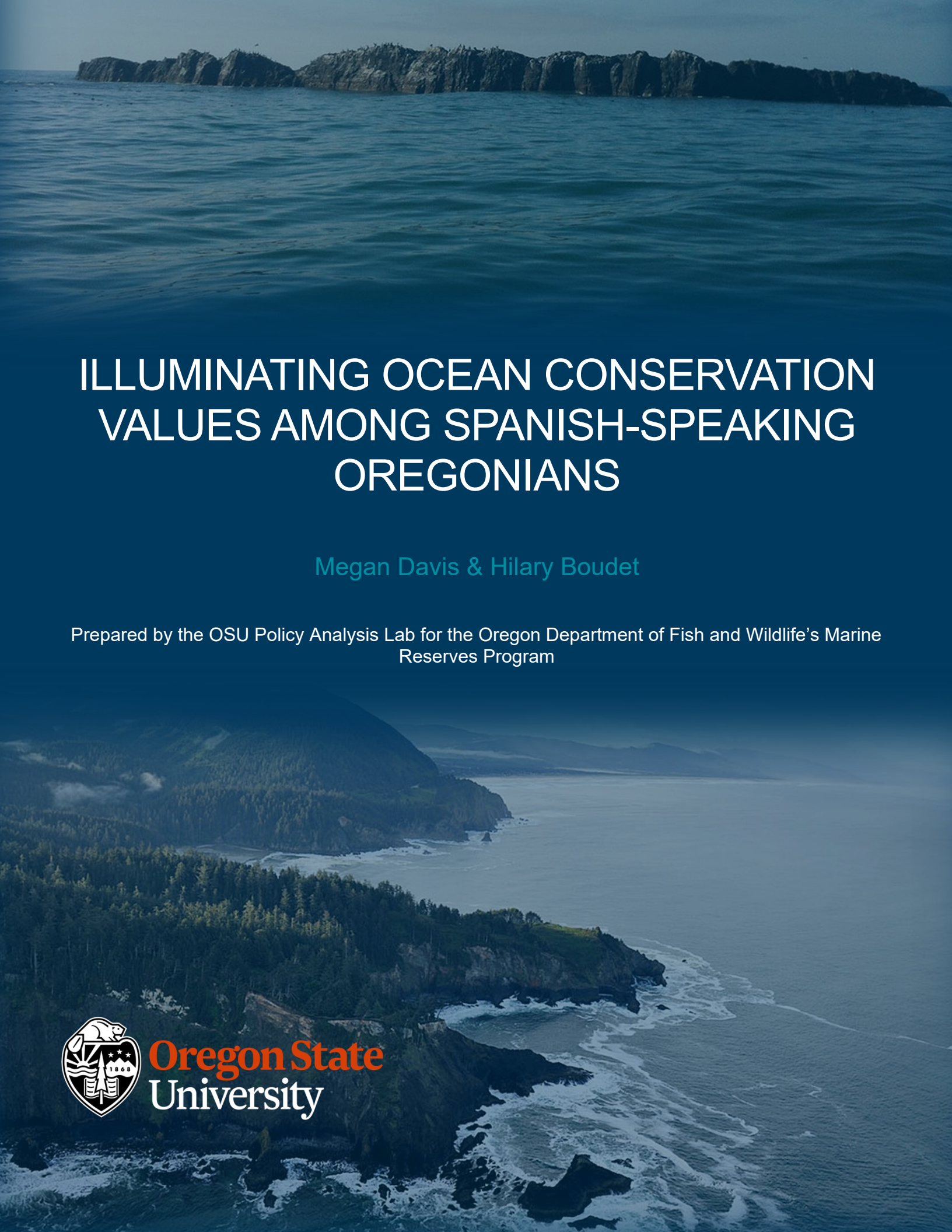




ILLUMINATING OCEAN CONSERVATION VALUES AMONG SPANISH-SPEAKING OREGONIANS

Megan Davis & Hilary Boudet

Prepared by the OSU Policy Analysis Lab for the Oregon Department of Fish and Wildlife's Marine
Reserves Program



