Sanctuary Advisory Council
CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

November 18, 2022

John Stedman
Chair, City of Santa Barbara Harbor Commission
735 Anacapa Street
Santa Barbara, CA 93101

Kristen Sneddon
Chair, City of Santa Barbara Sustainability Council Committee
735 Anacapa Street
Santa Barbara, CA 93101

Re: City of Santa Barbara cruise ship visits and protecting Channel Islands National Marine Sanctuary

Dear Chair Stedman and Chair Sneddon:

I write to you on behalf of the Channel Islands National Marine Sanctuary (CINMS) Advisory Council to provide our perspectives as the City of Santa Barbara evaluates its cruise ship program.[1] The Sanctuary Advisory Council brings together community members and representatives from government agencies to advise the National Oceanic and Atmospheric Administration's (NOAA's) Office of National Marine Sanctuaries on the protection, management, and compatible use of sanctuary waters and associated resources. We represent the general public, tourism, business, recreational fishing, commercial fishing, non-consumptive recreation, education, research, and conservation community interests, Chumash interests, as well as ten local, State, and Federal government agencies.

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

The CINMS is one of 15 national marine sanctuaries in U.S. waters. NOAA's National Marine Sanctuary System works to achieve many program-wide goals related to conservation, education, and human-use within sanctuaries. Importantly, among these goals is the commitment to "maintain the natural biological communities in sanctuaries and to protect and, where appropriate, restore and enhance natural habitats, populations, and ecological processes."[2] Human use of sanctuaries is also facilitated through the Sanctuary System to the extent such uses are compatible with the primary mandate of resource protection.[3]

Concerns with Santa Barbara's Cruise Ship Program

The Advisory Council recognizes that the cruise ship industry is an important economic driver to segments of many coastal communities. We also recognize several environmental impacts and risks associated with cruise ships that may harm sanctuary resources. Accordingly, the CINMS prohibits all discharges from cruise ships within its boundary (15 CFR 922.72(3)(i)) and restricts cruise ships and other large vessels from navigating closer than one (1) nautical mile from island shores (15 CFR 922.72(6).[4]

While sanctuary regulations may help protect the CINMS from the most direct impacts of cruise ships, this Advisory Council recognizes that the impacts of pollution within our oceans and atmosphere transcend jurisdictional boundaries in the following ways:

- Sewage and greywater waste discharged into the Santa Barbara Channel may be transported by currents into the CINMS.
- Many wildlife species that the CINMS strives to protect (including migratory whales and other marine mammals) regularly travel across the sanctuary boundary (as well across state and national boundaries) where cruise ships travel and harmful discharge of pollution (including acidic scrubber waste) from cruise ships occurs.
- Large vessel traffic throughout the Santa Barbara Channel increases the risk of ship strikes on whales. According to Whale Safe,[5] a program initiated by the Benioff Ocean Initiative (Marine Science Institute, University of California, Santa Barbara) to track cooperation with NOAA's Voluntary Vessel Speed Reduction (VSR) Zone[6] and the Protecting Blue Whales and Blue Skies VSR Program,[7] many cruise ships are not consistently cooperating with the

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[2] https://nmschannelislands.blob.core.windows.net/channelislands-prod/media/archive/management/manplan/cinms_fmp_2009.pdf

[3] *Id.*

[4] https://channelislands.noaa.gov/manage/regulations.html

[5] https://whalesafe.com

[6] https://channelislands.noaa.gov/manage/resource/ship-strikes.html

[7] https://www.bluewhalesblueskies.org/

voluntary program. The Southern California Region VSR Zone extends from Pt. Arguello to south of Dana Point.

- Air emissions from cruise ships, including greenhouse gas emissions, may contribute disproportionately to local air quality exceedances and to climate change, compared to other marine and land based modes of transportation.[8] These emissions threaten the integrity of CINMS resources.[9]

Climate change impacts to the CINMS

The CINMS Advisory Council supports NOAA's efforts to increase public understanding and awareness of the impacts of climate change, which are significant and potentially detrimental to both the Channel Islands ecosystem and commercial fisheries of economic value to Santa Barbara. The following impacts of climate change, of which cruise ships are a contributor, are cause for concerns to CINMS resources:

