



Clallam Marine Resources Committee Meeting Agenda

September 21st, 2026

5:30 p.m. – 7 p.m.

Hybrid meeting

[Clallam MRC Zoom Meeting Link](#)

Meeting ID: 837 6963 9254

Passcode: 12345

For more information about the MRC, please contact Chase O'Neil at 360-417-2361.

Welcome by Chair LaTrisha Suggs / Call to Order / Introductions

- Welcome: Howard Sprouse, new member representing District III
- Determination of quorum

Public Comment *on agenda items & limited to 3 minutes per participant*

Approval of Minutes

- August minutes

Presentation

- Amy Olsen – Research Scientist at Seattle Aquarium, Sea Otters (*Enhydra lutris*) in Clallam Bay

New or special business

- River and Ocean Film Festival 2026: Tabling opportunity

Announcements

- SoundToxins: WA Department of Fish and Wildlife's Organization of the Year for 2026
- Annual Project Reports are due September 30th
- WA Department of Ecology is proposing [amendments to the Shoreline Management Act](#): public hearing October 15th
- Northwest Straits Commission update – Alan Clark

Committee and Project Reports

- Project leads report only if an update is needed
- Education and outreach sub-committee
 - Fall Festivals 2026
- Advisory sub-committee
 - Clallam County Comprehensive Plan edits

Discussion of next meeting date and agenda

- Next regular meeting: October 19th
- Call for new agenda items

Good of the Order

Public Comment *limited to 3 minutes per participant*

Adjourn

Clallam County DCD is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

[Clallam MRC Zoom Meeting Link](#)

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Passcode: 12345

One tap mobile

+12532050468,,83769639254#,,,,*12345# US

+12532158782,,83769639254#,,,,*12345# US (Tacoma)

Dial by your location

- +1 253 215 8782 US (Tacoma)

2026 Meetings

January 26 (4th Mon)

February 23 (4th Mon)

March 16

April 20

May 18

June 15

No July meeting

August 17

September 21

October 19

November 16

December (TBD, may skip)



CLALLAM COUNTY MARINE RESOURCES COMMITTEE

Sea Otters (*Enhydra lutris*) in Clallam Bay

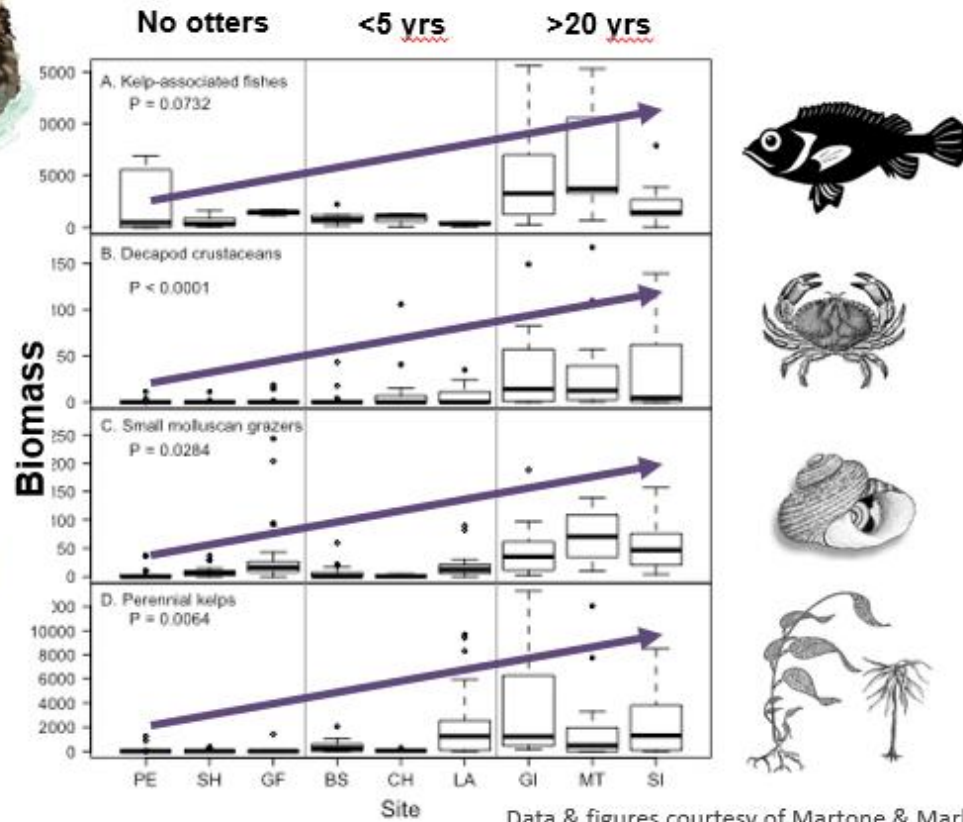
Amy Olsen MMA, Research Scientist

September 2026





Increase in
amount of
kelp forest
fishes,
small crabs,
small grazers
& perennial
kelps

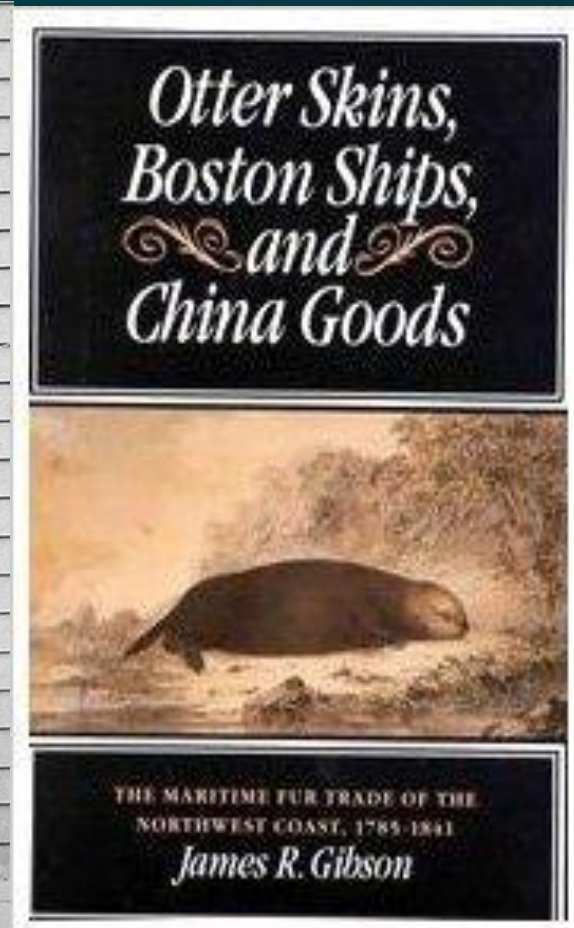


Data & figures courtesy of Martone & Markel,
unpublished data from West Coast Vancouver Island



History

- Washington's last native sea otter was hunted in 1910 near Willapa Bay.
- Almost 60 years later, sea otters were reintroduced from Amchitka, AK
 - 29 near Point Grenville (1969)
 - 30 near La Push (1970)
- An estimated 10 animals survived and founded the population today



Annual Population Survey

- Multi-day annual count.
- Organized by USFWS and WDFW.
- The Seattle Aquarium has been participating every year since 2001 (in 2025 and 2026 they did not have funding for full survey).

