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STATE ORCA TASK FORCE - RECOMMENDATION #22

Reducing Underwater Noise from Large Commercial Vessels

Final Recommendation Quiet Sound Program

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PROPOSAL

In accordance with State Orca Task Force Recommendation #22, this proposal is to stand up a program to reduce underwater noise from vessels in Washington waters. This program will coordinate closely with the Enhancing Cetacean Habitat and Observation (ECHO) Program implemented by the Vancouver Fraser Port Authority (British Columbia, Canada) and be tailored to address the unique characteristics of Southern Resident Orcas behavior and large commercial vessel movement in Washington waters, primarily Puget Sound. Our recommendation is that this program be named "Quiet Sound."

Purpose and Guiding Principles

The goal of the 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:

- 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
- 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

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.

BACKGROUND

Governor Inslee's Southern Resident Orca Task Force issued their Task Force Report and Recommendations on November 16, 2018. Task Force Recommendation #22 is to "implement shipping noise-reduction initiatives and monitoring programs, coordinating with Canadian and U.S. authorities," including the following tasks:

- Create a program for Washington State that is similar to the Vancouver Fraser Port Authority ECHO Program
- Coordinate with the ECHO Program on transboundary efforts to reduce noise impacts to Southern Resident Orcas

For the past several years, ECHO has achieved a high level of voluntary compliance and monitoring, focused primarily on speed reductions and distance from shore to minimize received levels of noise. Underwater noise is caused by a variety of sources, including large commercial vessels, whale watch vessels, Navy vessels, construction activities, and other sources. It adversely affects the Southern Resident Orcas because it impedes their ability to use sonar and sound for hunting and communication. In response to the Governor's Task Force Recommendation #22, the Quiet Sound effort is focused on large commercial vessels, including cargo, cruise, ferries, fish processors, and tug/barges.

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, Orcasound, 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."

The Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, Washington State Ferries, NOAA, and the Puget Sound Partnership co-convened a highly productive day-long workshop on October 3, 2019, to discuss implementation of Recommendation #22 and identify ways to reduce underwater attended by 75 state, federal, tribal, and Canadian government representatives, researchers, natural resource agencies, whale conservation groups, and representatives of the maritime industry.

Following the workshop, the Quiet Sound Planning Team was formed to develop a recommended structure and process for implementation of the program for Washington waters.

RECOMMENDED ORGANIZATIONAL STRUCTURE

Like the ECHO Program, Quiet Sound is envisioned as a voluntary program that is implemented through structured coordination of multiple entities, governed through agreement to a program charter (in the form of either a Memorandum of Agreement or Terms of Reference). The organizational structure and leadership concept is designed to support a voluntary program capable of adaptive management and continuous improvement.

In the recommended structure, the work performed by the program would be implemented by five individual Work Groups, each with an annual work plan and budget. The Work Groups would be made up of staff assigned and resourced in-kind from multiple member entities—industry, ports, tribes, agencies, and nonprofits—to perform the necessary work, with contractor assistance as needed.

PROPOSED QUIET SOUND WORK GROUPS

The October 3 workshop provided the framework for the Quiet Sound Work Groups. Staffed with representatives from industry, ports, tribes, and non-profits, with participation provided in-kind, suggested members are listed on the Recommended Organizational Structure diagram. Membership will be determined as Quiet Sound is implemented.

Monitoring Whales & Vessel Noise Work Group Visual and acoustic monitoring of Orca presence and underwater noise (led by PSEMP Marine Mammal Working Group)

Whale Notification System to Vessels Work Group Notification of Orca presence to vessel operators, including Whale Report Alert System usage (led by Washington State Ferries)

Vessel Operations & Incentives Work Group Voluntary adjustments to vessel operations to reduce underwater noise impacts to Orca, and related incentives (led by Marine Exchange/Harbor Safety Committee)

Evaluation & Adaptive Management Work Group
Evaluation of program effectiveness and
recommendations for continual improvement
(led by NOAA/Puget Sound Partnership [Orca recovery
objectives] and Northwest Indian Fisheries Commission
[Treaty rights and tribal objectives])

Innovation & Vessel Quieting Work Group Research, development, and implementation of vessel quieting technologies (led by Washington Maritime Blue)



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.

Each Work Group has a recommended leadership entity, whose purpose will be to coordinate the work of the group, coordinate with overall Quiet Sound program leadership, provide data and work products consistent with their work plan, and collaborate with the other Work Groups.

Governance

Governance of the Quiet Sound program will be overseen by an Advisory Board with effective chairpersons, representative of key member entities from the Work Groups, including tribes, federal agencies, state agencies, industry, ports, and nonprofits. To optimize functionality, the Advisory Board membership is recommended to be limited in size and chosen based on a set of criteria to be developed. The Quiet Sound Advisory Board would make the key operational and policy decisions for the program.