Oregon State
University

REPORT IN BRIEF

Interviews and focus groups were carried out with Spanish-speaking Oregonians in three communities along the Oregon coast: Newport (Lincoln County), Seaside (Clatsop County), and Tillamook (Tillamook County). The goal of these research efforts was to (1) understand community values as assigned to Oregon's coast and ocean; (2) explore community understanding of existing ocean conservation efforts in Oregon, specifically those related to Oregon's system of marine reserves; and (3) identify barriers and enabling factors that influence current or potential community participation in ocean conservation spaces. The Oregon State University (OSU) Policy Analysis Lab developed an interview protocol (utilized in Lincoln County) and a focus group protocol (utilized in Clatsop and Tillamook Counties) that was reviewed by partner organizations to ensure that these protocols were relevant to the lived experience of the communities they serve. All interviews and focus groups were carried out in Spanish by a bilingual member of the research team. Learnings from these three communities were then applied in the context of an event focused on recreational shellfish harvesting in Astoria (Clatsop County). This research was then applied in the context of an event focused on recreational shellfish harvesting in Astoria (Clatsop County). Emergent findings from across communities that may be harnessed to inform outreach strategies by ODFW's Marine Reserves Program are outlined in the **IMPLICATIONS FOR ENGAGEMENT** section of this report. Further information on each community, including detailed findings, insights, and outreach strategies have been compiled in location-specific profiles. These profiles, along with associated community contact information are available in an internal appendix provided to ODFW for planning and coordinating purposes.

ABOUT THE AUTHORS

MEGAN DAVIS is a Ph.D. candidate pursuing a cross-disciplinary approach to her dissertation through the Department of Integrative Biology and the School of Public Policy. As part of the OSU Policy Analysis Lab, she aims to understand the values underrepresented coastal community members apply to the coast and ocean to inform the development of culturally and contextually relevant opportunities to engage in ocean conservation.

HILARY BOUDET is a Professor and the Director of Graduate Programs at the School of Public Policy at Oregon State University. She also serves as a Principal Investigator in the OSU Policy Analysis Lab. Her research interests include environmental and energy policy, natural resource sociology, social movements, and public participation in energy and environmental decision-making.

TABLE OF CONTENTS

<i>REPORT IN BRIEF</i>	<i>2</i>
<i>ABOUT THE AUTHORS</i>	<i>2</i>
<i>PROJECT BACKGROUND.....</i>	<i>4</i>
<i>IMPLICATIONS FOR ENGAGEMENT.....</i>	<i>7</i>
<i>VALUE-BASED INSIGHTS</i>	<i>7</i>
<i>AWARENESS OF OCEAN CONSERVATION</i>	<i>9</i>
<i>OUTREACH & ENGAGEMENT</i>	<i>11</i>
<i>ACCESSIBLE PROGRAMMING.....</i>	<i>13</i>
<i>REFERENCES</i>	<i>16</i>



PROJECT BACKGROUND

Under the Public Trust Doctrine, natural resources, including those in nearshore and coastal zones, belong to the people, but are held in trust by the United States government with state and federal agencies acting as stewards (Roady 2015). Thus, these agencies are tasked with representing the collective will and values of an increasingly diverse citizenry. As such, it is critical that natural resource agencies develop strategies to better understand and engage with diverse communities. While there is a need for dedicated research efforts to inform such strategies, relatively little scholarly research has been dedicated to understanding the attitudes of minority communities toward conservation in the United States. Even less is known about the values that underpin these attitudes ([Carter et al. 2013](#)). To our knowledge, what research does exist tends to focus on terrestrial systems.

In Oregon, ocean conservation objectives manifest in part through the State's marine reserves system, managed by the Oregon Department of Fish and Wildlife (ODFW). The reserve sites were intentionally selected to avoid significant adverse impacts on coastal communities and ocean resource users ([ODFW 2022](#)). For that reason, ODFW's Marine Reserves Human Dimensions Program has carried out extensive research focused on understanding the social, cultural, and economic dynamics of the Oregon coast since the inception of the marine reserve system in 2009 ([Swearingen & Fox 2022](#)). Considerable research has been carried out at a level broadly representative of Oregon's coastal communities and with key stakeholder groups ([Swearingen & Epperly 2016](#); [Epperly et al. 2017a](#); [Epperly et al. 2017b](#); [Swearingen et al. 2017](#); [Swearingen et al. 2019](#); [Fox et al. 2022a](#); [Fox et al. 2022b](#); [French et al. 2022](#)), but minority populations were not directly engaged in this process.

