

THE NORTHWEST SEAPORT ALLIANCE
MEMORANDUM

MANAGING MEMBERS
STAFF BRIEFING

Item No. 8A
Date of Meeting August 4, 2020

DATE: July 22, 2020

TO: Managing Members

FROM: John Wolfe, CEO

Sponsors: Sandy Kilroy, Director, Maritime Environment & Sustainability, Port of Seattle, and Jason Jordan, Director, Environmental and Planning Services

Project Manager: Jon Sloan, Sr. Manager, Environmental Programs, Port of Seattle

SUBJECT: "Quiet Sound" Underwater Noise Reduction Program Recommendations (State Orca Task Force Recommendation #22)

A. BRIEFING REQUESTED

Staff will brief the Managing Members on the recommendations of the Planning Team to establish a program for reducing underwater noise from large commercial vessels. No action is being requested.

B. BACKGROUND

GOVERNOR'S ORCA TASK FORCE

Governor Inslee's Southern Resident Orca Task Force issued its Task Force Report and Recommendations on November 16, 2018. It consisted of 36 recommendations to collectively achieve the vision of a thriving and resilient Southern Resident orca population.

The recommendations emphasize four goals:

- Increase Chinook salmon abundance
- Decrease disturbance and risk to Southern Resident orcas from vessels and noise
- Reduce the exposure of Southern Resident orcas and their prey to contaminants
- Ensure that funding, information and accountability mechanisms are in place to support effective implementation

Task Force Recommendation #22 is to "Implement shipping noise-reduction initiatives and monitoring programs, coordinating with Canadian and U.S. authorities". This includes the following objective related to noise reduction:

- Create a program similar to Port of Vancouver’s Enhancing Cetacean Habitat and Observation program (ECHO) for Washington State, including participation by ports, whale watching operators, private vessel operators and tribal governments as desired.

The implementation details associated with Recommendation #22 encourage collaboration with strategic U.S. and Washington State partners, including the U.S. Coast Guard, Washington State Ferries, Puget Sound ports, the Pacific Merchants Shipping Association, the Puget Sound Pilots, Orca Sound, tribal co-managers and others, with a goal to support “parallel and adaptive implementation of ECHO and related shipping noise-reduction initiatives while promoting safe, sustainable shipping practices.”

ECHO PROGRAM

The ECHO program, launched in 2014, is a Vancouver Fraser Port Authority-led initiative aimed at better understanding and managing the impact of shipping activities on at-risk whales throughout the southern coast of British Columbia. Its objective is to develop mitigation measures to reduce potential threats to whales from shipping activities. The ECHO Program, guided by an advisory working group, relies heavily on collaboration. Early input from scientists, shipping industries, environmental groups, First Nations, and government agencies helped focus efforts and set goals and objectives.

ECHO program studies concluded that many vessel types contribute to underwater noise, including recreational craft, but large commercial vessels are typically the loudest and their lower frequencies contribute most to behavioral changes. Mitigation alternatives evaluated by the ECHO program include both design solutions and operational changes. Changes to vessel design include quieter hulls and propellers, or the use of lightweight or dampening materials. For existing vessels, operational changes can include speed reduction, modification of shipping routes and regular vessel maintenance to reduce drag and cavitation (UNGA 2018).

C. “QUIET SOUND” PROGRAM

The focus of this briefing is the Planning Team’s recommendation to establish an ECHO-like program in Washington State, with a proposed name of “Quiet Sound”. The planning effort began with an October 3, 2019 workshop to discuss Recommendation #22 and identify ways to reduce underwater noise in Puget Sound. The workshop was attended by 75 state, federal, tribal, and Canadian government representatives, researchers, natural resource agencies, whale conservation groups, and representatives of the maritime industry. A subset of these stakeholders formed a Planning Team to prepare a proposal based on workshop findings and continued collaboration with subject matter experts.

The Planning Team membership includes:

- Port of Seattle
- Port of Tacoma
- The Northwest Seaport Alliance
- NOAA
- Washington State Ferries
- Puget Sound Partnership
- Governor’s Maritime Sector Lead
- Washington Maritime Blue
- Pacific Merchant Shipping Association

- Marine Exchange of Puget Sound
- U.S. Coast Guard (Advisory Only)
- Makah Tribe

COMMISSIONER INVOLVEMENT

Commissioners were briefed on the Quiet Sound program at various stages of its development. Briefings included:

- July 2019 – Full Managing Members Briefing
- February 2020 – Managing Members Orca Committee Meeting
- June 2020 – Managing Members Orca Committee Meeting
- August 2020 – Full Managing Members Briefing

Feedback from Commissioners included an emphasis on partnerships with industry, Marine Exchange, vessel noise rating systems such as Green Marine and tribal outreach, as well as the need for strong involvement at the state and federal level (including financial support). Suggestions were made regarding advisory board membership, and Commissioners cautioned against loss of institutional knowledge with upcoming retirements of key stakeholders.

