22,201	32,604
Ocean Noise Reduction * (Decibels (dB) / transit)	--	--	--	1.0	--	2.3	4.1	4.6
Ship Strike Risk Reduction **	--	--	--	--	--	35%	50%	44%

* Represents the decrease in noise from participating vessels in the Southern California Region.

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

PROTECTING BLUE WHALES AND BLUE SKIES



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



We work closely with researchers and consultants to independently verify the benefits of the program.



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2022 Program Impacts

- 23 shipping companies signed up, eight received the top tier Sapphire Award
- 266,148 nautical miles traveled at less than 10 knots – over 78% of the total distance travelled by enrolled companies
- Emissions Reductions:
 - 921 tons of NOx
 - 32,604 metric tons of regional greenhouse gases
- Risk of fatal ship strikes to whales reduced by 44%
- Average ocean noise per transit reduced by 4.6 db



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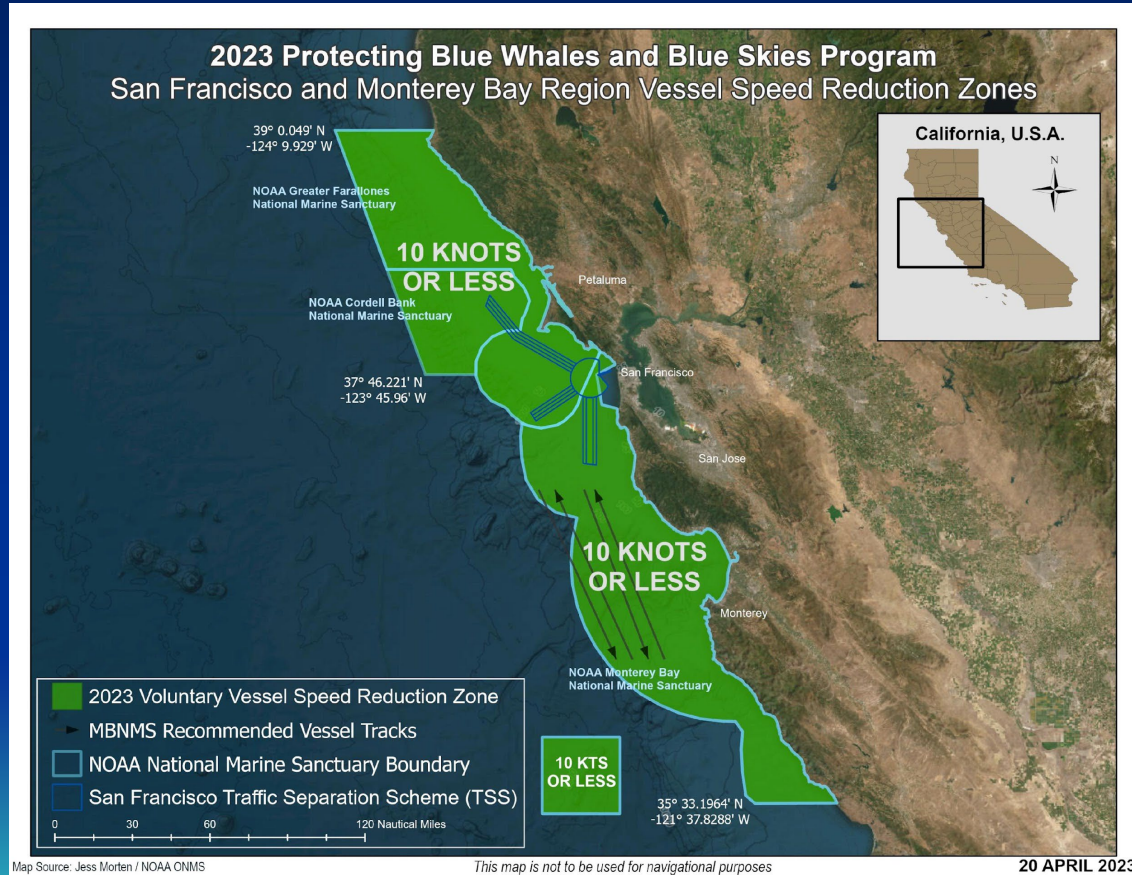
2023 Program

- Discontinued financial incentives
- Expanded VSR zone to cover Monterey Bay NMS
- 38 shipping companies signed up
- Eligible ship types: container, Ro-Ro, bulk, general, and tankers
- Mid-season data showed 22 companies over 35% cooperation rate with overall cooperation rate at 77%



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2023 Program VSR Zones



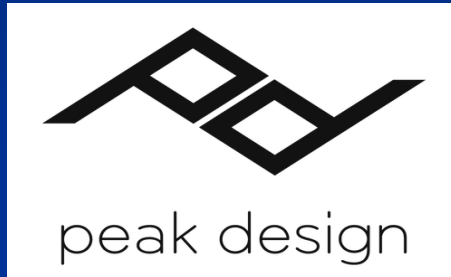
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2024 and Beyond

- Phase 3 Supplemental Environmental Project Award
- Considering year-round program starting May 1, 2024
- Potential Chumash NMS expansion of VSR Zones
- Submitted proposal to CARB to include BWBS in the state Priority Climate Action Plan
 - Necessary step to be eligible for an EPA Climate Pollution Reduction Grant
 - Potential funding for 2025-2030 and state-wide expansion



Ambassador Program



SONOS

NOMAD



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Questions/Discussion

Ventura County Air Pollution Control District

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