# Elizabeth (Liz) Marina Allyn

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I believe in doing science that is rigorous and creative, fills a data gap identified by management, and features meaningful community engagement. I am most interested in science that informs equitable resource management, especially in the context of treaty right exercise and management of culturally important resources.

### **EDUCATION**

## University of Washington, Seattle, WA

**MSc**, Aquatic and Fishery Sciences Expected Spring 2025

BS, Aquatic and Fishery Sciences

Marine Biology and Quantitative Science minors Graduated *Cum Laude* with Honors in 2018

### **CURRENT EMPLOYMENT**

### **Graduate Student**

## University of Washington, Seattle, WA

- o Co-PI on Washington Sea Grant research project titled: Two-eyed seeing in practice: Participatory modeling to evaluate tribal pinniped hunting in Puget Sound as a tool for salmon recovery
- Thesis research focused on evaluating tribal pinniped harvest scenarios and their impact on salmon survival through key migration bottlenecks in Puget Sound
  - Methodologies: Participatory Modeling Process, Indigenist Research Paradigm
  - Methods: multi-species dynamic models, agent-based models

### **Marine Mammal Technician**

## Makah Tribe, Neah Bay, WA

- Assist with research on marine mammals in the Makah U&A area, including survey efforts, data entry and management, grant writing and report writing
- Coordinate the Makah Marine Mammal Stranding Network by responding to stranding reports,
   recording relevant Level A data, and performing necropsies

## **Internship Coordinator**

### Makah Tribe, Neah Bay, WA

- Mentor 4 tribal high school students each summer through independent research projects on a topic of their choosing that informs tribal natural resource management and addresses an identified community need. Culminates in a poster and presentation
- Teach the interns basic scientific and professional skills, including statistics, research methods, scientific writing, and public-facing science communication
- Organize job shadowing opportunities with in-house staff and visiting researchers from universities, state and federal agencies, and NGO's
- Acquire funding for the program through competitive grant writing

### **PROFESSIONAL INTERESTS**

- Walsh R P, **Allyn E M**, Bradford A L, Norman S A, Stimmelmayr R, Scordino J J. (2024) Anthropogenic and killer whale (*Orcinus orca*) scarring on Pacific Coast Feeding Group gray whales (*Eschrichtius robustus*) in northwest Washington. JCRM.
- **Allyn E M,** Scordino J J, Akmajian A. (2024) Mysid distribution, demographics, and co-occurrence with gray whales in northwest Washington state. PeerJ.
- Walsh R P, **Allyn E M**, Scordino J J. (2023) Preliminary findings: Anthropogenic and killer whale (*Orcinus orca*) scarring on Pacific Coast Feeding Group gray whales (*Eschrichtius robustus*) in northwest Washington. IWC Working Paper SC/69A/IST/03.
- Acevedo-Gutiérrez A, Lewis Z K, Scordino J J, **Allyn E M**, Lance M M, Brown S, Schwarz D, Akmajian A. (2023) Diet of the harbor seal (*Phoca vitulina*) in the NW corner of the Olympic Peninsula, Washington state. Northwestern Naturalist.
- **Allyn E M,** Scordino, J J. (2020) Entanglement rates and haulout abundance trends of Steller (*Eumetopias jubatus*) and California (*Zalophus californianus*) sea lions on the north coast of Washington state. PLoS ONE.

### SUBMITTED:

Lewis Z K, Nelson B, Akmajian A, Scordino J J, **Allyn E M**, Schwarz D, Acevedo-Gutiérrez A. (2025) Steller sea lion (*Eumetopias* jubatus) consumption of age-0 Chinook salmon (*Oncorhynchus tshawytscha*) along the northwest coast of Washington State. Submitted to PLoS One Feb 2025.

### IN PREPARATION:

- Lewis Z K, Akmajian A, Scordino J J, **Allyn E M**, Lance M M, Brown S, Schwarz D, Acevedo-Gutiérrez A. Describing intrapopulation feeding diversity in Steller sea lion diet along the northern Washington coast.
- **Allyn E M**, King W, Yang S. Variations in air exposure affect desiccation of Z. marina gathered from different tidal zones. Preparing for PeerJ.