Commissioners also provided technical guidance, expressed concerns regarding both the costs of the program and the capacity of Maritime Blue to provide ongoing coordination and management. Awareness of, and sensitivity to, present economic conditions was strongly advised. Commissioners emphasized that Quiet Sound should not supplant or impede existing efforts but should carefully tailor its scope to fill gaps and make connections among project sponsors while remaining diligent about tracking measures of success.

Staff will incorporate Commissioner guidance into the final recommendations, notably an emphasis on partnership with ongoing efforts and the importance of funding from state and federal entities. The recommendations also envision a strong partnership between Maritime Blue and the Marine Exchange; this to help integrate long-term institutional knowledge into the program management structure and to address potential capacity concerns.

PURPOSE AND GOALS

The purpose of the proposed Quiet Sound program is to better understand and reduce the cumulative effects of acoustic and physical disturbance from large commercial vessels on Southern Resident Orcas throughout their range in Washington State. The program will be voluntary; it will be implemented through coordination of multiple entities with a structure that supports adaptive management and continuous improvement. It will also:

- Promote data-driven, targeted, results-oriented projects that lead to reduction in acoustic and physical threats to Southern Resident orcas
- Engender the highest level of respect for treaty rights and coordinate actions with Washington State tribes
- Promote voluntary compliance

- Leverage relationships with public, private, and non-profit sector partners to ensure cost-effective and coordinated utilization of resources
- Employ “best available science” in decision-making and support data collection to fill gaps as necessary
- Be transparent and well-documented
- Reflect equity, diversity and inclusion in hiring, contracting, and participation

PROGRAM STRUCTURE

Program coordination and fiscal management of the Quiet Sound program will be provided by Washington Maritime Blue, a newly established, growing 501(c)(6) organization whose mission is to develop maritime business, technology and practices that promote a sustainable future contributing to economic growth, ecological health, and thriving communities. The Quiet Sound program will be overseen by an Advisory Board of no more than 10 members, and with chairpersons representing member entities from each of five work groups:

- Monitoring Whales & Vessel Noise
- Whale Notification System to Vessels
- Vessel Operations & Incentives
- Evaluation and Adaptive Management
- Innovation & Vessel Quieting

Staff supporting the work groups will be resourced in-kind from member entities, with contractor support as needed. The program’s structure will leverage existing resources and continually review data and evaluate program impacts to adapt and improve as needed. It will prioritize government-to-government consultation with treaty tribes as well as ECHO program leadership, with a key objective to strengthen cross-border coordination.

This work will recognize and incorporate ongoing efforts as possible, ensuring that its implementation does not hold up or impede work that is currently underway. Examples of such work include monitoring and visual sighting networks, vessel quieting innovation, and boater education programs, as well as salmon recovery efforts, habitat creation, and stormwater improvements.

PROGRAM FUNDING

The estimated annual cost of the Quiet Sound program as proposed is approximately \$500,000, including program coordination, administration, and consultant support. The program could be started incrementally, reducing startup costs while supplemental funding sources are identified. Work Group participation is expected to be funded in-kind through existing budgets of participating entities. In addition to in-kind staffing resources, funding to support coordination and contract assistance for the Quiet Sound program must be sought from multiple sources, including:

- Federal and state appropriations, with legislative support
- Budgeted contributions from participating entities

- Grants
- Philanthropy and private capital

A letter of support from the Quiet Sound Planning Team entities for funding requests is under development.

Staff recommends a 2021 budget commitment of a \$100,000 combined match contribution from Port of Seattle, Port of Tacoma, and NWSA. This will be included in future NWSA policy and budget discussions.

D. NEXT STEPS

Planning Team staff continue to coordinate on next steps. A Planning Team meeting was held July 20, 2020, to discuss near-term funding strategy alternatives. Other topics under consideration include mechanisms for formalizing the financial and in-kind staffing contributions of member entities.

E. PREVIOUS ACTIONS OR BRIEFINGS

Staff briefed the Managing Members on July 2, 2019 prior to the October 3 workshop. Previous briefings include an informal briefing memo to the Commission in February 2019, which accompanied a Friday briefing packet.