Leadership and Coordination

For central leadership and coordination of Quiet Sound, assuming provision of dedicated funding for this purpose, Washington Maritime Blue will provide a Program Coordinator to coordinate overall annual Work Plans, transboundary coordination, internal/external collaboration, communication (including compilation and distribution of data), fiscal oversight, contract management, and stakeholder engagement. The Program Coordinator will work with the Advisory Board to develop Standard Operating Procedures for the program, structured communications, and expectations for Work Group performance. The Program Coordinator will work with both Washington Maritime Blue and the Marine Exchange to arrange for administrative support and office/meeting space. In addition, the Puget Sound Partnership will provide support to assist in launching the program.

A single Program Coordinator dedicated to Quiet Sound leadership is necessary to maintain an effective voluntary program. In selecting a leadership entity for coordination of the program, the following criteria were considered:

- Sphere of influence ability to engender buy-in from stakeholders and tribes to achieve successful outcomes
- Third party objectivity and credibility ability to work well with and be respected within the political environment of state/federal agencies, tribes, industry groups, and non-profit entities
- Capacity sufficient organizational bandwidth to manage and/or coordinate the activities of Work Groups, tribes, and stakeholders
- Competence relevant expertise and experience to achieve a high degree of program impact and desired outcomes
- Finance and accounting infrastructure ability to accept outside funding, manage contracts, and serve as fiscal entity for program expenses
- Authority clear connection to the organization's mission and/or charter, underpinned by well-established statutory authority

Washington Maritime Blue is well-suited to provide the Program Coordinator role and act as fiscal agent for Quiet Sound. They are an existing 501(c)(6) organization, committed to the development of maritime business, technology, and practices that promote a sustainable future contributing to economic growth, ecological health, and thriving communities. Its Board of Directors includes broad representation from the maritime sector, including industry groups, public agencies, and non-profits. They can receive funding from a variety of sources and can procure and manage contracts. Washington Maritime Blue is currently in a significant growth and startup phase, into which the leadership and coordination of the Quiet Sound program could be integrated. Marine Exchange of Puget Sound, which provides commercial vessel tracking, communications, and information services to the maritime industry, is positioned to collaborate with Washington Maritime Blue to support the needs of Quiet Sound.



RECOMMENDED ORGANIZATIONAL STRUCTURE

VESSEL OPERATIONS & INCENTIVES WORK GROUP

Marine Exchange/Harbor Safety Committee

Port of Seattle, Port of Tacoma, and Northwest Seaport Alliance
Pacific Merchant Shipping Association (PMSA)
American Waterways Operators, Puget Sound Pilots
Cruise Lines International Association (CLIA)
Cooperative Vessel Traffic Service (CVTS) Joint Coordinating Group (JCG)
U.S. Coast Guard (Advisory Role Only), Canadian Coast Guard (CCG)
Northwest Indian Fisheries Commission and participating individual tribes
Washington State Ferries

WHALE NOTIFICATION SYSTEM TO VESSELS WORK GROUP

Washington State Ferries

Puget Sound Pilots
PMSA/Industry/CLIA
Ocean Wise
The Whale Museum
U.S. Coast Guard (Advisory Role Only)

ADVISORY/GOVERNANCE BOARD

Representative membership from
Work Group entities
Membership limited in size to optimize
functionality

QUIET SOUND COORDINATION/LEADERSHIP

Washington Maritime Blue

In collaboration with Marine Exchange Puget Sound Partnership assistance to launch

Close Coordination with Canadian ECHO Program

Coordinate Leadership, Advisory Board, and Work Group efforts to maximize efficiencies with the ECHO Program managed by the Vancouver Fraser Port Authority

EVALUATION & ADAPTIVE MANAGEMENT WORK GROUP

National Oceanic and Atmospheric Administration (NOAA)/ Puget Sound Partnership

Evaluation re: Southern Resident Orca Recovery Objectives

Northwest Indian Fisheries Commission and participating individual tribes

Evaluation re: Treaty Rights/ Objectives

MONITORING WHALES & VESSEL NOISE WORK GROUP

Puget Sound Ecosystem Monitoring Program Marine Mammal Working Group

NOAA, U.S. Navy, UW-APL
Orcasound, Ocean Wise, Orca Network
The Whale Museum
Pacific Whale Watch Association
The Whale Trail
Washington State Ferries

INNOVATION & VESSEL QUIETING WORK GROUP

Washington Maritime Blue

Green Marine, PMSA/Industry/CLIA
Univ. of Washington – Applied Physics Lab (UW-APL)
U.S. Navy, Washington State Ferries
Port of Seattle Maritime Innovation Center
Transport Canada
U.S. Coast Guard (Advisory Role Only)



Continual Improvement – Orca Recovery and Tribal Treaty Rights

The recommended structure is designed to leverage existing resources, knowledge, and funding from multiple sources. It is designed to be data-driven and collaborative—the circular nature of the recommended organizational diagram represents a collaborative process in which Work Groups inform one another and feed data to evaluation teams, with which adaptive management decisions can be made and continual improvement implemented.

