

June 8, 2012

California Air Resources Board 1001 | Street, PO Box 2815 Sacramento, CA 95812

Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships

Dear Ms. Nichols and Board Members:

The Santa Barbara County Air Pollution Control District is pleased to provide input on use of Cap-and-Trade auction funds, and recommends that some funds be used as an incentive to reduce speeds of large ships along the California coast.

This action addresses the goals of AB 32 immediately and directly. Reducing ship speeds down to 12 knots along the California coast from the current speeds of approximately 20 knots would produce a 50% reduction of greenhouse gases (GHG). 12 knots appears to be a feasible lower limit. Approximately 1.4 million metric tons of GHG reductions would be achieved statewide. This amounts to nearly half of the entire reductions expected from Cap and Trade on a yearly basis.

This action also provides significant public health and business benefits. Particulates, air toxics, and nitrogen oxide emissions would also be reduced by vessel speed reduction, significantly benefiting public health. In addition, coastal communities, and the businesses located in these communities, would be assisted in efforts to attain health-based standards for particulate matter and ozone.

This action supports the state's economy, and furthers a long-term transformative effort to develop a clean-energy economy. Shipping companies docking in California already have to comply with the state's fuel rule and the International Maritime Organization's rules associated with the North American Emission Control Area. An incentive-based program avoids the need for mandatory ship speed reduction, which is under evaluation by the California Air Resources Board, and the National Oceanic and Atmospheric Administration (NOAA). NOAA has implemented mandatory speed-reduction measures along the East Coast, and has been petitioned to regulate speeds on the West Coast, for protection of endangered whales.

Providing incentives to shipping companies would avoid potential costs to the industry of scheduling adjustments, and would support the continued economic health of the ports, an economic engine for all of California. The auction revenue incentives would initially offset increases in scheduling and crew costs, and then substantial annual savings in fuel costs would kick in over the next few years, providing a sustainable incentive for speed reduction.

(continued next page)

<u>The action provides other important environmental benefits.</u> Reduced ship speeds would reduce the risk and severity of ship strikes on endangered blue, fin and humpback whales. NOAA supports this action for its benefits to these whale populations. Slower ships are also quieter ships, reducing ocean noise pollution that negatively affects marine mammals.

<u>The action could be implemented based on an existing model.</u> The Ports of Long Beach and LA already have implemented successful programs that reward shipping operators with incentives for voluntarily reducing ship speeds when approaching the ports. These programs have been in effect for several years, and compliance rates have been very high.

The emission reductions are verifiable and measureable. A network of monitors along the California coast currently tracks ship position and speed. This data can be obtained on a daily basis to ensure ships speeds are in compliance. Additionally, ship fuel consumption data could be reviewed.

Thank you for your consideration.

Sincerely,

Louis D. Van Mullem Jr., Air Pollution Control Officer

Santa Barbara County Air Pollution Control District



1528 Castillo Street Santa Barbara, CA 93101 805.687.2322 Telephone www.oceanconservancy.org

June 21, 2012

Chair Mary Nichols California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

Re: SUPPORT- Investment of Cap-and-Trade Auction Proceeds to Incentivize Large Ocean-Going Vessels to Reduce Speed

Dear Chair Nichols:

Please accept the following comments on behalf of Ocean Conservancy with regard to the development of an investment plan for the use of cap-and-trade auction proceeds to help reduce greenhouse gases that contribute to climate change. We support the use of auction proceeds to help incentivize large ocean-going vessels to reduce speed as they transit the California coast.

We have been following with interest the California Air Resources Board (CARB) process to develop the investment plan pursuant to AB 32. In our view, allocating a portion of the auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline would result in both substantial and measureable reductions in greenhouse gas emissions and yield important additional benefits to the marine and coastal environment.

Such an effort would build on proven programs to incentivize ship operations to attain air quality benefits, as well as contribute to safeguarding endangered whales in California waters. Reduced large ship speed off the California coastline clearly and measurably contributes to California's goal of reducing green house gas emissions while assisting in meeting other California and federal agency public health and resource management goals. This allocation would confer public health and economic benefits by reducing smog-producing pollutants, directly benefiting public health and helping facilitate compliance with clean air goals.

Ocean Conservancy recognizes that commercial shipping is vital to the California and US economy. Regulatory activity to address shipping-related resource management concerns – including ship speed restrictions along the East Coast has been implemented to protect migrating whales<sup>1</sup>. Clean fuel regulations are in place and focusing industry attention on routing, efficiency and scheduling. New technology designed to reduce collisions between endangered whales and ships is emerging.<sup>2</sup> And, incentive-based programs for achieving changes in

<sup>1</sup> Federal Register /Vol. 73, No. 198 / Friday, October 10, 2008 /Rules and Regulations

<sup>&</sup>lt;sup>2</sup> D.C. Denison. "App keeps whales, ships safely apart." Boston Globe, April 05, 2012, Business Section: articles.boston.com/2012-04-05/business/31287977 1 north-atlantic-right-whales-whale-sightings-whale-alert

Ocean Conservancy -Cap and Trade Auction Proceeds June 22, 2012 Page 2

shipping industry operations that benefit environmental protection are proven in California. This context argues favorably for an incentive based program in California that explores further opportunities to address both industry economics and environmental concerns.