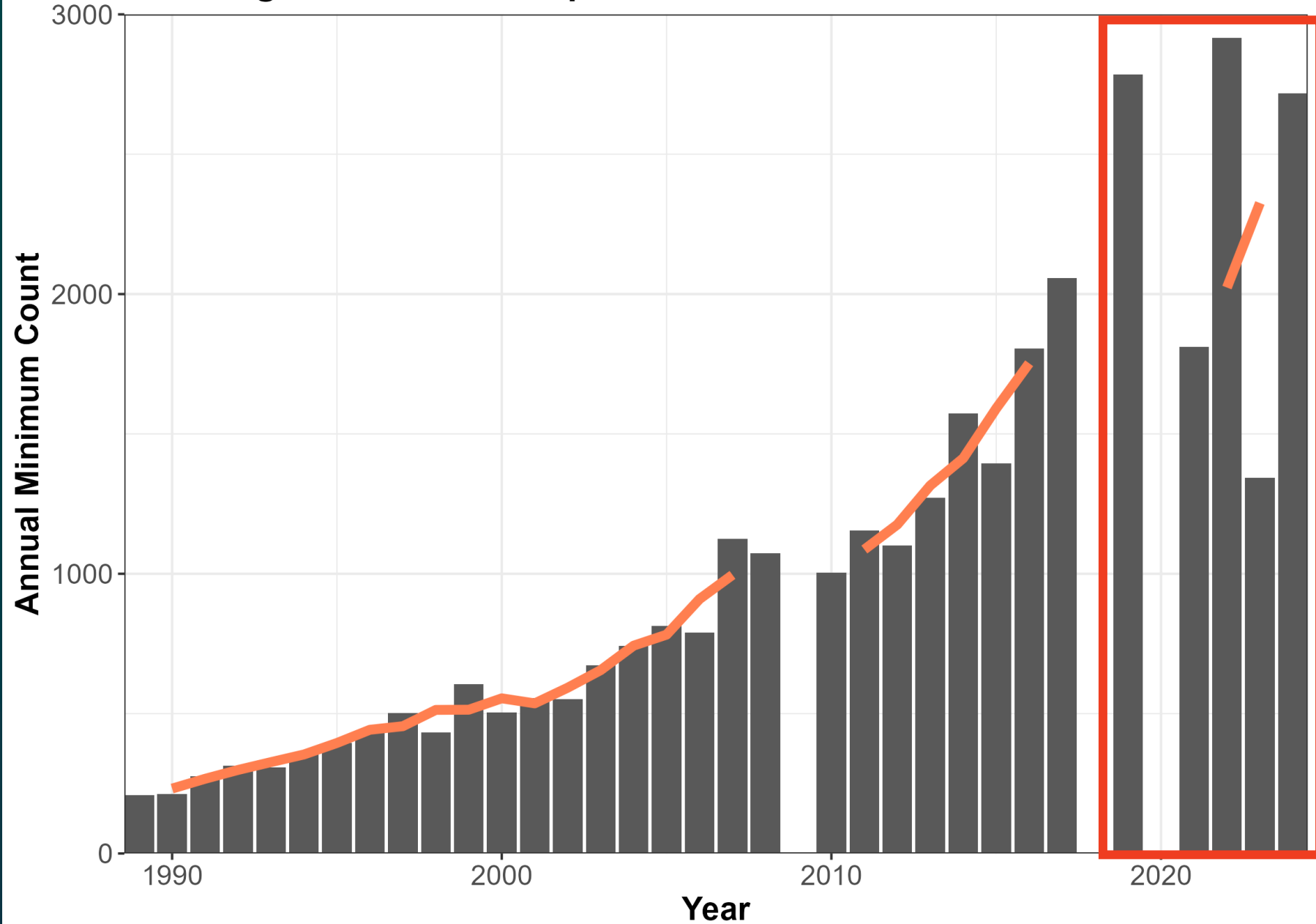


Methods

- Aerial survey via photography from small plane
- Ground observers conduct shore-based visual surveys

