



A Program of Washington Maritime Blue

Quiet Sound Leadership Committee Meeting Summary

October 22, 2024

Meeting notes v. 11/19/24

Action Items & Decisions

Action Items	Who	Status
Email additions for Kate Snider's 'thank you' note to Rachel	LC members	
Compile a spec list and considerations for the different thermal camera providers	Gonzalo	Done
Provide feedback on the project charter template & draft project charters: Admiralty Slowdown, Slowdown Desktop Study, and Thermal Imaging	LC members	
Circulate a poll to determine the best dates and times for the quarterly LC meeting	Sara	Done
Craft a proposal for potential Puget Sound Partnership funding for hydrophone work.	Quiet Sound and PSP	In progress

Meeting Notes

Welcome/Introductions

Rachel Aronson provided a land and water acknowledgement. Rachel shared the Orca Moment provided by Grace Ferrara (NOAA Fisheries). The Center for Whale Research released their latest census, showing a decline from 74 to 73 individuals. L90's calf was not included in that count. Shortly after that census, L128 was reported in very poor condition, and has likely died. This news highlights the importance of the work we're doing here in Quiet Sound. Together, the Quiet Sound slowdown in Admiralty Inlet and ECHO's voluntary measures provide SRKW with over 100 nautical miles of foraging habitat with less disturbances.

Sara Adams provided an overview of the agenda.

The Leadership Committee was introduced to Alle Brown-Law of Cascadia Consulting who will be serving as the facilitator for the Quiet Sound Leadership Committee and ORCAS Advisory Group meetings.

ECHO Regional Noise Targets Update

Orla Robinson provided an overview of the Canadian Regional Noise Targets process including context for the project, an overview of Canada's Species at Risk Conservation Agreement, the estimated timeline for the regional ship noise target setting process, guiding questions, potential target setting approaches that were considered, the preferred approach, and next steps.

The RNT process was initiated due to a lack of a formal framework for managing cumulative underwater noise in the region and the anticipated growth in traffic in the next decade. The ECHO program, started in 2014, aims to reduce acoustic and physical disturbance of large commercial vessels operating in critical habitat for SRKW; ECHO is facilitating and convening the group, but they see this process and the outcomes as belonging to the maritime sector at large. A task group was convened to advance the development of regional noise targets. Workshops were held in April and October 2019 and May and September 2023. The task group includes representatives from industry, environmental NGOs, government, and technical experts. The preferred approach involves developing a vessel-based accumulation target that is biologically relevant and improving noise levels relative to a reference year or period.

The work is currently in a holding pattern depending on the Canadian government's response to a recent petition for an emergency order under the Species at Risk Act. Key questions guiding the process include monitoring cumulative changes in regional shipping noise levels, understanding the effects on SRKW, and developing future targets and management measures.

Questions/Comments:

- Q: Is it a monitoring target or a project success target? How will the targets be applied? A: This is not an ECHO-program specific target; rather it's regional for the shipping sector. The task group will determine how the targets will be applied.

- Q: How do you establish correlation with other factors, such as prey availability? A: We put forward those options in workshop 1 (population-level target). That was ruled out as a realistic approach given the complexity and uncertainties. We focused instead on what is the noise level that SRKW need for their essential life functions.
- Comment: It's important to understand the biological relevance of noise levels to SRKWs. The body of evidence is being built; notably the NOAA peer-reviewed study that found noise above 110 dB compromises SRKW foraging success.
- Q: Can you speak to the methodology of the selection of the reference year/value? A: We looked at vessel traffic trends, ambient noise levels over time. Traffic and noise has remained fairly consistent over the last 5 years. We are not recommending a reference year yet, just offering the science that would inform it. Another possibility is a compilation of a number of years, modeling average traffic and average noise, since every year is unique. Either way, they will use a timeframe where we have hydrophone data to validate the model.
- Q: How does this impact the North Residents? A: No evidence that Northern Residents are coming down this far south. They're doing well, and don't experience the same pressures as the Southern Residents.
- Q: How would the Leadership Committee like to be kept updated on this target-setting process that ECHO is convening on behalf of the sector? A: Quiet Sound staff, PSP, WSF should continue attending meetings, watch progress, contribute a Washington perspective, and revert back to the LC.

Introducing Project Charters

Sara Adams shared the draft template for project charters to capture key project management details and align projects with the strategic plan. Suggested edits were noted in the draft project charter template. The group agreed on the importance of consistency across different projects, accepted the draft template and noted the need for adaptive updates to the template as they are utilized more. Sara to circulate a draft template for LC members to review and provide further feedback on.

Questions/Comments:

- Q: Does this feel useful as a way to structure information? A: Yes, this is a good starting point.
- Q: Where should charters live? A: Google doesn't work for WSF, USCG. OK to include with quarterly email packet.

