Protecting Blue Whales and Blue Skies

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Mary Byrd

Pacific Ports Clean Air Collaborative Conference
San Pedro, CA
March 21, 2018
Incentive-Based Vessel Speed Reduction (VSR)

PROGRAM GOALS

- Reduce threat of ship strikes to endangered whales
- Reduce harmful air pollution
- Partner with shipping industry
- Test effectiveness of incentive-based approach
2017 Vessel Speed Reduction Incentive Program Eligibility Map For Greater Farallones, Cordell Bank and Monterey Bay National Marine Sanctuaries
2017 VSR Funder:

- Santa Barbara County Air Pollution Control District
- Ventura County Air Pollution Control District
- Bay Area Air Quality Management District
- Volgenau Foundation
- National Marine Sanctuary Foundation

**Incentive Structure – financial and positive public relations**

- Slow to $\leq 12$ kts -- $1,000 for 1 way transit per VSR zone
- Slow to $\leq 10$ kts -- $250$ **bonus** for 1 way transit per VSR zone

  *Example*: Santa Barbara/Bay Area trip: $2,500 ($\leq 10$ kts)

- Extensive Positive Public Relations Campaign – print, televised and radio media

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**2017 VSR Funding**

**TOTAL BUDGET**: $250,000+

**Incentives Payments**: $187,600
2017 VSR SHIPPING LINES

K"K"LINE
KAWASAKI KISEN KAISHA, LTD.

CMA CGM

MSC
MEDITERRANEAN SHIPPING COMPANY

MAERSK LINE

NYK LINE
NIPPON YUSEN KAISHA

HMM
HYUNDAI MERCHANT MARINE CO., LTD.

EVERGREEN

HAMBURG SÜD

YAN YANG MING

Hapag-Lloyd
RECOGNITION EVENT MARCH 1ST 2018: BANNINGS LANDING CTR, NEAR PORT OF LA
### 2017 VSR Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td># of transit applications received</td>
<td>462 (238 were eligible)</td>
</tr>
<tr>
<td># of shipping lines enrolled</td>
<td>11</td>
</tr>
<tr>
<td># of different vessels</td>
<td>44</td>
</tr>
<tr>
<td>Total # of transits enrolled</td>
<td>143</td>
</tr>
<tr>
<td>% of transits @ 10 knots or less</td>
<td>66</td>
</tr>
</tbody>
</table>
VSR 2017 EMISSION REDUCTION RESULTS

- Reduced 83.5 tons of smog-forming nitrogen oxides emissions and 2,630 metric tons of greenhouse gases
- Asked shipping companies to try not to speed up in area in between the VSR Zones
- Reviewed previous baseline speeds for that area (approx. 200 nautical miles)
VSR 2017 EMISSION REDUCTION RESULTS

• Of the transits that participated in both VSR regions, 75 percent either slowed down or did not speed up in between as compared with historical baseline

• 60 percent slowed down in area in between
<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Shipping Lines</th>
<th>Ship Transits</th>
<th>Incentivized</th>
<th>Emission Reductions: NOx</th>
<th>Emission Reductions: GHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Santa Barbara Channel</td>
<td>7</td>
<td>27</td>
<td>incentivized</td>
<td>12.4 tons</td>
<td>500+ metric tons</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Green House Gases (GHG)</td>
</tr>
<tr>
<td>2016</td>
<td>SB Channel and South of Channel Islands</td>
<td>10</td>
<td>50</td>
<td>incentivized</td>
<td>25.6 tons</td>
<td>1000+ metric tons</td>
</tr>
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<td>2017</td>
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<td>11</td>
<td>143</td>
<td>incentivized</td>
<td>83.5 tons</td>
<td>2,630 metric tons</td>
</tr>
</tbody>
</table>
OVERALL: VSR PRODUCES IMMEDIATE BENEFITS

• Whale protection
• Air quality
• Noise reduction
• Reduced fuel use, reduced greenhouse gas emissions
CLIMATE CHANGE URGENCY

• Threats to marine mammals
  • Changes in food supply
  • Ocean acidification
• Threats to air quality
  • More smog with hotter temperatures
  • Drought, dust, wildfires
• Need to work on multiple solutions
  • short-term and longer-term
  • operational and technology solutions
LEGISLATIVE EFFORT

• Blue Whales and Blue Skies Act (H.R. 3682)
• Introduced in Congress September 2017
• National recognition for companies voluntarily slowing ships in Santa Barbara Channel region
• Will look at extending along U.S. Pacific Coast

U.S. Congressman Alan Lowenthal discusses Blue Whales and Blue Skies Act at March 1st 2018 event