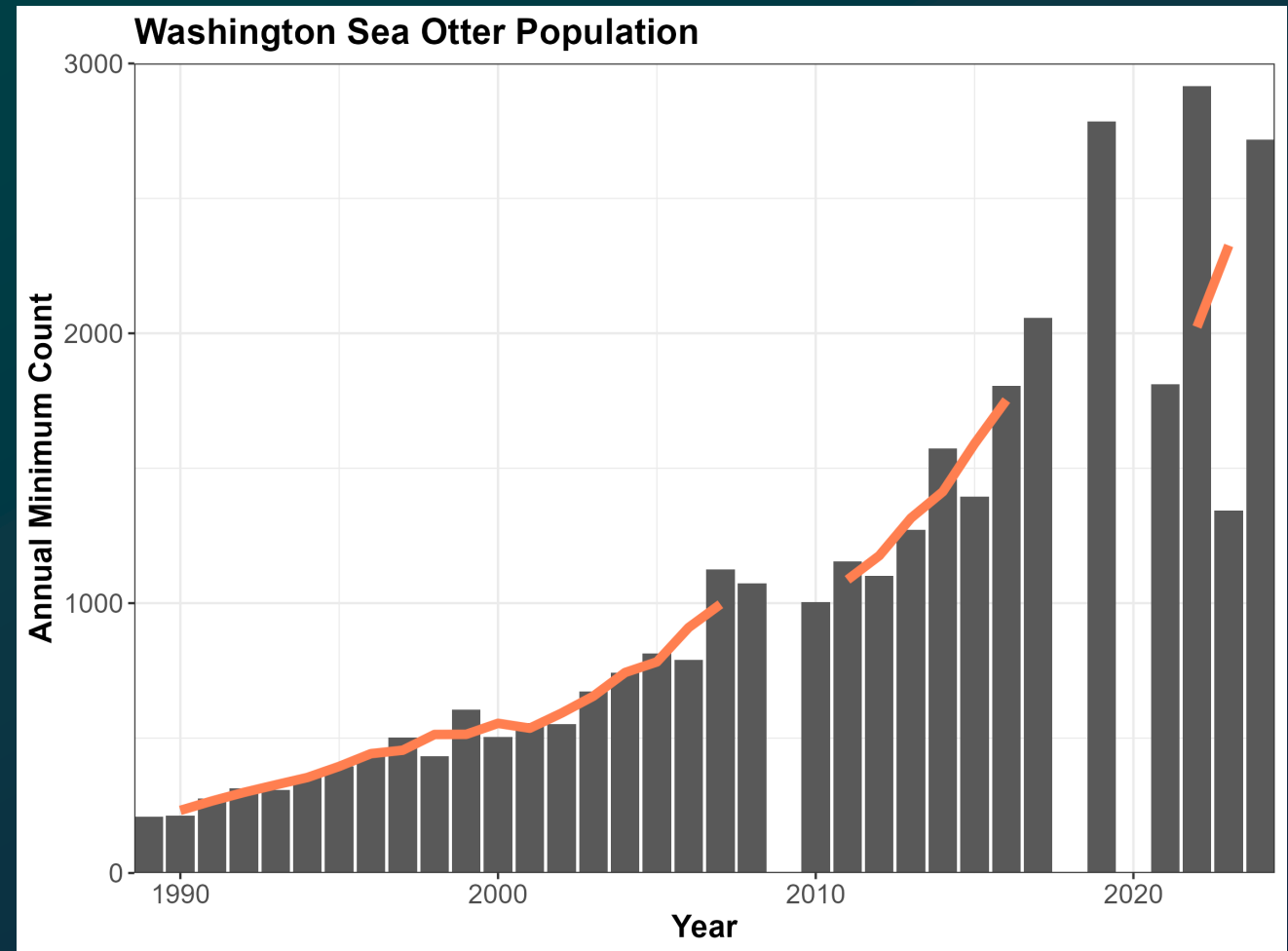


Washington Sea Otter Population



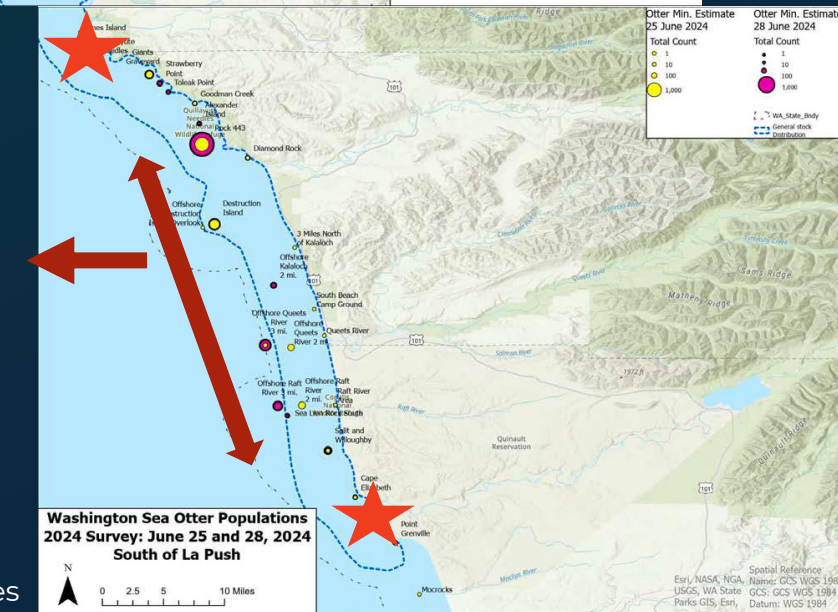
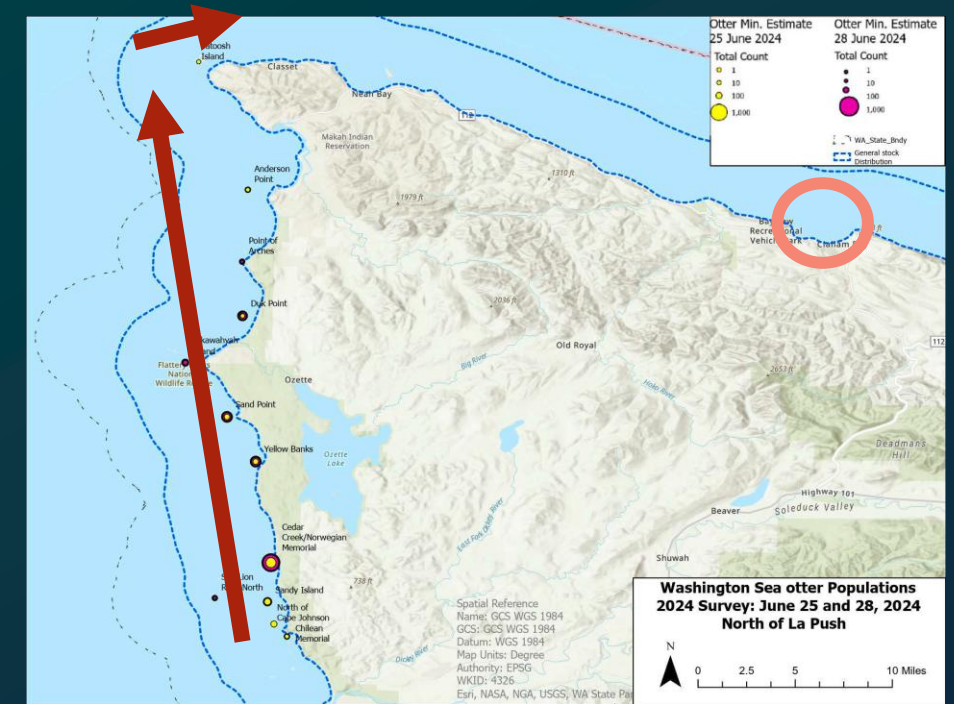
Challenges

- **2021:** dense fog during survey week, only one survey was completed.
- **2022:** ran 2 offshore transects for first time and counted substantial otter numbers 2-4 miles offshore.
- **2023:** thick fog during survey week, flew again one month later and finished one complete survey. No offshore transects.



Range Expansion

- The sea otter population reached equilibrium levels in the central area in the mid-1990s
- Expanded north and east, after 2000, sighting frequency decreased in the Strait of Juan de Fuca
- In mid-2000s, expanded range southward
- In 2022, found otters are moving offshore
- In 2024, group of otters in Clallam Bay!



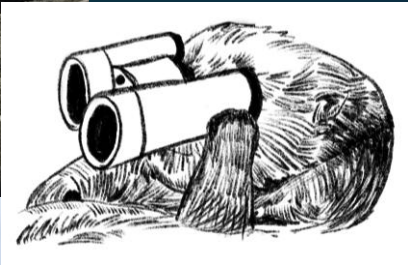
★ = reintroduction sites

WA Foraging Project



- Quantify foraging success and intensity since 2010
- The goal is to create a large database similar to CA and AK populations
- Provide information on status of population and relative abundance of prey





Challenges



NATIONAL GEOGRAPHIC
Olympic National Park
TRAILS ILLUSTRATED
TOPOGRAPHIC MAP

Garmin

PROTOCOL FOR GROUND OBSERVERS, WASHINGTON SEA OTTER SURVEY
Original Prepared by Ronald J. Janssen
Revised by Dennis Lynch
May 2016

Purpose
A census of the Washington sea otter population is conducted annually to determine the minimum population estimate and the general summer distribution. The survey is a combination of aerial and ground observations conducted over a 3-day period in June or July. This protocol provides the basic methods for the ground observers. This protocol is not intended for use by the general public or for surveys not coordinated/conducted under the supervision of Washington Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.

Method
Where: Ground observers are stationed along the Washington coast where known concentrations of sea otters occur. The primary observation stations include: Anderson Point, Oak Point (Seaford Creek), Cape Alava, Sandpoint, and Cedar Creek. Additional ground stations may be included when staff, funding, and accessibility are available.

When: Typically, the census will be conducted near the end of June. The aerial surveys begin with a reconnaissance flight on Monday. Aerial and ground surveys are conducted Tuesday through Thursday. All observers should be prepared to survey on Friday should conditions during the week prevent the ability to get a good quality survey.

Observers: Each ground survey station will have at least 2 people. During a survey/scan 1 person should be the primary observer/counter and 1 person records data and assists in scanning. These responsibilities can be exchanged throughout the day.

All primary observers will have established experience conducting sea otter surveys and be appointed by the ground observer coordinator.

Time of Day: The aerial portion of the survey is usually underway by 1000 hrs; therefore, ground observers will be in position no later than 0930 hrs. Ground observers will remain on site until 1500 hrs or until the 2nd flight has gone past the location, whichever is later in time safety.

Observers at Cape Alava need to be aware of the tide and ensure they depart the area as fast as possible.

The ground observer coordinator will notify observers if the aircraft is not able to make a 2nd flight.