Oregon's Latino population is the fastest growing demographic in the state, with a growth rate of around 31% since 2010 ([Census 2021](#)). Each of Oregon's coastal counties have experienced community growth rates at or above the state average since 2010 ([Census 2021](#)). The extent to which this growing community is aware of or engaged in marine conservation efforts in Oregon is unknown. Further, we lack an understanding of the values this group assigns to Oregon's coast and ocean. Developing strategies to engage with this community will require an understanding of existing community value structures ([Manfredo et al. 2017](#)). Agencies will also need to address community-identified barriers to participation, building on existing outreach efforts where they have seen success. This research effort represents a first attempt to address some of these knowledge gaps to inform outreach strategies that connect Spanish-speaking Oregonians with ODFW's Marine Reserves Program.

This context produced three primary objectives for this research:

1. to understand community values as assigned to Oregon's coast and ocean,
2. to explore community understanding of existing ocean conservation efforts in Oregon, specifically those related to Oregon's system of marine reserves, and

3. to identify barriers and enabling factors that influence current or potential community participation in ocean conservation spaces.

These objectives were examined in three communities along the Oregon coast: Newport

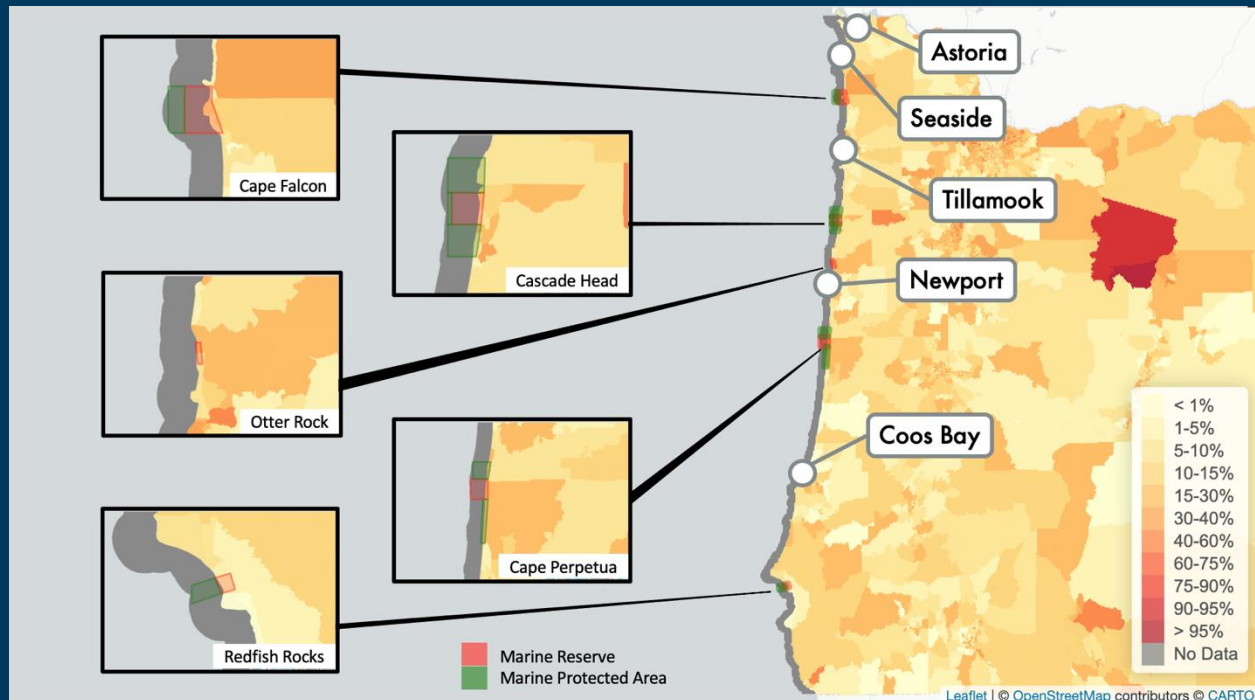


Figure 1. Map detailing the relative proximity of each of our study sites and Oregon’s five marine reserves to areas with a high proportion of Hispano or Latino residents.

