From Process to Practice: Lessons Learned on Public Engagement and Adaptive Management from Oregon's Marine Reserves Community Teams Process

Ava Vaughan, 2026 Oregon Sea Grant Summer Scholar

August 27th, 2026

Report to ODFW Nearshore Ecology Program's Oregon Marine Reserves team

Oregon Marine Reserves Community Teams Process Review

Executive Summary

Oregon's five marine reserves emerged from an extensive, community-driven public process that began in 2008 with 19 proposed sites and narrowed to six community team evaluations. Passed in 2024, House Bill (HB) 4132 mandates that the Oregon Department of Fish and Wildlife (ODFW) develop an Adaptive Management Plan (AMP) that includes a public engagement process for potential changes in management decisions. In the intervening 12-15 years since the reserves were established, there has been significant staff turnover. The passage of HB4132 coupled with staff changes created an opportunity to conduct a retrospective and prospective review of the community teams process.

This 10-week project, led by Oregon Sea Grant (ORSG) Summer Scholar Ava Vaughan, set out to (1) document the public processes that created Oregon's Marine Reserves, with a focus on Cape Perpetua, and (2) recommend pathways for improving public engagement and adaptive management going forward. The work combined a historical document review, an academic literature review, and ten qualitative interviews consisting of two retired agency staff and eight former community team members across all six sites.

Limitations of the report include a small interview sample weighted toward Cape Perpetua. In addition to a historical review, the paper provides recommendations and outlines eight next steps for a future Sea Grant Fellow or Human Dimensions (HD) Team Member to carry the work forward.

Key Findings

- The six community team processes (Otter Rock, Redfish Rocks, Cascade Head, Cape Perpetua, Cape Falcon, Cape Arago) varied substantially in agency oversight, timeline, representation, and facilitation
- Interviewees valued the process's use of local knowledge and consensus-based decision-making, but pointed to real constraints: limited staffing, data gaps, short timelines, and competing priorities
- Trust, informal relationship-building outside formal meetings, and pre-existing personal networks were repeatedly cited as more decisive to reaching consensus than the formal meeting structure itself
- Tribal engagement was consistently identified as a planning gap by both agency staff and community members alike
- “Adaptive management” itself lacks a shared definition among stakeholders, leaving open questions about what should prompt management changes and what an appropriate process would look like
- Staff turnover, limited community capacity for engagement, and the communication of Marine Reserves benefits and impacts remain challenges for community trust

Core Recommendations

- **Maintain relationships with Marine Reserve communities between formal management decisions.** Conduct periodic community listening sessions and informal

outreach; create clear channels for community questions, concerns, and information needs to reach MRP staff and agency leadership; continue communicating Marine Reserve research; and engage communities through existing fishing-industry networks, local businesses, community events, and other trusted spaces.

- **Strengthen the foundation for future Community Team Processes.** Expand recruitment to include younger community members and people with significant economic, cultural, and place-based ties to affected communities; reduce participation barriers through tools such as compensation, travel assistance, childcare, translation, virtual participation, and seasonally appropriate meeting schedules; continue tribal relationship-building to inform appropriate future engagement; improve staff continuity and retention in coastal communities; and centralize historical and engagement records to preserve institutional knowledge.
- **Define clear adaptive management and public engagement criteria.** Identify the ecological, social, economic, and community conditions that could prompt consideration of a management change; establish criteria for determining when a formal Community Team Process is warranted versus other forms of engagement; and clarify how communities should be involved as management questions emerge.

Acronyms and Abbreviations

Acronym	Definition
AMP	Adaptive Management Plan
CT	Community Team
CTCLUSI	Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians
CTP	Community Team Process
DLCD	Department of Land Conservation and Development
DSL	Department of State Lands
EO	Executive Order
HB	House Bill

HD	Human Dimensions
MLPA	Marine Life Protection Act
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MR	Marine Reserve
MRP	Marine Resource Program
NOAA	National Oceanic and Atmospheric Administration
NSAT	Nearshore Action Team
OAR	Oregon Administrative Rules
ODFW	Oregon Department of Fish and Wildlife
OPAC	Ocean Policy Advisory Council
OPRD	Oregon Parks and Recreation Department
ORSG	Oregon Sea Grant
OSP	Oregon State Police
OSU	Oregon State University
POORT	Port Orford Ocean Resources Team
PTD	Public Trust Doctrine
ROV	Remotely Operated Vehicle

RRCT	Redfish Rocks Community Team
SB	Senate Bill
SBAX	South Beach Annex
STAC	Scientific and Technical Advisory Committee

Introduction

The Oregon Marine Reserves (MRs) offer a unique glimpse into the realities of coastal management decisions and their implications for the communities they affect. Winnowing nineteen community proposals to six recommendations and eventually five designated marine reserve sites required immense sacrifice, time, and coordination from a diverse range of stakeholders and agency staff. Now, 18 years after the first community proposals, ODFW is reflecting on lessons learned from the many meetings, teams, and processes that established the system of reserves we have today.