A successful Vessel Speed Reduction Incentive Program at the ports of Long Beach and Los Angeles that offers monetary-based incentives to slow ships approaching and departing these ports has yielded significant air quality benefits. Slower ocean-going vessels produce substantially less greenhouse gas emissions and reduce nitrogen oxide and sulfur dioxide pollution. Importantly, slower ships have the additional benefit of providing enhanced protection of marine mammals by reducing the incidence and severity of ship strike impacts on endangered blue, fin and humpback whales. Such ship strikes occurred at least several times in the summer of 2007 in the vicinity of the Channel Islands National Marine Sanctuary.

We urge you to strongly consider the use of Cap and Trade auction funds to incentivize slower, less polluting ship speeds in California.

Sincerely,

Greg Helms

Manager, Pacific Program



June 22, 2012

Mary Nichols, Chair California Air Resources Board 1001 Street, Po Box 2815 Sacramento, CA 95812

RE: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships

## Submitted electronically via the CARB Comment Submittal Form

Dear Ms. Nichols and Board Members:

The Environmental Defense Center (EDC) is pleased to provide input on the use of Cap-and-Trade auction proceeds to reduce greenhouse gases (GHG) contributing to climate change. We support the request of the Santa Barbara County Air Pollution Control District (SBCAPCD) and Channel Islands National Marine Sanctuary (CINMS) to use some of the funds to develop an incentive program that will reduce the speeds of large marine ships traveling along the California coast.

EDC is a non-profit, public interest law firm and environmental organization which represents environmental and other community groups within Santa Barbara, Ventura, and San Luis Obispo Counties. Our mission is to protect and enhance the local environment through education, advocacy, and legal action. For more than five years, the EDC has been actively working and pursuing proactive mechanisms to reduce the incidence of ship collisions with large whales. The urgent need to address ship strikes was tragically illustrated in 2007 when four blue whales were stuck and killed by large cargo ships within the Santa Barbara Channel during a three-week period. EDC has been seeking a comprehensive approach to this issue including advocating for the re-routing of shipping lanes and the reduction in ship speed.

An incentive based program using Cap-and-Trade funds to reward large marine ships for reducing ship speeds from 18-22 knots/hour (current speed) to 12 knots/hour

<sup>&</sup>lt;sup>1</sup> See "Whale of an Opportunity: Coast Guard Study of Los Angeles/Long Beach Port Access Routes Holds Great Potential for Reducing Ship Strikes within Santa Barbara Channel," 37 Ecology Law Currents 58 <a href="http://elq.typepad.com/currents/2010/08/currents37-07-segee-2010-0816.html">http://elq.typepad.com/currents/2010/08/currents37-07-segee-2010-0816.html</a> (2010).

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships June 22, 2012

along the California coast would reduce carbon emissions and fulfill the goals of Assembly Bill 32 (AB 32). Specifically, incentivizing vessels greater than 300 gross registered tons to travel at speeds 12 knots/hour or slower would reduce GHG emission, protect whales from collisions with vessel and noise pollution, and provide other benefits associated with reduced speed. Benefits from an incentive based program are bulleted and details for each benefit are provided below.

- 1. Significantly Reducing GHG Emissions from Ships
- 2. Providing Additional Air Quality Public Health Benefits
- 3. Supporting the State's Economy and Efforts to Develop a Clean-Energy Economy
- 4. Reducing the Lethality and Severity of Whale Strikes and Acoustic Noise Impacts
- 5. Building on the Successful Existing LA Long Beach Green Ports Program
- 6. Reducing Fuel Cost for the Industry
- 7. Reductions are Measurable and Verifiable

## 1. Significantly Reducing GHG Emissions from Ships

Research shows that global climate change emissions from large marine shipping vessel are directly proportional to fuel consumption, and the amount of fuel ships consume is directly and exponentially related to vessel speed. Studies have demonstrated that the most cost effective, feasible method to reduce emissions from ships is to slow them down.<sup>2</sup> Indeed, the International Maritime Organization (IMO) reports that a 10% reduction in speed would result in a 23.3% decrease in emissions.<sup>3</sup> At low speeds, ships are one order of magnitude more efficient than land transport and two orders more efficient than air transport.<sup>4</sup> However, as ship speeds increase much of these efficiencies are lost and very fast ships have been found to have similar energy demands to airplanes.

The SBCAPCD reported that reducing ship speeds to 12 knots/hour along the entire California Coast would reduce GHGs by 50%, resulting in 1.4 million metric tons of GHG reduction.<sup>5</sup> Thus, an incentive program that reduces GHG emissions through reduced ship speeds could substantially contribute to the GHG emission reduction goals in Assembly Bill 32 (AB 32).