## **SELECTED PRESENTATIONS (18 total, 5 shown)**

**American Fisheries Society, National Meeting.** Participatory modeling to evaluate tribal pinniped harvest as a tool for salmon recovery. *Honolulu, HI. 2024* 

**Society for Marine Mammalogy, Northwest Student Chapter Annual Meeting.** Using participatory modeling to evaluate harbor seal (*Phoca vitulina*) management strategies for improving salmon recovery in Puget Sound. *Newport, OR. 2023*.

**PCFG Consortium, Annual Meeting.** Mysid distribution, demographics, and co-occurrence with gray whales in northwest Washington state. *Newport, OR. 2022.* 

**Clallam County Marine Resources Council.** Rates and causes of entanglement in Steller and California sea lions on the north coast of Washington. *Virtual, Port Angeles, WA. 2021*.

**Northwest Indian Fisheries Commission, Habitat Conference.** Rates and causes of entanglement in Steller and California sea lions on the north coast of Washington. *Shelton, WA. 2019.* 

## **GRANTS AND AWARDS**

2023	BIA Tribal Youth Initiative	(\$27,366)
	2025 Makah fisheries summer internship program	
2023	BPA Tribal Education and Capacity Building Grant Program	(\$24,973)
	2024 Makah fisheries summer internship program	
2022	BIA Tribal Youth Initiative Program	(\$25,781)
	2023 Makah fisheries summer internship program	
2021	Washington Sea Grant	(\$253,077)
	Two-eyed seeing in practice: Participatory modeling to evaluate tribal	
	pinniped hunting in Puget Sound as a tool for salmon recovery	
2020	BPA Tribal Education and Capacity Building Grant Program	(\$22,012)
	2021 Makah fisheries summer internship program	
2019	BPA Tribal Education and Capacity Building Grant Program	(\$22,012)
	2019 Makah fisheries summer internship program	
2017	NSF REU Environmental Science and Policy	(\$5,250)
	For research on dolphin behavior at Georgetown University	
2016	Mary Gates Endowment for Students Research Scholarship	(\$1,250)
	For research on eelgrass transplantation	
2015	LePore Scholarship	(\$500)
	To acknowledge the success of first year early entrance students	

### FIELD SKILLS

# Cetacean Monitoring and Research

Gray whale, humpback whale, killer whale, bottlenose dolphin, harbor porpoise

- Mark-recapture photography
- Photo identification matching
- Biopsy sampling via crossbow
  - Scat collection
  - Body condition assessment
  - Scar and injury assessment
    - Entanglement response
      - Necropsy
- Prey sampling via plankton net deployment
- Boat operation and positioning near whales
  - Line-transect survey
    - On-water counts

# Pinniped Monitoring and Research

Harbor seal, California sea lion, Steller sea lion, gray seal

- Vessel-based counts
  - Land-based counts
    - Scat collection
    - Brand resights
- Entanglement documentation and assessment

## **Fishery Sampling**

Salmon, Pacific halibut, gadids, groundfish

- Salmon, halibut, gadids, groundfish
  - Otolith sampling
  - Length, weight, sex
  - Fin clips/tissue sampling
  - Random sampling procedures

# Intertidal Monitoring and Census

- Salish Sea vertebrate and invertebrate identification
  - Invasive European green crab trapping
  - Eelgrass: growth, morphology, density, disease
    - Tide height via laser level
    - Zonation: transect, quadrat, randomization

### **MENTORSHIP**

## **NOAA Hollings Application Process**

- 2024 Megan Cosand (awarded) and Ellie In
- 2023 Annabel Wade (awarded) and Lauren Grady

## **Makah Fisheries Summer Internship Program**

- 2024 Adan Ellis, Cosmo Smith-Della, Xavier Russell, LeAnthony Jimmicum
- 2023 Jerriq Johnson, TeJae Buckingham, William Tyler, Tanisha Engram
- 2022 Azasha-Mya Greene, Aunjraya Roberts, Seactis Woodruff, Nelson Bowechop
- 2021 Paul Greene Jr, Ryana Moss, Shilaily Woodruff, Ethan Gonzales
- 2019 Kaeden Butterfield, Angelina Woods, Laney Keyes, Tobias Croy