The passage of HB 4132 in 2024 mandated ODFW to formalize an Adaptive Management Plan (AMP) for implementing and evaluating ecological and social research, monitoring, outreach, and engagement. While substantial effort has been invested in understanding and defining adaptive management, a gap exists in determining the scope of change and extent of public process and community involvement that should be involved in future management decisions. The original community teams process can provide insight into best practices moving forward. However, departmental and agency turnover, coupled with a retrospective gap of twelve to fifteen years, has led to a loss of institutional knowledge about the original community teams processes and marine reserve formation.

This report and 10-week project, completed by ORSG Summer Scholar Ava Vaughan, seeks to:

1. Understand and document the different public processes involved in the creation of Oregon's Marine Reserves, with specific focus on Cape Perpetua.
2. Determine and recommend potential pathways for improved public engagement and adaptive management.

This report includes findings from a historical document review, literature review, and a set of qualitative interviews with past community team members and agency representatives. The final recommendations can inform ODFW's AMP and future public processes. Next steps are included to facilitate the continuation of this project for a future ORSG Fellow or Human Dimensions (HD) Team Member.

Methodology

I. Historical Document Review

The first month of the project was spent reading, annotating, and synthesizing past documentation surrounding Oregon Marine Reserves. Key sources of information included the 2022 Synthesis Report (ODFW, 2022), 2012 Community Teams Process Report (Conway and Bird, 2012), 2022 University Assessment Report (Hopf et al., 2022), initial marine reserve site proposals, legislation, and planning process documents (meeting minutes, agendas, supporting documents, written testimonials, size and spacing workshop, etc.) from community teams, prioritizing documentation from Cape Perpetua, Cape Falcon and Cascade Head .

II. Literature Review

The first month also included a review of relevant research articles and academic papers on marine resource policy, public engagement, the public trust doctrine (PTD), marine protected areas (MPAs), and marine reserves. These papers provided valuable background on the science behind marine reserves and protected areas. They also presented new frameworks for engagement strategies, serving as analogous case studies to complement the Oregon process.

Papers were sourced from the Oregon State University (OSU) library database using the search terms:

- marine resource management AND public process AND conservation
- marine reserves AND community engagement AND public process
- marine conservation AND public process AND stakeholder engagement

Other academic papers were sourced indirectly from recommendations given during informal interviews with researchers, agency staff, and community team members.

III. Semi-structured Interviews

The latter month of the project focused on two distinct sets of interviews: administrative knowledge holders and former community team members. Interviews averaged an hour, typically lasting fifty to ninety minutes. Interviewees were recruited initially based on level of involvement with community teams and agency relationships; from there, a snowball sampling method was utilized to reach a broader range of representatives. Initial contact was made via email or phone call, with a set of questions sent one to two days ahead of time. Interviews were conducted both virtually and in person, with some participants meeting in informal locations or in ODFW meeting spaces, and others meeting over Microsoft Teams or by phone.

Twelve interviews were recorded, with audio transcripts generated either via Microsoft Teams or Apple recording and transcription software. After the transcripts were generated, they underwent manual editing to ensure clarity and accuracy. Of the 12 interviews conducted, ten were analyzed. Due to time constraints, two interview transcripts were not manually reviewed, rendering their further analysis inappropriate. The final analyzed interviews included two administrative knowledge holders and eight former Community Team participants.

Administrative knowledge holders were asked questions focusing on Community Team Process (CTP) recruitment, variance between CTPs, public engagement, and adaptive management. Community Team members were asked questions regarding general CTP, consensus, community outreach, and adaptive management. Four administrative interviews were conducted: two with

former ODFW staff, one with a current OPRD partner, and one with former OPAC leadership. Due to time constraints, only two of those interviews were analyzed. Eight community team member interviews were conducted with representation from each community team.