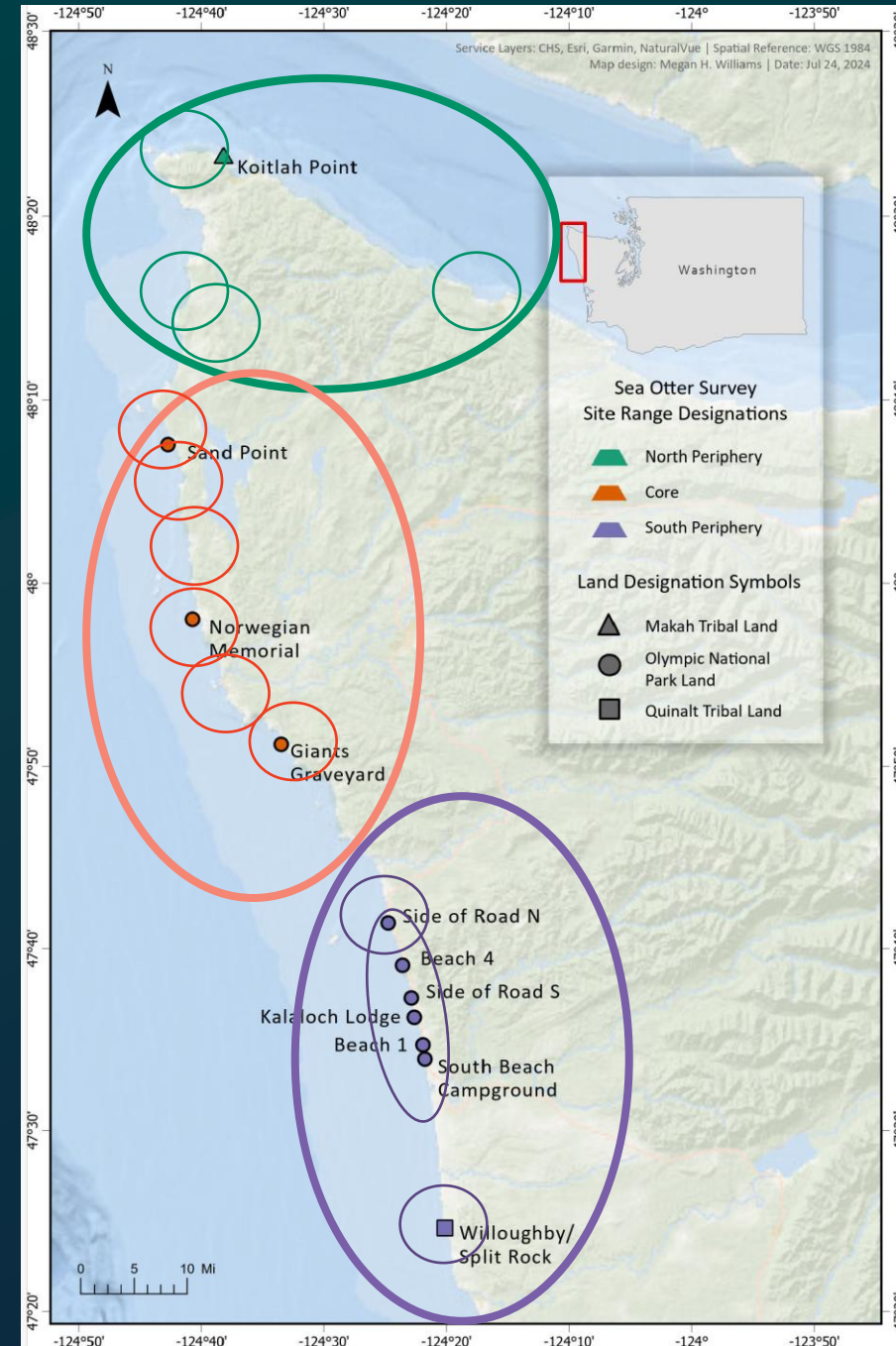
Timing and Number of Flights: The number and distribution of sea otters in the survey area. The aerial portion of the survey is designed to obtain 2 counts per hour, for a total of 6 counts over the 3-day period. If weather conditions can result in fewer flights.

Where: ER = emergent rocks; IN = intertidal; KC = kelp canopy; OW = Open water; UN = unknown.
Obs condition (otter dist, visibility, glare, chop, etc): Excellent, very good, good, fair, poor, Unknown
Pup: VS = very small, S = small, M = Medium, L = Large, Y = Yes, N = No pup, U = unknown
Why prey not eaten: dropped, gave to pup, stolen by other than pup, unknown



Data

- 2010-2026
- 3 range designations encompassing 12 areas with 36 unique sites
- 5,901 observations across 507 bouts
- 37 distinct prey items, including an “unidentified” category

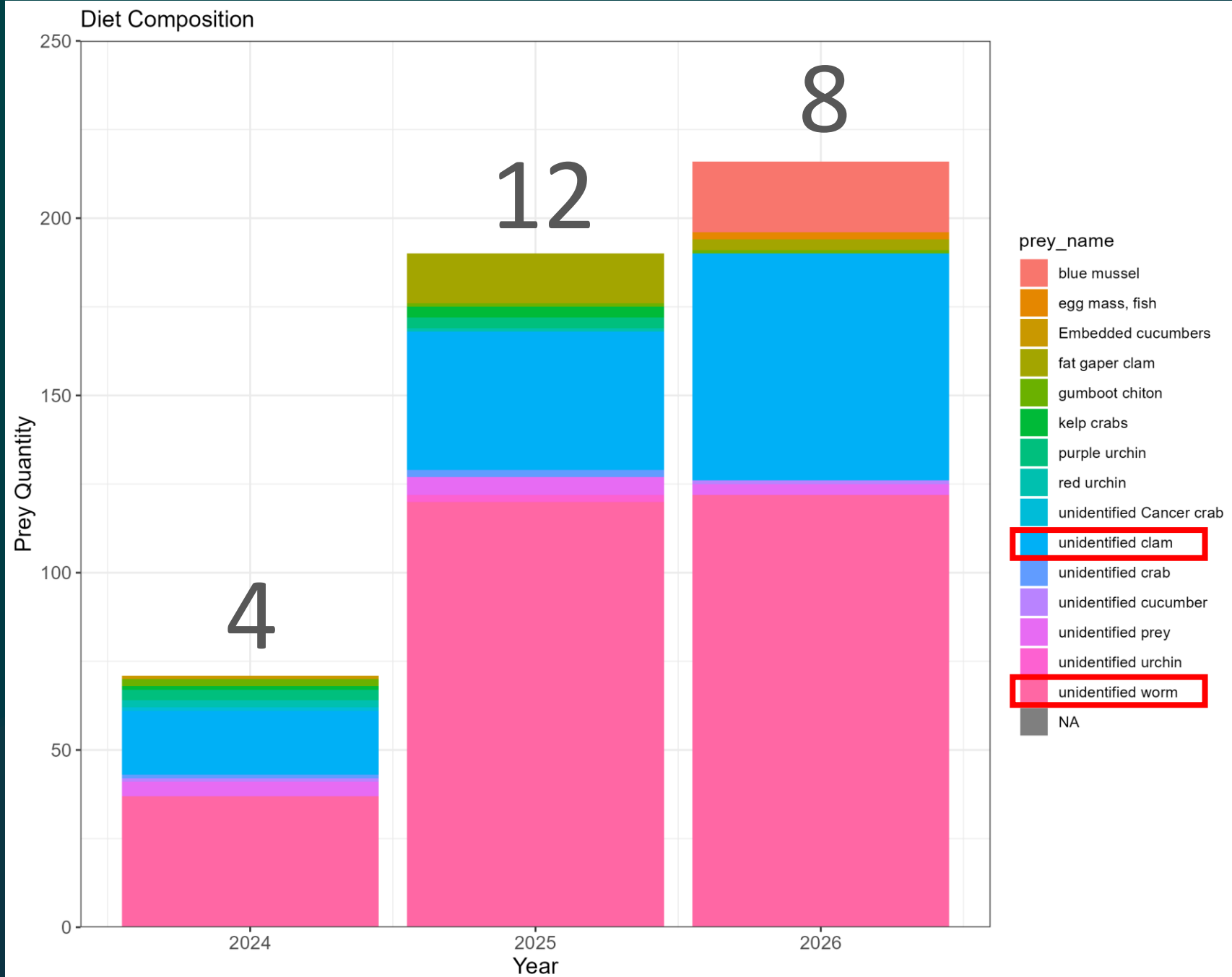


Observations in Clallam Bay

Date	# otters
5/21/24	20
6/24/24	13
8/13/24	20
8/15/24	7
1/21/25	13
3/25/25	2
3/26/25	0
4/16/25	5
5/13/25	0
5/14/25	5

Date	# otters
7/15/25	7
7/16/25	21
8/16/25	10
8/17/25	8
9/16/25	16
11/18/25	15
3/25/26	18
3/26/26	28
4/14/26	39
5/13/26	28

[illegible]



Diet Composition

Prey	Number
Embedded cucumber	1
Blue mussel	5
Egg mass	2
Fat gaper clam	14
Gumboot chiton	5
Kelp crabs	2
Purple urchin	4
Red urchin	3
Cancer crab	1
Unidentified Clam	109

Prey	Number
Unidentified Crab	3
Unidentified Cucumber	2
Unidentified Urchin	2
Worm	121
Unidentified Prey	33