Project Updates: Voluntary Commercial Vessel Operational Measures

Sara Adams provided an update on the Admiralty Inlet Slowdown. The slowdown began on October 6, 2024 after SRKW were confirmed in the slowdown zone on October 5. Funding delays have impacted the AIS analysis, which will now occur at the end of the slowdown. Quiet Sound will use pilot-reported participation in the bi-weekly updates, the first of which will go out on October

23. The Quiet Sound team is exploring when to deploy the hydrophone. Feedback was captured in the draft charter.

Sara Adams provided an update on the Slowdown Desktop Study, which aims to identify potential slowdown areas with the greatest noise reduction potential and greatest benefit to SRKW. The goal outcome is to present a draft decision support tool with recommendations to the LC in April. Quiet Sound will bring the slowdown desktop study draft charter to the ORCAS advisory group for input. Feedback was captured in the draft charter.

Project Updates: SRKW Detections and Alerts to Mariners

Gonzalo Banda-Cruz shared updates from the Hydrophone Feasibility workshop and next steps. The workshop was held on July 31 and included 17 participants. The goal of the workshop was to foster collaboration, assess capacity, and identify upgrade opportunities for real-time data sharing (i.e. by sending whale detections to WRAS). Quiet Sound synthesized findings into a final report. Quiet Sound is developing a full proposal to NFWF on funding for a cabled to shore hydrophone, due November 6.

Gonzalo provided updates on WRAS. Orca Network is now providing 70% of Washington State's detections. Funding is provided by USCG through the end of November. Next steps include: renewing data use agreements, modify data input fields for WSF needs (i.e. directionality), upgrades to the app interface, and address longer-term funding for Orca Network.

Gonzalo provided updates on the thermal imaging pilot. Revisions were made directly to the thermal imaging project charter. Gonzalo provided updates on his meetings with thermal camera providers, including the pros and cons of each. Gonzalo will share estimates and specs from thermal imaging camera providers to support decision-making. Quiet Sound will bring the thermal imaging draft charter to the ORCAS advisory group for input.

Questions/Comments:

- Q: Can we get a hydrophone in the water sooner, perhaps using a simpler hydrophone like Lime Kiln without the vessel noise measurements? Quiet Sound Answer: The current WA hydrophone network (Orcasound + others) are not at the point of providing real-time independent detections into WRAS. Same timeline for a hydrophone that can hear whales as opposed to hearing whales and recording ship noise. Depends on funding, cable-to-shore system (be prepared for this to take years), and permitting. ECHO Answer: At Lime Kiln, in the last two years ECHO added software that's more accurate (goes after PAMguard) so that you don't need a human verification process. Need to decide confidence level, number of false positives. Lime Kiln was able to work with the existing hydrophone and shore infrastructure at the lighthouse, and had permission already. Keep in mind that the biggest challenges are where to put it and where to cable it to shore. Boundary Pass hydrophone is a really nice, complicated system.
- Q: Does thermal imaging go through a human verification? A: Depends on the service and the level of certainty that we want – combination of AI and human.

- Comment: There is a preference to use the systems that have been used in Canada, citing concerns about the timeline. A: Several providers have a bottleneck due to chip shortage. New cameras won't be ready for 6 months.

ORCAS Advisory Group updates

Gonzalo Banda-Cruz provided an update on the ORCAS Advisory Group that had its kick-off meeting on October 15 with 26 participants. During the meeting, Quiet Sound outlined the vision for the group, presented the strategic plan, upcoming and ongoing projects. Quiet Sound will ask the ORCAS for input on project charters.

Legislative Engagement

Rachel Aronson provided an update on completed and upcoming legislative engagement at the state level.

LC member updates

- Puget Sound Partnership: The Partnership has potential additional funding through the EPA's National Estuarine Program. Todd will reach out to develop a timeline for preparing a proposal for increasing acoustic SRKW detections. Rachel to inquire about a letter of support from NFWF.
- Marine Exchange: Applied for and received an FCC license to transit AIS. It covers two sites to be avoided using a geofence, on behalf of NOAA Olympic Coast sanctuary. Goes straight to the ECDIS of any AIS-equipped vessel. The thermal camera on the Marine Exchange roof is back up and running, and has started to get positive detections of whales in Elliott Bay. Adding a second thermal camera (West Seattle Buoys).
 - Q: Does the license allow you to send any type of message or just one? A: Just one, 'you're in an area to be avoided'.

Attendees:

1. Rachel Aronson, Quiet Sound Program Director, Washington Maritime Blue
2. Sara Adams, Quiet Sound Program Manager, Washington Maritime Blue
3. Gonzalo Banda-Cruz, Quiet Sound Program Manager, Washington Maritime Blue
4. Orla Robinson, ECHO, Port of Vancouver
5. Krista Trounce, ECHO, Port of Vancouver
6. Alle Brown-Law, Cascadia Consulting
7. Cassidy Fisher, Director, Joint Innovation Program, Washington Maritime Blue
8. Todd Hass, Special Assistant to the Director, Puget Sound Partnership
9. Patrick Gallagher, Executive Director of the Marine Exchange of Puget Sound

10. Mike Moore, Pacific Merchant Shipping Association (PMSA)
11. Nora Nickum, Senior Ocean Policy Manager at Seattle Aquarium
12. Kathleen Hurley, Senior Environmental Program Manager, Port of Seattle
13. Adrienne Stutes, Biology Program Lead, Washington State Ferries
14. John Robertson, Waterways Management Division Chief, USCG Sector Puget Sound