### **TEACHING**

## Makah Fisheries Summer Internship Program

Neah Bay, WA

Intern Coordinator

2019-present

Mentor research projects and teach foundational science skills

## **UW Program on the Environment**

Seattle, WA

Reader/Grader

2022-2023

Grading and giving feedback

## **Huntington Learning Center**

Bellevue, WA

Tutor

**NWIFC/NOAA** 

2018

Test-taking, homework help, remedial math and reading

## **ADVISORY GROUPS AND SOCIETIES**

Amer	ıcan Fı	ısher	ies Soc	ıetv

WA/BC

Pinniped Working Group

2024 - present

**American Fisheries Society** 

Seattle, WA

**UW Student Subunit, Chapter Secretary** 

2024 - present

Society for Marine Mammalogy

**Pacific Northwest** 

Northwest Student Chapter, Chapter Leader

2023 - 2024

Workforce Development Working Group

Washington

Peninsula College

2022 - present **Port Angeles, WA** 

Natural Resources Employer Advisory Council

2022 - present

**UW School of Aquatic and Fishery Sciences** 

Seattle, WA

**Equity & Inclusion Committee** 

2022 - 2023

**WA Commercial Whale Watch Rulemaking Process** 

Olympia, WA

Intergovernmental Advisory Group

2019 - 2022

#### SKILLS AND CERTIFICATIONS

BOAT WA Boater Education Certification, Small Boat Handling, Sailing (race, day sail, cruise)

COMPUTER Microsoft Office, Google Suite, Dropbox, R, Figma, Wordpress

SCUBA PADI Open Water, SDI Advanced Adventure
OIL SPILL 48 Hour HAZWOPER, Oiled Wildlife Response

### **VOLUNTEER ACTIVITIES**

**Community Boating Program** Port Angeles, WA Outreach/Event Volunteer 2023 - present **UW Students Explore Aquatic Sciences** Seattle, WA Outreach/Event Volunteer 2023 - 2024 **Hoko State Park Community Garden** Sekiu, WA Volunteer 2020 - 2021 **Scout Troop 681** Washington Chaperone/Outing Facilitator 2018 **NOAA NWFSC West Coast Groundfish Trawl Survey Oregon Coast** Wet Lab Volunteer 2018 **NOAA AFSC Pollock Acoustic Survey Bering Sea** Wet Lab Volunteer 2018 **WA/BC Coast NOAA NWFSC Hake Acoustic Survey** Wet Lab Volunteer 2017 **Conservation Made Simple Everett, WA** Head of Public Image 2017 - 2019 The Whale Museum Friday Harbor, WA **Archives Volunteer** 2016 **Collecting the Stories of the Latino Elderly** Yakima, WA Transcriber 2016 **Seattle Aquarium** Seattle, WA 2014 - 2015 Youth Ocean Advocate **Amnesty International** Seattle, WA **UW Chapter Officer** 2014 - 2016 **The Global Immersion Project US/Mexico Border** 2014, 2015 Peacemaker In Training **YMCA Earth Service Corps Garfield High School** 

2013 - 2014

### RELEVANT COURSEWORK

Club Member

Continuing Education (American Fisheries Society)

Fall 2024 Structured Decision Making for Natural Resource Management

Spring 2024 Contemporary Approaches to Salmon Forecasting

Graduate Studies (University of Washington)

Spring 2023 Advanced Environmental Law

Spring 2023 Linear Modeling with Environmental Data Spring 2023 Indigenous Research Methodologies Winter 2023 Marine Policy Analysis
Winter 2023 Quantitative Ecology
Fall 2022 American Indian Law
Fall 2022 Salmon Biology & Ecology
Fall 2022 Conservation Computing
Undergraduate Studies (University of Washington)

Spring 2018 Modeling in Conservation and Resource Management

Winter 2018 Fisheries Oceanography
Winter 2018 Aquatic Animal Physiology
Winter 2018 Statistics for Biologists

Fall 2017 Genetics and Molecular Ecology

Fall 2017 Introduction to Environmental Law and Process

Fall 2017 R Statistical Programming

Spring 2017 Marine Mammalogy Spring 2017 Fisheries Ecology

Winter 2017 Arctic Marine Vertebrate Ecology

Winter 2017 Biology of Shellfish

Fall 2016 Integrative Oceanography

Fall 2016 Biology of Fishes

Fall 2016 Research in Marine Biology

Fall 2014 Marine Biology