<sup>&</sup>lt;sup>2</sup> Friends of the Earth International. 2007. Prevention of Air Pollution from Ships: Recent Findings on Global Warming Justifying the Need for Speedy Reductions of Greenhouse Gas Emissions from Shipping. Submitted to the Marine Environment Protection Committee, IMO (May 4, 2007). (pg 6)

<sup>&</sup>lt;sup>3</sup> International Maritime Organization. 2000. Study of Greenhouse Gas Emissions from Ships: Final Report to the International Maritime Organization. Issue no. 2-31 (March 2000). Available at: http://unfccc.int/files/methods\_and\_science/emissions\_from\_intl\_transport/application/pdf/imoghgmain.pd f (accessed June 19, 2012). (at pg 17, Table 1-5)

<sup>&</sup>lt;sup>4</sup> Isensee and Bertram 2004. Quantifying external costs of emissions due to ship operation. Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering of the Maritime Environment 218: 41.

<sup>&</sup>lt;sup>5</sup> Santa Barbara Air Pollution Control District Letter, Submitted June 8, 2012. Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emission from Ships.

#### 2. Providing Additional Air Quality Public Health Benefits

In addition to significantly contributing to GHG emissions, ship emissions contain toxic air pollution that put people at risk of cancer, asthma and premature death. Health risk pollutants from ships include nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM). Locally in Santa Barbara County, marine shipping contributes over 54% of the total daily NOx emissions. This is more than all other sources combined including: stationary sources, on-road motor vehicles, other mobile sources, and are-wide sources. The table below demonstrates substantial emissions reductions for NOx, SOx, and PM pollutants if a 12 knot/hour speed limit was required within the Santa Barbara Channel. Should an incentive based speed limit program be implemented across the state, even greater air quality improvements could be achieved. An incentive based program to slow down ships would lead to measurable improvements to air quality and would contribute to AB 32's goal of long-term transformative effort to improve public health.

Emission Reductions for a 12 knot/hour Speed Limit on
Cargo Ships within the Santa Barbara Channel

Pollutant	Emission Reductions (Tons/Year)	% Reduction
NOx	11,017	66%
SOx	7,044	67%
PM	000	68%

Table adapted from SB APCD presentation "Air Quality and Marine Shipping" dated September 28, 2011. Accessed <a href="https://example.com/here-presentation">here</a>

# 3. Supporting the State's Economy and Efforts to Develop a Clean-Energy Economy

An incentive program for shipping could offset the initial upfront cost to the industry for scheduling adjustments, additional ships, and/or additional crew. In slowing ships down, the industry will also experience annual fuel cost saving. It is expected that these savings may provide sustained incentives for speed reduction into the future (see section below on "Lowering Fuel Cost for the Industry"). Depending on the response to the incentive program, the industry may also be able to avoid mandatory ship speed regulations that are being considered and evaluated by the Air Resources Board vessel speed reduction initiative for the California coast.

# 4. Reducing the Lethality and Severity of Whale Strikes and Acoustic Noise Impacts

Scientific research has shown that there is a direct correlation between vessel speed and ship strikes resulting in whale mortality. Vessels traveling at 14 knots or faster

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships June 22, 2012

resulted in 89% of lethal or severe injuries to whales.<sup>6</sup> It was also noted in this study that none of the whales hit at a speed of 10 knots or less were killed. Vanderlaan and Taggart report that "as vessel speed falls below 15 knots, there is a substantial decrease in the probability that a vessel strike to a large whale will prove lethal," but that only at speeds slower than 11.8 knots does the chance of a fatal injury to a large whale drop below 50%. California hosts some of the busiest ports in the world, meaning that large commercial vessels regularly speed through these waters on their way to port. California waters also host some of the highest densities of marine wildlife including a wide variety of whales such as: blue, humpback, gray, fin, sperm, and killer whales. In fact, the Santa Barbara Channel, home to the largest seasonal population of endangered blue whales on the planet, is also host to one of the busiest shipping corridors in the country.

After reviewing various mechanisms for preventing Atlantic right whale deaths from ship strikes, NMFS concluded that a mandatory speed limit for large vessels was imperative. Ship strikes are one of two major causes of right whale deaths off the U.S. east coast and, combined with mortalities caused by entanglement in fishing gear, have driven the species to near-extinction. In determining how to reduce ship strikes, NMFS examined operational measures and found that no other measure was as essential or effective as the establishment of a mandatory 10-knot speed limit. NMFS found that instituting this speed limit would also benefit other whales, such as humpback, fin, sperm, and sei whales, as well as sea turtles.