- Cape Perpetua – 5 (Science, conservation, commercial fishing, recreational fishing, local government)
- Cascade Head – 1 (Local government)
- Cape Falcon – 1 (Conservation)
- Otter Rock – 1 (Commercial fishing)
- Redfish Rocks – 1 (Conservation)
- Cape Arago – 1 (Science)

IV. Thematic Analysis

The final two weeks of the project involved analyzing themes from the eight official interviews using a phenomenological coding method (Creswell & Poth, 2018) and the Dedoose Version 10 software (Dedoose, 2026). Initial base codes were formed using a set of questions informed by the project goals:

- What went well in the initial CTP?
- What could be improved from the initial CTP?
- Who was involved in the CTP?
- What voices were represented in the CTP?
- Were any voices prioritized in the overall CTP?
- What did tribal engagement look like for the CTP?
- What might adaptive management look like in the context of marine reserves?

Base codes considered a broad array of factors including CTP strengths, CTP challenges, representation and involvement, community teams' differences, consensus, influence, adaptive management definitions, and the future of Oregon marine reserves.

A list of key themes and ideas were inductively identified through the first round of coding using the initial base codes. These were iteratively sorted using sticky notes to form secondary codes, including procedural, societal, and structural challenges and strengths. A second round of coding was conducted using these secondary codes. Analysis of these codes was considered alongside takeaways from the document review to inform key recommendations.

Findings

I. Historical Document Review

The Oregon Marine Reserves originated from a long public process characterized by high-levels of community involvement and participation. In 2008, the Oregon Governor's office solicited community proposals, resulting in 20 sites for evaluation (see Figure A). After evaluation by the Oregon Ocean Policy Advisory Committee's (OPAC) Scientific Technical Advisory Committee (STAC), nine sites were considered for further evaluation. From these nine sites, six moved forward to a Community Teams Process (ODFW, 2022).

These processes varied substantially by agency involvement, structure, timing, and purpose. The two pilot sites, Otter Rock and Redfish Rocks, had preexisting grassroots community teams that played large roles in the original proposal process, but functioned primarily as steering committees to implement OPAC's recommendation .

The remaining four sites, Cape Falcon, Cascade Head, Cape Perpetua, and Cape Arago, were assigned community teams to evaluate OPAC's proposal based on criteria or "sideboards" prescribed in Executive Order 08-07: sites, individually or collectively, are to be large enough to allow scientific evaluation of ecological benefits, but small enough to avoid significant adverse economic or social impacts to ocean users and coastal communities (Office of the Governor, State of Oregon, 2008).

Cape Falcon, Cascade Head, and Cape Perpetua followed similar processes, with 35 meetings held across the three teams during 2010. Recruitment was solicited via an application process overseen by ODFW and the Coastal Caucus (Bird and Conway, 2022). Snowball recruitment and word of mouth were primary means of distributing the application.

Each team had 16 voting representatives and 16 non-voting alternates from eight legislatively mandated interest groups: local government, recreational fishing industry, commercial fishing industry, non-fishing industry, recreationalists, conservation, coastal watershed councils, and relevant marine and avian scientists. All three teams elected co-chairs to work with a third-party facilitator, ODFW, and Sea Grant staff in setting meeting agendas. Team composition included members of a variety of communities that could be affected by a marine reserve (ODFW, 2022).

- Cape Falcon Team – Clatsop and Tillamook Counties. Astoria, Cannon Beach, Arch Cape, Manzanita, Nehalem, Garibaldi, Bay City, Tillamook, Cloverdale, Oceanside, Netarts, Portland, Corvallis.
- Cascade Head Team – Tillamook and Lincoln Counties. Garibaldi, Tillamook, Hebo, Pacific City, Neskowin, Otis, Lincoln City, Gleneden Beach, Otter Rock, Siletz, Newport, Yachats, Portland, Vancouver (WA).
- Cape Perpetua Team – Lincoln and Lane Counties. Otter Rock, Newport, Toledo, Eddyville, Corvallis, Seal Rock, Waldport, Yachats, Florence, Mapleton, Walton, Eugene.

January and February were focused on defining OPAC sideboards, establishing a Community Team Charter, appointing co-chairs, and establishing background information on the marine reserve sites. In March through April, the group agreed on ecological, economic, and social information data needs and specified final decision criteria. From May through June, both staff and Community Team (CT) members gathered information, and from July through August, each CT developed scenarios for evaluation by the OPAC STAC. After STAC input, community teams voted on final recommendations, which were forwarded to ODFW in November (Bird and Conway, 2022).

The Cape Falcon, Cascade Head, and Cape Perpetua teams ultimately recommended Marine Reserves, with Cascade Head and Cape Perpetua modifying the official OPAC boundaries in pursuit of consensus. Designation of a marine reserve at Cape Arago was not supported.