It is recommended that one of the Work Groups be focused on continual review of data regarding the benefits and impacts of the program. They will conduct evaluation of the efforts of the Quiet Sound program relative to Southern Resident Orca recovery objectives as well as tribal treaty rights and related objectives. This Evaluation and Adaptive Management Work Group will recommend to the Advisory Board adaptive management actions and improvements to Quiet Sound's efforts to optimize outcomes for the Southern Resident Orca, without infringement on tribal treaty rights. It is recommended that individual treaty tribes and the Northwest Indian Fisheries Commission have the opportunity to fill primary roles in the Quiet Sound program in addition to government-to-government consultation on program focus, scope of work, and desired outcomes, as desired by the tribes.

Ongoing Work and Early Actions

It is important that the process to implement the Quiet Sound program is designed to complement and strengthen ongoing work and early actions to address underwater noise. This includes excellent work underway in Washington waters regarding:

- Hydroacoustic monitoring and visual sighting networks
- Implementation of the Whale Report Alert System (WRAS)
- Vessel quieting innovation
- Boater education and awareness programs
- Coordination with the ECHO Program
- Development of underwater noise rating criteria (e.g., Green Marine)

Efforts currently underway in these areas will be incorporated into the overall structure of the Quiet Sound program and included in the annual Work Plans for specific Work Groups. The productive partnerships supported by the formation of Quiet Sound will further this ongoing work.

Canadian Cross-Border Coordination

Close coordination with the ECHO Program will be prioritized, incorporating lessons learned while adapting metrics of success to Washington's unique context. Quiet Sound will work to coordinate leadership, Advisory Board, and Work Group efforts to maximize efficiencies in coordination with the ECHO Program managed by the Vancouver Fraser Port Authority. An intent of the recommended program will be to maintain and strengthen cross-border coordination between Quiet Sound member entities, tribes, and stakeholders, and the following Canadian and cross-border entities:

- Vancouver Fraser Port Authority ECHO Program
- Cooperative Vessel Traffic Services (CVTS) Joint Coordination Group (JCG)
- · Canadian Coast Guard
- Pacific Coast Marine Advisory Review Panel
- First Nations
- Department of Fisheries and Oceans Canada
- Transport Canada
- Canadian non-profit entities such as Ocean Wise and Vancouver Aquarium

It is important that the process to implement the Quiet Sound program

strengthen ongoing work and early

actions to address underwater noise.

is designed to complement and

Importantly, within waters that have shared Canadian and U.S. jurisdiction, consistent policies and guidance to mariners must be given by the ECHO Program and Quiet Sound.

Quiet Sound will coordinate leadership, Advisory Board, and Work Group efforts to maximize efficiencies in coordination with the ECHO Program managed by the Vancouver Fraser Port Authority.



ESTIMATED QUIET SOUND PROGRAM BUDGET: REQUIRED FUNDING

New funding is seen as absolutely necessary for implementation of the Quiet Sound Program. Dedicated funding is required for the Program Coordinator and administrative staff, administrative overhead, consulting contracts, and support to the Work Group efforts. An estimated annual budget is provided below.

QUIET SOUND PROGRAM	ESTIMATED ANNUAL COST
Program Coordinator	\$150,000
Administrative Assistance	\$50,000
Facility Charges	\$50,000
Expenses: Administrative	\$15,000
Expenses, Hosting	\$15,000
Consultant Contracts	\$100,000
Work Group Support	\$150,000
Estimated Annual Cost	\$530,000

New
dedicated funding
for the Quiet Sound
program is necessary.
An estimated annual
budget is \$530K.

This budget assumes that primary Work Group participation is funded through in-kind contribution of resources under existing budgets of the participating entities.

Additional targeted funding will likely be required for specific projects defined by the Work Groups.

FUNDING STRATEGY

This work is being undertaken in the midst of the COVID-19 pandemic, and the team recognizes that budgets are highly constrained. In addition to in-kind services provided by Work Group participants, 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, private capital, and public-private partnerships

A letter of support from the Quiet Sound Planning Team entities is being developed to support funding requests. It is expected that the Planning Team organizations will work together to implement a funding strategy, to include development of agreements regarding participant funding, outreach to federal and state legislative bodies, application for federal and state grants, public-private partnerships, and philanthropic fundraising.