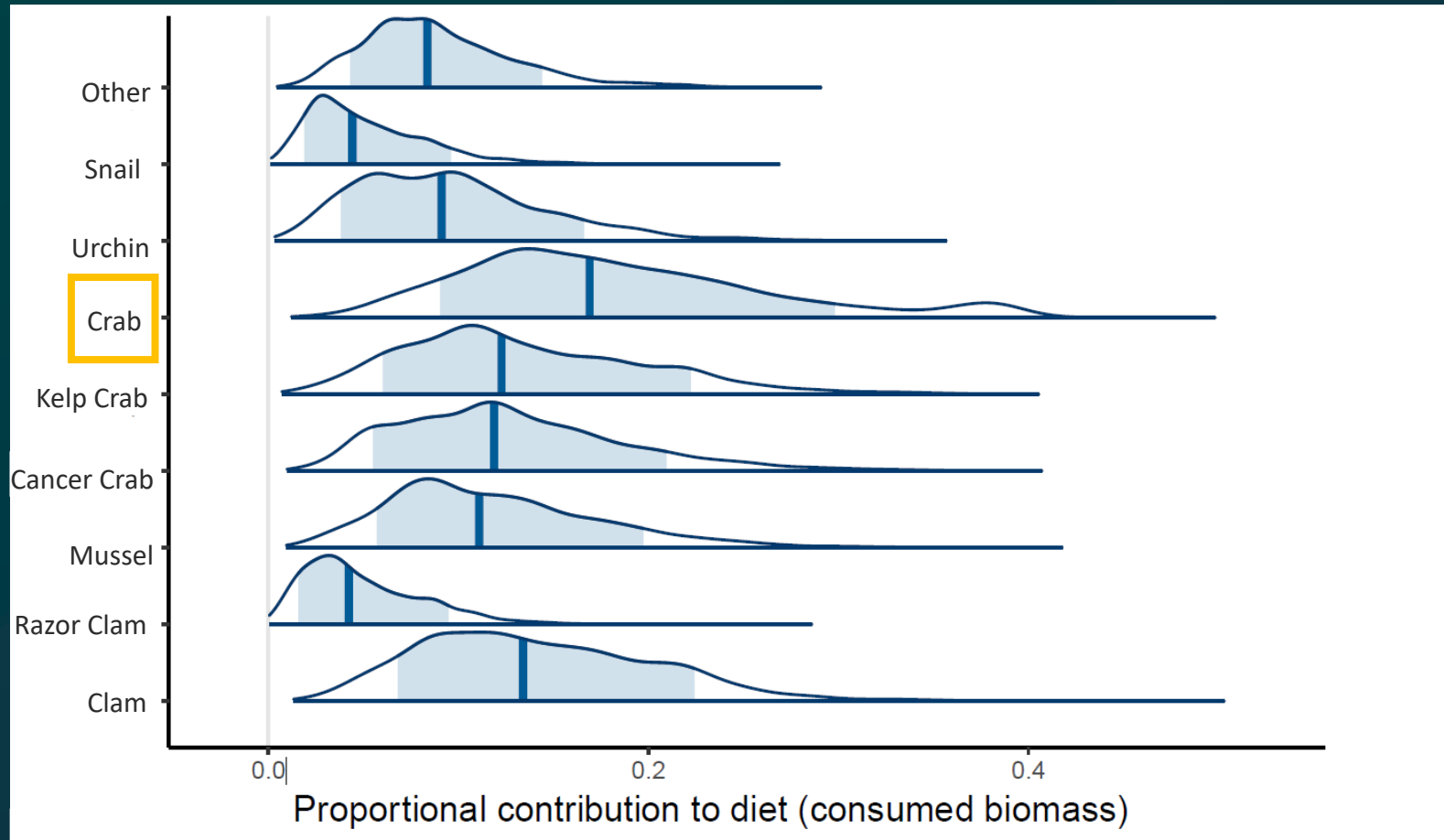


Data Analysis

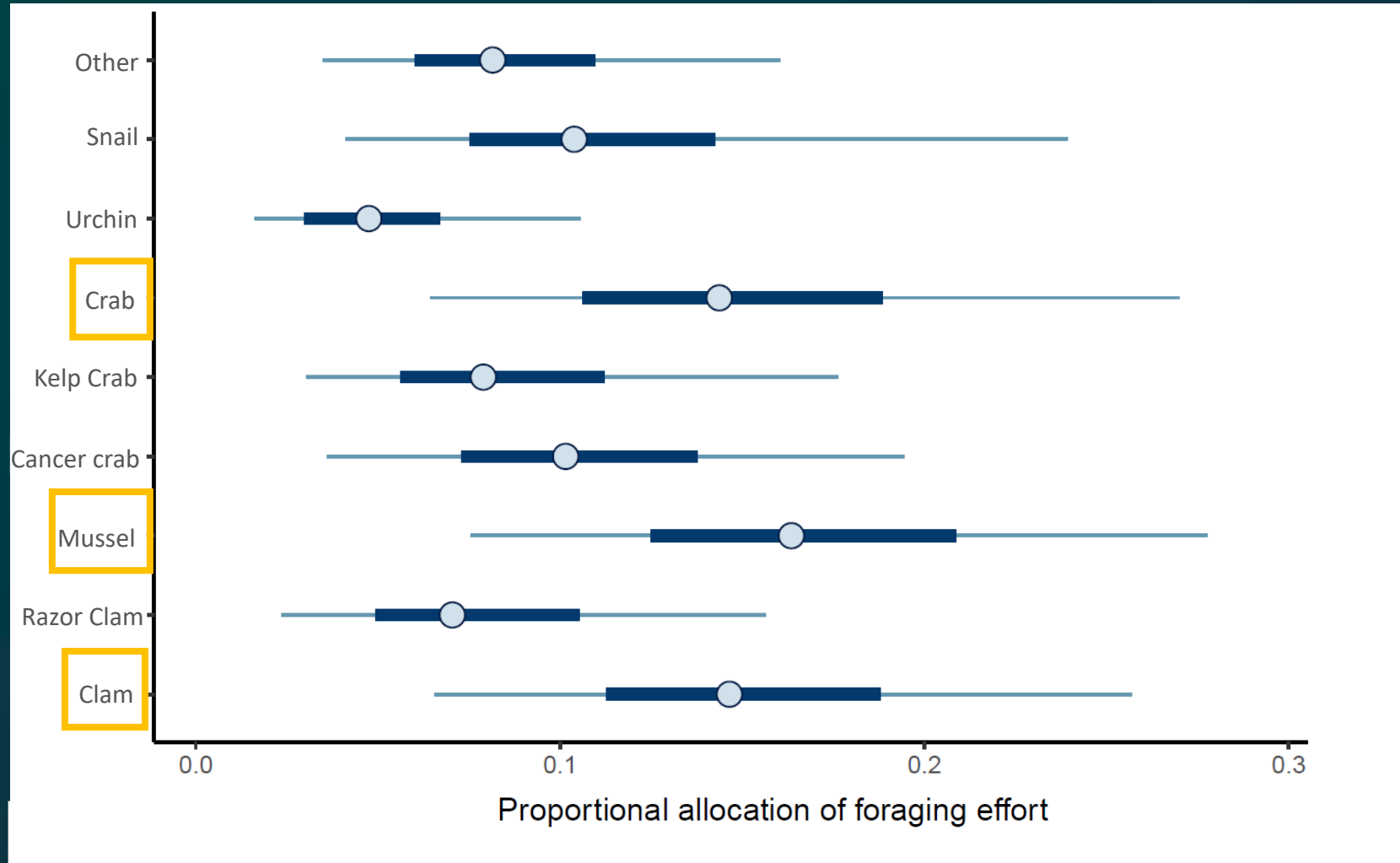
- **Sea Otter Foraging Analysis (SOFA 3.2) Model**
 - Bayesian methods are used to fit a process model to observational data
 - Questions
 - How sea otters allocate effort (energy)
 - How much of each prey type contributes to diet
 - Overall net rate of biomass consumption and energy intake
 - Makes educated guesses for unknown prey items