(Lincoln County), Seaside (Clatsop County), and Tillamook (Tillamook County) (Figure 1). Outreach related to this project was also carried out in Coos Bay (Coos County) and efforts to connect with community members are ongoing (see [COOS BAY, COOS COUNTY](#)). Perspectives were collected via semi-structured interviews (Lincoln County) and focus groups (Clatsop and Tillamook Counties) (see [RECRUITMENT & OUTREACH](#) headings for each location-specific profile for detailed information on the methods utilized in each community). This research was then applied in the context of an event focused on recreational shellfish harvesting in Astoria (Clatsop County) (Figure 2). Emergent findings from across communities that may be harnessed to inform outreach strategies by ODFW’s Marine Reserves Program are outlined in the [IMPLICATIONS FOR ENGAGEMENT](#) section of this report. Further information on each community, including detailed findings, insights, and outreach strategies have been compiled in location-specific profiles. These profiles, along with associated community contact information are available in an internal appendix provided to ODFW for planning and coordinating purposes.



Figure 2. Recreational shellfish harvesting event held in Astoria in June 2025.



IMPLICATIONS FOR ENGAGEMENT

VALUE-BASED INSIGHTS

There is a desire for family-oriented marine programming that is highly interactive.

Several participating community members expressed a desire for Spanish-language marine programming that is family-friendly and highly interactive. These aspirations were particularly common in Lincoln and Tillamook Counties where the coast was highly valued as a place to recreate while building and enhancing personal connections with family members. Parents highlighted that their children tended to be deeply interested in learning more about the ocean, often acting as the primary driver for frequent coastal visitation. Some of these individuals expressed that more family-friendly marine programming could carry the additional benefit of reaching parents with conservation and marine safety messaging while connecting with children on marine life.

The ocean is frequently characterized as connected to livelihoods and there is significant interest in expanding on this relationship to directly address food security.

Of the 58 community members we contacted across Clatsop, Lincoln, and Tillamook Counties, just under half ($n = 27$) worked in marine associated industries, including seafood processing and tourism. Many of these individuals characterized their livelihood as dependent on the ocean, as did several participants working outside these industries (e.g., farm or mountain-based harvesting, education, etc.). Several community members across all three counties indicated that they would like to learn how to harvest food from the ocean, citing the high cost of fresh seafood from the supermarket. Through the Astoria razor clam event we found that engagement focused on the recreational harvest of seafood generates high community turnout and can be leveraged to discuss ocean conservation concepts.

Many participating community members are engaged in acts of environmental stewardship and feel a strong sense of responsibility for maintaining the health and cleanliness of Oregon's coast and beaches.

Several participants across Clatsop, Lincoln, and Tillamook Counties mentioned doing their part to keep the Oregon coast and their communities clean and healthy by recycling and cleaning up garbage along the beach. Many of these individuals expressed concern over the impact of this debris on marine life. There may be untapped potential to connect these acts of environmental stewardship to existing ocean conservation efforts. Further, future outreach and engagement could build on existing concern over the harmful impacts of marine debris to highlight other threats to the health of Oregon's coast and ocean.

Access to the Oregon coast is highly valued, but those values are often context specific.

Across each of our three study locations, we found that participating community members highly valued the health and cleanliness of Oregon's marine and coastal spaces, as well as the ability to spend time in these spaces with friends and family. However, the overall suite of values applied to the coast and ocean differed for each community (Figure 3). In Newport, many values were tied to the ability to recreate on the coast with family. In Seaside, the ocean was characterized as part of the core scenery of everyday life; not as a place to recreate, but as a place to be lived in and cared for. In Tillamook, participants valued coastal recreation as a way to connect with nature and felt a high degree of attachment to specific places along the Oregon coast. Even within value types shared across communities, we found nuance. For example, though the coast was always characterized as a place to build and enhance personal connections, in Newport those connections were with close family members, in Seaside connections were forged between community members and distant relatives, and in Tillamook participants described a mix of both. Therefore, though many of the implications we have drawn from this work are intended to be applied broadly, outreach efforts will likely be more successful if they are tailored to the specific community of interest.



