

Results from 2017 Vessel Speed Reduction (VSR) Incentive Program

Board of Directors Santa Barbara County Air Pollution Control District

Our Mission: To protect the people and the environment of Santa Barbara County from the effects of air pollution.

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Director / APCO

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2017 VSR Shipping Lines

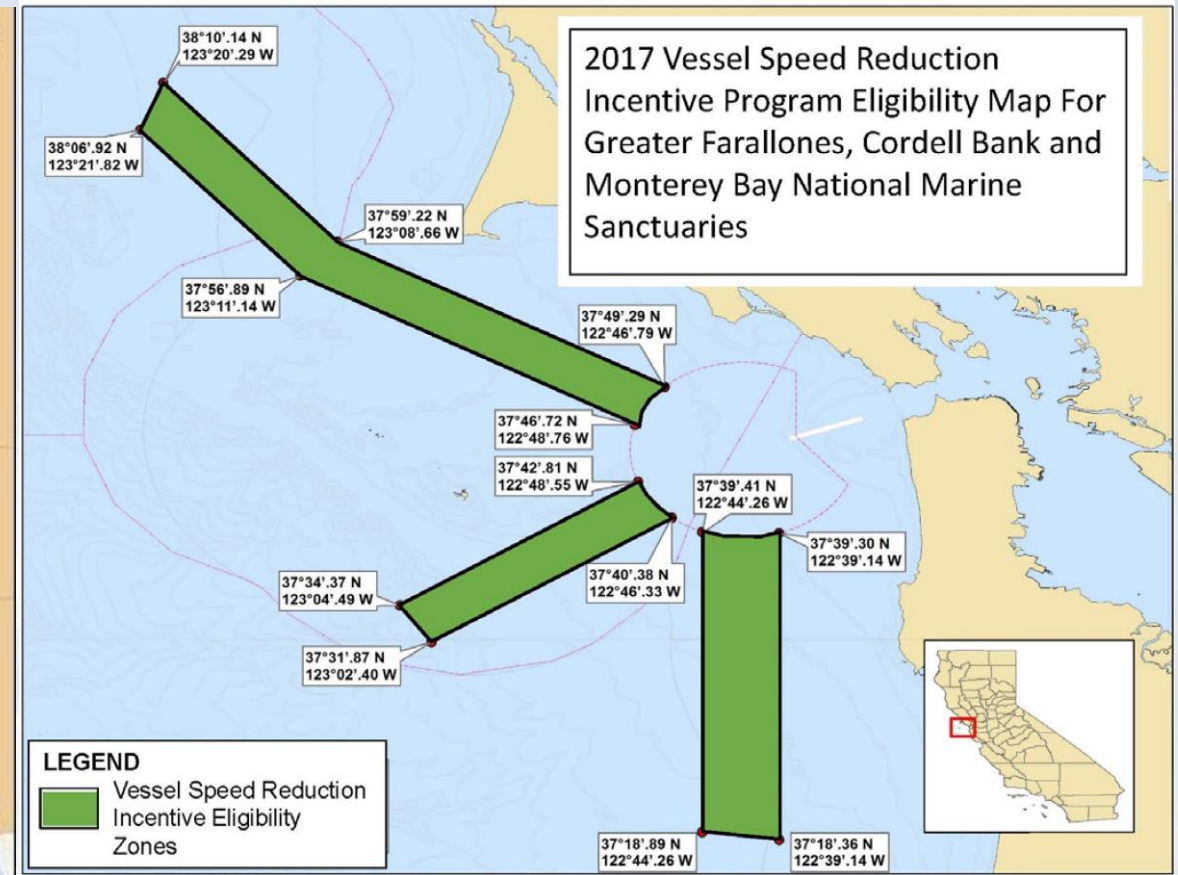
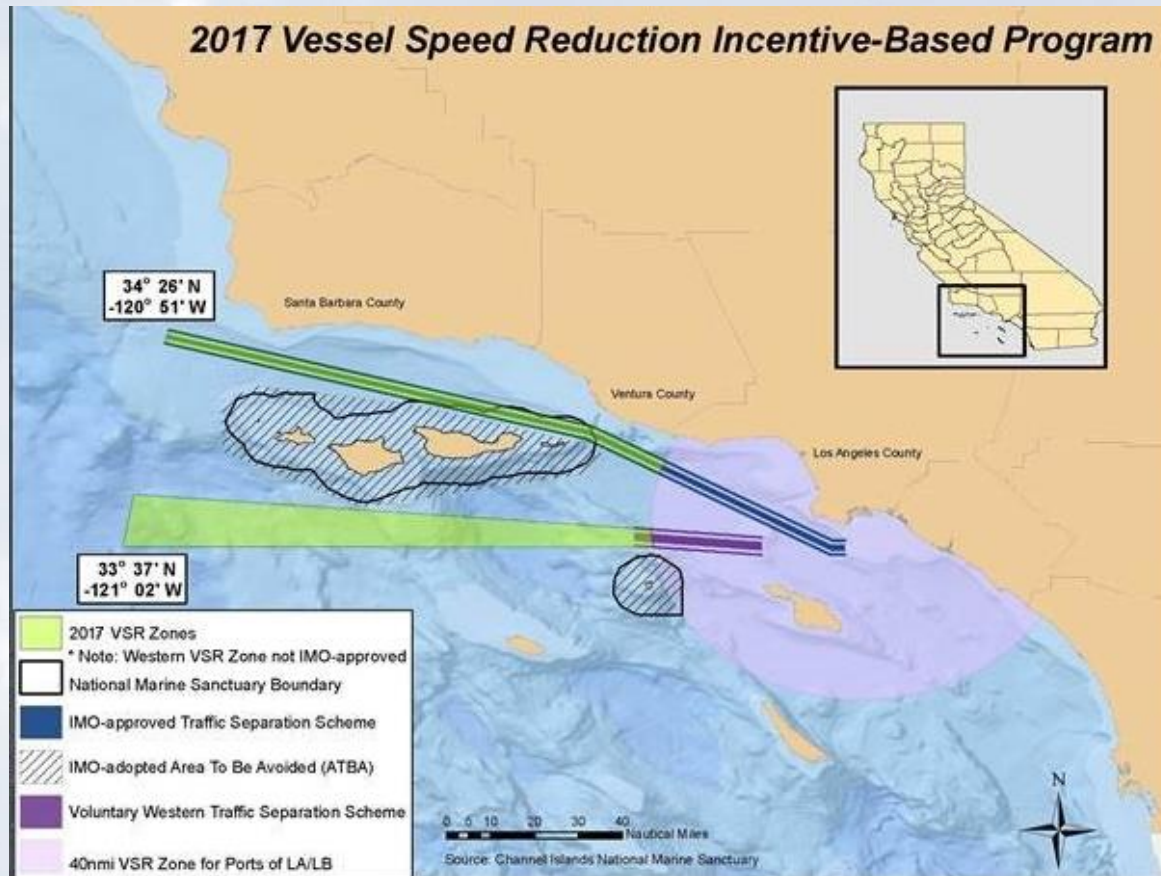
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Air Pollution Control District