SOFA 3.2 – Entire Range



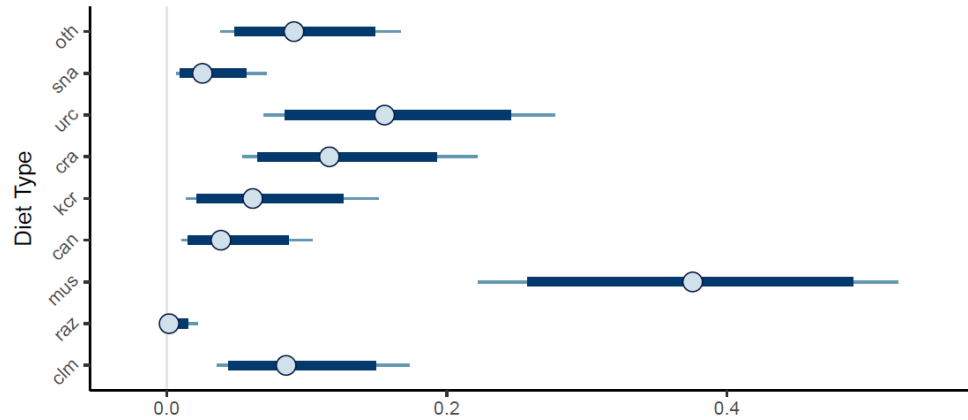
SOFA 3.2 – Entire Range



SOFA 3.2 – By North, Core, South

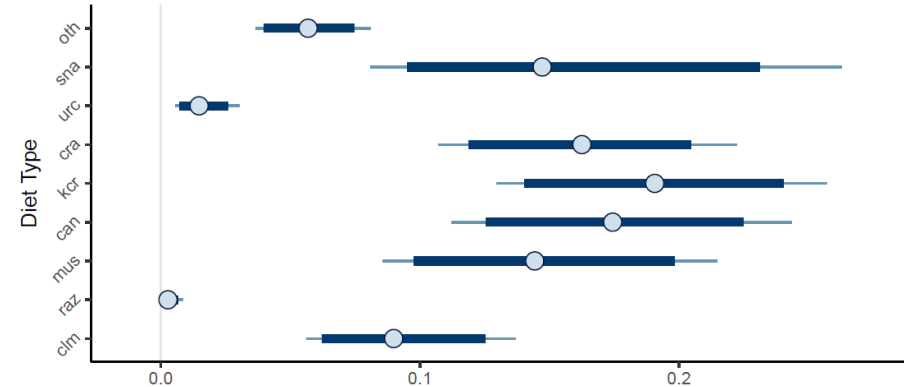
Proportional contribution of prey to diet, by group

Group level north



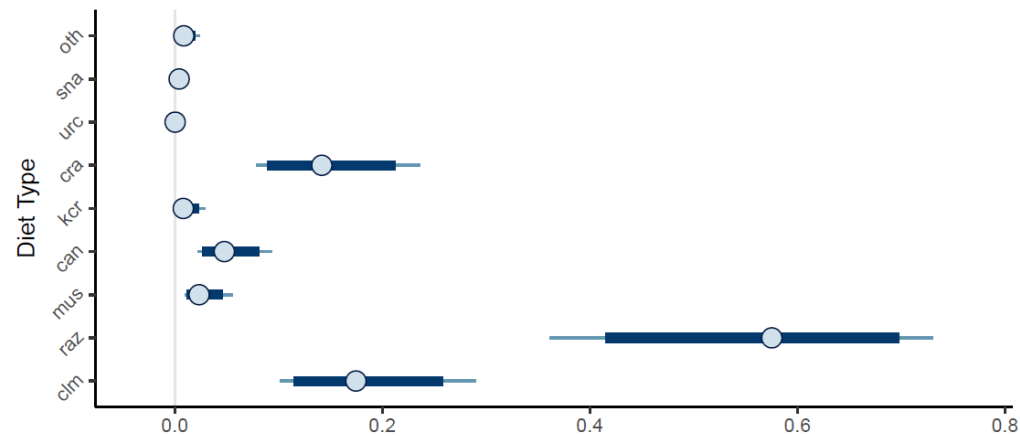
Proportional contribution of prey to diet, by group

