

Hood Canal Marine Spatial Plan

PHASE 1 REPORT: PRE-PLANNING

Prepared for:

Hood Canal Coordinating Council

17791 Fjord Drive NE, Suite 118

Poulsbo, WA 98370

Attn: Haley Harguth, Nate White, and Scott Brewer



Authored by:

Confluence Environmental Company



Pacific Shellfish Institute



October 2021

This report should be cited as:

Confluence (Confluence Environmental Company) and PSI (Pacific Shellfish Institute). 2021. Hood Canal Marine Spatial Plan, Phase 1 Report: Pre-Planning. Prepared for Hood Canal Coordinating Council, Poulsbo, Washington. Confluence, Seattle, Washington.

Acknowledgements

This project has been funded wholly or in part by the United States Environmental Protection Agency under Assistance Agreement CE-01J65401. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.



TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	OVERVIEW OF THE MARINE SPATIAL PLANNING PROCESS.....	4
2.1	Steps in the Process.....	4
2.2	Best Practices Approach	9
3.0	HOOD CANAL MSP: PRE-PLANNING METHODS.....	11
3.1	Identifying Partners and Participants.....	11
3.2	Literature Review.....	13
3.3	Workshops	15
3.4	Interviews	16
4.0	RESULTS AND RECOMMENDATIONS	18
4.1	Pre-Planning Information Developed.....	18
4.2	Information to be Developed	24
5.0	CONCLUSIONS	25
5.1	Outreach and Engagement	25
5.2	Data and Applications.....	25
5.3	Concerns and Pitfalls.....	26
5.4	Status of Pre-planning Process and Enabling Conditions	26
6.0	REFERENCES	31

TABLES

Table 1: Benefits of an MSP3

Table 2: NOAA’s 7Rs Recommendations for Tribal Partnerships 11

Table 3: List of Breakout Discussion Topics for Workshop 1 15

Table 4: List of Interviews by Group and Organization 16

Table 5: Participant-Identified Potential Benefits of a Hood Canal MSP 19

Table 6: Enabling Conditions and Guiding Questions (Smith et al. 2018).....27

Table 7: Checklist for Assessing Enabling Conditions for an MSP Process28

FIGURES

Figure 1. Hood Canal Region.....2

Figure 2. Marine Spatial Planning Process4

Figure 3. The Marine Spatial Adaptive Management Planning Cycle8

Figure 4. Overview of Types of Marine Spatial Plans9

APPENDICES

- Appendix A – Annotated Bibliography
- Appendix B – Workshop 1 Presentation and Meeting Notes
- Appendix C – Workshop 2 Presentation and Meeting Notes

ACRONYMS AND ABBREVIATIONS

Acronym/ Abbreviation	Definition
BMP	best management practice
Confluence	Confluence Environmental Company
DNR	Washington Department of Natural Resources
DOH	Washington Department of Health
Ecology	Washington Department of Ecology
EPA	U.S. Environmental Protection Agency
GIS	geographic information system
HCCC	Hood Canal Coordinating Council
HCSI	Hood Canal Shellfish Initiative
Hood Canal MSP	Hood Canal Marine Spatial Plan
MSP	Marine Spatial Plan
NANOOS	Northwest Association of Networked Ocean Observing Systems
NOAA	National Oceanic and Atmospheric Administration
Navy	U.S. Navy
PSI	Pacific Shellfish Institute
SMART	specific, measurable, attainable, relevant, and time based
TNC	The Nature Conservancy
WDFW	Washington Department of Fish and Wildlife

This page intentionally left blank
for double-sided printing

EXECUTIVE SUMMARY

After the completion of the Hood Canal Shellfish Initiative (HCSI) Action Plan, the Hood Canal Coordinating Council (HCCC) Board of Directors sought to build on 1 of its recommended actions and explore developing a marine spatial plan for Hood Canal. This is a decision-support tool to activate the HCSI's shared values into practice for multiple potential applications and users within the Hood Canal region. Pursuing this tool could provide HCCC with:

- A public process of analyzing and allocating resources;
- Account for multiple management objectives, tribal rights, and partner interests; and
- Provide tools for improved permitting, restoration design, and communication.

HCCC engaged in a process with tribal partners, stakeholders, ecosystem recovery practitioners, regulators, community members, and marine spatial planning experts to evaluate the potential for, and to refine the potential scope of, a Hood Canal Marine Spatial Plan (Hood Canal MSP). This effort included:

- A review of literature and regional examples of marine spatial plans;
- Workshops, which included more than 70 participants; and
- Focused interviews with selected partners and experts.

Interest in developing a Hood Canal MSP is driven by recognition of the ongoing interests of multiple partners in a range of uses of Hood Canal nearshore areas. An initial focus for a Hood Canal MSP is to proactively identify and evaluate competing uses and their potential tradeoffs. The goal of this focus is to reduce conflict between uses that affect the Hood Canal nearshore and provide for sustainable shellfish production.

Development of a marine spatial plan is a multi-step process with several enabling conditions necessary for successful plan development and implementation (Table ES-1). These enabling conditions are ranked as high, medium, and low, depending on the readiness and feasibility of each condition for planning and implementation. The scoring is intended to assess the strengths and weaknesses identified during the scoping phase. Specific tasks or deliverables can also provide stand-alone value to partners. For example, a potential inventory of marine spatial data and mapping tools can provide a common resource for guiding permitting, project development, and engagement on a range of interests and concerns.

Table ES-1: Checklist for Assessing Enabling Conditions for an MSP Process

#	Enabling Condition	Pre-Planning	Plan Development	Implementing the Plan
1	Authority	Medium	Medium	Medium
2	Champion	High	Medium	Medium
3	Driver	High	Medium	Medium
4	Financing	High	Low	Low
5	Information, data, knowledge	High	Medium	Medium
6	Leadership for the process	High	Medium	Medium
7	Legal instruments	Medium	Medium	Medium
8	Proponents and opponents	High	High	High
9	Staff capacity	High	Medium	Medium
10	[Partner] engagement capacity	High	High	Medium
Ranking				
High – This enabling condition is present, very strong, and there is high confidence that it will persist during the planning process and for implementation. In other words, it exists and there is high confidence that this enabling condition will not change.		Medium – This condition is present, moderately strong, and there is a perceived or known risk that it may disappear or weaken during the planning process and/or implementation. Medium could be scored if the enabling condition is not currently present but there is high confidence that it will develop during the planning process. Medium could also be scored if only a portion of something exists but what is missing is not going to hinder progress because other options are possible or could be developed (e.g., spatial data for all economic sectors is missing but could use participatory mapping).		Low – This enabling condition is absent or very weak, and/or there is evidence that it will be challenging to develop or strengthen. Low also could be scored if the enabling condition exists now and it is definitely going to disappear during the planning and implementation phases (e.g., funding for only a portion of the planning process; a process Champion will be lost, the driver will disappear or not be relevant).
Source: Smith et al. 2018				

Representative examples of marine spatial planning processes suggest that the overall schedule for developing and beginning implementation of a Hood Canal MSP may take 3 to 5 years of partner engagement. During this engagement, goals and objectives would be developed and refined into specific, measurable, attainable, relevant, and time based (SMART) metrics that are supported by partners. Ultimately, the Hood Canal MSP would result in a framework for proactively identifying and assessing potential tradeoffs between competing uses of nearshore resources in Hood Canal. This advisory framework would form a transparent and accessible informational resource and decision-support tool for HCCC members, tribes, project proponents, stakeholders, regulators, and decision-makers. Feedback gathered from partners throughout this pre-planning phase suggests that a spatial planning resource would be desirable to help identify concerns so that they may proactively evaluate and address them during a project development phase. Furthermore, maintenance of a spatial planning resource may help focus data collection and sharing to support identification of nearshore priorities and opportunities.

1.0 INTRODUCTION

The Hood Canal Coordinating Council (HCCC) member governments' jurisdictional boundaries dissect the Hood Canal watershed, including Jefferson, Kitsap, and Mason Counties, and the lands and waters of the Port Gamble S'Klallam and Skokomish Tribes. HCCC brings these governments together to address transboundary resource management issues with a mission to work with partners and communities to advance a shared regional vision to protect and recover Hood Canal's environmental, economic, and cultural wellbeing.

After the completion of the [Hood Canal Shellfish Initiative \(HCSI\) Action Plan](#), the HCCC Board of Directors sought to build on 1 of its recommended actions and explore developing a marine spatial plan for Hood Canal, a decision-support tool to activate the HCSI's shared values into practice for multiple potential applications and users.

Shoreline and nearshore areas provide for many uses, bringing many differing perspectives about how the shared space *should* be used. There are a variety of arenas where these differing perspectives come to light, including the permitting of in- and over-water structures in designated treaty-protected fishing areas, recreational harvest of shellfish and finfish resources, private tideland ownership and tribal treaty harvest rights, the recent dismissal of nationwide permit 48 and new requirement for all shellfish operations to be individually permitted, longstanding frustrations with the onerous shellfish aquaculture permitting process, economic interests for a thriving local shellfish industry, the cumulative impacts of shellfish aquaculture activities throughout Hood Canal, and salmon restoration efforts that can impact shellfish resources and aquaculture operations downstream. Collectively, these reasons indicate there is strong impetus for a Hood Canal MSP tool that can help share common information, evaluate tradeoffs, and identify areas best suited for specific uses.

HCCC initiated a pre-planning phase for a new Hood Canal Marine Spatial Plan (Hood Canal MSP) Project that would address the entire Hood Canal waterway (Figure 1).

Confluence Environmental Company (Confluence) and the Pacific Shellfish Institute (PSI) supported HCCC during the pre-planning phase of this work.

The Hood Canal MSP Project pre-planning phase was guided by the HCSI opportunity statement articulating the community of practitioners' shared values:

SHARED VALUES STATEMENT

Hood Canal is characterized by its iconic shellfish, which are ecologically, culturally, and economically critical to local communities. The opportunity to promote resilience of Hood Canal shellfish to environmental and human pressures is uniquely served by a collaborative, diverse network of tribal partners and stakeholders invested in Hood Canal's long-term vitality and identity.