The Cape Arago team process varied substantially from the other three sites. The Port of Coos Bay led the process, with limited ODFW oversight; representation, process, and timelines all

differed from the other 2010 CTs. The process took 18 months and resulted in a 23:11 vote against a marine reserve. There were 39 listed participants on the "Marine Reserves Recommendation Committee." One interview was conducted with a member of this committee, but a more in-depth review of Cape Arago was not within this project's scope. Several valuable documents provide context for this process, including the Cape Arago Marine Reserve Recommendation Committee Dissenting Report (2011a) and the Cape Arago Marine Reserve Recommendation Committee Final Recommendation (2011b).

Past projects and research have evaluated the efficacy of various Marine Reserve public processes. The 2022 University Assessment of Oregon Marine Reserves reports that there is "currently not enough information to assess whether this approach succeeded in actually incorporating community interests as it is unclear that those who participated were able to represent key community interests. Moreover, participation does not always equate to inclusion" (Hopf et. al., 2022).

In 2012, ODFW contracted researchers at OSU to conduct a Rapid Evaluation of the 2010 Marine Reserve Community Teams Process using a web-based survey methodology. The report reflected both positive and negative feelings about the process and proposed recommendations for future processes. Overall sentiment was positive about the process and the knowledge generated. However, respondents expressed notable frustration with the clarity of decision options, representation, and influence (Bird and Conway, 2022). Given the targeted nature of data collection, substantial gaps remained in recruitment transparency, participation equity, site-level management differences, outreach consistency, and public comment accessibility. This project used the report's findings as background and sought to investigate these unexplored topics in further depth.

II. Thematic Analysis

Several themes emerged across interviews regarding the broader context surrounding Marine Reserve formation, the strengths and limitations of the CTP, stakeholder representation, differences among site processes, consensus-building, sources of influence, adaptive management, and the future of Marine Reserves.

a. External, Informal, and Contextual Factors

Interviewees emphasized that the CTP did not occur in isolation; broader political, economic, social, and historical ***context strongly shaped perceptions of and willingness to engage*** with Marine Reserve formation. California's marine conservation process, spurred by the Marine Life Protection Act (MLPA), was particularly influential, contributing to a perception among Oregon fishing communities that some form of marine reserve was inevitable and helping drive early, often fear-based, community proposals and organizing. Generational ties to fishing grounds and coastal places, along with high levels of community dependence on natural resources and limited economic diversification, also shaped attitudes toward new fishing restrictions. Broader economic conditions, including inflation, recession, and declining access to fishing markets, further affected perceptions of potential management impacts.

Trust and relationships with ODFW and its Marine Resource Program (MRP) leadership were similarly important, as was scientists' ability to communicate the goals, evidence, and limitations of Marine Reserves in ways communities perceived as accessible and unbiased. Interviewees

also identified uncertainty surrounding appropriate pathways for tribal involvement as a barrier to meaningful engagement.

At the same time, informal conversations occurring before, between, and after formal meetings were described as critical to ***relationship-building, knowledge exchange, and ultimately consensus.*** The process was also deeply affected by *personal sacrifice* from participants, both those willing to volunteer their time and, particularly, those whose livelihoods and history were deeply imbued with the reserve sites.

b. Representation and Involvement

The CTP involved a ***broad network of governmental, scientific, environmental, fishing, business, and community actors***. Key institutional participants included ODFW, OPAC, STAC, the Coastal Caucus, the Governor's Office, and agency partners such as the Oregon Parks and Recreation Department (ORPD), Department of State Lands (DSL), and Department of Land Conservation and Development (DLCD). Environmental organizations, including Surfrider, Bird Alliance, Audubon, Our Ocean, and The Nature Conservancy, also contributed to the process, alongside fishing representatives from commodity commissions, commercial fishing, sport fishing, and charter fishing communities. Local business owners provided additional perspectives on potential economic impacts. However, interviewees and past document review highlighted an important gap between the breadth of organizations involved and the ***limited involvement of coastal federally recognized tribes***, including the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians (CTCLUSI), the Coquille Indian Tribe, the Confederated Tribe of Siletz Indians, the Cow Creek Band of Umpqua Tribe of Indians, and the Confederated Tribes of Grand Ronde. The absence of formal tribal consultation was viewed as a limitation in the overall representation of coastal interests and rights.

c. Differences Between Community Teams

Although the 2010 Cape Falcon, Cascade Head, and Cape Perpetua CTP followed broadly similar decision-making patterns, interviewees identified meaningful differences between these processes and the Cape Arago process that played important roles in the final recommendations and perceptions of procedural fairness.