Item No.: 8A
Date of Meeting: August 4, 2020

Staff Briefing: “Quiet Sound” Underwater Noise Reduction Program Recommendations

Presenter: Jon Sloan

Sr. Manager, Environmental Programs, Port of Seattle

Overview

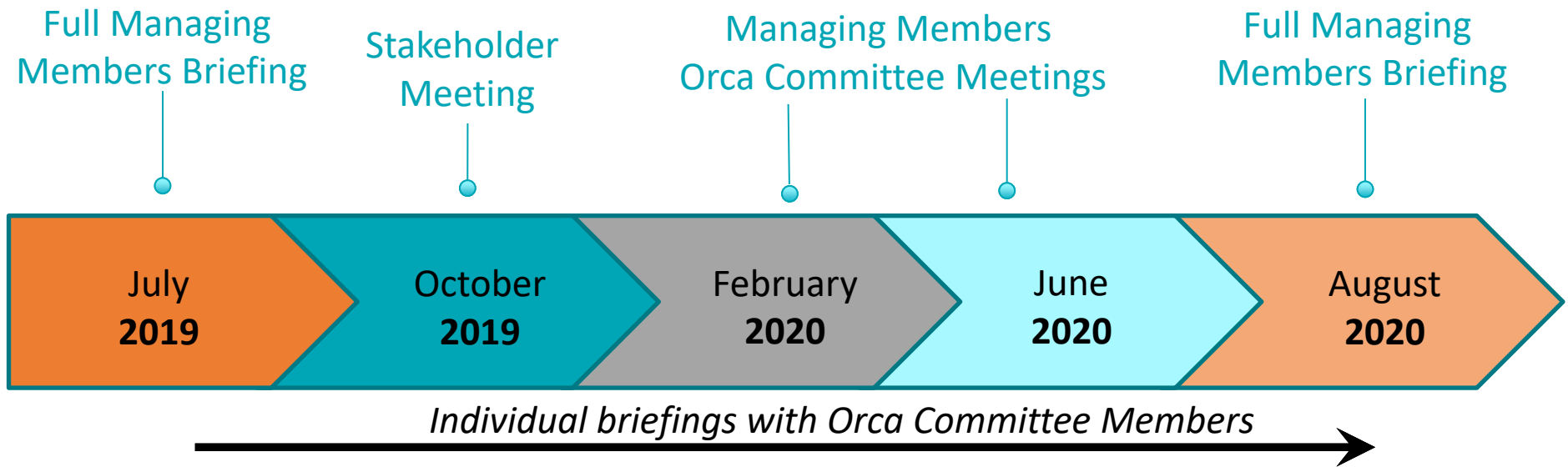
“Quiet Sound” Underwater Noise Reduction Program

Briefing Overview

- **Background**
 - Governor’s Orca Task Force
 - ECHO Program
- **Proposed “Quiet Sound” Program**
 - Planning Team
 - Purpose and Goals
 - Program Structure
 - Funding
 - Open Discussion Items & Next Steps
- **No action is requested.**



Managing Members Briefings/Timeline

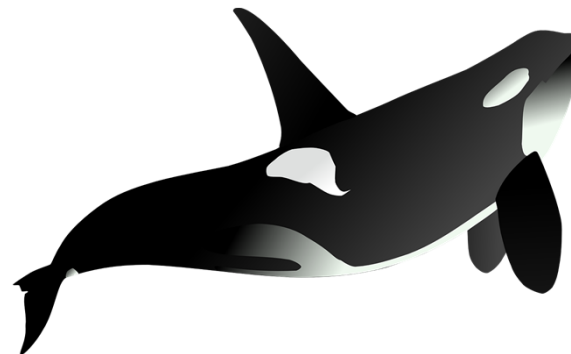


Background

Orca Task Force Recommendations

Governor's Southern Resident Orca Task Force *Report and Recommendations* (November 2018)

- Includes 36 recommendations to support four goals:
 - Prey availability (Chinook salmon)
 - Contaminants in the food chain
 - Underwater noise
 - Funding, information, and accountability mechanisms