After analyzing the whale strikes in the vicinity of the Santa Barbara Channel in 2007, Berman-Kowalewski et al. recommended that "mitigation measures developed for other species (i.e. the right whale) should be considered for blue whales off the California coast if further mortality is to be reduced." NOAA's National Marine Sanctuary Advisory Councils have also identified policy recommendation that include slowing ships down to reduce ship strikes. In 2009, the CINMS Advisory Council adopted several recommendations to reduce the risk of ship strikes in the Santa Barbara Channel. Implementing ship speed limits and developing incentive based programs to slow ships down were both recommendations. In 2012, the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries joint working group on vessel strikes and acoustic

<sup>&</sup>lt;sup>6</sup> Laist, D.W., Knowlton, A.R., Mead, J.G., Collet, A.S. and Podesta, M. 2001. Collisions between ships and whales. *Marine Mammal Science* 17(1): 35-75.

<sup>&</sup>lt;sup>7</sup> Vanderlaan, A.S.M. and Taggart, C.T. 2007. Vessel Collisions with Whales: The probability of lethal injury based on vessel speed. Marine Mammal Science 23(1): 144-156.

<sup>&</sup>lt;sup>8</sup> National Marine Fisheries Service (NMFS). 2008. FEIS to Implement Operational Measures to Reduce Ship Strikes to North Atlantic Right Whales (August 2008).

<sup>&</sup>lt;sup>9</sup> Berman-Kowalewski, Michelle et al. 2010. Association Between Blue Whale (Balaenoptera musculus) Mortality and Ship Strikes Along the California Coast. Aquatic Mammals 2010, 36(1), 59-66, DOI 10.1578/AM.36.1.2010.59.

Abramson, L., Polefka, S., Hastings, S., Bor, K. 2009. Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary. Prepared and adopted by the Channel Islands National Marine Sanctuary Advisory Council. September 17, 2009. 73 pgs. Online at <a href="https://www.channelislands.noaa.gov">www.channelislands.noaa.gov</a>.

Ms. Nichols and Board Members

Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships June 22, 2012

impacts also suggested slowing ships down in dynamic management areas (DMA's) to reduce the risk and lethality of ship strikes.<sup>11</sup>

In addition to collisions, shipping also results in ocean noise pollution that may have a range of impacts on marine life and cetacean species. There is increasing awareness that the potential for chronic exposure from shipping noise can have harmful impacts on marine ecosystems and wildlife. Noise-related stress can lead to disruptions in feeding, mating, migration, predator avoidance, navigation, or may trigger an abandonment of habitat. Speed restrictions have been identified as a possible mitigation measure to reduce the potential impacts from shipping noise. An incentive based speed limit of 12-knots/hour for large marine ships would accomplish both a reduction in the likelihood and lethality of ship strikes and reduction in underwater noise pollution.

## 5. Building on the Successful Existing LA/Long Beach Green Ports Program

The Ports of Los Angeles and Long Beach already have a speed reduction scheme in place, providing incentives for ships to remain at or below a speed of 12 knots. The ports have seen program participation rates over 90 percent, which have resulted in significant reductions in ship emissions. If In 2007, the ports estimate that the vessel speed reduction program resulted in the following reductions: 1,345 tons of nitrogen oxides, 832 tons of sulfur oxides, 112 tons of particulate matter, and 55,502 tons of carbon dioxide. As discussed above, these analyses illustrate another important point regarding regulations limiting vessel speed – they would have pollution reduction benefits extending to a variety of air emissions as well as GHG again contributing to multiple goals outlined in AB 32.

#### 6. Reducing Fuel Cost for the Industry

Restrictions on vessel speed would reduce the emissions of pollutants per ton of cargo carried but also have the added benefit of improving fuel efficiency for ships. The shipping industry increasingly has recognized the economic value of reducing vessel speed. <sup>16</sup> In order to lower costs and environmental impacts, some within the shipping industry have voluntarily implemented "super slow steaming" – the practice of operating a ship at a greatly reduced speed in order to burn less bunker fuel. In 2007, Maersk, a

<sup>&</sup>lt;sup>11</sup> Abramson L. 2012. Vessel Strikes and Acoustic Impacts - Report of a Joint Working Group of the Gulf of the Farallones and Cordell Banks National Marine Sanctuary Advisory Councils.

<sup>&</sup>lt;sup>12</sup> Popper, A.N. 2003. Effects of anthropogenic sounds on fishes. Fisheries 28(10): 24-3

<sup>&</sup>lt;sup>13</sup> Merchant N.D., Witt M.J., Blondel P., Godley B.J., Smith G.H., Assessing sound exposure from shipping in coastal waters using a single hydrophone and Automatic Identification System (AIS) data. Marine Pollution Bulletin (2012), http://dx.doi.org/10.1016/j.marpolbul.2012.05.004

Port of Long Beach. 2008. Green Flag Incentive Program Monthly Report, (1/1/10 to 12/31/10), Operator Compliance at 20 nm. Available www.polb.com/civica/filebank/blobdload.asp?BlobID=8182 (accessed June 19, 2012). (page 6)

<sup>&</sup>lt;sup>15</sup> See http://www.cleanairactionplan.org/strategies/vessels/vsr.asp

<sup>&</sup>lt;sup>16</sup> Rosenthal, E. Feb. 17, 2010. "Slow Trip Across Sea Aids Profit and Environment." New York Times. Vidal, John. July 25, 2010. Modern cargo ships show to the speed of the sailing clippers. The Guardian. White, Ronald D., July 31, 2010. Ocean shipping lines cut speed to save fuel costs. Los Angeles Times.