Figure 3. Major groups of values related to Oregon's coast or ocean referenced by interview and focus group participants in Clatsop, Lincoln, and Tillamook Counties.

AWARENESS OF OCEAN CONSERVATION

Awareness of Oregon's system of marine reserves is low, but many members of these communities are interacting with other coastal conserved spaces.

Of the 58 individuals we interacted with across Lincoln, Clatsop and Tillamook Counties, only three were familiar with Oregon's system of marine reserves. However, most participating community members had interacted with coastal conserved spaces (e.g., Yaquina Head Outstanding Natural Area, Short Sand Beach, Cannon Beach, etc.) or marine education spaces (e.g., Oregon Coast Aquarium, Hatfield Visitor Center, Seaside Aquarium). In some cases, participants were not familiar with the regulations that govern these spaces or did not characterize them as related to ideas of ocean conservation; this tended to vary across communities. Existing visitation to such spaces may be harnessed as an opportunity to connect with Spanish-speaking Oregonians on ocean conservation.

On the north coast, there is high visitation to coastal spaces directly adjacent to Cape Falcon Marine Reserve, offering an opportunity to connect with community members on Oregon's marine reserves.

Several participating community members in Clatsop and Tillamook Counties referenced frequent visitation to Short Sand Beach, which is adjacent to Cape Falcon Marine Reserve. Bilingual staff and signage could be strategically placed at this location to enhance awareness of Oregon's system of marine reserves.

Familiarity with the regulations that govern coastal conserved spaces is variable.

Most participants in the Seaside focus group felt that they did not have a firm grasp on the regulations that govern local conserved spaces. In contrast, those in Tillamook stated that they felt very familiar with relevant regulations due to the presence of signage on several local beaches with strong visual elements. Though the Tillamook focus group was largely comprised of members of an English as a Second Language group, there was a similar amount of self-reported English-language proficiency between the two groups. Therefore, it seems unlikely that English-language proficiency is driving this difference. Familiarity with the regulations that govern coastal conserved spaces was not directly investigated in Newport, but several participants related conservation concepts to catch-size restrictions. They indicated that this information had been passed through the community by word-of-mouth.

Many community members have strong opinions on how Oregon's marine spaces should be managed, particularly related to the health and cleanliness of Oregon's beaches, but they are not engaged in marine management spaces.

Several participants across our three study sites mentioned doing their part to keep Oregon's beaches clean and healthy by recycling or collecting trash along the shore. These actions sometimes built into larger community efforts, with multiple community members in Newport indicating that they had either organized or participated in larger group clean-ups of local beaches. During the Tillamook and Seaside focus groups, several community members provided targeted suggestions for how marine debris should be managed, identifying beaches that need more trash cans and describing a management system in which the tourism industry funds efforts to keep Oregon's beaches clear of refuse. However, when asked if they would be willing to attend meetings to share ideas with management agencies or municipal government officials, participants generally stated that they felt that their perspectives would be ignored. These individuals did note, however, that they would be more willing to share their perspectives if a bilingual individual was present in these spaces.

OUTREACH & ENGAGEMENT

Outreach and engagement outcomes improve when community-serving organizations are involved in their design and implementation.

Throughout this project, community partners in Clatsop, Lincoln, and Tillamook Counties provided invaluable input on its design and implementation. These partners provided feedback on our research goals, interview guide, focus group protocol, and outreach strategy. They also facilitated the recruitment process, connecting the research team with community members through trusted channels of communication. In Newport and Coos Bay, we found that recruitment carried out without the assistance of community partners was entirely unsuccessful. In our focus groups and interviews, participants indicated that they were more likely to attend events affiliated with trusted community organizations and identified these organizations as trusted sources of information, alongside churches, schools, and, in certain cases, emergency responders who pass information through the community by word-of-mouth (Figure 4). Therefore, community-serving organizations serve as important long-term partners in the development of outreach and engagement events and for the dissemination of important information to community members.