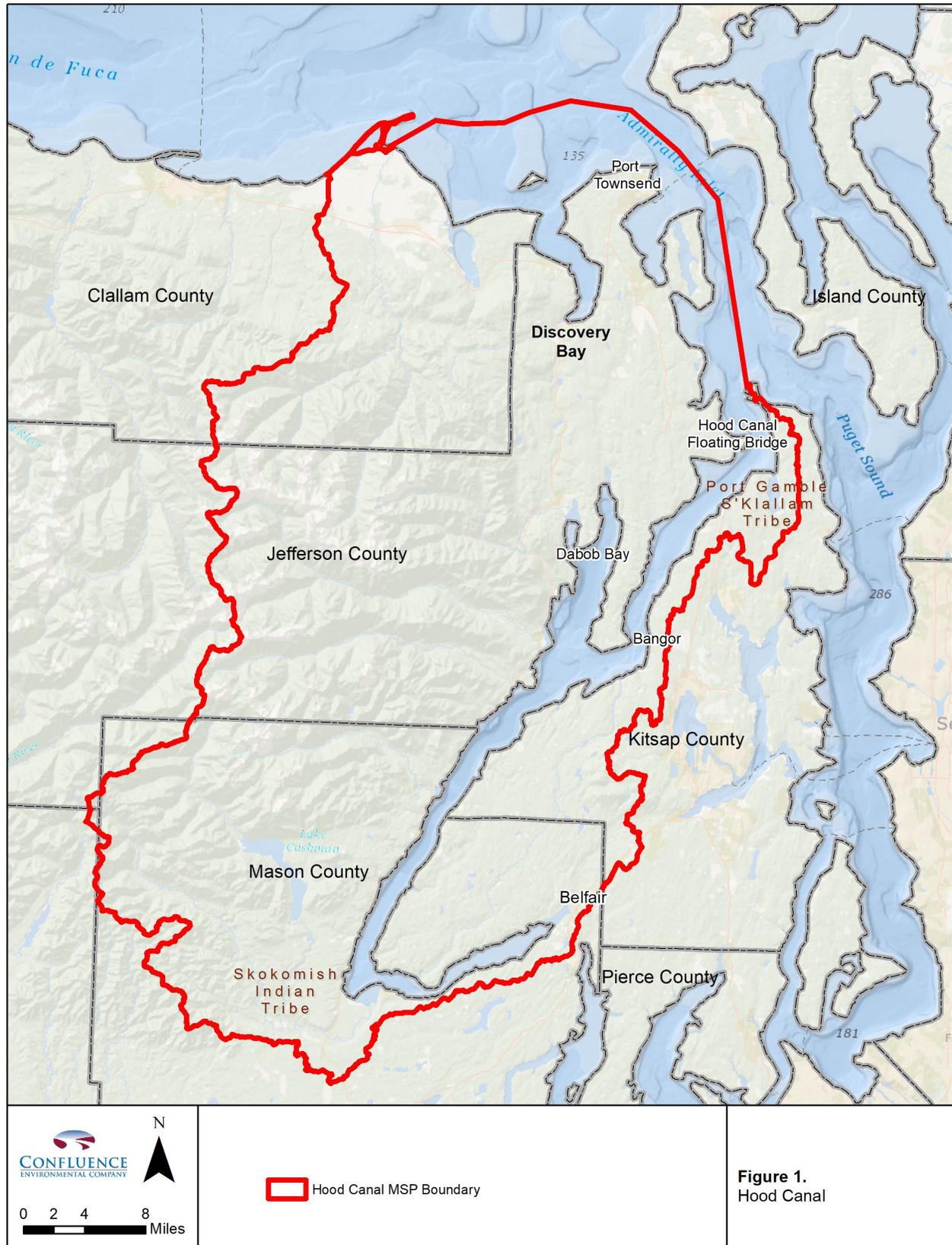


Figure 1.
Hood Canal

Figure 1. Hood Canal Region

Using the shared values identified in Box 1, the Hood Canal MSP Project created the following purpose and objectives during the planning process.

Purpose: HCCC is exploring the opportunity for a Hood Canal Marine Spatial Plan that evaluates tradeoffs between sustainable shellfish production, ecosystem protection, and other shoreline uses.

Objectives:

- Inform responsible shellfish aquaculture siting in Hood Canal;
- Honor tribal treaty rights and interests for Hood Canal’s Tribal communities;
- Prioritize important shoreline and nearshore areas in need of ecosystem protections; and
- Provide an information resource to support project development and permitting.

This document describes an overview of the benefits of MSP, the MSP planning process, lessons learned from other efforts around the world, methods and results of the pre-planning phase of work, and recommendations for the next phase of the Hood Canal MSP Project. Identified benefits of an MSP, as determined through review of planning efforts from around the world, include a variety of consistent topics (Table 1).

Table 1: Benefits of an MSP

Benefit	Reason Identified in the Literature
Protect species and habitats	MSP can be used as a tool to create biodiversity goals that are balanced with a sustainable economy by restricting or limiting specific activities in sensitive areas. One example is to create areas that are identified as High Protection, Medium Protection, and Multiple Use.
Improve tribal partner and stakeholder participation	Involving tribal partners and other stakeholders, and providing time to gather information, prepare comments, and provide input, strengthens relationships and acceptability of the final MSP.
Improve decision making and buy-in	Diverse participation helps provide equity in the information incorporated, management priorities established, and transparent decisions. The process will likely slow down if lack of agreement or misunderstandings arise. Part of the MSP process includes gathering information to help resolve issues and obtain a high level of support.
Improve sustainability of uses	There are likely tradeoffs and compromises between economic development and protection of key areas for biodiversity and ecosystem function. MSP provides the ability to understand these tradeoffs and what activities are sustainable within different habitats and for competing uses.
Increase economic opportunity	Defining locations for sustainable use of activities also allows for opportunities to do economic analysis and evaluate the potential impacts and benefits of management strategies. This analysis can allow for adaptations that improve outcomes.
Increase financing and capacity	Raising awareness of multiple uses of an area, and being transparent about how those uses fits within management goals, can increase trust and support from financing groups. Providing clear goals also improves the technical capacity and knowledge from regulatory agencies or other users.
Support action for climate change	Defining management goals through an MSP process can direct financing for climate change adaptation projects.
Improve maritime safety	Maritime safety is a major concern for several MSPs identified around the world, and can be a competing use within a geographical area. Including this as a management goal can ensure that it is being considered against potential conflicting uses.
Sources: Smith et al. 2021	

2.0 OVERVIEW OF THE MARINE SPATIAL PLANNING PROCESS

A Marine Spatial Plan is a “public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives” (Ehler and Douvère 2009). Marine spatial planning is a form of place-based management that accounts for multiple management objectives, tribal rights, project planning, and partner interests.

Marine spatial planning is a process-based tool that can influence where and when human activities occur. Development of this tool involves a multi-stage process integrating partner concerns, resource management tools, and spatial distribution of resources in Hood Canal using web-based tools.

2.1 Steps in the Process

Previous marine spatial planning efforts have identified discrete steps in the MSP process (Beck et al. 2009, Ehler and Douvère 2009, Smith 2016, Smith et al. 2018). These include steps that are occurring in the current scoping phase, during plan development, and during implementation phases. As identified during the workshops, the Hood Canal MSP Project is currently in the “create a vision” step (Figure 2). While these steps are fairly sequential, they are interrelated and can be reassessed throughout the process.

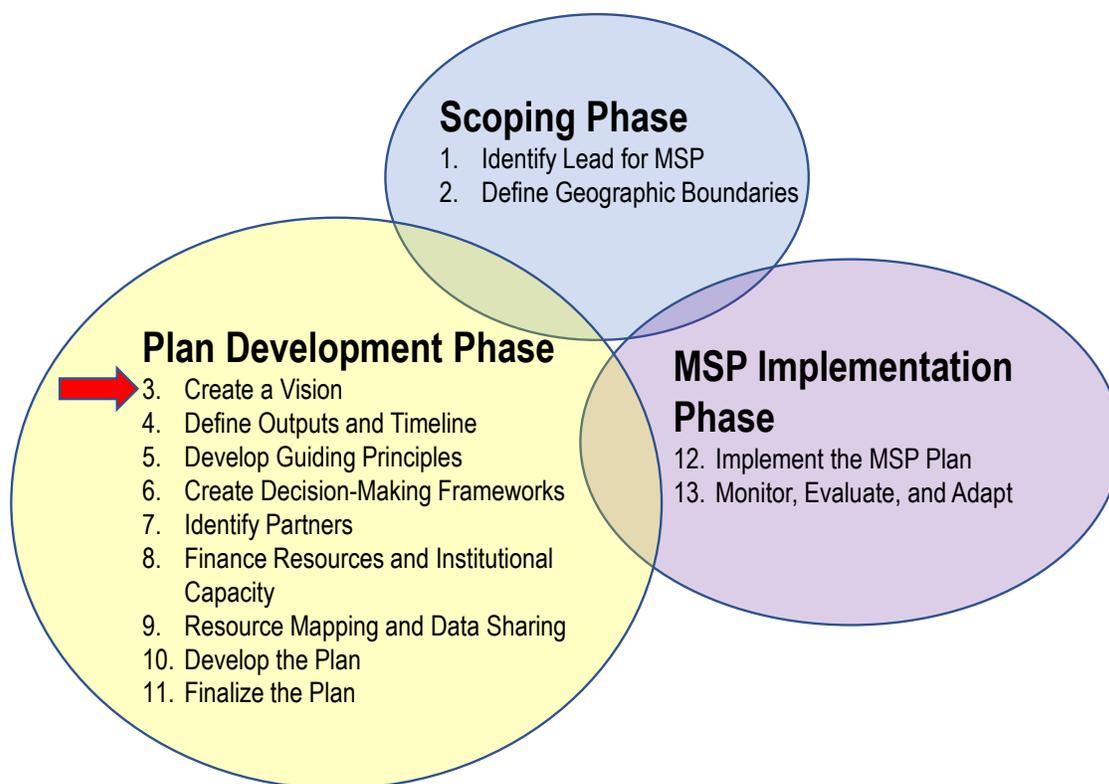


Figure 2. Marine Spatial Planning Process

Red arrow (→) = where the Hood Canal MSP is in the process

2.1.1 Scoping Phase

The scoping phase has 2 main decisions that will drive the MSP planning process: (1) identify the lead for the MSP, and (2) define the geographic boundary. These are described below. The initial efforts conducted during Phase 1 of the Hood Canal MSP Project were part of the scoping phase.

Identify Lead for MSP

The HCCC has self-identified as the lead for developing the Hood Canal MSP. This entity is uniquely suited to address this issue because it draws its board leadership from county commissioners and tribal council representatives from across Hood Canal and its role in guiding and facilitating implementation of salmon and ecosystem recovery. Although HCCC has initiated this process, it is open to partners interested in co-ownership of a potential Hood Canal MSP.

Define Geographic Boundary

The geographic boundary for the Hood Canal MSP will match HCCC's operating area, including the entire Canal and eastern Strait of Juan de Fuca to the Dungeness River. During the plan development phase, this geographic boundary may be sub-divided into sub-areas where different uses or goals may be emphasized.

2.1.2 Plan Development Phase

Plan development is a multi-step process that involves: (1) create a vision, (2) define outputs and timeline, (3) develop guiding principles, (4) create decision-making frameworks, (5) identify partners and participants, (6) gather data and map information, (7) develop the plan, and (8) finalize the plan. The HCCC has started to develop a vision, as indicated in the introduction, but should revisit this vision during the plan development phase.

Create a Vision

A vision may be a broad target or goal with regards to resource use or ecosystem function. HCCC's Integrated Watershed Plan indicators will provide initial guidance for targets that could be adapted for a Hood Canal MSP Project. These include targets for the area of commercial and recreational harvestable shellfish beds, as well as targets for a range of ecosystem and human well-being metrics. These targets may be supplemented or re-focused to incorporate interests of Hood Canal MSP partners during initial phases of the planning process.

Define Outputs and Timeline

Workplan development for the scoping phase should identify specific deliverables, timelines, and participants for each of the following steps in the development of a Hood Canal MSP. MSP timelines are often driven by the need to include partner consultation. Timelines and deadlines

drive the process forward. Two tiers of timelines may be developed, with 1 set focused on the consultation efforts with partners, while parallel effort focuses on gathering relevant spatial data.