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships June 22, 2012

major international shipping company, initiated a comprehensive study of 110 vessels that proved, contrary to the traditional policy of running vessels with no less than a 40-60% engine load (a measure of how hard the engine is working), that its container ships can run safely with as little as a 10% engine load. In other words, Maersk found that its vessels could travel safely and efficiently at lower speeds. This makes it possible for vessels to travel at half-speed while realizing a 10 to 30% savings in fuel costs and carbon dioxide emissions. By implementing slow steaming, Maersk experienced significant overall saving even after the costs of adding another container ship to their fleet was taken into account.

#### 7. Reductions Are Measurable and Verifiable

Currently, the California coast has a network of monitors known as the Automated Identification System (AIS) that are used to track ship position and speed. In addition, ships over 300 gross tons are required to carry AIS. Thus, data for vessels over 300 gross tones can be easily attained. Locally, the CINMS monitors ship traffic around the Channel Islands and Santa Barbara Channel using the AIS system to track their compliance and behavior with a voluntary season speed limit of 10-knots/hour. Unfortunately, compliance is very low; hence the potential role for an effective incentive based program. The existing state wide AIS system can serve as a platform for data collection on a daily basis to track compliance with the incentive program. Furthermore, ship fuel consumption data could also be reviewed to verify AIS data and track GHG and other emission reductions.

#### Conclusion

EDC is working in partnership with the CINMS, the CINMS Sanctuary Advisory Council, SBAPCD and other NGOs to implement a variety of management strategies to protect whales from ship strikes. The Cap-and-Trade auction fund provides a unique opportunity to develop an incentive based program to reduce the speed of large marine cargo ships to 12 knots/hour or slower along the entire California coast. It is important to recognize that this is a rare instance in which the Air Resources Board can address multiple environmental concerns and fulfill multiple objectives in AB 32 through a single mechanism. Implementing a simple measure to incentives commercial vessel speed reductions can reduce GHG and other emissions while also protecting human health and marine wildlife like blue, gray, humpback, and other whales.

Thank you for your consideration of these comments. Please do not hesitate to contact me or Linda Krop, EDC Chief Counsel; at (805) 963-1622 should you have further questions or concerns.

Sincerely,

Kristi Birney Marine Conservation Analyst

# Sanctuary Advisory Council CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

Member/Alternate

Tourism

Andrea Mills / Capt. Mat Curto

Business

Capt. Richard McKenna / Michael Gould

Non-Consumptive Recreation Debra Herring / Nicole Peters

Commercial Fishing

Commercial Fishing
Bruce Steele / Stephanie Mutz

Recreational Fishing

Capt. David Bacon / Merit McCrea
Education

Maria Petueli / Amanda Hendrickson

Research

Dr. Robert Warner / Dr. Mark Steele

Conservation

Linda Krop / Greg Helms

Public At-Large 1 Phyllis Grifman / Victor Cox

> Public At-Large 2 Eric Kett / <vacant>

Chumash Community
Luhui Isha Waiya / Vennise Miller Forte

National Marine Fisheries Service Elizabeth Petras / Stephanie Koes

National Park Service Russell Galipeau / David Ashe

U.S. Coast Guard
CDR Christina Davidson / LCDR Elisa Garrity

Bureau of Ocean Energy Management Donna Schroeder / Dr. Ann Bull

U.S. Department of Defense John Ugoretz / Walter Schobel

California Department of Fish and Game Marija Vojkovich / Kristine Barsky

> California Resources Agency <vacant> / Amy Vierra

California Coastal Commission Dr. Jonna Engel / Steve Hudson

County of Santa Barbara Dianne Black / Susan Curtis

County of Ventura Lyn Krieger / <vacant>

Channel Islands Nat'l Marine Sanctuary Chris Mobley [non-voting]

Monterey Bay Nat'l Marine Sanctuary
Paul Michel / Karen Grimmer [non-voting]

Gulf of the Farallones Nat'l Marine Sanctuary Maria Brown / Brian Johnson [non-voting]

> Chair: Eric Kett Vice Chair: Bruce Steele Secretary: Phyllis Grifman

June 13, 2012

Mary D. Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

Re: Investment of Cap-and-Trade Auction Proceeds to Incentivize Large Ocean-Going Vessels to Reduce Speed

Dear Chair Nichols:

As chair of the Channel Islands National Marine Sanctuary Advisory Council, I am writing with regard to the development of an investment plan for the use of cap-and-trade auction proceeds to help reduce greenhouse gases that contribute to climate change. Specifically, the advisory council supports the use of auction proceeds to incentivize large ocean-going vessels to reduce speed.

