Marine Shipping Update

Board of Directors
Santa Barbara County
Air Pollution Control
District

January 19, 2017

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Channel Islands National
Marine Sanctuary







Overview

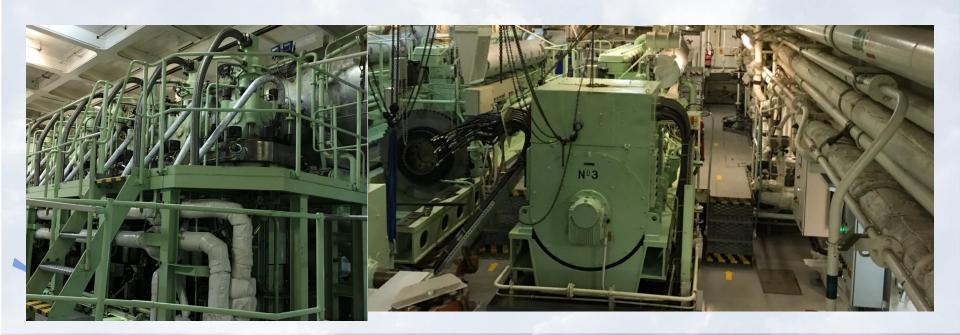
- Background
- Vessel Speed Reduction (VSR) 2016
 - Jan. 20, 2017 event
- Film
- Federal legislation
- VSR 2017 and future funding





Background - Emissions

- Shipping major source of air pollutants in our County, including NOx (nitrogen oxides; forms smog or ozone)
 - Need NOx reductions to meet ozone standards



Background – International Rules

- Fuel rules are reducing particulate, air toxics, sulfur dioxide; but not much NOx
- Starting 2016, cleaner engines required for new ships off our coast
 - NOx reductions estimated to start 2020s
- Update: construction of many new ships started before 2016 (overbuilt)
 - New ships won't have the cleanest engines
 - Now estimate NOx reductions starting 2030s



Background - Whales



Santa Barbara County

Air Pollution Control District

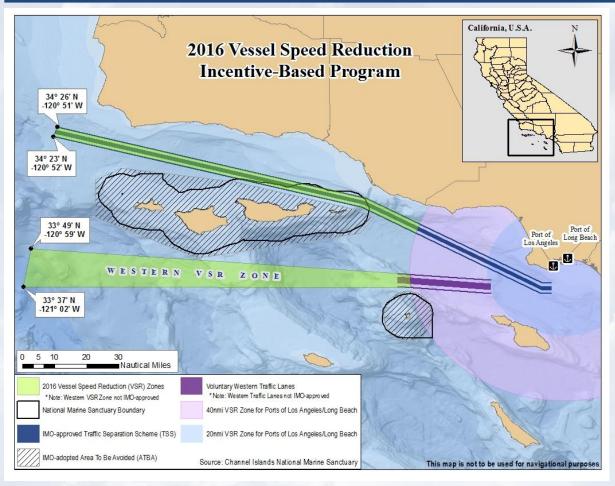
Vessel Speed Reduction (VSR) Strategy

- Cuts many pollutants including NOx
- Reduces risk of fatal ships strikes on whales
- Whale season and ozone season coincide





VSR 2016 Overview



- ❖ July 1- Nov. 15
- Sliding scale incentives targeting the fastest ships





Second VSR Zone south of the islands

VSR 2016 structure

	2014	2016
# of shipping lines enrolled	7	10
# of transit applications received	89	376
# of transits slowed	27	50
Total incentive payments	\$67,500	\$107,750





2016 Results

❖ 50 transits slowed to 12 knots or less Of these, 14 transits slowed to 10 knots or less

Included 38 "coastal" transits, 12 "western"

transits

5 lines provided whale sightings forms



VSR Results - Preliminary

- Emissions Reduced
 - 27.50 tons NOx
 - 1,094 metric tons of greenhouse gases





VSR Results - Preliminary

- Previous baseline speeds 14 20.54 knots
- Highest emission reductions for a vessel
 - Yang Ming Brussels Bridge
 - 1.23 tons NOx reduced
 - Slowed from 20.54 knots to 9.34 knots





Lessons Learned

- Shipping companies very interested
- Many will slow to 10 knots
- Those already transiting south of the Islands will participate
- Bonus approach successful for 10 knots
 - Other bonuses checked off but not used;
 funding was reserved for possible bonuses



Lessons Learned

- A lower incentive amount will be successful
 - Per transit in 2014: \$2,500
 - Average per transit in 2016: \$2,155
- We could verify more transits with more real time tracking
- Increased communication with shipping companies contributed to success





2016 Santa Barbara Channel Region Vessel Speed Reduction Program Program Wrap-Up ● Recognition Ceremony



Friday, January 20, 2017 • Santa Barbara Zoo • 500 Ninos Dr, Santa Barbara, CA 93103

<u>Please Note:</u> This Vessel Speed Reduction Program ceremony will take place during a NOAA Channel Islands National Marine Sanctuary Advisory Council meeting, which is open to the public and minutes will be published. More information about the Sanctuary Advisory Council can be found online at http://channelislands.noaa.gov/sac/welcome.html

DRAFT AGENDA

10:30 - 10:45am: Welcome/ Introductions

10:45 - 11:15am: 2016 Program Results

11:15 - 11:50am: Recognition/Award Ceremony

11:50 - 12:00pm: Closing Remarks

12:00 - 1:15pm: Optional Lunch with program partners



Film





Possible Federal Legislation

- Goal: reward industry for participating with a national recognition program
 - a way to expand impact without funding
- Congressman Lowenthal's (D-CA, 47th District office) Office early draft
 - Meeting with committees and other congressional offices
 - Possibly introduce legislation later this year



SEP Listing

- Ventura County APCD drafted and submitted proposal
- Met criteria for listing as Supplemental Environmental Project
- No guarantee of funding
- Funding for project can be part of settlements



VSR 2017

- Possible start June 1, 2017
 - Ventura County APCD prefers June start ozone season
- Funding
 - Confirmed partners: District (approved in FY 16-17 budget), Volgenau Foundation
 - Potential partners: Ventura
 County APCD, National Marine
 Sanctuary Foundation





Next Steps

- Return with updated agreement if VSR 2017 is confirmed
- Questions?