The 2010 CTP operated under greater ODFW oversight, while the Cape Arago process involved substantially less agency participation and was more directly shaped by local political leadership. The 2010 teams also operated on a shorter, more standardized timeline and included legislatively specified interest groups, whereas the Cape Arago process incorporated greater citizen representation, was more heavily weighted toward fishing interests, and included some tribal engagement without necessarily treating tribes as distinct rights-holders. Facilitation and leadership also differed: the 2010 teams used third-party facilitators and co-chairs, while the Cape Arago process was directed primarily by local political leadership.

Both CT and administrative interviewees described variation in willingness to engage across teams, with Cape Arago and Cape Falcon generally characterized as more contentious than Cape Perpetua and Cascade Head.

These ***differences greatly influenced perceptions of fairness and efficacy of the process*****;** the dissenting opinion in Cape Arago expressed the facilitation and lack of opportunities for public input introduced excessive bias into the process. Interviewees involved with the Cape Falcon CT

also voiced frustration with the gridlock from opposing perspectives. While Cape Perpetua and Cascade Head were also contentious, with at least one dissenting vote in each team, there was ***general satisfaction with representation and leadership that resulted in more positive feelings associated with the process.***

d. Consensus

Consensus emerged as one of the most significant and complex themes across interviews. Rather than resulting from an absence of disagreement, ***consensus was often achieved through contention, negotiation, and compromise.*** Formal meetings provided an important venue for resolving disagreements, but interviewees repeatedly emphasized tha***t informal relationships and conversations outside the meeting room were equally important for building trust, exchanging information, and identifying areas of shared interest.*** Consensus was generally compromise-oriented: participants did not necessarily leave fully satisfied with the outcome, but instead sought solutions that would limit impacts while protecting the most important interests of different groups. In several cases, achieving consensus required substantial personal sacrifices from individual participants. ***Shared values and broader goals,*** including a desire to protect coastal communities, livelihoods, and marine ecosystems, helped provide a foundation for resolving otherwise significant disagreements.

e. Influence

Throughout the interview process, questions were raised regarding the role key individuals or groups had on the CTP and its outcomes. ***ODFW and MRP leadership*** played an important role in shaping both the structure of the process and participants' perceptions of agency credibility. Organized interests, particularly environmental organizations and fishing commodity commissions, also influenced participation and community sentiment through outreach, advocacy, and mobilization. At the table, ***co-chairs tended to have the most individual sway, varying on their leadership abilities and credibility on a site-to-site basis.*** Each vote on the team was given equal weight. Some community team members appreciated this equal distribution of influence, while others reflected concerns of underrepresenting or undervaluing voices from important local interest groups.

f. CTP Strengths

Structural

Interviewees identified several structural characteristics that supported the CTP. The process ***provided opportunities for public comment and written testimony, used state funding rather than relying on private interests, and established representation and agency involvement through legislation***. The use of alternate representatives helped mitigate attendance attrition, while efforts to rotate meeting locations and consider travel stipends demonstrated attention to participant accessibility. Interviewees also viewed the ***continuation of Community Team "friends' groups"*** after the formal CTP as evidence of lasting institutional and community relationships.

Societal

The CTP generated ***substantial community outreach and brought local knowledge, lived experience, and place-based perspectives directly into decision-making.*** The 2021 Synthesis

Report estimates that community team members collectively put in over 25,000 volunteer hours during this time period (ODFW, 2022). Many volunteer hours were spent conducting the eight hours of outreach a month required in the CT application process. Interviewees emphasized the ***value of bringing diverse perspectives, including fishing, conservation, scientific, and local knowledge, to the same table***. Community Teams also served as important spaces for ***relationship-building and gathering within relatively isolated coastal communities*****,** creating opportunities for participants to develop shared understanding beyond the immediate policy question.

Procedural

Procedurally, the process succeeded in bringing scientific expertise and increased agency involvement and support to coastal communities. Interviewees also highlighted the process as a means of ***knowledge co-production and exchange among groups that did not always interact through traditional decision-making channels*****.** The ***inclusion of local knowledge and emphasis on representation from the communities most affected*** was also voiced as a procedural strength. This firm understanding of place and community allowed participants to identify strategic reserve boundaries that could meet ecological objectives while minimizing impacts on coastal users. The collaborative nature of the process, coupled with the emphasis on local knowledge, ***resulted in increased understanding across interest groups and reduced the socioeconomic footprint of the reserves, helping to foster greater satisfaction with the process and the science and purpose of the reserves.***