The advisory council provides advice on management, use and protection of sanctuary waters. The council is comprised of 42 individuals representing the general public, tourism, business, recreational fishing, commercial fishing, non-consumptive recreation, education, research, conservation and Chumash community interests, as well as local, State and Federal government agencies.

At our May 2012 meeting, sanctuary and Santa Barbara Air Pollution Control District staff informed us of the California Air Resources Board (CARB) process to develop the investment plan. Staff further suggested that by allocating some of the auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline, there would be substantial reductions in greenhouse gas emissions and other environmental benefits from slower moving ships.

In a 2009 sanctuary report endorsed by the advisory council we recommended that incentive-based approaches to slow ships down be explored, specifically, to reduce ship strike risks on endangered whales. We are familiar with the successful Vessel Speed Reduction Incentive Program at the ports of Long Beach and Los Angeles that offers monetary-based incentivizes to slow ships approaching and departing these ports, yielding significant air quality benefits.

Slowing large ocean-going vessels offers a substantial reduction of greenhouse gas emissions as well as reducing nitrogen oxide and sulfur dioxide pollution. Slower ships also provide enhanced protection of marine mammals by reducing noise and ship strike impacts on endangered blue, fin and humpback whales. Therefore, the sanctuary advisory council supports allocating auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline.

A unique and compelling opportunity now arises to develop an incentive-based program focused on reducing ship speeds to address the state's goals under the cap-and-trade program, and help protect endangered whales off our coast. I hope the support of our sanctuary advisory council will be given due consideration as part of the California Air Resources Board's public consultation process.

Sincerely,

Eric Kett, Chair

Sanctuary Advisory Council<sup>ii</sup>

cc: William J. Douros, Acting Deputy Director, NOAA Office of National Marine Sanctuaries Chris Mobley, Superintendent, Channel Islands National Marine Sanctuary Brian Shafritz, Manager, Technology and Environmental Assessment Division, Santa Barbara County Air Pollution Control District

enclosure: Channel Islands National Marine Sanctuary Advisory Council voting results, May 18, 2012.

<sup>&</sup>lt;sup>i</sup> "Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary: Recommendations and Case Studies." Available online at: <a href="http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf">http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf</a>.

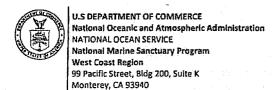
The council is an advisory body to the sanctuary superintendent. The opinions and findings of this letter do not necessarily reflect the position of the sanctuary and the National Oceanic and Atmospheric Administration.

# Voting Results: May 18, 2012 - Channel Islands National Marine Sanctuary Advisory Council

Voting results on a motion approving the Sanctuary Advisory Council's Executive Committee to prepare a letter to the California Air Resources Board (CARB) supporting CARB's consideration of allocating some of the cap-and-trade auction proceeds to an incentive program that would be designed to encourage reduced speeds from large ships; including a reference to a specific recommendation concerning exploring incentive programs within a ship strike report previously endorsed by the sanctuary advisory council; and supporting the council's views being mentioned at a May 24th CARB public meeting on the matter. May 18, 2012, Santa Barbara, California.

Name	Council Seat - position	Vote	
Capt. Mat Curto	Tourism – alternate	Yes	
Debra Herring	Non-Consumptive Recreation – member	Yes	
Capt. Richard McKenna	Business – member	Yes	
Linda Krop	Conservation – member	Yes	
Bruce Steele [Vice Chair]	Commercial Fishing – member	Yes	
Capt. David Bacon	Recreational Fishing – member	Yes	
Maria Petueli	Education – member	Yes	
Dr. Mark Steele	Research – alternate	Yes	
Phyllis Grifman [Secretary]	Public At Large #1 – member	Yes	
Eric Kett [Chair]	Public At Large #2 – member	Yes	
Luhui Isha Waiya	Chumash Community – member	Yes	
Elizabeth Petras	NOAA Fisheries – member	Yes	
David Ashe	National Park Service – alternate	Yes	
CDR Christina Davidson	US Coast Guard – member	Yes	
Donna Schroeder Dr. Ann Bull	Bureau of Ocean Energy Management – member Bureau of Ocean Energy Management – alternate	ABSENT	
John Ugoretz	Dept. of Defense – member	No	
Marija Vojkovich	California Department of Fish & Game – member	Yes	
<vacant></vacant>	California Natural Resources Agency – member		
Amy Vierra	California Natural Resources Agency – alternate	ABSENT	
Dr. Jonna Engel	California Coastal Commission – member	Yes	
Susan Curtis	Santa Barbara County – alternate	Yes	
Lyn Krieger <vacant></vacant>	Ventura County – member Ventura County – alternate	ABSENT	

Yes -17 No -1 Abstain -0



U.S DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, CA 90802-4213

June 21, 2012

Mary D. Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

#### Re: Use of Cap-and-Trade Auction Funds to Incentivize Ships to Reduce Speed

Dear Chair Nichols and Board Members,

We understand that the State of California's Air Resources Board (CARB) will be developing an investment plan for the auction proceeds from the cap-and-trade program to meet the goals of Assembly Bill 32 to improve public health, develop a clean energy economy and provide additional environmental and public health benefits. The National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries, West Coast Region and National Marine Fisheries Service, Southwest Region support the use of these proceeds to create an incentive program that rewards large ocean-going ships for slowing down while transiting off California's coast. We believe this use of the funds could achieve multiple environmental benefits important to both of our agencies.