2017 VSR Zones



VSR 2017 Funding

- Incentives and Administrative Costs: \$205,000
 - District: \$40,000
 - Other funders: Ventura and Bay Area air districts, National Marine Sanctuary Foundation, Volgenau Foundation
- Emissions Calculations for VSR Zones and Study of Area between: \$41,000
 - Shared by the three air districts



VSR 2017

- \$1,000 incentive for slowing to 12 knots or less (each region)
- Additional \$250 bonus for slowing to 10 knots (each region)
- Max incentive if ship slowed to 10 knots in both Zones: \$2500

2017 Program Numbers	
Transit applications received	462 (238 were eligible)
Shipping lines enrolled	11
Number of different vessels	44
Total number of transits enrolled	143
How many slowed to 10 knots or less	66%

VSR 2017 Emissions Reductions

- Reduced 83.5 tons of smog-forming nitrogen oxides (NOx) and 2,630 metric tons of greenhouse gases (GHG)
 - 73.7 tons NOx and 2,327 metric tons of GHG reduced in Channel region (much longer speed-reduction zone)



Cost Effectiveness

- Approximately \$3,000/ton of NOx reduced
- Includes both regions: incentives, administrative costs, and costs of calculations
- Does not include: staff time
 - NOAA
 - Air districts



Study of Area Between the VSR Zones

- Asked companies to try not to speed up in between
- 68 transits included both regions
- Compared with previous baseline speeds in the area between (approx. 200 nautical miles)
 - 40 vessels slowed down compared to previous baseline
 - 11 vessels traveled at same speed as baseline
 - 17 vessels sped up
- **75 percent either slowed down or did not speed up in between compared w/ historical speeds**



Snapshot: VSR Programs

2014	2016	2017
Santa Barbara Channel	Channel and Outside Channel Islands	Channel region (both routes) and SF Bay Area
2 air districts, 1 national marine sanctuary, 2 NGOs 27 transits	2 air districts, 1 national marine sanctuary, 2 NGOs 50 transits	3 air districts, 4 national marine sanctuaries, 2 NGOs 143 transits
Emission Reductions: 12.4 tons NOx 500+ metric tons GHG	Emission Reductions: 25.6 tons NOx 1,000+ metric tons GHG	Emission Reductions: 83.5 tons NOx 2,630 metric tons GHG

VSR 2017 Examples

- 100% success rates for participating transits

“K” Line (24 transits)



Yang Ming (26 transits)



VSR 2017 Examples

- New shipping company participant for 2017 Program: MSC (Mediterranean Shipping Company)
 - Slowed 28 transits
 - Provided voluntary whale sightings report



Takeaways

- Expansion successful
- Tracking specific vessels and transits
 - Emission reductions are real and specific to the vessels
 - Difficult to implement in an expanded program
 - Company fleet averages may be better for larger program
 - Impact on emission reductions calculations



Takeaways

- Not producing significant speed up in other areas
- Recognition is meaningful to shipping companies
- Blue Whales and Blue Skies Act
- Looking ahead



U.S. Congressman Alan Lowenthal discusses Blue Whales and Blue Skies Act (HR3682) at March 1st event

Contact Information

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