- Ocean acidification threatens the survival of deep water coral populations in the CINMS.[10,11]
- Warming ocean temperatures can reduce kelp habitat[12], which is critical to the CINMS marine ecosystem.
- Lower oxygen levels caused by increasing ocean temperatures could decrease rockfish habitat in the sanctuary by 50%[13] and reduce breeding habitat for market squid.[14]
- Climate change is altering the frequency and intensity of harmful algal blooms (HABs), such as the bloom that we experienced this summer in the Santa Barbara Channel that resulted in domoic acid poisoning of hundreds of sea lions and other animals.[15]

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[8] https://www.sciencedirect.com/science/article/pii/S0025326X21010134#bb0330

[9] *Office of National Marine Sanctuaries, National Oceanic and Atmospheric Administration. (2020) Climate Change Impacts, Channel Islands National Marine Sanctuary.* https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/docs/20200820-climate-change-impacts-channel-islands-national-marine-sanctuary.pdf

[10] *Gomez et al. (2018) Growth and feeding of deep-sea coral Lophelia pertusa from the California margin under simulated ocean acidification conditions. PeerJ*

[11] *Wickes (2014) The effect of acidified water on the cold-water coral, Lophelia pertusa: Distribution in the Southern California Bight and analysis of skeletal dissolution. PQDT Open*

[12] *Cavanaugh et al. (2019) Spatial variability in the resistance and resilience of giant kelp in Southern and Baja California to a multiyear heatwave. Front. Mar. Sci*

[13] *McClatchie et al. (2010) Oxygen in the Southern California Bight: Multidecadal trends and implications for demersal fisheries. Geophys. Res. Lett.*

[14] *Navarro et al. (2018) Development of Embryonic Market Squid, Doryteuthis opalescens, under Chronic Exposure to Low Environmental pH and [O_2]. PLoS One*

[15] *Southern California Coastal Ocean Observing System (2022) Summer 2022 Newsletter.* https://sccoos.org/wp-content/uploads/2022/09/SCCOOS-Summer-2022-Newsletter.pdf

- Increased and more severe occurrences of HABs have recently resulted in closures of Santa Barbara and CINMS commercial fisheries such as mussels, lobster, and rock crab.[16,17]

Advisory Council Recommendations

The CINMS Advisory Council asks that the City of Santa Barbara be mindful that increased cruise ship traffic through the Santa Barbara Channel logically results in an increased risk of environmental impact to CINMS resources. We recommend that the City carefully consider approaches that could both reduce the likelihood of potential impacts to CINMS resources and potentially incentivize advancement of the cruise industry towards less impactful practices and technologies. Such approaches may include, but not be limited to, adopting policies such as:

- Cap and/or reduce the existing number of annual visits;
- Limit visitation to ships with advanced sewage treatment systems installed, and prohibit ships with Tier 2 marine sanitation devices;
- Limit visitation to ships with best technologies (i.e. Tier 3 engines, plug-in technology, closed-loop scrubber technologies incorporating shore-side hazardous waste disposal, etc.) to minimize marine waste disposal as well as greenhouse gas and other criteria air pollutant emissions;
- Restrict visitation of ships with poor records of environmental compliance;
- Adopt additional limitations to balance the City's economic interests with environmental considerations relevant to the CINMS;
- Modify the City's voluntary 12-mile VSR request to require cooperation within the entire vicinity of the VSR Zone to reduce nitrogen dioxide (NOx) emissions and help bring Santa Barbara County into compliance with California Ambient Air Quality Standards;
- Phase in the required use of at-anchor emissions control systems when such technologies become feasible; and
- Periodic review of the City's cruise ship policies to update measures based on evolving industry sustainability best practices.

The CINMS Advisory Council appreciates the City's willingness to create forums to receive public input regarding the cruise ship program. As a multi-stakeholder body, we offer our Council's support as the City explores the future direction of the cruise ship program. We also invite the City to engage

[16] *Ocean Science Trust (2016) Frequently Asked Questions, Harmful Algal and California Fisheries, Developed in Response to the 2015-16 Domoic Acid Event*
[17] *Moore et al (2019) An index of fisheries closures due to harmful algal blooms and a framework for identifying vulnerable fishing communities on the U.S. West Coast*

with CINMS staff, who offer significant expertise as partners working to protect the sanctuary and Santa Barbara Channel.

Sincerely,

Kristen Hislop

Kristen Hislop, Chair
CINMS Advisory Council

cc: William J. Douros, Regional Director, West Coast Region, NOAA Office of National Marine Sanctuaries

Chris Mobley, Superintendent, NOAA Channel Islands National Marine Sanctuary

Enclosure: Sanctuary Advisory Council voting record on the motion to approve this letter.