Figure 4. Methods of information sharing mentioned by interview and focus group participants in Clatsop, Lincoln, and Tillamook Counties.

Productive working relationships are further supported through the alignment of outreach and engagement efforts with existing organizational goals and the compensation of community-serving organizations.

Compensation and alignment of research efforts with the goals of our community partners was necessary to form productive working relationships with community organizations on the north coast. While compensation was necessary and appreciated, our working relationship was also contingent on the development of a community engagement event focused on recreational shellfish harvesting that responded more directly to existing community priorities related to food security. Transparency in the goals of this project and our available funding allowed us to arrive at a collaboration that was mutually beneficial and built trust between the research team and our community partners.

Collaboration with other organizations, agencies, and researchers working with this community provides greater opportunities for outreach and engagement.

Working closely with other organizations, agencies, and researchers in conducting outreach and engagement offers several opportunities for mutual benefit. In fact, the opportunity to expand this research project to Clatsop and Tillamook Counties arose in part as the result of frequent collaboration between the research team and members of Cascadia CoPes Hub Team 3. Members of CoPes Hub Team 3 had already established trust with community organizations in these counties and facilitated connections between these organizations and the research team. As this project developed, the research team forged relationships with other researchers interested in working with Spanish-speaking communities along the coast (Table 1). Working together to attend community events enhances overall capacity for outreach and engagement. This also allows for alignment of outreach and engagement or research priorities between groups, which may serve to reduce community contact fatigue.

When engaging with communities for the first time, existing community groups offer a productive starting point for outreach and engagement.

In Lincoln County, OSU has an established presence and strong ties with local community organizations. Spanish-speaking community members in this area have been engaged far more frequently in university research and outreach efforts than those in Clatsop and Tillamook Counties. For that reason, our community partners advised us that it would be extremely difficult to engage with community members in a one-on-one interview format, as had been carried out in Lincoln County. Instead, we chose to pursue a focus group format to enhance the comfort of participating community members as they engaged with the research team. While the focus group format provides this benefit, it also presents a challenge: selecting a time when enough community members can participate and a location where they feel comfortable gathering. Utilizing existing community groups as the setting for our focus groups in Clatsop and Tillamook Counties successfully addressed this problem. These focus groups were opened to community members outside the traditional attendees, but attendance was largely made up of group members. Therefore, this seems to be a productive method for initial community engagement, but other strategies may be required to engage with community members outside these groups.

ACCESSIBLE PROGRAMMING

Participants are interested in learning more about ocean conservation and Oregon's system of marine reserves but feel that there is a lack of accessible Spanish-language materials on these topics.

In Clatsop, Tillamook, and Lincoln Counties, the vast majority of participants indicated that they were interested in learning more about ocean conservation, including Oregon's system of marine reserves. However, they identified a lack of Spanish-language resources and materials as a barrier to engaging in ocean conservation events and spaces. Specifically, participants referenced a lack of Spanish-language educational materials, information on regulations, information on opportunities for engagement (e.g., community events or opportunities for public comment), and signage on local beaches. Since the inception of this research project in 2023, several Spanish-language educational resources have been developed related to Oregon's marine reserves and their regulations. Several ODFW resources were also available in Spanish online well before this project began. However, participants were not aware of any of these existing Spanish-language resources. Thus, the development of additional Spanish-language resources may need to be paired with targeted efforts to build awareness around how these resources can be accessed.

There is a desire for marine programming and materials offered entirely in Spanish.

Participants expressed a specific desire to avoid programming offered in English with Spanish interpretation, especially in cases where organizations aim to gather community perspectives. In general, participants noted that they felt far more comfortable expressing themselves in their native language and felt far more confident that the nuances of their responses would be accurately captured if events were offered entirely in Spanish. In some instances, like the razor clam event, where the intention is to pass on information, Spanish-language interpretation may be suitable, however, the research team found that this strategy reduces the ability to make direct connections with community members. This strategy also runs the risk of important information being lost in translation, particularly if participants are uncomfortable asking clarifying questions through the translator.

Depending on the community of interest, other forms of interpretation may be necessary.

