



Quiet Sound Leadership Committee Meeting Summary

April 18, 2023

Meeting notes v. 5/4/23

Action Items	Who	Status
Discuss and decide on strategic priorities of the QS program to drive programmatic actions	QS staff and LC members	QS staff will schedule this discussion
Figure out if the SMRU hydrophone detected SRKW at times when they were not visually sighted	QS staff and SMRU	

Decisions

The LC passed the proposed 2023-24 QS budget. The budget will now move onto the Washington Maritime Blue Board of Directors for final approval.

Acronyms: QS - Quiet Sound, WG - Work Group, LC - Leadership Committee, SRKW - Southern Resident Killer Whale

Agenda

Welcome/Introductions

- Land and water acknowledgement
- Agenda overview and expectations

ECHO Swiftsure Bank communication collaboration

Krista Trounce, Research and acting Program Manager for ECHO, described proposed collaboration with Quiet Sound regarding the Swiftsure Bank voluntary vessel slowdown:

- Quiet Sound staff and ECHO have been in communication about increasing collaboration between the two programs on the inbound Swiftsure Bank slowdown - the slowdown area covers the inbound lane at the beginning of the Strait of Juan de Fuca which is in WA waters.
- For 2023, the main goal is for ECHO to coordinate with QS and other US-based orgs to communicate Swiftsure Bank slowdown to inbound vessels

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- In the future, the hope is for collaboration between ECHO and QS to deepen so the slowdown can be a co-branded effort

2023-24 Quiet Sound budget

Rachel Aronson reviewed the budgets for the current fiscal year and proposed the budget for the 2023-23 fiscal year (see budget slides attached to email).

- Note that QS's budget year is wrapping up as the state biennium budget is ending and the following biennium's budget is still being mapped out. This means there is some uncertainty about QS funding for the next fiscal year. QS proposes three different budget scenarios to account for the unknown funding sources.
 - **Breaking news post LC meeting - Quiet Sound was funded through the WA state legislature for the 2023-25 biennium at the full ask of \$350,000 per year!**
- Rachel reviewed the 2022-23 fiscal year budget and the three scenarios for the 2023-24 proposed budget (see slides attached to email)
- Comments and questions:
 - What are examples of restricted funds? - some funding, such as the NFWF dollars, are slotted for a specific project, such as WRAS improvements, and we would not be able to use them for a different project, like acoustic monitoring for the slowdown
 - What are the timelines for state/congressional funding? - state funding may be announced this week. Congressionally directed spending could be announced as late as October or December.
 - Does scenario 1 expenses assume QS would have the new FTE onboard for the entire year? - The expenses do assume that for simplicity, although in reality we wouldn't have them onboard until halfway through the fiscal year at the earliest.
 - Can you speak to your vision for a "science manager" as opposed to a "technology manager" or some other title? - there is flexibility in defining the work of this third person, prioritizing someone who is experienced in underwater noise and acoustics. QS would like to bring some technical expertise in-house that will add overall capacity to the team
 - It will be important to scope out the administrative needs of QS and overall program metrics to be able to best communicate our funding needs to elected officials
 - How will the Coast Guard's Cetacean Desk affect QS's budget? - the Cetacean Desk should not change our operations or budget in the immediate future
 - It would be helpful to have a list of the things QS staff are unable to do right now due to capacity constraints that could be alleviated by a third FTE, grad fellow, etc. This would help with long-term staff planning and wanting to make sure Rachel and Caitlin have the support they need so they don't burn out!

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- See the below slide from the January LC meeting illustrating current staffing restraints

Quiet Sound staffing constraints

What Rachel & Caitlin do:

- **Fundraising** (federal, state, foundation/private)
- **Grant management** (6 current grants)
- **Contract management** (5 current contracts)
- **Project management** (high workload to low)
 - Trial slowdown (continuous)
 - WRAS improvements (continuous)
 - Navy Tech Challenge (ending)
 - Oceans Initiative (ending)
 - Port hydrophone study (?)
- **Leadership Committee/Work Group engagement**
- **External engagement** (external work group participation, presentations/conferences, stakeholder engagement, media, etc.)
- **Administrative duties** (budget management, media, event/meeting logistics, Maritime Blue responsibilities, etc.)

