VESSEL SPEED REDUCTION INCENTIVE PROGRAM

2021 PROGRAM RESULTS

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.

Aeron Arlin Genet
Director / APCO

Molly Pearson, Planning Division Manager
May 19, 2022
BACKGROUND

- Over 100 miles of coastline in Santa Barbara County
  - Offshore emissions = onshore impacts

- 2019 Ozone Plan
  - Emission inventory for Marine Shipping
  - Commitment to pursue VSR

- Near-term NOx reductions
  - Federal and International actions on engine requirements will take a long time
  - Air districts are required to plan to meet federal and state ozone standards

[Source: Draft estimates for 2022 Ozone Plan]
A PARTNERSHIP FOR CLEANER AIR, SAFER WHALES, AND A QUIETER OCEAN

- Air Districts, National Marine Sanctuaries, Non-Profits, Foundations
- 2014 pilot in Santa Barbara Channel, expanded each year 2016-2021
- Financial & recognition incentives to shipping companies to slow down in VSR zones
- Benefits:
  - Significant emission reductions (NOx, GHGs, PM, Air Toxics)
  - Reduce risk of fatal ship strikes on whales
  - Reduce ocean noise
2021 PROGRAM - VSR ZONES

Southern California Region Vessel Speed Reduction Zone
2021 Protecting Blue Whales and Blue Skies Incentive-Based Program

Legend
- NOAA Channel Islands National Marine Sanctuary
- IMO-Approved Traffic Separation Scheme (TSS)
- Harbor Safety Committee Voluntary Western Traffic Lanes
- IMO-Approved Area To Be Avoided (ATBA)
- Voluntary Extended Area to Be Avoided (ATBA)
- 40mi VSR Zone for Ports of Los Angeles/Long Beach
- 2021 Incentive Program Vessel Speed Reduction Zone

*NOTE: Mariners traveling through the western and northern approach to land from the Port of Los Angeles and Long Beach (SALSB) are advised to follow the established TSS through the Santa Barbara Channel as shown on NOAA and Admiralty charts in the area. International Maritime Organization (IMO) approved ruled treasure in the area and the Navy achieves that continuous hazardous operations may take place at any time on the U.S. Port Navy Sea Range.*

San Francisco Bay Region Vessel Speed Reduction Zones
2021 Protecting Blue Whales and Blue Skies Incentive-Based Program

Legend
- 2021 Incentive Program Vessel Speed Reduction Zone
- NOAA National Marine Sanctuary Boundary
- IMO-Approved Traffic Separation Scheme (TSS)
2021 PROGRAM - CRITERIA

- Seasonal (May to November) to coincide with high ozone levels and presence of whales
- Open to containerships and auto carrier shipping companies
- Vessels voluntarily travel at 10 knots or less
- Over $200,000 in funding for awards and recognition
- Financial awards ranged from $5,000 to $50,000

**Recognition levels**
Tiered based on % of distance traveled at 10 knots or less

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sapphire</td>
<td>85-100%</td>
</tr>
<tr>
<td>Gold</td>
<td>60-84%</td>
</tr>
<tr>
<td>Blue Sky</td>
<td>35-59%</td>
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## RESULTS

<table>
<thead>
<tr>
<th>Company</th>
<th>Cooperation Rate</th>
<th>Vessel Count</th>
<th>Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC</td>
<td>93%</td>
<td>65</td>
<td>$50,000</td>
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<tr>
<td>Swire Shipping</td>
<td>89%</td>
<td>4</td>
<td>$5,000</td>
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<tr>
<td>Yang Ming</td>
<td>81%</td>
<td>19</td>
<td>$12,500</td>
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<tr>
<td>Cosco</td>
<td>77%</td>
<td>33</td>
<td>$12,500</td>
</tr>
<tr>
<td>Hapag-Lloyd</td>
<td>79%</td>
<td>18</td>
<td>$25,000</td>
</tr>
<tr>
<td>Maersk</td>
<td>75%</td>
<td>49</td>
<td>$25,000</td>
</tr>
<tr>
<td>Mol ACE</td>
<td>71%</td>
<td>31</td>
<td>$12,500</td>
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<tr>
<td>NYK-RoRo</td>
<td>73%</td>
<td>39</td>
<td>$12,500</td>
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<tr>
<td>CMA CGM</td>
<td>66%</td>
<td>57</td>
<td>$25,000</td>
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<tr>
<td>Wallenius</td>
<td>66%</td>
<td>32</td>
<td>$12,500</td>
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<tr>
<td>ONE</td>
<td>63%</td>
<td>63</td>
<td>$25,000</td>
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<tr>
<td>Wan Hai</td>
<td>57%</td>
<td>43</td>
<td>$0</td>
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<tr>
<td>K Line</td>
<td>56%</td>
<td>30</td>
<td>$0</td>
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<tr>
<td>Evergreen</td>
<td>54%</td>
<td>29</td>
<td>$0</td>
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<tr>
<td>Hyundai Glovis</td>
<td>54%</td>
<td>12</td>
<td>$0</td>
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## RESULTS (continued)

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<table>
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<tbody>
<tr>
<td><strong>Total Incentive Funds</strong></td>
<td><strong>$217,500</strong></td>
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<tr>
<td><strong>Incentives Accepted</strong></td>
<td><strong>$112,500</strong></td>
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<tr>
<td><strong>Incentives Declined</strong></td>
<td><strong>$105,000</strong></td>
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</table>

Six companies generously declined their financial incentive payment and reinvested it in the 2022 program.
2021 PROGRAM - WHALE BENEFITS

Fatal Ship Strike Risk
50% reduction

Ocean Noise
5 decibel reduction
2021 PROGRAM - RECOGNITION

**Fall 2021: Campaign Report**

<table>
<thead>
<tr>
<th>Number of News Stories</th>
<th>Est. Number of Impressions</th>
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<tbody>
<tr>
<td>150 +</td>
<td>1.2 million</td>
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</table>

<table>
<thead>
<tr>
<th>Number of Sponsored Features and Advertisements</th>
<th>Est. Number of Impressions</th>
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<tbody>
<tr>
<td>28</td>
<td>4.2 million</td>
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</table>

**Brand Ambassador Program**

- Highlights a company's commitment to sustainable shipping.
- Increases demand signal for VSR participants.
INTERAGENCY WORK

California Air Resources Board

- New Ocean-Going Vessel Emission Methodology
  - Data set results in a 50% decrease in marine shipping NOx emission estimates within Santa Barbara County waters.

- 2020 Mobile Source Strategy:
  - Near-term: require cleaner vessels visiting ports
  - Long-term: stricter federal and international engine emission standards
  - Evaluating incentive or regulatory measures that achieve slower vessel speeds within Regulated California Waters (24 nautical miles from shore)
2022 PROGRAM

- **Extended Season:** May 1, 2022 to December 15, 2022
- **Expanded Vessel Types:** Added bulk and general cargo
- **Expanded Region:** Covers additional marine sanctuary waters in San Francisco Bay Region
- Nearly $300,000 of incentive & recognition funds, from CARB Supplemental Environmental Project (SEP)
  - Managed by Ventura County APCD
  - District receives compensation for staff time
- New SEP application submitted for additional program funding for 2023 & beyond
CONTACT INFORMATION

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