If the goal is to conduct outreach in the Newport area, availability of Mam-interpretation may be necessary to increase comprehension by Guatemalan community members. Connections with Spanish-to-Mam interpreters may be facilitated by Arcoíris Cultural Center. In Seaside or Tillamook, offering services only in Spanish may be more appropriate.

Programming that incorporates strong visual elements may be particularly successful.

Several participants in our interviews and focus groups indicated that they felt that they absorbed more information from educational events that incorporate strong visual elements or storytelling. A few individuals in Newport alluded to the power of film and animation to deliver strong conservation messages in a way that's accessible and memorable. In Tillamook and Seaside, others referenced the ability of images or other visual aids to successfully communicate complex ideas. The incorporation of visual elements may be particularly useful when the structure of the outreach event includes verbal components that last for longer than 10 minutes, as was the case with the razor clam harvesting event in Astoria. The research team did not prepare visual aids to support information delivered verbally. We received feedback from our partner organization that participants were having a hard time staying focused on the information we were trying to deliver and found that certain important points did not stick with our participants when it came time to start harvesting the razor clams. The provision of some sort of visual aid for each participant highlighting important harvesting regulations and brief tips and techniques for harvesting razor clams accompanied by images probably would have resolved some of these issues.

Future outreach events should address additional community-identified barriers associated with time, transportation, food, and childcare.

The most frequently identified barrier to participation in ocean conservation spaces was a lack of events and materials offered entirely in Spanish. However, participants across study locations also identified other important barriers to participation including time, transportation, food, and childcare (Figure 5). Most participants indicated that they worked irregular schedules, which impacts their ability to attend meetings and events. Our community partners provided invaluable information on when certain groups of community members tend to be available (e.g., individuals working in seafood processing, stay-at-home parents, etc.). It will be critical to work closely with community partners to ensure that outreach events are designed to accommodate these schedules. Events that are not family-friendly were also identified as a barrier by many participating community members. To allow these individuals to participate, events should either offer activities appealing to children or provide an option for free childcare if children cannot participate. Finally, though transportation was rarely mentioned in the context of our interviews and focus groups, the research team often had to address this barrier to facilitate participation. In some cases, the research team had to pick up interview participants from their homes and, in preparing for the razor clam event, our community partner had to organize carpools to ensure that everyone was able to make it to the coast for the harvesting portion of the event. Participation may be enhanced through the provision of funds for transportation.



Figure 3. Major categories of barriers to participation in ocean conservation spaces mentioned by interview and focus group participants in Clatsop, Lincoln, and Tillamook Counties.

Programming that addresses community-identified barriers and aligns with identified community values and priorities is likely to see the greatest amount of participation.

Addressing community-identified barriers certainly increased participant turnout in each of our study locations, in part because it demonstrated our commitment to accessible programming. This commitment made our community partners more willing to support and advertise our research efforts, leveraging existing trust with community members to secure high participant turnout. Participating community members from the Seaside and Tillamook focus groups indicated that the event's affiliation with a trusted community organization factored heavily into their decision to attend. In Newport, we have several interview participants state that they chose to speak with us largely because a trusted community leader had told them it was a good opportunity. Affiliation with a trusted community organization is necessary for successful outreach, but alignment with existing community or values may further increase turnout. The Astoria razor clam event, for example, aligned with existing community priorities related to food security. While community partners had to put in serious legwork to recruit enough participants for our interviews and focus groups, this event generated so much interest that participation had to be capped at 22 adults and their children. As is clear through the success of our research in Newport, Seaside, and Tillamook, outreach or engagement that does not directly align with community values or priorities is still possible, but compensation or some other form of incentive may be required to ensure sufficient participation.

REFERENCES

Carter, E. D., B. Silva, G. Guzmán (2013). Migration, Acculturation, and Environmental Values: The Case of Mexican Immigrants in Central Iowa. *Ann. Assoc. Am. Geogr.* 103:129-147. <https://doi.org/10.1080/00045608.2012.696231>.

Epperly, H., T. Swearingen, J. Dalaba (2017a). *2016 Visitor Intercept Survey: Coastal Visitor Awareness*. Oregon Department of Fish and Wildlife, Marine Resources Program. <https://oregonmarinereserves.com/content/uploads/2017/03/Visitor-Intercept-2016-Report.pdf>.