With additional staff we will:

- Have **consistent engagement with all Work Groups** to fully utilize their technical expertise
- Be able to **pursue project-dependent funding** sources (ex. META)
- Pursue/re-engage with **projects outside of the slowdown and WRAS**
 - Engage with tugs & fast ferries
 - Pursue vessel quieting tech innovation
 - Pursue whale sensing tech innovation (ex. UnCruise prototype, infrared cameras)

5

- Is WRAS ever going to be a less expensive project? - WRAS is such a large line item for the next fiscal year because of the NFWF grant we were awarded. In future years the cost for this project could be reduced as we move from 'new improvements' into 'maintenance/management'
- Suggest looking to contractors to cover capacity holes for QS staff
- Need to keep in mind, what are the ecological benefits of the QS program? What is the long-term purpose of QS and what does success look like?
- Next steps for QS LC could be to look at strategic priorities for the overall program
- Need to also make sure that the metrics we are focusing on match the strategic priorities for the program
- With a more robust understanding of the kinds of support QS staff needs, LC members could assist to cover capacity restraints in certain areas

Project Updates

Caitlin O'Morchoe gave updates on the major Quiet Sound projects currently underway.

- Project 1: Further Develop the Whale Report Alert System

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- WRAS API testing begins in a few weeks. Ocean Wise learned throughout this process that it was more complicated to build this API than anticipated in the beginning of the process.
- Ocean Wise is also beginning to test the inclusion of acoustic detections.
- Orca Network real-time whale reporting from October 2022-March 2023:
 - 741 SRKW sightings into WhaleAlert
 - 493 Biggs & 496 baleen into WhaleAlert
 - 142 SRKW directly into WhaleReport
- Quiet Sound, Ocean Wise, Puget Sound Pilots, BC Coast Pilots, NavSim met in April 2023 to discuss the feasibility of adding WRAS alerts directly into the pilot's Portable Pilot Units. Next steps: Ocean Wise and NavSim are going to scope a project. PSPilots and BCCP will advise as the end users. Quiet Sound will assist by seeking funding and facilitating meetings.
- NFWF funding in 23-24 will be used for WRAS services, API maintenance,
- Comments and questions:
 - What would be the role of other sightings networks/groups? All sightings groups and members of the public continue to be able to support WRAS by using WhaleReport and soon WhaleAlert.
 - Does it make sense to use funds internally to record real-time sightings rather than paying for sightings network capacity? Quiet Sound staff strongly do not recommend this approach. Orca Network has provided real-time coverage for all daylight hours, which involves more than one actual human. Quiet Sound is not able to hire someone to provide this service with the funds available.
 - It may make sense to bring the Leadership Committee a recommendation from the workgroups on next steps with WRAS. LC members agreed that workgroup leads ought to take an active role in organizing meetings.
- Project 2: Trial Voluntary Vessel Slowdown
 - Quiet Sound's slowdown follow up has included:
 - Survey to mariners
 - Debrief with TOTE Maritime Alaska
 - Debrief with Puget Sound Pilots, with Marine Exchange and SMRU
 - Debrief findings to date: reasons for not participating included: needing to hit certain windows in environmental hurdles (like tides/shoals), concerns about delays in tugs/ports of arrival if slowed, fatigue mitigation.
 - Participation rates: Caitlin reviewed that AIS calculated ship participation is 54%, pilot-reported ship participation is 70%. The reasons for the difference include mismatched transit data sets, potential differences in tidal models between pilots and SMRU, the innate imperfections of models and human error.

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- Jason Wood, SMRU:
 - SMRU collected data from a hydrophone in Useless Bay from Dec 12, 2022 to Feb 14, 2023.
 - Data analysis: ambient noise
 - Steps: check data quality, combine data, remove time periods with "nuisance covariates"
 - Make sure participant is within 6 km of hydrophone
 - Velocity of current is < 25 cm/s (note: may adjust this cutoff based on data analysis for this site)
 - Wind velocity < 5 m/s (did not have to remove much data due to wind, will also check this threshold)
 - Small boats are not present (run a program that detects small boats. This was less of an issue for QS than for ECHO because it was winter)
 - Acoustic data analyzed so far looks good in quality. Analysis is not complete.
 - SMRU used PAMGuard to detect whistles and moans and then checked each detection manually to confirm ecotype.
 - 18 SRKW detections, 6 transient detections
 - Next steps:
 - Complete combining of data
 - Remove nuisance covariates
 - Calculate dB reduction
 - Reporting
 - Challenges/potential changes in the future:
 - Permitting
 - Slowdown validations process
 - Removing the high frequency noise floor (accidentally included from equipment on the hydrophone lander)
- Looking ahead: Caitlin noted that slowdown parameters may be slightly revised in collaboration with workgroups, particularly slowdown dates. The Leadership Committee will get a proposal from the workgroups and QS staff in the July meeting. LC members are interested in hearing:
 - Should the time period be extended?
 - Should the slowdown area be expanded or modified?
 - Are there any new learnings from ECHO?
- Comments and questions from LC:
 - Did the hydrophone pick up any acoustic antifouling hull cleaners? No, but these are typically on cruise ships and it was not cruise season.
 - Did the hydrophone detect SRKW at times when visual detections did not? In the past SMRU has analyzed this, the Lime Kiln hydrophone

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sometimes picks up SRKW in the night when visual sightings networks are not operating. The two types of detection are complementary.