Research has shown that large ocean-going vessels traveling at slow speeds substantially reduce their greenhouse gas emissions and nitrogen oxide and sulfur dioxide pollution. Encouraging ships to travel at slower than normal speeds can also reduce the anthropogenic effects on marine mammals by reducing the risk of lethal strikes and noise pollution in the marine environment. Identifying and minimizing impacts to endangered blue, fin and humpback whales is a priority for NOAA. We believe that creating an incentive program to encourage vessels to travel at slow speeds could be a benefit to the people and the whales offshore of California.

To be successful, the development of an incentive based slow speed initiative will require collaboration with the shipping industry and other partners. We have been in discussion with the Santa Barbara Air Pollution Control District regarding the viability of this idea and look forward to working with them and CARB to develop the idea further. We have reached out to a number of partners, including the Marine Exchanges of California, the Pacific Merchant Shipping Association, and the Sanctuary Advisory Council of Channel Islands National Marine

Sanctuary<sup>i</sup>, and received general support for what we all believe is an idea worthy of further consideration (see attached letter of support).

Thank you for your consideration of using cap and trade auction proceeds to incentivize ocean-going vessels to reduce speed and greenhouse gas emissions, and to protect endangered whales. Please contact Sean Hastings, Channel Islands National Marine Sanctuary, <a href="mailto:sean.hastings@noaa.gov">sean.hastings@noaa.gov</a> or (805) 884-1472 and/or Elizabeth Petras, National Marine Fisheries Services, Southwest Region, <a href="mailto:Elizabeth.petras@noaa.gov">Elizabeth.petras@noaa.gov</a> or (562)980-3238 if you have any questions.

Sincerely,

\_for Rodney McInnis

Regional Administrator
Southwest Regional Office

National Marine Fisheries Service

William Douros Regional Director

**West Coast Region** 

Office of National Marine Sanctuaries

cc:

Channel Islands Sanctuary Advisory Council Louis D. Van Mullem Jr., Air Pollution Control Officer, Santa Barbara Air Pollution Control District

Enclosure:

Channel Islands Sanctuary Advisory Council Support Letter

in 2009, a report endorsed by the Sanctuary Advisory Council of Channel Islands National Marine Sanctuary recommended that incentive-based approaches to slow ships down be explored, specifically, to reduce ship strike risks on endangered whales. See: "Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary: Recommendations and Case Studies" available online at: http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf.

# Sanctuary Advisory Council CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

Member/Alternate

Tourism
Andrea Mills / Capt. Mat Curto

Business

Capt. Richard McKenna / Michael Gould

Non-Consumptive Recreation
Debra Herring / Nicole Peters

Commercial Fishing Bruce Steele / Stephanie Mutz

Recreational Fishing

Capt. David Bacon / Ment McCrea

Education

Maria Petueli / Amanda Hendrickson Research

Dr. Robert Warner / Dr. Mark Steele

Conservation Linda Krop / Greg Helms

Public At-Large I Phyllis Grifman / Victor Cox

Public At-Large 2
Eric Kett / <vacant>

Chumash Community Luhul Isha Waiya / Vennise Miller Forte

National Marine Fisheries Service Elizabeth Petras / Stephanie Koes

National Park Service Russell Galipeau / David Ashe

U.S. Coast Guard
CDR Christina Davidson / LCDR Elisa Garrity

Bureau of Ocean Energy Management Donna Schroeder / Dr. Ann Bull

U.S. Department of Defense John Ugoretz / Walter Schobel

California Department of Fish and Game Marija Vojkovich / Kristine Barsky

> California Resources Agency <vacant> / Amy Vierra

California Constal Commission Dr. Jonna Engel / Steve Hudson

County of Santa Barbara Dianne Black / Susan Curtis

County of Ventura Lyn Krieger / <vacant>

Channel Islands Nat'l Marine Sanctuary Chris Mobiley [non-voting]

Montercy Bay Nat'l Marine Sanctuary

Paul Michel / Karen Grimmer [non-voting]
Gulf of the Farallones Nat'l Marine Sanctuary

Maria Brown / Brian Johnson [non-voting]

Chair: Eric Kett

Vice Chair: Bruce Steele

Secretary: Phyllis Grifman

June 13, 2012

Mary D. Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

Re: Investment of Cap-and-Trade Auction Proceeds to Incentivize Large Ocean-Going Vessels to Reduce Speed

Dear Chair Nichols:

As chair of the Channel Islands National Marine Sanctuary Advisory Council, I am writing with regard to the development of an investment plan for the use of cap-and-trade auction proceeds to help reduce greenhouse gases that contribute to climate change. Specifically, the advisory council supports the use of auction proceeds to incentivize large ocean-going vessels to reduce speed.

