



A Program of Maritime Blue

Quiet Sound Advisory Committee (ORCAs) Meeting Summary

Jun 26, 2026

Action Items & Decisions

Action Items	Who
Follow up with David Bain to integrate the Sunset Bay hydrophone SRKW data into QS mapping analyses.	Gonzalo Banda-Cruz
Engage PMSA, Puget Sound Pilots, and AWO members to investigate anomalous tanker speed spikes observed during the 2025–2026 season.	Sara Adams & Mike Moore
Extract a verified list of ATB names from AIS tracking data to properly distinguish them from standard tanker transits.	Sara Adams / Jostein Kalvøy

Meeting Notes

Welcome/Introductions

Rachel Aronson opened the session by welcoming the committee's "brain trust". She delivered a land and water acknowledgement.

- **Orca Moment:** Monika Wieland-Shields indicated that the unofficial population count stands at **76**, and the celebrated birth of a new calf.

Long-Term Hydrophone & Thermal Camera Updates

Gonzalo Banda-Cruz and Rachel Aronson provided an integrated technical briefing on the program's expanding sensing network.

- **Cable-to-Shore Hydrophone:** SMRU's analysis of currents, sediment, and shipping lanes confirmed **Point No Point** as the optimal deployment site. Quiet Sound has secured non-opposition agreements from the Suquamish and Port Gamble S'Klallam Tribes. Two temporary Soundtraps were successfully recovered, and data is currently being analyzed to capture the area's environmental noise baseline.
- **JARPA Permitting Status:** Siting the equipment from shore introduces complex, overlapping regulatory layers. It requires a shoreline exemption from Kitsap County, a specialized real estate permit from the USCG for the cable stretch running through federal tidelands, a standard seabed lander lease from WA DNR, and final clearings through the Army Corps of Engineers and the U.S. Navy.
- **Thermal Camera Data & Insights:** May marked one full year since the Point Wilson thermal camera ("Whale E") was integrated into WRAS. Species richness and diversity trends successfully matched the known regional ecological dynamics, peaking around August and September during major salmon returns. Detections are currently dominated by pinnipeds and killer whales, alongside surprising, consistent year-round signatures from local fish populations.
- **Sustained System Resilience:** Analysis of seasonal mean detection distances proved that the system is incredibly resilient to Point Wilson's harsh weather, maintaining a stable detection average of **1.5 to 1.7 kilometers**, with spring and fall outlier detections clocking in as far as **4.5 kilometers** away. The hardware experienced zero structural downtime outside of localized regional radar tower power outages.
- **Network Scaling:** Verification funding via the Puget Sound Partnership is slated for immediate renewal. Whales Spotter is successfully modifying a shipboard model to deploy a fixed shore-based **pod directionality module** to add travel vectors (northbound vs. southbound) directly into WRAS alerts. Furthermore, two

additional camera deployments are locked in for the upcoming fiscal year—one at Point No Point, and a second at a location currently TBD.

Questions and Comments:

- **Q:** On the 4.5-kilometer outlier detection, what is the exact height of the Point Wilson camera?
- **A:** It sits on the VTS radar tower at an elevation of 30 meters (~90 feet). On board commercial test vessels like Matson's fleet, the same tech yields reliable detections out to 1–2 miles, giving captains plenty of room to execute course alterations.
- **Q:** Are there concrete plans to make the upcoming cabled hydrophone feed available via live-stream?
- **A:** We are closely evaluating a framework with SMRU using the Lime Kiln model. Because the peninsula lacks landline cables, the team will deploy a Starlink terminal to secure the required bandwidth.
- **Q:** Have you considered recording high-quality acoustic data locally on-site while streaming a lower-quality bandwidth feed for public listeners and AI detection?
- **A:** The listening station runs the standard Pamguard algorithmic model, which is highly reliable for killer whales. If splitting the audio quality data stream optimizes real-time alerts while maximizing regional data access for partners, we are entirely open to adapting the architecture.

Admiralty Inlet Slowdown

Sara Adams presented the finalized performance metrics for the fourth voluntary slowdown season, which ran from September 14, 2025, through January 12, 2026.