Develop Guiding Principles

The overall goals of the Hood Canal MSP will focus on healthy ecosystems, delivery of ecosystem services, and sustainable uses, in line with the shared values established in the HCSI Action Plan. The overall principles for Hood Canal may include components focused on continued sustainable shellfish production, maintenance of native fish populations and the habitats they depend upon, and continued cultural practices (among other human wellbeing values) in Hood Canal. For each guiding principle, key features to be supported and objectives to be monitored would be considered.

Create Decision-Making Frameworks

During the scoping phase, participants enunciated an interest in the Hood Canal MSP providing pertinent scientific and spatial information to inform project proponents and regulators. There was concern from some participants about explicitly tying outputs of the Hood Canal MSP to regulatory decisions. It was argued that it should, instead, be an informative decision-support tool in recognition that any planning effort cannot account for unknowns and attributes of future projects. The framework is a voluntary and informational resource that is used to track overall progress towards achieving Hood Canal MSP objectives. This may include development of interactive decision support systems that allow users to evaluate future conditions.

Identify Partners and Participants

Many of the Hood Canal MSP partners have already been identified and participated during the initial scoping effort. These include entities with regulatory responsibilities, landowners and site managers, tribes with treaty protected cultural and natural resource rights, ecosystem recovery practitioners with interest in habitat improvements and protections, and public users of the nearshore environment in Hood Canal.

Finance Resources and Institutional Capacity

Financial resources are a key component for the planning process. Being able to make the planning process transparent and robust includes making the commitment to support partner engagement, workshops, consultations and public meetings, interviews, staff and consultant time, research and technical work, data gathering, and facilitation. Funding should be stable and available for a 3- to 5-year planning process. Part of the financial commitment also includes a commitment from the institution to provide staff and direction during the process.

Resource Mapping and Data Sharing

A large amount of time and technical effort is spent gathering and managing existing data. Delivery and implementation of an effective MSP is impacted by decisions made in the data collection and management phase. This step may include the development of an independent panel of scientific experts to guide resolution of questions about data, methods, and findings. While the geographic boundaries help guide data collection efforts, data will be sought to support planning objectives and targets for the MSP. Data will be collected into a common format so they can be used across a range of tools and can facilitate sharing among partners.

Develop the Plan

The plan will be documented in technical reports with partner input into the planning process. This process will be overseen by HCCC.

Finalize the Plan

Finalization of the plan would include commitments by individuals and groups to utilize the tool in its multiple potential applications. This may include a public review process.

2.1.3 MSP Implementation Phase

The MSP implementation phase is iterative and includes 2 main steps, but they are constantly cycling to improve the functionality of the plan: (1) implement the plan, and (2) monitor, evaluate, and adapt (Figure 3).

Implement the MSP Plan

Implementation of the plan includes commitments to maintain and update plan information and any conditions related to use of the plan as an advisory resource. It is likely that plan implementation would include reporting on whether the vision adopted during the planning phase is being realized and identifying adaptive management measures to achieve the plan vision over time. During implementation, the MSP would continue to engage with spatial data providers and create a demand for development of additional spatial data that supports the plan objectives.

Monitor, Evaluate, and Adapt

Monitoring and adaptive management are key elements of achieving the plan's vision. This phase is focused on identifying information that demonstrates whether marine spatial plans are achieving their measurable objectives. Public reporting on these objectives creates opportunities to work with regulatory and non-regulatory parties to understand what factors are contributing to the success or failure of the MSP in achieving its vision.

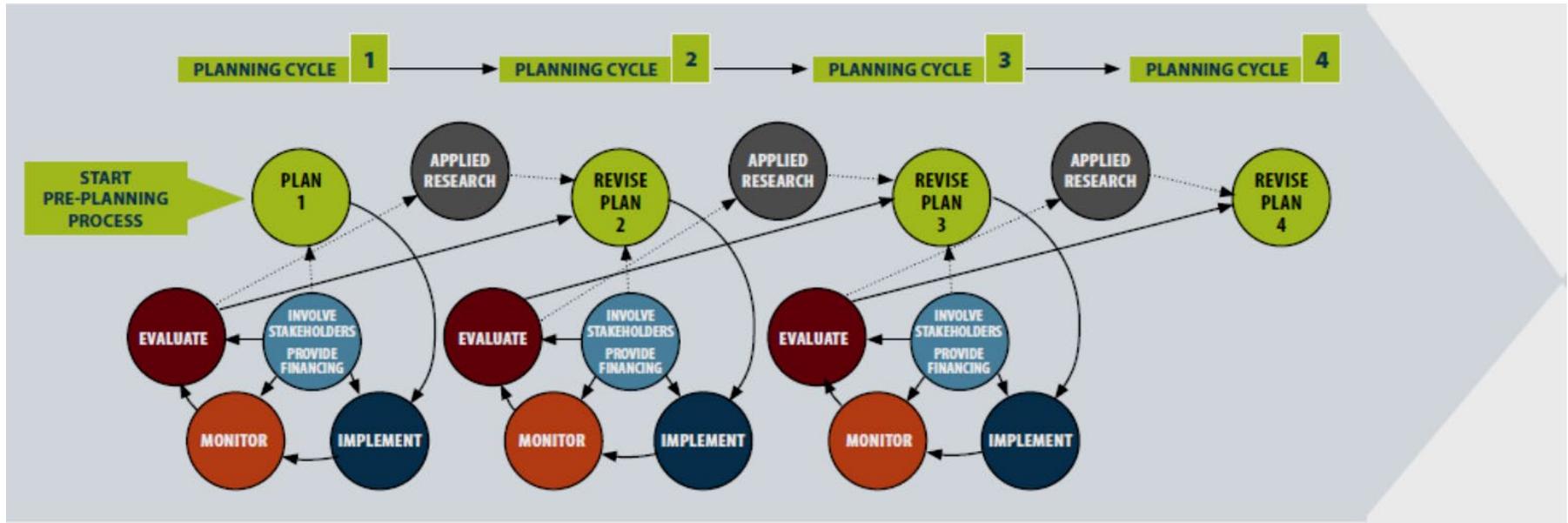


Figure 3. The Marine Spatial Adaptive Management Planning Cycle
Source: Ehler and Douvère 2009

2.2 Best Practices Approach

There are multiple types of MSPs that vary in the level of detail and application to projects. These approaches can be defined by the level of detail and applied to different purposes (Figure 4). For example, a high level strategic plan might help with defining a vision for the MSP and next steps in the planning process. As the plan gets into more details, it can explore scenarios and areas of focus or specific activities. Finally, a high detail MSP will be relevant for management, and can help inform governance of the activities described in the plan. Overall, as the details in a plan evolve, so does the functionality for users.

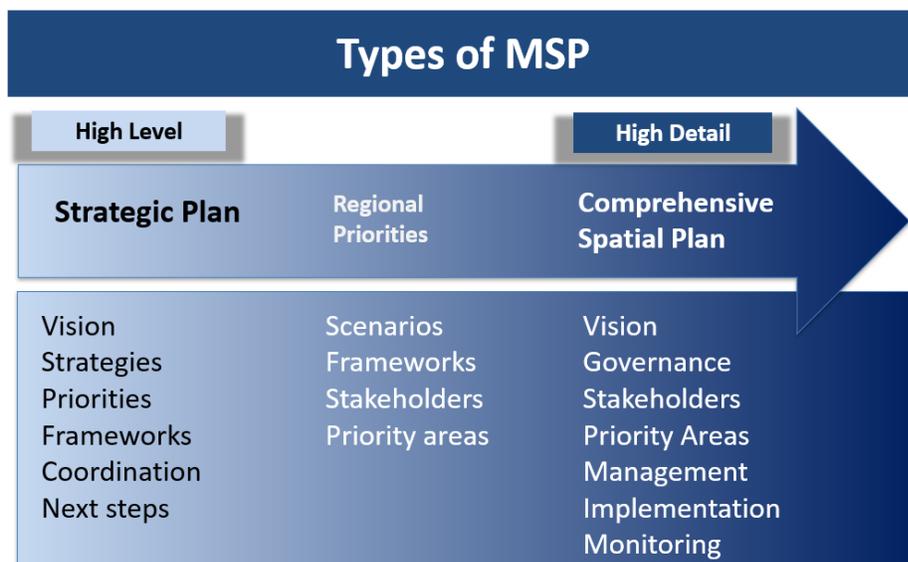


Figure 4. Overview of Types of Marine Spatial Plans

Recommendations on best management practices (BMPs) based on lessons learned from other MSP efforts from around the world were identified in Section 2.1 above. Management objectives (e.g., as defined in Shoreline Master Programs) or user conflicts help to define why a plan is needed. Beck et al. (2009) recommends facilitating involvement of diverse local partners and stakeholders for successful MSP planning. Also important is explicitly identifying and quantifying tradeoffs among management objectives, and finding common ground among user groups. A specific example provided during the Hood Canal MSP pre-planning workshops was the tradeoff between different types of shellfish aquaculture gear and tribal fishing rights. Working to find common ground among these important groups in Hood Canal is a necessary challenge of the MSP process.

Another study by Smith et al. (2018) reviewed 10 conditions that enable successful development and adaptive management of an MSP. Here, again, is an emphasis on the driver – the reason to plan – that is guiding the effort. The authors ask a series of questions to understand why planning needs to happen and how it will benefit the future of the resources. Another key recommendation is to identify and engage plan champions (e.g., individuals who can represent and convey the purpose and objectives of the project). Champions can also serve to disseminate

its progress to various audiences to ensure that momentum is maintained throughout the multi-year planning process.

Overall, these studies suggest a general list of BMPs during development of an MSP:

- Develop clear objectives for the plan;
- Ensure the process is transparent and participatory;
- Identify relevant data needs and gaps, but be realistic;
- Create adaptive systems and frameworks;
- Develop forward-looking plans;
- Assess socioeconomic impacts of MSP on partners and stakeholders;
- Develop implementation plans including costing; and
- Identify and secure long-term sustainable financing.

3.0 HOOD CANAL MSP: PRE-PLANNING METHODS

During the initial phase of this work, a broad survey of existing plans and interviews with researchers was undertaken to ensure partners, and other interested parties, understand the various forms and goals that can be incorporated under the auspices of a Hood Canal MSP. While the focus of the pre-planning work is on shellfish resources, the purpose is to find tradeoffs between sustainable shellfish production, ecosystem protection, and other shoreline uses. These multi-benefit goals expand upon the objectives previously outlined in the HCSI Action Plan (White and Harguth 2020).

The methods for the following pre-planning efforts are described below: (1) identifying partners and participants, (2) literature review, (3) workshops, and (4) interviews.

3.1 Identifying Partners and Participants

The Hood Canal MSP pre-planning working group identified key partners and participants in 2 workshops. Seven groups were identified through previous work with the HCSI and additional recommendations during pre-planning. These participants were selected to holistically capture the major interest groups surrounding Hood Canal; they broadly include tribal partners, federal representatives, state natural resource managers, local and county regulatory authorities, industry leaders, ecosystem recovery practitioners, and community members.

3.1.1 Tribal Partners

Tribal partners for the pre-planning effort include HCCC's member governments, the Port Gamble S'Klallam Tribe and Skokomish Indian Tribe. Other tribal partners with usual and accustomed fishing areas and interests within the Hood Canal, the Jamestown S'Klallam Tribe, Point No Point Treaty Council, and Northwest Indian Fisheries Commission, were also present. When engaging tribal partners, the Hood Canal MSP pre-planning working group followed the National Oceanographic Atmospheric Administration's (NOAA's) 7Rs guidelines to foster meaningful tribal partnerships (Table 2).