g. CTP Challenges

Structural

Interviewees identified several structural constraints that limited the CTP's effectiveness. ODFW operated with ***limited staffing and funding***, putting high burdens on a select group of individuals tasked with facilitating the process. The ***limited availability of Oregon-specific cold-water data*** and the early development of technologies such as remotely operated vehicle (ROV) surveys and bathymetry also constrained the information available to participants. The process also ***lacked many of the communication tools*** that would now facilitate broader participation, including video conferencing, online polling, and automated translation services. ***Recruiting specific interest groups***, particularly scientists, in small coastal communities was difficult. Additionally, ***complex pre-existing regulations and reserve designations*** sometimes complicated both rule-making and public understanding. Finally, the ***limited timeline*** placed substantial constraints on public engagement and the collection of the ecological and socioeconomic data needs that were identified by the community teams as necessary for making a final decision.

Societal

Societal challenges centered largely on ***trust, competing interests, representation, and perceptions of fairness***. Three interviewees representing local government, recreational fishing, and commercial fishing described a persistent perception that there was not an option for "no Marine Reserves." Additionally, ***knowledge gaps*** regarding the distinction between Marine Reserves and MPAs, ODFW regulations, and management efficacy contributed to misunderstanding. Conflicting interests, unwillingness to compromise, and occasional verbal conflict or aggressive engagement further complicated discussions. ***Attendance and participant***

attrition (for causes unknown) affected continuity but was somewhat abated by the presence of alternates. There were also potential issues of ***representation across identities and perspectives,*** reflected by gender imbalances and relative distribution of affiliations at the tables. Interviewees also raised concerns about whether the ***equal-weight voting structure*** adequately reflected differences in livelihood dependence or the economic consequences of decisions.

Procedural

Across community teams, there was a noted variation and ***lack of clarity around the role of co-chairs as facilitators.*** Several interviewees mentioned a debate over whether co-chairs or hired third party facilitators should lead meetings. This led to conversations over fairness and the ability of co-chairs to facilitate such a complicated process; after several meetings, the role was restored to the third-party facilitator.

Other procedural difficulties included ***navigating competing schedules***, especially during times of high fishing demand. Meetings held in the evenings were often at odds with commercial fishing schedules, making their participation more challenging.

h. Adaptive Management Definitions

"Adaptive management" remains an ***important but inconsistently defined concept among participants and stakeholders.*** While there was broad support for the principle that Marine Reserve management should respond to new information and changing conditions, interviewees differed in how they understood what adaptation should entail, who should initiate it, and what evidence or criteria should necessitate a management change. This understanding often was ***influenced by an interviewee's familiarity of policy, agency protocol, and scientific background.*** Those with prior experience working for ODFW or OPAC tended to have more specific thoughts and questions regarding the language used in HB 4132 and jurisdiction of ODFW to enact potential changes. Others from both academia and fishing communities, approached the subject from more of a scientific lens, highlighting the importance of monitoring data, design, and methodology.

This lack of a shared definition and ambiguity around Marine Reserves' next steps signals ***a need for legislative clarification, deeper agency planning, and increased community communication*** regarding the future of adaptive management.

i. Future of Marine Reserves

Specific Marine Reserve Requests

Interviewees offered several specific recommendations for the future management and development of Marine Reserves. These included allowing more interaction with the space from fishing communities for uses such as ***testing pop-up gear.*** Other conservation groups suggested ***pursuing active restoration,*** particularly regarding kelp production and urchin culling. A large proportion of the scientific and conservation community advocated for the consideration of ***expanded network connectivity*** to increase the Marine Reserves ecological benefits. A participant from the conservation community also recommended clearer distinctions between Marine Reserves and other forms of MPAs, including ***more specific titles or names*** to acknowledge the value and distinction between the two management tools. The hope of this request was to mimic the feeling of reverence often associated with designated sites such as the

National Park System. Across all interest groups, there was an expectation for the agency to modify management in response to new data and established goals based on a formal, public facing process.

Ongoing Challenges

Several ongoing challenges were identified as important considerations for the future of the Marine Reserves. Participants expressed concern about ***"Marine Reserve fatigue"*** among community members who have already devoted substantial time and energy to the process. Continued ***economic challenges and limited fishing markets*** may also shape community perceptions of Marine Reserves. ***Staff turnover*** presents an additional challenge by contributing to the loss of institutional knowledge, disrupting relationships and trust, and interrupting project continuity. Interviewees also identified ***confusion around reserve boundaries, limited signage and public awareness,*** and ***difficulty accounting for both historical and ongoing effort shift*** as ongoing challenges. Finally, participants identified persistent challenges in ***defining clear criteria for adaptive management*** and ***demonstrating the positive economic impacts*** of Marine Reserves.