- Did we get enough data in both the trial and the baseline to draw conclusions? SMRU won't know for sure until calculations are completed, but the initial answer is that yes, it looks like we did. The factor that leads to the biggest drop in what sampled data can be analyzed is the time when ships are not present.
 - Was the drop site a good site? So far it seems like this was a good site, which has implications for permits (likely to follow same permitting process with same entities).
 - Extending the slowdown may be prudent given the extended SRKW presence after the slowdown.
 - This is a big accomplishment for the first programmatic year of the Quiet Sound program.
 - In the longer term, the LC is interested in how the program gets refined for a) reduction of underwater noise, b) increase in participation, and c) how we communicate the successes/lessons learned from the slowdowns. It seems like it will be an iterative process over the years.
- Project 3: Port of Seattle hydrophone gap analysis
 - Kathleen Hurley shared that contracting with NOAA NMFS has been stalled due to conflicting state and federal contracting regulations. The Port of Seattle is looking at options to repurpose or restructure the dollars that would satisfy the same purpose.
 - Project 4: Oceans Initiative hydrophone study
 - Expecting a final report from Oceans Initiative soon.
 - Project 5: Navy NW Tech Bridge Challenge
 - The Navy completed the awards for the challenge in February 2023 and shared contact information for the winners with Quiet Sound in April.

Updates from LC members

- Senate Bill 5371 passed - small vessels must stay 1000 yards away from SRKW beginning in 2025
- Port of Seattle has finalized their ambient noise data collection pilot project for Underwater Noise Mitigation and Management Plan (UNMMP). Final report describes the four deployments during varying vessel make-up conditions near Pier 69. Danielle will send along the report
- Mike noted that generally port calls are reducing in number over the years. February had the lowest number in many years - vessel traffic volume will continue to decrease for container ships

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- The Marine Exchange is pursuing SCC licensing to be able to transmit from their AIS towers. The Marine Exchange is also looking into making their AIS data more widely attainable
- The International Maritime Organization (IMO) has been taking a close look at their guidelines on how vessels should address underwater noise. Accompanying these recommendations is a three year Experience Building Phase - an opportunity for industry and other stakeholders to try out the new guidelines and provide feedback. One of the new guidelines is every ship should have an underwater noise management plan. QS should consider how we can support these new voluntary guidelines
- Sector Puget Sound is still waiting on guidance from Coast Guard Headquarters regarding operationalizing the Cetacean Desk. The Coast Guard is working with NOAA regarding potential staffing options. An FTE was just hired for a 2 year period to lead the Cetacean Desk work. Still waiting on direction regarding the "local variance" language in the bill. Also waiting to hear from Coast Guard legal regarding the Coast Guard's role on the QS LC - should the Coast Guard hold more than an advisory role?

Attendees

- Rachel Aronson, Quiet Sound Program Director, Washington Maritime Blue
- Caitlin O'Morchoe, Quiet Sound Project Manager, Washington Maritime Blue
- Patrick Gallagher, Executive Director of the Marine Exchange of Puget Sound
- Kate Snider, Principal and Founder of Floyd|Snider environmental consulting firm
- Krista Trounce, Research Manager and acting Program Manager for ECHO
- Todd Hass, Special Assistant to the Director, Puget Sound Partnership
- Nora Nickum, Ocean Policy Senior Manager at Seattle Aquarium
- Joshua Berger, President/CEO of Washington Maritime Blue
- Laird Hail, Director of Puget Sound Vessel Traffic Services, US Coast Guard
- Kevin Bartoy, Chief Sustainability Officer for WA State Ferries
- Kathleen Hurley, Sr. Environmental Program Manager, Port of Seattle
- Regan Nelson, Senior Advocate, Oceans Program, Marine Mammal Protection Project at the Natural Resources Defense Council
- Natalie Lowell, Policy Analyst for the Makah Tribe
- Mike Moore, Vice President at Pacific Merchant Shipping Association
- Jason Jordan, Director of Environmental Programs at Port of Tacoma
- Danielle Butsick, Sr. Environmental Management Specialist, Port of Seattle
- Jason Wood, Managing Director, SMRU Consulting