Table 2: NOAA's 7Rs Recommendations for Tribal Partnerships

R Rule	Description
Respect	Acknowledge that tribes are full co-managers, not stakeholders
Relevancy	Strengthen tangible connections to resources to ground cultural values
Reciprocity	Ensure management decisions and knowledge flow in both directions
Responsibility	Recognize the shared duty to protect resources that benefit multiple groups
Rights	Tribes are sovereign nations with their own government and structure
Reconciliation	Integrate indigenous expertise and knowledge into decision making in a meaningful way
Relationships	Build long-lasting and forward-thinking relationships to promote inclusion

3.1.2 Federal Representatives

Although most waters within Hood Canal are directly managed by the state, federal agencies also influence regional marine activities through their authorities. Key federal representatives relevant for the Hood Canal MSP included NOAA, U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency (EPA), and U.S. Navy (Navy). NOAA consults on permitting actions overlapping with Essential Fish Habitat for federally managed species as mandated by the Magnuson-Stevens Fishery Conservation and Management Act, as well as critical habitat designated for species listed under the Endangered Species Act. As directed by the Clean Water Act, the EPA is the core authority regulating discharge of pollutants to waters of the United States and works directly on projects involving Tribal Nations and indirectly through the Washington State Department of Ecology (Ecology) for projects within state waters. Finally, the Navy has an interest in Hood Canal marine activities and resources around its restricted water space surrounding the Kitsap-Bangor Naval Base and adjacent training areas.

3.1.3 State Natural Resource Managers

Numerous state natural resource managers that regulate the shared Hood Canal waterway were present at workshop meetings. The represented agencies involved in the Hood Canal MSP scoping process manage proposed or existing aquatic-related activities or resources through a variety of state regulations and permitting requirements. Washington State Department of Health (DOH) oversees commercial and recreational shellfish to protect public health for sanitary quality and closure zones due to biotoxins, as stipulated by the Washington Sanitary Control of Shellfish (WAC 246-280 and 282). Washington Department of Fish and Wildlife (WDFW) co-manages shellfish harvest with the tribes with usual and accustomed fishing areas and interests (RCW Ch. 77.60 and 65) and on-water alterations that require a Hydraulic Project Approval Permit (RCW Ch. 77.55). Washington State Department of Natural Resources (DNR) manages leasing of state aquatic lands for projects that include shellfish production, as directed by the Washington Aquatic Lands Act (RCW Ch. 79.10).

The Washington Department of Agriculture established a Shellfish Aquaculture Coordinator to help organize efforts surrounding the Washington Shellfish Initiative and co-chair Ecology's Shellfish Interagency Permitting team. This was a co-sponsored initiative between Ecology and NOAA to "make effective and efficient use of agency resources to facilitate timely and predictable delivery of quality decisions on shellfish aquaculture permit applications while protecting public health and the environment" (Lund and Hoberecht 2016). The Washington State Parks and Recreation Commission is charged with responsible stewardship of designated state parks with the mission of connecting Washingtonians with memorable recreational and educational experiences while preserving natural and cultural heritage (RCW 79A.05.015).

3.1.4 Local and County Regulatory Authorities

Local governments also regulate activities along their shorelines through various Shoreline Master Programs under the state Shoreline Management Act (RCW Ch. 90.58). Representatives from HCCC's 3 member county governments (i.e., Jefferson, Kitsap, and Mason counties) participated in the workshops and interviews to provide local regulatory perspective on potential Hood Canal MSP applications.

3.1.5 Industry Leaders

Shellfish aquaculture industry leaders represent an important partner within Hood Canal that supplies jobs and supports local economies. They have a vested interest in responsible resource management and establishing good relationships with the tribes and local communities. Shellfish operations are also important modifiers of marine habitat within a project site. Representatives from Taylor Shellfish, Pacific Seafood, Blue Dot Sea Farm, Hama Hama Company, Baywater Shellfish, and HC Snail all participated in pre-planning activities.

3.1.6 Ecosystem Recovery Practitioners

Ecosystem recovery practitioners are another important partner with vested interests in the Hood Canal MSP process. Key participants in the workshops included the Puget Sound Restoration Fund, Puget Sound Partnership, North Olympic Salmon Coalition, Hood Canal Salmon Enhancement Group, Great Peninsula Conservancy, Jefferson Land Trust, , Kitsap Conservation District, Mason Conservation District, Jefferson Marine Resources Committee, and Long Live the Kings.

3.1.7 Community Members

Local community members and visitors can also influence activities along the waterfront through shoreline development (e.g., piers, ramps, floats, bulkhead), participation in local community groups, or public notice comments required by some permits and review processes, visiting Hood Canal's many public beaches, and recreational harvest of shellfish resources. Potential user conflicts with shoreline residents and other uses were identified as key perspectives to be included in the Hood Canal MSP process. Representatives from the Hood Canal Environmental Council and other community members participated in the workshops.

3.2 Literature Review

HCCC has been exploring specific issues around shellfish production in Hood Canal since at least 2013, and most notably with the [Hood Canal Shellfish Initiative Action Plan](#) (2020). This work provided a solid background to understanding the pre-planning phase for Hood Canal MSP. These documents included, but are not limited to:

- 2013-2021: [Hood Canal Regional PIC Program](#)
- 2013: [Developing Human Wellbeing Indicators for the Hood Canal Watershed](#)

- 2017: [HCCC Integrated Watershed Plan](#)
- 2017: [Assessment of Interactions Between Salmon Habitat Restoration and Bivalve Shellfish Resources](#)
- 2020: [Hood Canal Shellfish Initiative – Action Plan](#)

Additional literature relevant to Hood Canal MSP pre-planning process was identified through interviews, workshops, and professional expertise (Appendix A).

At the Federal level, NOAA and the Department of Interior’s Bureau of Ocean Energy Management recently published OceanReports (NOAA 2019). This is a massive web-based reporting tool designed to aid coastal and ocean planners in analysis using a custom drawn area of interest. With over 100 data layers, this tool can provide summary statistics for the drawn area that cover 6 overarching topics: (1) general information, (2) energy and minerals, (3) natural resources and conservation, (4) oceanographic and biophysical, (5) transportation and infrastructure, and (6) economics and commerce. Primarily focused on federal waters within the contiguous United States (i.e., the Exclusive Economic Zone), this tool largely excludes state waters within 3-miles from shore, such as Hood Canal and the Puget Sound.

A similar tool was developed in 2018 for Washington state waters by Ecology, WDFW, and DNR with the general purpose to provide “a baseline of scientific information, a consistent way of evaluating future proposals, and a framework to coordinate decisions around human uses of the sea” (Ecology 2018). This MSP was designed to create a coordination process for governments and an avenue for partner input for new potential ocean uses like offshore wind energy and shellfish production. The scope of this tool is restricted to the outer coast of Washington, which includes usual and accustomed fishing areas of the Makah, Quileute, Hoh, and Shoalwater Bay tribes, the Quinault Indian Nation, 4 county districts from Clallam to Pacific counties, the Olympic Coast Marine Sanctuary, and National Wildlife Refuges in Willapa Bay and Grays Harbor.

A plethora of available geographic information system (GIS) data layers and oceanographic datasets within Puget Sound and adjacent U.S. waters are publicly available and highly relevant to MSP. However, these datasets are not readily available to the average user. There are several user-friendly web-based GIS tools hosted by state agencies like the DNR Washington Marine Vegetation Atlas, Ecology’s Washington State Coastal Atlas, and the DOH Commercial and Recreational Shellfish Map Viewers; as well as online viewers from other organizations like the Northwest Association of Networked Ocean Observing Systems (NANOOS) Visualization System and Northwest Straits Commission’s SoundIQ. These tools are largely contained within hosting agencies and do not include data from other agencies. This is a constraint for activities in shared waterways that cross multiple jurisdictions, agencies, and governments. Conversely, other available platforms are so broad that oversaturation of options may reduce the way in which the database was intended to be used.

The level of data maintenance and metadata available to public viewers is also inconsistent across existing platforms. Oftentimes users cannot download data that they wish to save or upload data that they would like to add to the current spatial workspace. There is currently no platform that focuses on data needs for cross-jurisdictional management and regulation of major on-water activities in Hood Canal.

Besides a general review of available databases and MSP efforts, the Hood Canal MSP pre-planning working group reviewed relevant literature to understand lessons learned and applicable information that could be used in the Hood Canal MSP (Appendix A).

3.3 Workshops

Two remote workshops were conducted with tribal partners, stakeholders, regulators, ecosystem recovery practitioners, and other interested parties. Each workshop was approximately 3 hours long and consisted of guided discussions on MSP topics designed to aid the Hood Canal MSP pre-planning working group in defining the scope of the plan within Hood Canal. All feedback and comments were noted and consolidated, then distributed to participants.

3.3.1 Workshop 1

Workshop 1 was focused on establishing what MSP meant for Hood Canal and addressing potential concerns and opportunities identified by participants. An introductory presentation defined the purpose and goals, as identified by HCCC. This was then followed by a general overview of what MSP can accomplish when implemented effectively (refer to Appendix B). Time was also allocated for the Port Gamble S’Klallam and Skokomish Tribe partners to address MSP with emphasis on indigenous perspective, following the previously mentioned 7Rs Recommendations for Tribal Partnerships (refer to Table 2).

Workshop 1 included 2 breakout sessions where participants were divided into groups for facilitated discussion, followed by a full group discussion. Breakout session 1 examined general concerns and opportunities surrounding marine spatial planning in Hood Canal. Breakout session 2 focused in on how MSP could specifically be utilized beneficially and effectively by groups within Hood Canal (Table 3).

Table 3: List of Breakout Discussion Topics for Workshop 1

Breakout Session 1 Topics	Breakout Session 2 Topics
<ul style="list-style-type: none"> ▪ What are the opportunities? ▪ What are the concerns? ▪ How can this tool address those concerns? 	<ul style="list-style-type: none"> ▪ How can this tool inform future opportunities for economic growth, ecological sustainability, and bettering human quality of life? ▪ Potential uses of MSP in project development and review after project is proposed

3.3.2 Workshop 2

Workshop 2 solicited feedback and experiences from Workshop 1 and prompted participants to define a shared vision for the Hood Canal MSP. The introductory presentation highlighted a revised purpose and goals statement, which was based on feedback from Workshop 1 and prior HCSI activities (refer to Appendix C). Next, the presentation addressed the main takeaways from Workshop 1 and outlined a potential timeline for developing a Hood Canal MSP. Definitions, benefits, and best practices for developing an MSP were also provided. Finally, participants were prompted for group discussion of 2 scenarios that a Hood Canal MSP could address.

The first scenario presented the complex permitting process for shellfish aquaculture within Puget Sound and demonstrated how MSP could aid in the planning and siting process. The second scenario presented a hypothetical salmon habitat restoration project within Hood Canal, applying MSP to identify potential place-based conflicts during project design. A final segment of the presentation identified the current stage of Hood Canal MSP planning, relative to The Nature Conservancy's (TNC's) 12 steps for MSP development. The Hood Canal MSP is at the "create a vision" stage and, therefore, participants were asked to provide thoughts on their vision of what is important for them in Hood Canal that could be used in the next phase of the planning process.