- **Season Highlights:** Driven by early whale arrivals on September 13, the season was triggered three weeks earlier than historical averages, resulting in a **21-day extension** of the total protection window.
- **Participation Metrics:** Pilot-reported participation settled at **64%**, with **56%** of total transits successfully hitting specific Speed Through Water (STW) targets. While percentages dropped slightly year-over-year due to brutal offshore weather patterns in November and late-season operator fatigue, the extended duration meant that the absolute volume of participating vessels increased by roughly **100 transits**.
- **Acoustic Outcomes:** For the first time, Quiet Sound utilized a statistical sampling approach using past acoustic datasets to mathematically model noise reduction. This data allowed the team to isolate and calculate the acoustic impact of the cruise sector from day one of the slowdown in September. The season yielded a consistent **1 decibel total noise reduction (a 20% overall sound pressure drop)**,

including a localized **15% to 22% sound reduction** specifically inside critical SRKW communication and echolocation frequency bands.

- **Contextualizing Historical Baselines:** When matching current slowdown velocities against identical seasonal timeframes from 2019 (pre-Quiet Sound data sets), the regional progress becomes highly evident. Pre-program vessel transits in 2019 trended much faster, showing tight clusters of velocity. Modern slowdown implementations have effectively flattened those trends, showing broader speed boxes and creating a macro-regional shift toward quieter waters, displaying an acoustic drop of **2.3 decibels (a 40% reduction)** against 2019 levels.
- **Dynamic End-Date Protocol:** Quiet Sound proposed a dynamic end framework launching a monitoring buffer on January 8 toward a targeted January 15 end date. If SRKWs are detected within or south of the slowdown zone during the preceding 7 days, the slowdown automatically extends via rolling one-week increments up to a hard ceiling on February 15. Cheryl Ng noted that Canada's ECHO program uses a similar 15-day monitoring block but explicitly declares its hard ceiling (November 30) from day one to protect industry scheduling.
 - **Salmon Run Intersections:** David Bain noted that record chum salmon returns are actively reshaping whale foraging tracks, enticing pods to linger significantly longer in the southern basin.
- **Harbor Safety Standards:** Quiet Sound announced the formal publication of the new **Standard of Care for Light Tugs and ATBs** within the Puget Sound Harbor Safety Plan. This provides a non-speed-centric avoidance tool tailored to the specialized operations of the tug sector

Questions and Comments:

- **Q:** Are Articulated Tug Barges (ATBs) being counted under the tanker banner? The total transit numbers listed for tankers seem low.
- **A:** The current dataset relies purely on how ships voluntarily classify themselves via automated AIS parameters. If an ATB registers as a tug, they are omitted from the category; if they classify as a tanker, they leak into the numbers. We will look to cross-reference an explicit list of ship names to isolate this trend moving forward.
- **Comment:** The 11-knot class (bulkiers, tankers, general cargo) accounts for less than a quarter of total transits and a mere 8% of the baseline noise budget. Given four years of static numbers and the reality that this group actually increased its speeds this past year, we are seeing diminishing returns. If we do not see a profound change by next season, I will propose eliminating the 11-knot group entirely.
- **Comment:** Whether a tanker is escorted or unescorted by a tug shouldn't impact their capacity to comply with the slowdown. Escorted tankers are typically dictated by an 10.7 to 11-knot "sweet spot" to ensure their escort tug retains reserve power

to intervene if a mechanical failure occurs. They can easily meet the target when loaded or when transiting in ballast.

Member updates

- GreenTech 2027—Green Marine's premier annual conference for sustainable maritime transportation—will be held in Victoria, B.C. The three-day event is set for June 8 to June 10, 2027, and will uniquely mark the organization's 20th anniversary.

Attendees:

1. Adrienne Stutes, Washington State Ferries
2. Andrea Balla-Holden
3. Andrea Doyle, AltaGas
4. [Carly Green](#), Ocean Wise
5. Cheryl Ng, VFPA ECHO Program
6. David Bain, Orca Conservancy
7. Donna Spalding, CLIA
8. Gonzalo Banda-Cruz, Quiet Sound
9. Jostein Kalvøy, Puget Sound Pilots
10. Joy Brungardt, Orca Network
11. Kathleen Hurley, Port of Seattle
12. Liam Moorcroft, AWO
13. Maggie Moran-Dour U.S. Navy
14. Meghan Reckmeyer, NWSA/Port of Tacoma
15. Mike Moore, PMSA
16. Monica Wieland Shields, Orca Behavior Institute
17. Natalie Lowell, Makah
18. Nick Zylstra, Kitsap Transit
19. Rachel Aronson, Quiet Sound
20. Ryan Dicks, Pierce County
21. Sara Adams, Quiet Sound
22. Sara Thompson, Department of Ecology
23. Serena Tierra, Orca Network
24. Tara Galuska, GSRO
25. Todd Hass, Puget Sound Partnership