Group level core

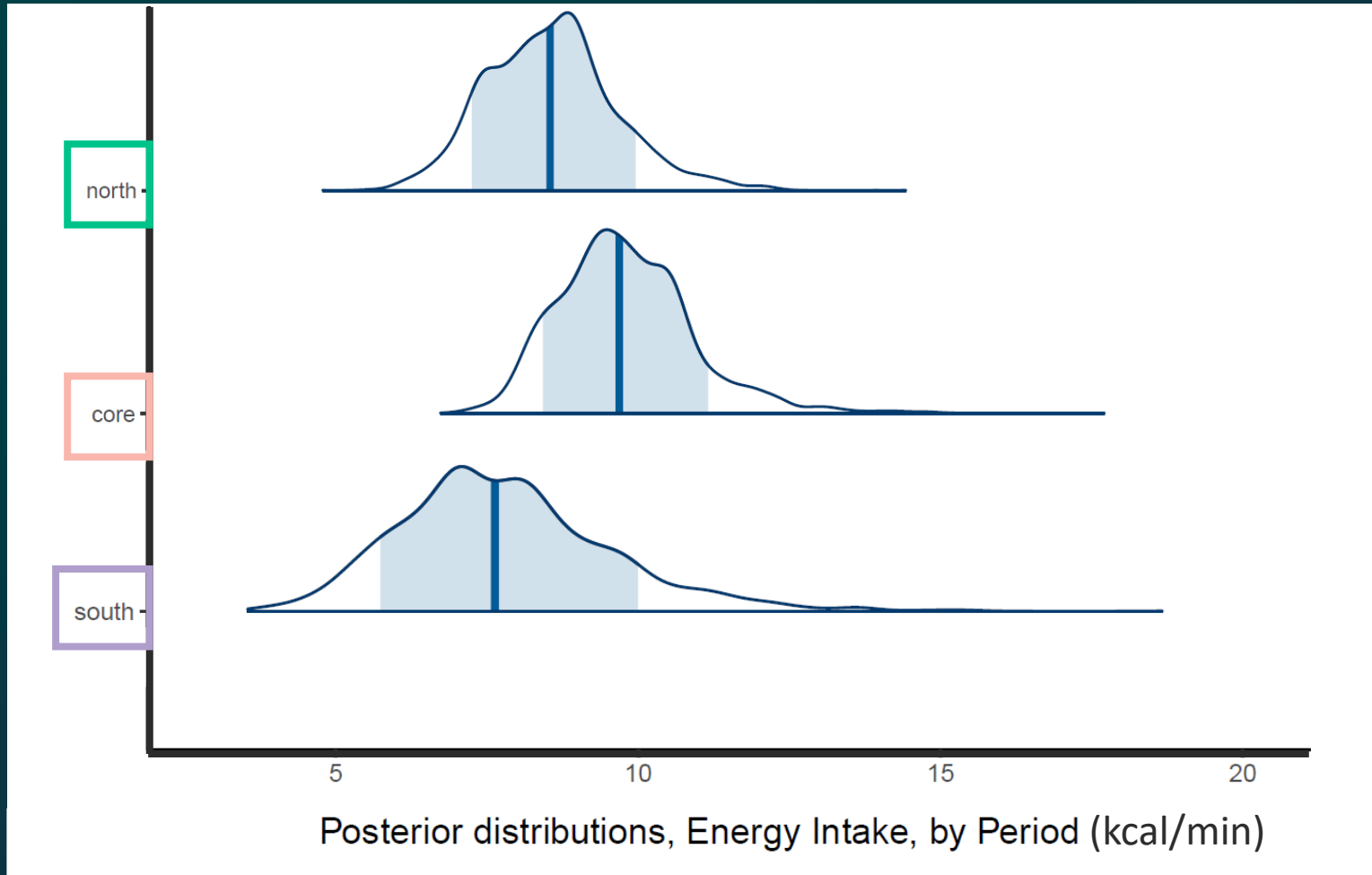


Proportional contribution of prey to diet, by group

Group level south



SOFA 3.2 – By North, Core, South



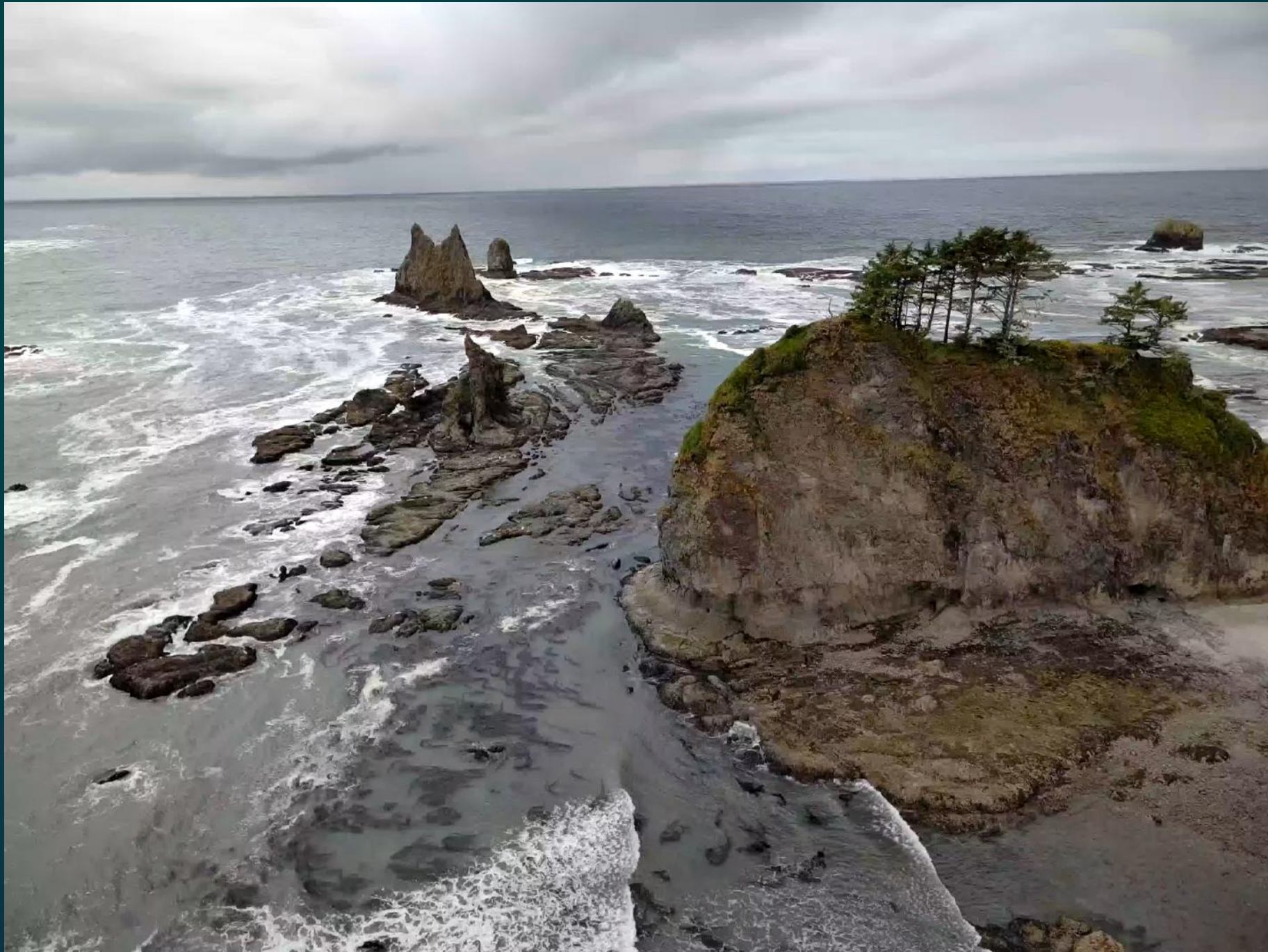
Aerial Surveys

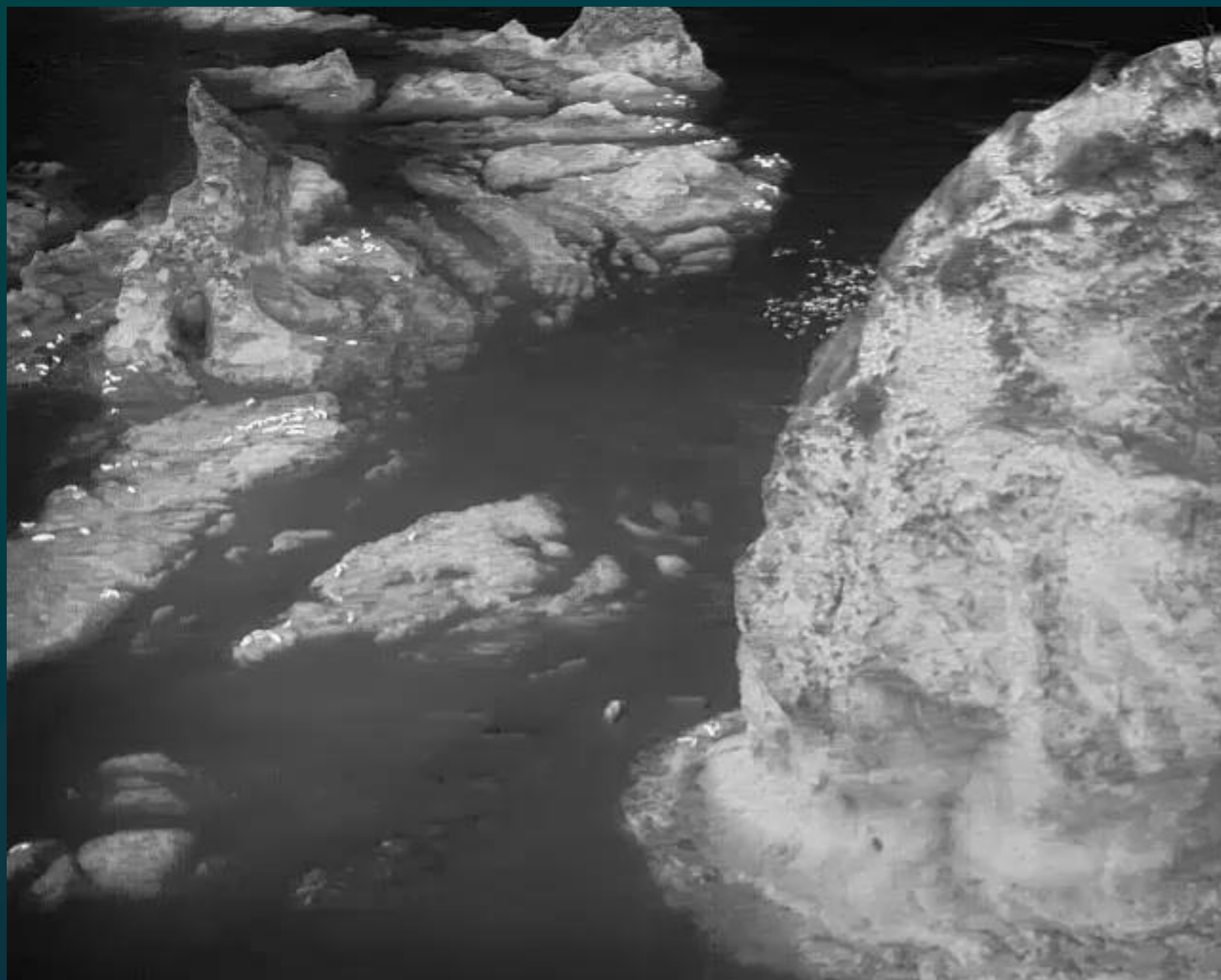


Meet OTIS!