3.4 Interviews

Individual interviews were conducted to gather information (observations and/or data) and perspectives from partners and participants not represented in the workshops (Table 4).

Table 4: List of Interviews by Group and Organization

Group Type	Organization	Contact
Agency	Office of Governor Jay Inslee	Jennifer Hennessy
Agency	Washington Department of Fish and Wildlife (shellfish group)	Chris Eardley, Camille Speck and Brady Blake, Aaron Dufault
Agency	Mason County Community Development	Kell Rowan, Julie Lewis
Tribal	Quinault Indian Nation	Joe Schumaker
Community Group	Hood Canal Co-op	Suzy Myers
Nonprofit	The Nature Conservancy	Joanna Smith

Some interviews focused on expertise and experience in other geographic areas while others focused on tribal partners or stakeholders that were unable to participate in workshops.

Interviews were structured around the following topics/questions:

- Overview of the marine spatial planning process and status of effort in Hood Canal
- What benefits or opportunities do you see in participating in a marine spatial planning process?
- What concerns do you have about the management of marine resources in Hood Canal?
- How would you like to be/stay engaged as the marine spatial planning process moves forward?
- What spatial information do you think is most important in a marine spatial planning process?
- Do you have spatial information that you would like to see included in a marine spatial planning process?

4.0 RESULTS AND RECOMMENDATIONS

Hood Canal MSP pre-planning outreach included all targeted partners with representatives participating in at least 1 workshop or an interview. All participants provided valuable feedback on how they envision MSP for Hood Canal. The 2 workshops generated the majority of the feedback and informed which groups and individuals to contact for interviews. This outreach articulated clear needs for the various user groups in Hood Canal, potential conflicts, and key participants for future efforts.

4.1 Pre-Planning Information Developed

As discussed above, marine spatial planning efforts have identified discrete steps (also called enabling conditions) for the MSP process (Beck et al. 2009, Ehler and Douvère 2009, Smith 2016, Smith et al. 2018). Below is an evaluation of the feedback received and progress conducted, to date, on assembling the enabling conditions for a Hood Canal MSP.

4.1.1 *Identify MSP Lead and Define Geographic Boundaries*

The HCCC has self-identified as the organizational lead entity for development of a Hood Canal MSP. Existing participation of several key constituencies in the HCCC Board of Directors, including county and tribal government, make it a well suited organization to lead a Hood Canal MSP. In addition, the HCCC has a well-established history of integrating science with community priorities to protect and restore valued ecosystem components while also working to support community interests in Hood Canal.

Participants in workshops and interviews recognize HCCC as a valid leader and organizer for a Hood Canal MSP. Involvement of tribes in the Board of Directors of HCCC is perceived as a valuable connection that may strengthen and improve a future MSP. Another positive indication of HCCC as a lead authority is based on the interest and participation in workshops and interviews. Despite the relatively compressed schedule for this phase of the Hood Canal MSP Project, there was strong interest and recognition that HCCC has sufficient capabilities to support an MSP process.

4.1.2 *Create a Vision*

The literature suggests that vision and goals are an important part of the justification for tribal partners and stakeholders to engage in, and find utility, from an MSP process. The Hood Canal MSP is focused on goals surrounding sustainable shellfish production. This enabling condition can be addressed using 3 sub-indicators:

- Have management issues to be addressed been identified and prioritized?
- Do goals define both desired societal and environmental conditions?
- Are goals time bound and include quantitative targets (when and how much)?

Workshop and interview participants contributed to understanding each of these indicators. If the Hood Canal MSP progresses, details can be developed, and the questions revisited over time. Interviewees noted that early brainstorming sessions can generate lengthy lists of priorities that should ultimately be pared back to a focused list of approximately 10 or less. In general, fewer priorities will lead to a more focused effort.

Workshop attendees noted that an MSP could greatly benefit shellfish production in Hood Canal by better informing the permitting process and by identifying areas of potential use conflicts and priority areas for new sites based on social and environmental data. There could be benefits for identifying where the presence of shellfish could help with nutrient sequestration that other shoreline projects could use as mitigation (e.g., septic projects, combined sewer projects). Mapping active shellfish aquaculture areas over water quality closure areas, habitat types, and other physical conditions would benefit shellfish farmers to identify suitable locations for operations. The Hood Canal MSP could serve as a way to engage tribes, resource agencies, and communities. The goal would be to increase communication efforts, dispel misinformation, help understand no-net-loss of environmental function, net ecological gain, cumulative impacts, and ease concerns around the public permissibility of various on-water activities.

Greater mapping of kelp and eelgrass beds, spatial water quality characteristics, and important salmon habitat could foster improved examination of ecosystem services within Hood Canal. Increased mapping and data sharing could also aid in designation of priority areas for restoration and concentrate efforts for funding. Finally, greater tracking of marine resources and habitats would make potential losses or degradation harder to overlook.

Workshop participants identified ways that the Hood Canal MSP could inform opportunities for economic growth, ecological sustainability, and bettering human quality of life in Hood Canal (Table 5).

Table 5: Participant-Identified Potential Benefits of a Hood Canal MSP

Economic and Regulatory	Ecological/Environmental	Social and Cultural Wellbeing
<ul style="list-style-type: none"> ▪ Aid in decision making, planning, and implementation strategies for nearshore activities ▪ Preserve and increase acres and production for shellfish ▪ Show past work over time (i.e., monitoring) ▪ Assist in grant acquisition and increasing tourism ▪ Reduce permitting time ▪ Aid in Shoreline Master Program updates 	<ul style="list-style-type: none"> ▪ Develop information resources for protecting aquatic lands ▪ Tool for cumulative effects and processes ▪ Aid Navy in protecting aquatic lands 	<ul style="list-style-type: none"> ▪ Identify co-benefits of projects ▪ Build out projects that have community engagement and restoration benefits ▪ Better understand perspectives for use of Hood Canal

Tribal partners and stakeholders noted that shared values, like those enunciated by the HCSI opportunity statement, are needed before defining a vision. Participant groups weighed in on individual values based on their personal perspectives which, although coming from diverse backgrounds, generally were synergistic. It was agreed that seeking multi-benefit approaches to projects was preferable and more impactful than a targeted single use project. Responses are summarized below:

- Preservation of water quality and associated habitats to ensure ecosystem services;
- Protection of tribal treaty rights;
- Ability to continue recreational activities on/in Hood Canal and along the waterfront;
- Support for local businesses, sustainable shellfish aquaculture, and better informing permitting; and
- Ensure these opportunities get passed along to future generations.

4.1.3 Define Outputs and Timeline

Planning processes can be confusing to groups that are not familiar with them. Often planning includes deliberative discussions and may include engagement over time that create fatigue in some participants that are initially excited about the overall process. As described above, the MSP development process has 3 primary phases:

- Scoping
- Plan development
- Implementation

The plan development phase can extend over a long period of time (years) with tribal partners and stakeholders waiting to see how their interests are addressed. To maintain enthusiasm and interest in the Hood Canal MSP, experts reported that it is useful to develop early outputs that are valued by tribal partners and stakeholders as wins. Early wins are likely to focus on the compilation of spatial data and initial evaluation of that data for users. This should occur prior to engaging in the more challenging topics that are likely to focus on the spatial and temporal allocation of resources driven by human uses and values. These topics require engagement with a large number of participants and the pace of progress may be slow and cause interest to ebb.

4.1.4 Identify Partners and Participants

Partner and participant identification is dramatically accelerated for the Hood Canal MSP due to prior HCCC efforts revolving around the HCSI. These efforts have brought forward partners that represent a wide range of interests. While the scoping phase of the Hood Canal MSP included a diverse group, it may also be necessary to formally engage these organizations. In particular, tribes may want formal engagement directed towards the Tribal Chair in addition to Tribal Council Members and Natural Resource Directors. This formal communication may take the form of a letter recognizing their status, treaty rights, and inviting them to engage in a

consultation process. Best practices for tribal consultation are identified as including: 1) Early and frequent communication; 2) Appropriate representation; 3) Understanding of and respect for Tribal process; 4) Consensus-seeking approach; and 5) Agency transparency and accountability (West Coast Ocean Tribal Caucus 2020).

4.1.5 Financial Resources and Institutional Capacity

Experts report that development of a Hood Canal MSP is likely to take approximately 3 to 5 years. Sustainable funding for staff and consultant support to develop a Hood Canal MSP is an important determinant of project success. Lapses in funding may lead to delays or cause tribal partners and stakeholders to lose interest in the overall process. Funding and staff support for the project is likely to include:

- Identification and integration of existing spatial data
- Ongoing tribal partner and stakeholder engagement
- Public outreach and communication
- Plan development

Successful MSP processes tend to be led by at least 1 dedicated staff from the MSP lead organization who manages and oversees a team that includes other staff, tribal partners, stakeholders, and consultants through the plan development process. Consultants are well suited to support the exchange of best practices, data acquisition, integration and analysis, outreach facilitation, and document preparation. Tribal partners and stakeholders may be elevated to leadership roles where they will support outreach, communication, or act as senior reviewers of products.

Reviews of other MSP processes identified a few potential funding models. Portfolio models that use multiple discrete sources to support plan development and implementation appear to be effective ways to manage budgetary concerns. Public financing through government grants or direct financial support can be an important source, but can also create an uneven financial profile that should be supported by other funding sources to provide process continuity and limit uncertainty. Private grant-based funding sources that have historically supported MSP development include The David and Lucile Packard Foundation and the Gordon and Betty Moore Foundation. Regional foundations that have supported marine resource planning include The Russell Family Foundation and Bullitt Foundation.

Marine spatial plan budgets can be wide ranging based on how focused the planning effort is, the number and level of engagement with stakeholders, and the amount of data development/creation incorporated into the planning effort. The Washington Coast Marine Spatial Planning effort was initially allocated a budget of \$2.1 million by the State Legislature. This budget included support for pre-planning, plan development, State Environmental Protection Act (SEPA) evaluation of the plan and initial implementation for a planned 4-year

process. Similarly, World Wildlife Fund Canada received a grant from the Gordon and Betty Moore Foundation for approximately \$2 million for a 3-year effort to support marine spatial planning in Canada.

The Hood Canal MSP appears to be a more limited effort that may not require formal adoption through a public SEPA process which should reduce costs. The process of defining management goals, understanding and predicting future uses, evaluating potential use conflicts and compatibilities, selecting management strategies and plan scenarios, developing an implementation plan, and adopting the plan are likely to take approximately 3 years. Maintaining momentum and giving stakeholders a clear signal that the effort will be sustained through completion are key actions that can streamline the overall process. It is likely that annual budgets of \$75,000-\$150,000 would be needed to maintain and sustain a Hood Canal MSP process. This makes for a likely project budget of \$225,000-\$450,000 excluding any costs associated with public review (SEPA) and implementation.