CTP Process Recommendations

Interviewees generally supported ***continuing with the "Oregon Way***" approach to public engagement and consensus-building while modifying the process to address known barriers to participation. Recommendations included ***involving respected community members, using third-party facilitators, creating pathways for participation that do not require attending formal meetings, and holding meetings during winter*** when community and social gatherings experience a downturn. Participants also suggested ***creating a "sandbox" mechanism*** through which concerns outside the scope of Marine Reserves could be acknowledged and directed toward appropriate agencies or processes. ***Smaller discussion panels*** were identified as another potential tool for facilitating more focused dialogue. Across these recommendations, interviewees emphasized that ***relationship-building should continue outside formal Community Team processes*** rather than beginning and ending with a specific management decision.

Human Dimensions Team and Agency Recommendations

Interviewees also identified several opportunities for ODFW/MRP to strengthen ongoing community engagement and knowledge exchange. These included ***expanding opportunities for knowledge co-production, such as fisherman roundtables;*** creating clearer ***channels for public feedback to reach MRP and agency leadership***; increasing ***economic monitoring and communication of research findings;*** and expanding ***community outreach around marine science and local history.*** Participants suggested ***meeting people in spaces they already frequent,*** including targeted outreach to fishing communities and local businesses, and specifically identified locations such as Englund Marine and Northern Oregon charter-boat communities as potential outreach venues. Additional recommendations included ***improving signage and messaging around reserve boundaries, acknowledging the contributions and sacrifices of Community Team participants, increasing the visibility of social science research, and institutionalizing Community Team knowledge*** within coastal communities. In particular, interviewees emphasized the value of ***documenting and communicating the history of how collaboration was achieved through conflict and compromise.***

Next Steps

The findings from this assessment suggest three primary areas for continued work: maintaining relationships with Marine Reserve communities, continuing to build the institutional and procedural foundation for future Community Team Processes, and establishing clearer criteria for adaptive management.

I. Relationship Building

1. **Establish ongoing community listening and engagement between formal management processes.** Conduct periodic listening sessions and informal outreach with Marine Reserve communities, past Community Team participants, local businesses, fishing communities, and other community partners that do not involve specific decision making.
2. **Continue active communication of Marine Reserves research.** Continue soliciting information needs from communities and communicating research as it becomes available and future management questions develop.
3. **Create clear pathways for community feedback to reach agency leadership.** Establish accessible mechanisms for community members to communicate questions, concerns, and information needs to MRP staff and agency leadership outside of formal Community Team processes.
4. **Meet communities where they are.** Use existing community events, fishing-industry networks, local businesses, and other trusted spaces as opportunities for ODFW/MRP staff to interact with community members and better understand local concerns and information needs.
5. **Broaden future community team participant recruitment.** Direct attention towards younger community members and individuals with significant economic, cultural, or place-based ties to communities affected by Marine Reserves.

II. Continuation of This Project

6. **Continue the interview series.** Follow the snowball sampling contacts and prioritize individuals who can fill gaps in representation across the six Community Teams.
7. **Expand qualitative analysis framework.** Refine the initial coding framework in Dedoose and conduct further analytics once more data has been compiled.
8. **Evaluate options to increase participation accessibility.** Consider options such as compensation, travel assistance, childcare, translation, virtual participation, alternate representatives, and seasonally appropriate meeting schedules.
9. **Continue tribal relationship-building and engagement efforts.** Work with tribal governments and agency representatives to determine appropriate engagement approaches for adaptive management decisions.

10. **Develop strategies to support staff continuity and retention in coastal communities.** This is particularly important for positions responsible for maintaining Marine Reserve relationships and institutional knowledge.
11. **Review analogous public processes.** This will help identify effective engagement models, participation strategies, and approaches to adaptive management that could be applied to future Marine Reserve decisions.
12. **Develop a more streamlined data-management system.** Focus on consolidating historical documents, engagement records, socioeconomic information, and other relevant Marine Reserve materials in a centralized location to avoid duplication and ensure smoother onboarding for new team members.

III. Define Adaptive Management Criteria

13. **Define conditions that inform potential management adjustments through an adaptive management approach**. Clarify the types of management changes that require public engagement and determine when a formal CTP would be appropriate versus other engagement approaches.