OTTER TRACKING & IMAGING SYSTEM





Summary

- Lots of movement of individuals in/outside of the Bay. Traveling further into the Strait?
- In Clallam Bay, the otter's diet is comprised of mostly tube worms and clams. Observing mostly young males.
- New tools can aid in providing more accurate numbers of individuals at certain sites





Thank you

a.olsen@seattleaquarium.org



Commissioner Mark Ozias
223 E 4th Street, Suite 4
Port Angeles, WA, 98362

September 17, 2026

Re: Recommended policy improvements for the Comprehensive Plan Update to inform updates to Critical Areas Code and Shoreline Master Program

Dear Commissioner Ozias,

The Marine Resources Committee appreciates your request to recommend how the draft Comprehensive Plan Update can best provide clear direction for the upcoming Critical Areas Code and Shoreline Master Program updates. Essentially, we aim to ensure that the findings of the Climate Vulnerability Assessment are translated into meaningful policy and implementation.

Our input is organized according to the questions you posed at our monthly MRC meeting in August 2026.

1. What language, especially new language, is contained in the Plan that will be important in forming the Critical Areas Code update?

The most important language is the Plan's recognition that climate change is creating increasing risks to ecosystems, critical areas, salmon and shellfish habitat, water quality, and water availability. The Plan identifies threats associated with reduced snowpack, drought, increased flooding, rising temperatures, sea-level rise, and saltwater intrusion.

This language should provide a strong foundation for updating the Critical Areas Code. In particular, the Code should:

- Address **cumulative impacts** to wetlands, streams, riparian areas, marine shorelines, floodplains, and other critical areas—not just the impacts of an individual development proposal.
- Protect and maintain **connected habitat corridors**, including connections between upland, freshwater, estuarine, and marine environments.
- Incorporate current climate information and best available science into critical-area designations, buffers, mitigation, and long-term management.

- Recognize that critical areas provide essential community infrastructure, including flood protection, water storage, water quality protection, fish and wildlife habitat, and climate resilience.
- Require consideration of both immediate and long-term impacts, including how development may affect ecological functions under future climate conditions.

The MRC also recommends that the Plan clearly direct the County to use qualified biological expertise during implementation. The Critical Areas Code should include a requirement that County planners coordinate with the County biologist or other qualified biological staff during permitting and development review when critical areas, habitat, or other environmental resources may be affected.

2. What language, especially new language, is contained in the Plan that will be important in forming the Shoreline Master Program update?

The Plan's discussion of marine resources, habitat protection, climate vulnerability, flooding, sea-level rise, and water quality will be especially important to the future Shoreline Master Program update.

The SMP should build on the Plan's direction to:

- Preserve and enhance the ecological functions of marine shorelines, estuaries, wetlands, riparian areas, and aquatic habitat.
- Protect fish and shellfish spawning, rearing, migration, and harvest areas.
- Maintain habitat connectivity between marine shorelines and adjacent upland and freshwater systems.
- Address shoreline development in the context of **cumulative impacts**, rather than evaluating each proposal in isolation.
- Incorporate projected sea-level rise, coastal flooding, erosion, saltwater intrusion, and changing streamflows into shoreline planning and development standards.
- Ensure that shoreline policies and regulations are coordinated with the Critical Areas Code so that protection does not depend on whether a resource falls inside or outside shoreline jurisdiction.

The MRC recommends that the SMP update use the Climate Vulnerability Assessment as a practical planning tool. The assessment identifies climate risks to coastal and marine ecosystems, salmon and shellfish resources, water quality, and shoreline communities. These findings should be reflected in shoreline policies, restoration priorities, setbacks, mitigation requirements, and decisions regarding areas appropriate for development.

3. Based on the Comp Plan review, are there any policy suggestions or recommendations the MRC might have that should be considered for incorporation right away?

Yes. The MRC recommends that the following policy improvements be considered during the current Comprehensive Plan Update rather than waiting for the code and SMP processes:

A. Use clear, enforceable policy language.

Where protection is intended, the Plan should use direct language such as “shall” rather than vague terms such as “should,” “where feasible,” or “where possible.” The Plan should firmly establish no net loss of ecological functions as a minimum standard and identify opportunities for long-term ecological improvement.

B. Add an explicit cumulative-impact policy.

The Plan should direct the County to more thoroughly evaluate the combined effects of development, infrastructure, shoreline modification, water withdrawals, habitat loss, and climate change across watersheds and over time. The existing SEPA process is one opportunity but it is very rarely successfully utilized.

C. Require biological coordination during permitting.

The Plan should direct County planners to coordinate with qualified County staff, such as the County biologist and others, when proposed development may affect critical areas, fish and wildlife habitat, water resources, or ecological functions.

D. Strengthen water-resource planning and account for long-term changes in water availability.

The Comprehensive Plan’s Climate Vulnerability Assessment identifies water supply as a moderate-to-high climate risk and the MRC recommends it be raised to “high” risk. Glacier studiesⁱ provide evidence that regional hydrologic conditions are changing. We support a policy requiring the County to incorporate climate projections and seasonal water availability into growth management, development review, water planning, and protection of aquatic habitat.

The Plan should clearly distinguish between:

- Existing water-system and water-right capacity;
- Long-term availability of surface water and groundwater;
- Aquifer recharge and vulnerability to contamination or saltwater intrusion;
- Future residential, agricultural, commercial, and industrial demand;
- Instream and ecological water needs; and
- Climate-related changes in the timing and availability of water.

The policy improvement is not to assume that the glacier study proves a specific water-supply shortage in Clallam County. Rather, its conclusion demonstrates why the County should require long-term, climate-informed water-resource planning

instead of relying solely on historical water conditions or present-day system capacity.

E. Make the Climate Vulnerability Assessment actionable.

The Plan should identify how the assessment will be used in future development review, capital planning, critical-area regulations, shoreline regulations, restoration priorities, monitoring, and periodic Plan updates. The assessment should serve as an implementation tool—not simply background information.

F. Strengthen education elements.

The Plan should more strongly direct County staff to provide information about natural resource vulnerability, and should at least strongly recommend hazards disclosure, such as the real estate community providing info and resources for shoreline properties regarding sea level rise and storm surge.

The plan should direct staff to incorporate the goals of the SMP and CAO into department policies and goals.

G. Fix oversights.

[we need to insert the specific language edits that didn't get processed right when they addressed our comment letter from 12/25... currently this doc is an attached exhibit but we should excerpt the most relevant and important parts]

Overall, the MRC supports the direction of the draft 2026 Plan because its policies* better incorporate the impacts of climate change. Our principal recommendation is that the Plan provide stronger, more specific direction so that the subsequent Critical Areas Code and SMP updates result in consistent, science-based protection of marine and freshwater resources. We strongly support any tools that improve the County's ability to respond to identified climate vulnerabilities. **If you need specific policies named let us know.*

Respectfully,

LaTrisha Suggs

Chair, Clallam County Marine Resources Committee

Cc: DCD Director Bruce Emery

ⁱ The MRC recommends that the County also recognize the changing role of the Olympic Mountains' glaciers and perennial snowfields in the regional water cycle. A 2022 study published in the Journal of Geophysical

Research: Earth Surface found that Olympic Mountain glaciers lost approximately 45% of their area between 1980 and 2015. The study concludes that warming winter temperatures are increasingly causing precipitation to fall as rain rather than snow and projects that the region's glaciers will largely disappear by 2070.

JGR Earth Surface - 2022 - Fountain - Glaciers of the Olympic Mountains Washington The Past and Future 100 Years.pdf