4.1.6 Resource Mapping and Data Sharing

Successful delivery of an MSP is highly affected by decisions on data collection and management. This step underpins future decision-making and provides an early test for collaboration. The Hood Canal MSP can serve as a shared platform to facilitate compiling data and data sharing. For many MSP processes, gathering and collecting existing data and information uses most of the allocated budget and a significant amount of time. Best practices to streamline this include developing a group of scientific experts to guide data collection and resolve questions about data needs, methods, and interpretation. Data collection in the absence of clear goals and objectives can cause the effort to be overly broad and unfocused. By linking the data inventory process to early development of planning objectives, data collection can support the development of SMART metrics and aid in future phases when monitoring, reporting, and adaptive management are likely expected by tribal partners and stakeholders. Early data collection can also support the planning process by providing illustrative examples and spatial data for engagement with tribal partners and stakeholders. Data gaps may be filled by modeling or predicting where resources are present, others may be filled by using expert or traditional knowledge. New data collection can rarely be accomplished within the plan development timeframe. New data is likely to be deferred to the plan implementation phase. Finally, participants in the Hood Canal MSP pre-planning process are data stewards and should be engaged as potential data providers for a future MSP development phase.

Workshop participants described some concerns about the condition of spatial data used by resource agencies. They noted that data sharing systems that fail to maintain current data could either lead to disuse of the plan or mislead agency decisions. Similarly, some data sets require a nuanced understanding of the data collection method to inform use of that data. Without this metadata, shared data could be misused and cause inappropriate decisions. Finally, displaying temporal variability of data layers may prove difficult. For example, improvements in water

quality can be a powerful way to show progress toward shared goals, but typical MSP tools are static and do not easily show change. Each of these concerns should be addressed through an advisory panel for spatial data that will identify appropriate responses.

Workshop participants were also prompted with 2 approaches to MSP: (1) show all data layers and the user can look at what overlays they are interested in viewing, or (2) draw circles/polygons on a map and use the data to interpret if it's a good area for that activity. Feedback highlighted the need for both approaches and underlined the importance of incorporating transparent interpretation when identifying areas of importance for specific shellfish growing methods. When asked, "What is this MSP intended to solve and how should success be measured?" feedback indicated that this tool could assist in prioritizing limited funds for acquisition and restoration, enhanced public access to existing public tidelands for recreational harvest, and coordination of other potentially conflicting uses.

4.1.7 Plan Development

The literature emphasizes the importance of collaboration and transparency in the MSP planning process. Specific to a Hood Canal MSP, there is strong momentum to improve conditions for both permitting of shellfish aquaculture and responsible sustainable shellfish production. The participants were a diverse group with sometimes conflicting ideas about what is best for Hood Canal, but key themes also unified the various groups. For example, water quality and habitat improvements can benefit shellfish, fish, wildlife, and landowners. Improvements in water quality and related metrics (e.g., shellfish growing areas, fishing opportunities) over time can galvanize a feeling of shared success for a community.

Plan development could occur in 2 major phases, in terms of problems it could solve, with the first being gathering all relevant data and the second focusing on impacts surrounding human activities. Potential measures of success identified by participants included reduced shellfish permitting time and conflicts, and long-term monitoring to identify success or failure of management practices. These are examples of SMART metrics that could be added to assess that the MSP developed for Hood Canal is working as intended.

4.1.8 Plan Implementation

The need to constantly monitor, evaluate, and adapt is repeated as a recommendation throughout the literature of MSP planning. This concept was discussed above in Section 2.1, Steps in the Process. This process includes a scientific approach to MSP, which is a desire stated by multiple individuals during the workshops, and used to define attainable goals and metrics for success of the Hood Canal MSP.

4.1.9 Cautions

While workshop participants and interviewees voiced positive perceptions and expectations for a potential Hood Canal MSP, they also noted several concerns and cautions.

Workshop participants described a perception that tribal partners, stakeholders, and natural resource managers do not always work together towards shared goals. Each entity has its own priorities that it is striving to achieve. The concern showed that not all groups share the same value systems, which could result in a dissonance in the overarching purpose and goals for the final Hood Canal MSP tool. One specific example provided was the need to balance permitting needs for shellfish production and requirements for eelgrass and salmon habitats. In particular, 1 tribal interest stated that they do not support expansion of, or conversion to, off-bottom shellfish culture (such as intertidal flip-bag oyster culture, mussel rafts, and geoduck tubes) within Hood Canal because it can encroach on treaty-protected access to fishing grounds. Tribal treaty fishing and harvesting activities can co-exist with off-bottom culture, but these types of proposals are evaluated on a case-by-case basis and require early engagement with affected tribes to alleviate potential impacts.

Other participants voiced a reluctance to engage in a process if it would result in an explicit zoning where activities were concretely described as could or could not occur. They recognize the value in compiling data, but also believe that such a top-down regulatory approach could prevent innovation and possibly prevent suitable projects from advancing. These participants have a preference for a Hood Canal MSP to be an informational resource and decision-support tool that does not have an explicit tie to regulatory actions. Other participants voiced that a Hood Canal MSP should not be designed to streamline permitting in a way that bypasses review requirements for environmental laws like the National Environmental Policy Act and State Environmental Policy Act.

4.2 Information to be Developed

There are 2 steps that were not discussed during the pre-planning process: (1) develop guiding principles, and (2) create decision-making frameworks. These steps are deferred to the plan development stage. As noted above, all of the steps should be either reassessed or developed during the MSP planning phase.

5.0 CONCLUSIONS

The Hood Canal MSP is at the start of the pre-planning process. The following includes lessons learned from the pre-planning phase. These fall into 3 general categories: (1) outreach and engagement, (2) data and applications, and (3) concerns and pitfalls.

5.1 Outreach and Engagement

The pre-planning effort included over 70 participants and over 45 partner agencies, organizations, and tribes. The types of groups represented a diverse range of interests in Hood Canal. This diversity is largely a product of the existing participation in the HCCC Board of Directors, and the partnerships and interest built during the HCSI Action Plan development, but also of the well-established history that HCCC has of integrating science with community priorities. Continued engagement during the planning phase of this work will be a key component of a successful Hood Canal MSP. In general, the outreach indicated the following points.

- Partners and participants voiced an interest in continued development of a Hood Canal MSP, expressing interest in using the tool to help identify and navigate future nearshore projects.
- Most participants self-identified as likely users of a Hood Canal MSP tool.
- No other entities have volunteered to provide staff or resources to support development of an MSP apart from contributing spatial data.

5.2 Data and Applications

A Hood Canal MSP may bring together scientific understanding and interpretation to help guide future shellfish aquaculture permitting, support restoration and protection efforts, and identify and fill gaps in understanding, and inform regulatory processes.. Other potential applications for a Hood Canal MSP are listed below.

- Mapping would both incorporate and interpret available spatial data to evaluate sites for sustainable shellfish aquaculture, ecosystem function, and public interest.
- Participants highlighted the need for both approaches to MSP: (1) show all data layers and the user can look at what overlays they are interested in viewing, and (2) draw circles/polygons on a map and use the data to interpret if it is an appropriate or priority area for that activity. This need underlined the importance of incorporating transparent interpretation when identifying areas for specific shellfish growing methods.
- This tool could assist in prioritizing limited funds for protection and restoration, enhanced public access to existing public tidelands for recreational harvest, and coordination of other potentially conflicting uses.

- Plan development could occur in 2 major phases, in terms of problems it could solve, with the first being gathering all relevant data and the second focusing on impacts surrounding human activities.
- SMART metrics could include reduced shellfish permitting time and conflicts, and long-term monitoring to identify success or failure of management practices.

5.3 Concerns and Pitfalls

Concerns and pitfalls identified during the pre-planning phase included perceptions and expectations. Some of these concerns could be addressed through spatial data, although use of data generated additional concerns. Spatial data for Hood Canal readily exists for many resources. Ultimately, the next phase of a Hood Canal MSP should include an inventory and rating of spatial data based on its utility.

- Tribal partners, stakeholders, and natural resource managers do not always work together towards shared goals or have a shared value system.
- Reluctance to engage in a process if it would result in an explicit zoning where activities were concretely described as could or could not occur.
- Resource data, in particular associated with endangered species, tribal cultural resources, and harvest activities, may be sensitive or non-public information that is not made available by data owners/managers. Additional transparent conversations during the plan development phase would have to provide a clear path that is acceptable to the entity providing the data, such as summarization or broad characterization.
- Data sets that require a nuanced understanding of the data collection method could be misinterpreted and cause inappropriate decisions.
- Data that is based on historic surveys may not reflect current conditions.
- Data where resources are not reported (e.g., eelgrass, fish populations) may mean that resource is absent or that the area has not been surveyed.
- Interactions between the Hood Canal MSP and other public mapping resources that include Hood Canal (e.g., NOAA's Environmental Response Management Application or Ecology's Washington State Coastal Atlas) are unclear.

5.4 Status of Pre-Planning Process and Enabling Conditions

This pre-planning process demonstrated that support is high among Hood Canal recovery partners to continue pursuing the benefits of MSP. Development of an MSP is a multi-step process with several enabling conditions necessary for successful plan development and implementation. Table 6 lists the enabling conditions and their guiding questions, as modified from Smith et al. (2018).

Table 6: Enabling Conditions and Guiding Questions (Smith et al. 2018)

#	Enabling Condition	
1	Authority	What is the legal authority to plan?
2	Champion	Who will ensure that the plan is completed? Who will maintain momentum? Who will provide motivation and inspiration during the planning process, set a course for success, and articulate the vision?
3	Driver	What is the reason for planning? What are the problems or issues that marine spatial planning will solve or address? What are the specific objectives for improved ocean management?
4	Financing for planning and implementation	What are the financial resources for pre-planning, planning, and implementation stages?
5	Information, data, knowledge	What information and data are available to support the planning objectives? Has a needs assessment and gap analysis been done? Who is available to share their knowledge about the local environment, local economy, and socio-cultural values?
6	Leadership for the process	Who will lead the process; what agency will provide the leadership for the plan, and implement the plan?
7	Legal instruments	What are the legal instruments to do the planning and guide implementation? What are the legal instruments that affect how marine sectors operate in this geography?
8	Proponents and opponents	Who will support the planning process? Who will not support the planning process and may actively try to harm or stop the process?
9	Staff capacity to develop plan	What is the capacity (at the scale of the planning) to do the planning work and guide it through to implementation? What are the capacity building opportunities for implementation?
10	[Partner] engagement capacity	How are the [partners] currently organized? Do they have capacity in staff and financial resources to participate in a multi-year process? What are some of the ways that [partners] can participate so that it does not result in economic hardship? How can equity be addressed so that all [partners] can participate and share information?
Source: modified from Smith et al. 2018		

These enabling conditions are ranked as high, medium, and low, depending on the readiness and feasibility of each condition for planning and implementation. Based on the pre-planning results discussed above, a potential Hood Canal MSP process was evaluated using this framework, with results shown in Table 7, and further explanation of the ratings below.

It is necessary to review and assess these conditions throughout the process to improve scores and inform approaches to plan development and implementation. Smith et al. (2018) indicates that a review of the enabling conditions might be necessary following an election, substantial changes to funding for the planning (both decrease and increase), and losing an MSP driver or champion.