The advisory council provides advice on management, use and protection of sanctuary waters. The council is comprised of 42 individuals representing the general public, tourism, business, recreational fishing, commercial fishing, non-consumptive recreation, education, research, conservation and Chumash community interests, as well as local, State and Federal government agencies.

At our May 2012 meeting, sanctuary and Santa Barbara Air Pollution Control District staff informed us of the California Air Resources Board (CARB) process to develop the investment plan. Staff further suggested that by allocating some of the auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline, there would be substantial reductions in greenhouse gas emissions and other environmental benefits from slower moving ships.

In a 2009 sanctuary report endorsed by the advisory council' we recommended that incentive-based approaches to slow ships down be explored, specifically, to reduce ship strike risks on endangered whales. We are familiar with the successful Vessel Speed Reduction Incentive Program at the ports of Long Beach and Los Angeles that offers monetary-based incentivizes to slow ships approaching and departing these ports, yielding significant air quality benefits.

Slowing large ocean-going vessels offers a substantial reduction of greenhouse gas emissions as well as reducing nitrogen oxide and sulfur dioxide pollution. Slower ships also provide enhanced protection of marine mammals by reducing noise and ship strike impacts on endangered blue, fin and humpback whales. Therefore, the sanctuary advisory council supports allocating auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline.

A unique and compelling opportunity now arises to develop an incentive-based program focused on reducing ship speeds to address the state's goals under the cap-and-trade program, and help protect endangered whales off our coast. I hope the support of our sanctuary advisory council will be given due consideration as part of the California Air Resources Board's public consultation process.

Sincerely,

Eric Kett, Chair

Sanctuary Advisory Councilii

cc: William J. Douros, Acting Deputy Director, NOAA Office of National Marine Sanctuaries
Chris Mobley, Superintendent, Channel Islands National Marine Sanctuary
Brian Shafritz, Manager, Technology and Environmental Assessment Division, Santa Barbara
County Air Pollution Control District

enclosure: Channel Islands National Marine Sanctuary Advisory Council voting results, May 18, 2012.

<sup>&</sup>lt;sup>i</sup> "Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary: Recommendations and Case Studies." Available online at: <a href="http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf">http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf</a>.

<sup>&</sup>quot;The council is an advisory body to the sanctuary superintendent. The opinions and findings of this letter do not necessarily reflect the position of the sanctuary and the National Oceanic and Atmospheric Administration.

## Voting Results: May 18, 2012 - Channel Islands National Marine Sanctuary Advisory Council

Voting results on a motion approving the Sanctuary Advisory Council's Executive Committee to prepare a letter to the California Air Resources Board (CARB) supporting CARB's consideration of allocating some of the cap-and-trade auction proceeds to an incentive program that would be designed to encourage reduced speeds from large ships; including a reference to a specific recommendation concerning exploring incentive programs within a ship strike report previously endorsed by the sanctuary advisory council; and supporting the council's views being mentioned at a May 24th CARB public meeting on the matter. May 18, 2012, Santa Barbara, California.

Name	Council Seat - position	Vote	
Capt. Mat Curto	Tourism alternate	Yes	
Debra Herring	Non-Consumptive Recreation - member	Yes	
Capt. Richard McKenna	Business – member	Yes	
Linda Krop	Conservation – member	Yes	
Bruce Steele [Vice Chair]	Commercial Fishing - member	Yes	
Capt. David Bacon	Recreational Fishing – member	Yes	
Maria Petueli	Education – member	Yes	
Dr. Mark Steele	Research – alternate	Yes	
Phyllis Grifman [Secretary]	Public At Large #1 - member	Yes	
Eric Kett [Chair]	Public At Large #2 – member	Yes	
Luhui Isha Waiya	Chumash Community – member	Yes	
Elizabeth Petras	NOAA Fisheries – member	Yes	
David Ashe	National Park Service – alternate	Yes	
CDR Christina Davidson	US Coast Guard – member	Yes	
Donna Schroeder Dr. Ann Bull	Bureau of Ocean Energy Management – member Bureau of Ocean Energy Management – alternate	ABSENT	
John Ugoretz	Dept. of Defense – member	No	
Marija Vojkovich	California Department of Fish & Game - member	Yes	
<vacant></vacant>	California Natural Resources Agency - member	ADCENT	
Amy Vierra	California Natural Resources Agency - alternate	ABSENT	
Dr. Jonna Engel	California Coastal Commission – member	Yes	
Susan Curtis	Santa Barbara County - alternate	Yes	
Lyn Krieger <vacant></vacant>	Ventura County – member Ventura County – alternate	ABSENT	

Yes -17 No -1 Abstain -0