Epperly, H., T. Swearingen, H. Polis (2017b). *2010, 2011, 2014, and 2015 Business Surveys: Redfish Rocks, Cape Perpetua, Otter Rock, Cascade Head, and Cape Falcon Marine Reserves*. Oregon Department of Fish and Wildlife, Marine Resources Program. [https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?pn=ViewFile&att=ODFW%2FODFW_42737_2_Epperly.2017.+2010-2015+Business+Surveys+\(ODFW\).pdf](https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?pn=ViewFile&att=ODFW%2FODFW_42737_2_Epperly.2017.+2010-2015+Business+Surveys+(ODFW).pdf).

Fox, H., T. Swearingen, A. Molina, C. Kennedy (2022a). Oregon recreational fishers' knowledge, support, and perceived impacts of marine reserves. *Ocean Coast. Manag.* 225:e106241. <https://doi.org/10.1016/j.ocecoaman.2022.106241>.

Fox, H., T. Swearingen, C. Kennedy, A. Molina (2022b). *Oregon Marine Reserves 2021 Statewide Recreational Fisher Survey*. Oregon Department of Fish and Wildlife, Marine Resources Program. https://drive.google.com/file/d/1GpgARf7r8DA2aM_nUKzPoHFSC8mXmRIV/view.

French, J., H. Fox, T. Swearingen (2022). *A review of business surveys (2010 to 2021) from communities proximate to Oregon Marine Reserves*. Oregon Department of Fish and Wildlife, Marine Resources Program. https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?pn=ViewFile&att=ODFW%2FODFW_42738_2_French.2021.Review+of+Business+Surveys+2010-2021.pdf.

Manfredo, M. J., J. T. Bruskotter, T. L. Teel, D. Fulton, S. H. Schwartz, R. Arlinghaus, S. Oishi, A. K. Uskul, K. Redford, S. Kitayama, L. Sullivan (2017). Why social values cannot be changed for the sake of conservation. *Conserv. Biol.* 31(4):772-780. <https://doi.org/10.1111/cobi.12855>.

Oregon Department of Fish & Wildlife (2022). *Marine Reserves Program Synthesis Report: 2009-2021*. ODFW. <https://oregonmarinereserves.com/2022/02/24/synthesis-report/>.

Roady, S. E. (2015). The Public Trust Doctrine. In D. C. Baur, T. Eichenberg, G. H. Snusz, M. Sutton (Eds.), *Ocean and Coastal Law and Policy* (pp. 43-74. American Bar Association.

Swearingen, T., and H. Epperly (2016). *2015 Visitor Intercept Survey: Cape Falcon Marine Reserve*. Oregon Department of Fish and Wildlife, Marine Resources Program. <https://oregonmarinereserves.com/content/uploads/2016/12/Visitor-Intercept-2015-Report.pdf>.

Swearingen, T., and H. Fox (2022). Synthesis Report Appendix: A Summary of Marine Reserves Socioeconomic Research 2010 – 2021. Oregon Department of Fish and Wildlife. https://drive.google.com/file/d/1pkEBDaxm_OVP1RQuPPo3KFGxnmqPPIbA/view.

Swearingen, T., H. Epperly, L. Kazloff (2019). *2014 Visitor Intercept Survey: Cape Perpetua, Otter Rock, and Cascade Head Marine Reserves*. Oregon Department of Fish and Wildlife, Marine Resources Program. <https://drive.google.com/file/d/1822wzXPCdeeltAVOMHrhJO1tMjAW9ng3/view>.

Swearingen, T., H. Epperly, H. Polis (2017). *2012-13 Visitor Intercept Survey: Cape Perpetua, Otter Rock, and Cascade Head Marine Reserves*. Oregon Department of Fish and Wildlife, Marine Resources Program. <https://oregonmarinereserves.com/content/uploads/2017/03/Visitor-Intercept-2013-Report.pdf>.

United States **Census** Bureau (2021b). *Racial and Ethnic Diversity in the United States: 2010 Census and 2020 Census*. US Census Bureau. <https://www.census.gov/library/visualizations/interactive/racial-and-ethnic-diversity-in-the-united-states-2010-and-2020-census.html>.