Table 7: Checklist for Assessing Enabling Conditions for an MSP Process

#	Enabling Condition	Pre-Planning	Plan Development	Implementing the Plan
1	Authority	Medium	Medium	Medium
2	Champion	High	Medium	Medium
3	Driver	High	Medium	Medium
4	Financing	High	Low	Low
5	Information, data, knowledge	High	Medium	Medium
6	Leadership for the process	High	Medium	Medium
7	Legal instruments	Medium	Medium	Medium
8	Proponents and opponents	High	High	High
9	Staff capacity	High	Medium	Medium
10	[Partner] engagement capacity	High	High	Medium
Ranking				
High – This enabling condition is present, very strong, and there is high confidence that it will persist during the planning process and for implementation. In other words, it exists and there is high confidence that this enabling condition will not change.		Medium – This condition is present, moderately strong, and there is a perceived or known risk that it may disappear or weaken during the planning process and/or implementation. Medium could be scored if the enabling condition is not currently present but there is high confidence that it will develop during the planning process. Medium could also be scored if only a portion of something exists but what is missing is not going to hinder progress because other options are possible or could be developed (e.g., spatial data for all economic sectors is missing but could use participatory mapping).		Low – This enabling condition is absent or very weak, and/or there is evidence that it will be challenging to develop or strengthen. Low also could be scored if the enabling condition exists now and it is definitely going to disappear during the planning and implementation phases (e.g., funding for only a portion of the planning process; a process Champion will be lost, the driver will disappear or not be relevant).
Source: Smith et al. 2018				

The following explains the rankings, as they relate to the Hood Canal MSP process, for the various enabling conditions checklist presented in Table 7:

Authority: HCCC’s member governments, organized by interlocal agreement among all local Hood Canal tribes and counties, have strongly supported the pursuit of MSP for Hood Canal, building on the shared values, objectives, and policy areas of focus established in the HCSI Action Plan. However, there is no specific legal authority requiring HCCC or another government agency pursue MSP in Hood Canal at this time.

Champion: As the lead of the pre-planning phase, HCCC has championed this effort thus far, with the support of key leaders in the shellfish industry, tribes, and regulating entities at the local, state, and federal government levels. Uncertainties remain about which specific entities and individuals will commit to champion this effort throughout planning and implementation phases.

Driver: The shoreline and nearshore provides for many uses, bringing many differing perspectives about how the shared space *should* be used. There are a variety of arenas where

these differing perspectives come to light and provide a strong impetus for a Hood Canal MSP tool that can help share common information, evaluate tradeoffs, and identify areas best suited for specific uses. It is expected that many of these drivers will continue to persist and potentially worsen over time without direct attention.

Financing for planning and implementation: HCCC secured financing for the initial pre-planning phase. Ongoing funding for future plan development and implementation is uncertain at this time. If HCCC moves to continue pursuing MSP in Hood Canal, both public and private grant sources would be pursued to fund a continued Hood Canal MSP effort.

Information, data, knowledge: Many useful datasets have been identified and are available across multiple clearinghouses at state and federal government agencies. Known information gaps have also been identified, that may require new primary data collection, as well as types of information that involve local knowledge not currently captured in an existing dataset. There is some uncertainty about the community's willingness to share sensitive information, specifically regarding tribal cultural practices and shellfish grower operations. The project team has learned of nuanced approaches to incorporate sensitive information while respecting preferences to not specify precise locations on a map. This will be an important element to an MSP process, requiring relationship building, and a careful approach to gain the trust of these partners.

Leadership: HCCC led this pre-planning phase, with encouragement from shellfish industry leaders, local, state, and federal agencies, Hood Canal tribes, and other important ecosystem recovery partners. HCCC is prepared to lead future phases should the decision be made to continue pursuing MSP for Hood Canal. A successful Hood Canal MSP would benefit from further partnerships with agencies or entities with an interest in co-leading this process, to add more formal support, offer additional capacity and resources, and strengthen its legitimacy to ensure the tool's utilization.

Legal Instruments: There is no specific legal instrument supporting this MSP process, but many partners' roles are legally defined and support their interests in engaging in this process. Such legal mandates include tribal treaty rights, state agency resource management, local government shoreline master plans, shellfish aquaculture regulations, HCCC's interlocal agreement, and others.

Proponents and opponents: Many proponents self-identified during pre-planning, while some concerns were also raised. An MSP tool would support the demonstration of potential tradeoffs reflecting established shared values across the many perspectives present. Proponent and opponent perspectives may also evolve throughout an MSP process.

SUPPORT FOR A HOOD CANAL MSP

The pre-planning process for a Hood Canal MSP indicated that support is high to continue the effort.

Staff capacity to develop plan: If HCCC moves to continue pursuing MSP in Hood Canal and secures the necessary financing, staff capacity would potentially be available to conduct the work, and would likely also require additional consultant support. This would necessitate adjustments to current staff capacity allocations across HCCC programs over a multi-year time frame.

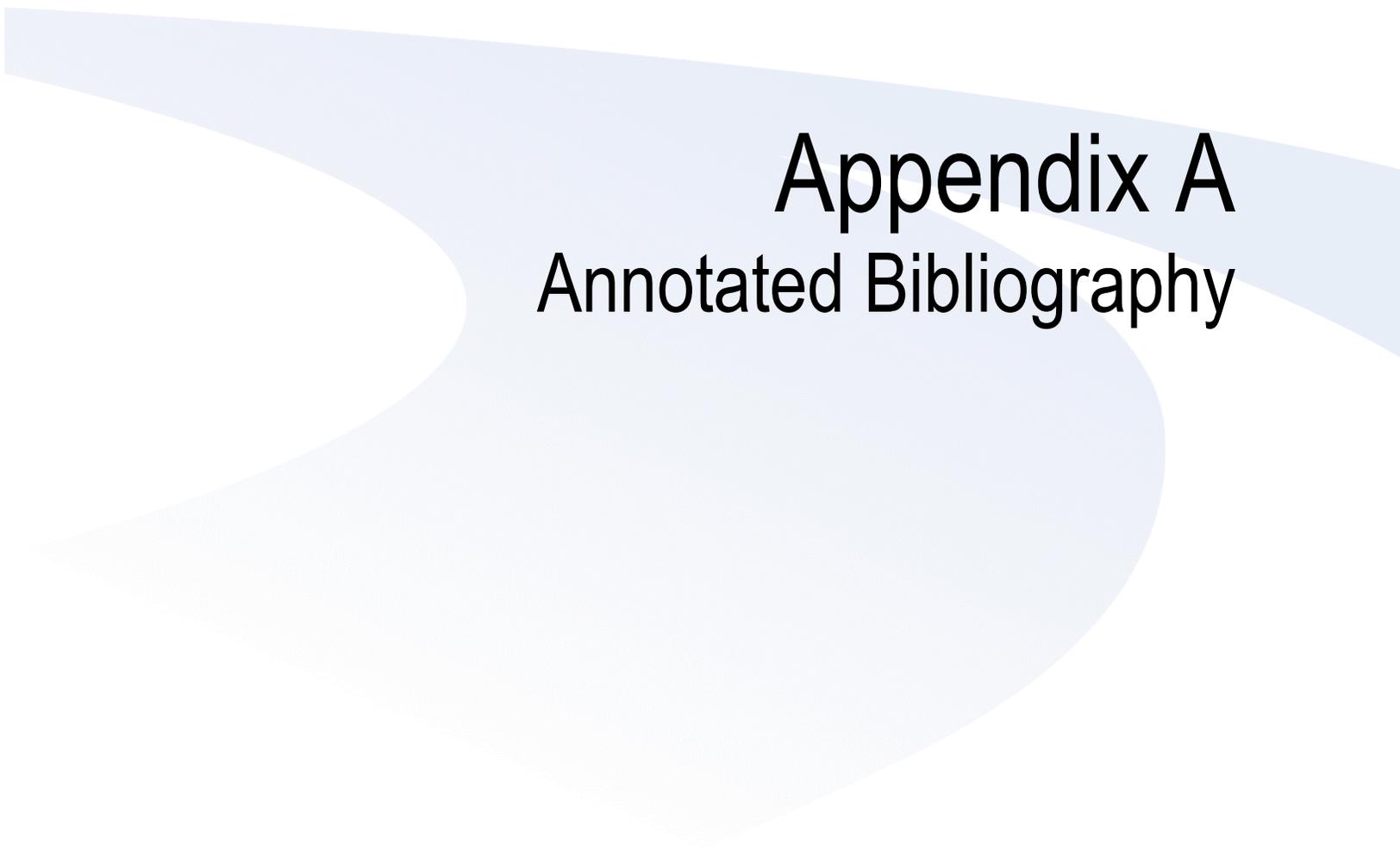
[Partner] engagement capacity: There was a high degree of partner engagement throughout the pre-planning phase. It is expected that would continue through a plan development phase as the interest is high, however work remains to build the commitments from potential MSP tool users to utilize and implement a completed Hood Canal MSP and tool.

Overall, the pre-planning process for a Hood Canal MSP indicated that support is high to continue the effort. Although there will be challenges, there are means and methods to work through the process and provide a valuable tool for the Hood Canal community.

6.0 REFERENCES

- Biedenweg, K. and A. Hanein. 2013. Developing human wellbeing indicators for the Hood Canal watershed. Prepared by the Puget Sound Institute, Tacoma, Washington. Prepared for the Hood Canal Coordinating Council, Poulsbo, Washington.
- HCCC (Hood Canal Coordinating Council). 2013-2021. Hood Canal regional pollution identification & correction program. Available at: <https://hccc.wa.gov/PIC> (accessed on September 30, 2021).
- Blake, B. and A. Bradbury. 2014. Washington Department of Fish and Wildlife plan for rebuilding Olympia oyster (*Ostrea lurida*) populations in Puget Sound with a historical and contemporary overview. WDFW, Point Whitney Shellfish Laboratory, Brinnon, Washington.
- Confluence (Confluence Environmental Company). 2017. Assessment of interactions between salmon habitat restoration and bivalve shellfish resources. Prepared by Confluence, Seattle, Washington. Prepared for the Hood Canal Coordinating Council, Poulsbo, Washington.
- HCCC (Hood Canal Coordinating Council). 2017. Hood Canal integrated watershed plan: Five-year strategic priorities – 2017 update. HCCC, Poulsbo, Washington.
- Beck, M.W, Z. Ferdaña, J. Kachmar, K.K. Morrison, P. Taylor and others. 2009. Best Practices for Marine Spatial Planning. The Nature Conservancy, Arlington, Virginia.
- Ecology (Washington State Department of Ecology). 2018. Marine Spatial Plan for Washington's Pacific Coast. Publication no. 17-06-027 Revised June 2018. Available at: https://msp.wa.gov/wp-content/uploads/2018/06/WA_final_MSP.pdf (accessed on September 24, 2021).
- Ehler, C. and F. Douvère. 2009. Marine Spatial Planning: A step-by-step approach toward ecosystem-based management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO.
- Lund, P. and L. Hoberecht. 2016. Shellfish Interagency Permitting Team Phase I Report. Washington State Department of Ecology, Southwest Regional Office, and NOAA Fisheries, West Coast Regional Office. Available at: <https://ecology.wa.gov/DOE/files/44/446c9a20-fe38-4a23-85ba-f25b87da05b8.pdf> (accessed on September 24, 2021).
- NOAA (National Oceanographic Atmospheric Administration). 2019. OceanReports. NOAA, Office for Coastal Management. Available at: <https://coast.noaa.gov/digitalcoast/tools/ort.html> (accessed on September 24, 2021).