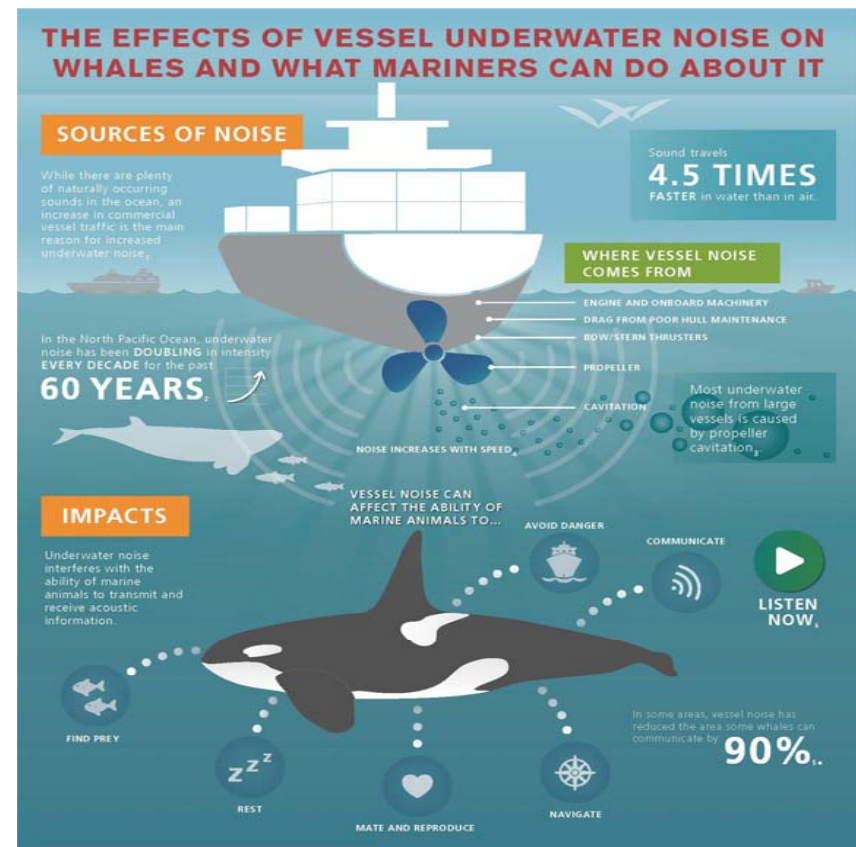


Background

Orca Task Force Recommendations

Recommendation #22: Implement shipping noise-reduction initiatives and monitoring programs

- Create a program similar to *Enhancing Cetacean Habitat and Observation* program (ECHO, Vancouver-Fraser Port Authority)



<https://www.portvancouver.com/2017-echo-program/>

Background

ECHO Program

Objective: Develop mitigation measures to reduce threats to whales from shipping.

- Better understanding and managing impacts of shipping
- Relies on collaboration, input from scientists, shipping industry, environmental groups, First Nations, government agencies
- Scientific studies:
 - Acoustic monitoring and noise characterization
 - Quieting technology
 - Speed and shipping lane studies
- Annual budget for ECHO is \$1-2m; 2-3 full time employees

Proposed “Quiet Sound” Program Planning Team

Planning Team Membership

- Port of Seattle
- Port of Tacoma
- The Northwest Seaport Alliance
- NOAA
- Washington State Ferries
- Puget Sound Partnership
- Governor’s Maritime Sector Lead
- Washington Maritime Blue
- Pacific Merchant Shipping Association
- Marine Exchange
- U.S. Coast Guard (Advisory Only)
- Makah Tribe



Proposed “Quiet Sound” Program

Purpose and Goals

Purpose: Better understand and reduce cumulative effects of acoustic and physical disturbance from large commercial vessels on Southern Resident orcas throughout their range in Washington.

Goals:

- Promote data-driven, targeted, and results-oriented projects that lead to reduction in acoustic and physical threats to Southern Resident orcas
- Engender the highest level of respect for treaty rights and coordinate actions with Washington State tribes
- Promote voluntary compliance

The Quiet Sound program will be a voluntary effort implemented through coordination of multiple entities, with a structure that supports adaptive management and continuous improvement.

Proposed “Quiet Sound” Program

Purpose and Goals

Goals (Cont.):

- Leverage relationships with public, private, and non-profit sector partners to ensure cost-effective and coordinated utilization of resources
- Employ “best available science” in decision-making and support data collection to fill gaps as necessary
- Be transparent and well-documented
- Reflect equity, diversity, and inclusion in hiring, contracting, and participation

It is important that the process to implement the Quiet Sound program does not hold up or impede ongoing work and early actions.



Proposed “Quiet Sound” Program

Program Structure

Program Coordination/Fiscal Management: Washington Maritime Blue

- 501(c)(6) organization; Mission is to develop maritime business, technology, and practices for sustainable future
- Considered sphere of influence, objectivity/credibility, capacity, competence, finance/accounting infrastructure, and authority

Advisory Board: ~10 members, five co-chairs

Work Groups:

- Monitoring Whales & Vessel Noise
- Whale Notification System to Vessels
- Vessel Operations & Incentives
- Evaluation and Adaptive Management
- Innovation & Vessel Quieting

In-kind staff support from member entities, contract support as needed.