Discussion

I. Project Limitations

This project provides useful insight into the public processes surrounding Oregon's Marine Reserves, but several limitations should be considered when interpreting the findings. While interviews included participants from all six CTs, the sample was relatively small and included some overlap among participants, with greater representation from Cape Perpetua. Additional interviews with participants from Cape Falcon and Cascade Head, as well as with other key administrative knowledge holders, community members, and partners, would provide a more representative understanding of the three 2010 processes. Time constraints also limited the depth of qualitative coding and analysis of full interview transcripts.

The project's emphasis on Cape Perpetua is another important consideration. Although findings from Cape Perpetua may provide insight into the broader 2010 Marine Reserve processes, the site had its own community context, stakeholders, and procedural dynamics. As a result, findings should not be assumed to apply uniformly to the other two teams. Instead, Cape Perpetua should be viewed as an informative case study that can be complemented by additional research into the other sites.

II. Remaining Questions

Several questions remain that could inform future Marine Reserve management and Community Team processes:

- **Modification criteria:** What specific ecological, social, economic, or community conditions should trigger the development of a Community Team Process (CTP) or another formal public engagement process?

- **Tribal engagement:** What would a meaningful and appropriate tribal engagement process look like for future Marine Reserve management and adaptive management decisions?
- **Community economic impacts:** What strategies could increase positive economic benefits associated with Marine Reserves while reducing or mitigating negative impacts on affected communities?
- **Socioeconomic information:** What socioeconomic information would communities find most useful for understanding Marine Reserve impacts and informing future decisions?
- **Representation and diversity:** How can future CTPs engage a broader and more representative range of stakeholders, particularly younger community members and individuals with significant economic, cultural, or place-based ties to affected communities?

Acknowledgements

This project would not have been possible without the support of numerous individuals and collaborators. First and foremost, I am incredibly grateful for the community members who participated in my interviews and project. Their feedback, personal stories, and time were invaluable in creating this report. I also want to extend my sincerest appreciation to my mentors, Dr. Maria Zapetis, Katie Darr, Dr. Julia Bingham, and Dr. Thomas Swearingen for all of their guidance, direction, and encouragement. I am thankful to the greater Nearshore Ecology Program and ODFW community for the many exciting moments at the South Beach Annex and my induction into the honorary eco-team guild.

Throughout my summer, I had the immense privilege of speaking to researchers and practitioners from a wide range of organizations and institutions. Their advice and recommendations played foundational roles in shaping my research approach both professionally and personally. A specific thank you is owed to Vaughn Robi son, Leslie Palotas, and Talaina King for their time and input. I also want to acknowledge my fellow interns and community that served as sounding boards, adventure partners, and my ultimate cheerleaders.

Lastly, I would like to express my deepest appreciation for the land, ocean, and community in which I had the immense privilege to live, learn, and work.

References

Bird, A., & Conway, F. (2012). *Rapid evaluation of the 2010 Marine Reserve Community Team Process: A report for the Oregon Department of Fish and Wildlife*. Marine Resource Management Program, Oregon State University.

Creswell, J.W. & Poth C.N. (2018) Qualitative inquiry & Research Design: Choosing Among the Five Approaches. 4th ed. Sage Publications.

Cape Arago Marine Reserve Recommendation Committee. (2011a). *Cape Arago Marine Reserve Recommendation Committee dissenting report.*

Cape Arago Marine Reserve Recommendation Committee. (2011b). *Cape Arago Marine Reserve Recommendation Committee final recommendation*.

Dedoose Version ***10.1.11***, cloud application for managing, analyzing, and presenting qualitative and mixed method research data ***(2026)***. Los Angeles, CA: SocioCultural Research Consultants, LLC www.dedoose.com.

Hopf, J., Erickson, B., Caselle, J., Biedenweg, K., & White, W. (2022). *2022 assessment of Oregon's marine reserves*. Oregon State University, prepared for the Scientific and Technical Advisory Committee of the Oregon Ocean Policy Advisory Council.

Office of the Governor, State of Oregon. (2008). *Executive Order 08-07: Directing state agencies to protect coastal communities in siting marine reserves and wave energy projects*. https://www.oregon.gov/gov/Documents/executive_orders/eo0807.pdf

Oregon Legislative Assembly. (2024). *Chapter 38, Oregon Laws 2024: House Bill 4132*. https://olis.oregonlegislature.gov/liz/2024R1/Downloads/MeasureDocument/HB4132/Enrolled

ODFW 2022. Marine Reserves Program Synthesis Report: 2009-2021. Oregon Department of Fish and Wildlife. Newport, Oregon.