The recommended structure is designed to leverage existing resources, knowledge, and funding from multiple sources. It is designed to be data-driven, targeted, and collaborative.

QUIET SOUND

WHALE NOTIFICATION SYSTEM TO VESSELS WORK GROUP

- Washington State Ferries
- Puget Sound Pilots
- PMSA/Industry/CLIA
- Others

VESSEL OPERATIONS & INCENTIVES WORK GROUP

- Marine Exchange/ Harbor Safety Committee
- Port of Seattle, Port of Tacoma, NWSA
- PMSA/CLIA
- Others

ADVISORY/GOVERNANCE BOARD

- Representative membership from Work Group entities
- No more than 10 members to optimize functionality

QUIET SOUND COORDINATION/LEADERSHIP

- Washington Maritime Blue in collaboration with Marine Exchange
- Puget Sound Partnership assistance to launch

EVALUATION & ADAPTIVE MANAGEMENT WORK GROUP

- NOAA
- Puget Sound Partnership
- Northwest Indian Fisheries Comm.
- Others

Close Coordination with Canadian ECHO Program

MONITORING WHALES & VESSEL NOISE WORK GROUP

- Puget Sound Ecosystem Monitoring Program/Marine Mammal Working Group
- NOAA, US Navy, Orcasound, Ocean Wise, Orca Network, The Whale Museum, The Whale Trail
- Washington State Ferries
- Others

INNOVATION & VESSEL QUIETING WORK GROUP

- Washington Maritime Blue
- Green Marine
- PMSA/Industry
- University of Washington
- Others

Proposed “Quiet Sound” Program Program Funding

Total estimated annual cost: \$250,000 - \$500,000

- Range reflects incremental vs. full program implementation
- Full funding includes program coordination, administration, working groups, and consultant support
- Also requires in-kind contribution through working groups

Proposed funding sources:

- Federal and state appropriations, with legislative support
- Budgeted contributions from participating entities
- Grants
- Philanthropy and private capital

Quiet Sound will coordinate leadership, advisory board, and working group efforts to maximize efficiencies in coordination with the ECHO program managed by the Vancouver Fraser Port Authority.

Letter of support for funding requests is under development.

Orca Committee Members Feedback

February 2020 Orca Committee Meeting:

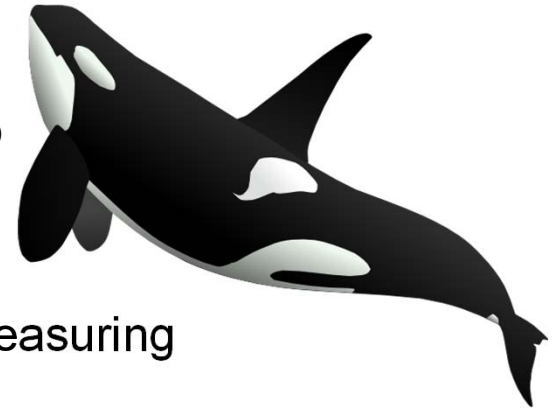
- Emphasize partnerships
- Concerns regarding cost
- Seek input from commissioners
- Technical guidance
- Importance of Marine Exchange/Industry involvement
- Need for tribal outreach
- Need strong state/federal participation
- Concerns about capacity of Maritime Blue
- Level playing field between north and south harbor



Orca Committee Members Feedback (cont.)

June 2020 Orca Committee Meeting:

- Suggestions for advisory board membership
- Emphasize financial participation of stakeholders and tribes
- Importance of adaptive management and measuring impact
- Public/private partnerships
- Awareness of economy
- Optimize existing ongoing work
- Importance of vessel noise rating systems (Green Marine)
- Retirements of key stakeholders
- Importance of state financial contribution



Proposed “Quiet Sound” Program

Open Discussion Items

- **Future of Planning Team**
 - Sunset now that final deliverable is complete?
 - Closing workshop for stakeholders?
- **Mechanisms for formalizing member contributions**
 - Resolution, Interlocal Agreement and/or normal budget process?



Proposed “Quiet Sound” Program

Recommended Next Steps

- Incorporate Managing Members input into Final Quiet Sound Recommendations document (August 2020)
- Generate letter of support signed by all planning team members (Sept. 2020)
- Implement strategy to encourage state funding (Sept. 2020)
- Incorporate POS/POT/NWSA funding in 2021 budget -- create \$100k matching fund (Oct.-Nov. 2020)

Questions and Feedback?