- Smith, J. 2016. Lessons learned from Seychelles Marine Spatial Planning: Summary of some of the problems that Seychelles has experienced, and how they were overcome. The Nature Conservancy, TNC Canada, Global Oceans Team.
- Smith, J., V. Agostini, M. Beck, M. Eggars, F. Ghersi, L. Hale, K. Hum, T. Leberer, K. Longley-Wood, G. Perdanahardia, C. Wagner and H. Sims. 2018. Evaluating the enabling conditions for marine spatial planning. The Nature Conservancy. Unpublished report. 6 pp.
- Smith, J.L., H.E. Sims, and A. de Comarmond. 2021. Seychelles - using marine spatial planning to meet the 30 percent marine protected areas target. Commonwealth Blue Charter. Case Study: Marine Protected Areas. February 2021.
- West Coast Ocean Tribal Caucus. 2020. Guidance and Responsibilities for Effective Tribal Consultation, Communication, and Engagement: A Guide for Agencies Working with West Coast Tribes on Ocean & Coastal Issues. 45 pp. Available online at:
https://static1.squarespace.com/static/5bc79df3a9ab953d587032ca/t/5f0cdc876f40e375a32305af/1594678422449/WestCoastTribalEngagmentGuidance_July2020.pdf
- White, N. and H. Harguth. 2020. Hood Canal Shellfish Initiative: Action Plan. Hood Canal Coordinating Council. Available at:
https://hccc.wa.gov/sites/default/files/resources/downloads/Hood%20Canal%20Shellfish%20Initiative-Action%20Plan_20201211.pdf (accessed on September 24, 2021).



Appendix A

Annotated Bibliography

Appendix A HOOD CANAL MARINE SPATIAL PLANNING PROJECT: ANNOTATED BIBLIOGRAPHY

Prepared for:

Hood Canal Coordinating Council
17791 Fjord Drive NE, Suite 118
Poulsbo, WA 98370
Attn: Haley Harguth, Nate White, and Scott Brewer

Authored by:

Confluence Environmental Company



Pacific Shellfish Institute



October 2021

INTRODUCTION

The Hood Canal Coordinating Council (HCCC) initiated a pre-planning phase for a new Hood Canal Marine Spatial Planning (MSP) Project. The proposed geography for the plan is the entire Hood Canal, although additional geographic segments could be developed for the plan itself. The Hood Canal MSP Project was a recommendation from the Hood Canal Shellfish Initiative (HCSI), to further the goal of balancing Hood Canal’s shellfish aquaculture uses while protecting tribal treaty rights and high value ecosystem functions and locations. Confluence Environmental Company (Confluence) and the Pacific Shellfish Institute (PSI) provided support for HCCC during the pre-planning phase of this work.

This appendix is an annotated bibliography of the most relevant information identified and reviewed that relate to species use of habitat, nearshore ecosystem processes, and the value of establishing an MSP for specific regions. These documents are reviewed and summarized in table below. The documents are derived from the following sources:

- Scientific Information (Peer-Reviewed Journal)
- Technical Information
- Presentations
- Websites and Databases

It is identified in the table whether the document is relevant to the work being done by HCCC. A summary of the major conclusions is presented for each document presented. Note that this appendix includes the citations used in the main report. The report itself has a longer list of cited references.

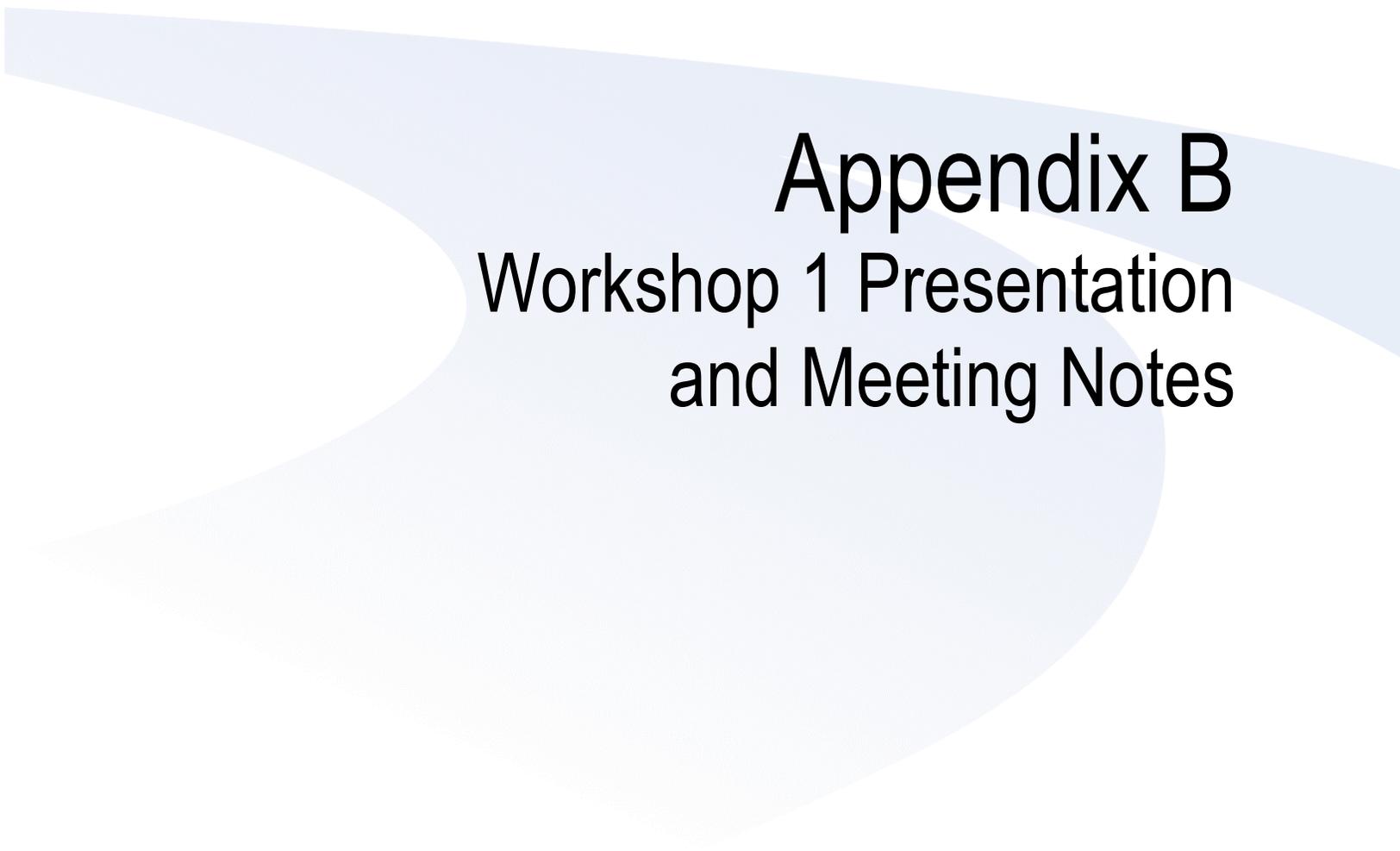
This page is intentionally left blank.

Citation	Full Reference	Discusses the MSP Process?	Relevant to HCCC Pre-Planning?	Summary of Major Conclusions of the Document
Collie et al. 2012	Collie, J.S., W.L. (Vic) Adamowicz, M.W. Beck, B. Craig, T.E. Essington, D. Fluharty, J. Rice, J.N. Sanchirico. 2012. Marine spatial planning in practice, Estuarine, Coastal and Shelf Science. http://dx.doi.org/10.1016/j.ecss.2012.11.010	Yes	Yes	<ul style="list-style-type: none"> Empirical review of 16 existing marine spatial plans, their attributes, and the extent to which the expert guidance is actually being followed. Created an idealized plan from the review from the steps included in recent expert papers. All plans have a high-level government mandate and the authority to implement spatial planning vested in existing institutions. Almost all the plans used data with clear criteria for data inclusion. Success is defined inconsistently across plans; in half the cases there are no metrics of success with reference benchmarks. Although monitoring is included in the majority of plans, only in some cases do monitoring results feed back into management decisions. The value of marine spatial planning is not just in the development of the product but also in the process. Done well, the planning process can help to clarify management objectives, examine trade-offs among them, involve stakeholders and reduce conflicts among users. Key characteristics that do matter: (1) Planning efforts need a legal mandate with political capabilities to implement the plan; (2) Planners should try to move from conceptual objectives to specific, operational objectives early in the planning process; (3) Plan leaders should be meaningfully inclusive; (4) The standards and expectations for MSPs should be commensurate with the financial and human resources for the work; and (5) Plans should be designed for feedback and adaptive learning that links monitoring with future plan revisions.
Ehler 2008	Ehler, C. 2008. Conclusions: Benefits, lessons learned, and future challenges of marine spatial planning. <i>Marine Policy</i> 32:840-843.	Yes	Yes	<ul style="list-style-type: none"> Identifies principal conclusions from papers presented in this special issue on marine spatial planning. Identifies potential economic, ecological, and administrative benefits (and costs) that might be realized from the implementation of MSP. Identifies lessons learned and identifies future challenges and directions for MSP, including the development of international guidelines for its implementation. Sea use management is a continuous, iterative, adaptive, and participatory process, comprising a set of functions including research, analysis and planning (including MSP), financing, implementation, monitoring, and evaluation—all of these individual functions must be carried out for the management to be successful. MSP is an important function of ecosystem-based sea use management. MSP can be used to identify biologically and ecologically sensitive areas of marine places in time and space, to identify existing and potential human uses of marine places, and to evaluate the cumulative effects of human activities on marine ecosystems. The boundaries for MSP often will not (and do not have to) coincide with the boundaries for management (see the article of Gilliland and Laffoley in this issue). As long as the productive capacity and resilience of marine ecosystems are left intact, marine areas can be managed for human uses that do not harm ecosystem functions (see the article of Crowder and Norse). Early and continuing engagement of stakeholders in a clear management process is critical to the long-term success and engenders trust and ownership of the process. Monitoring, reporting, and evaluation are critical functions that allow MSP to adapt to changing conditions As a result of the first International Marine Spatial Planning Workshop held at UNESCO in November 2006, the Gordon and Betty Moore Foundation and the David and Lucille Packard Foundations have provided funds to UNESCO to develop such international guidelines. A manual of principles and guidelines for marine managers will be developed that lays out a step-by-step procedure for the implementation of ecosystem-based, marine spatial management.
Halpern et al. 2012	Halpern, B.S., Diamond, J., Gaines, S., Gelcich, S., Gleason, M., Jennings, S., Lester, S., Mace, A., McCook, L., McLeod, K., Napoli, N., Rawson, K., Rice, J., Rosenberg, A., Ruchelshaus, M., Saier, P., Scholz, A., Zivian, A. 2012. Near-term priorities for the science, policy and practice of Coastal and Marine Spatial Planning (CMSP). <i>Marine Policy</i> 36:198-205.	Yes	Yes	<ul style="list-style-type: none"> Identified need for MSP initiatives in the United States, Europe, Australia and Canada. Included 35 experts to address most pressing needs in the near-term. Focus group included those experienced in the science, policy, and/or practice of CMPS, governmental representatives, and academics, but noted that Tribal representation and industry involvement was underrepresented. Overall, 20 needs were identified and grouped into four categories: process, communication and engagement, tradeoffs and valuation, and decision support. Process needs included developing proactive processes with location-specific objectives, promoting coordination in planning and governance, and conducting an assessment to different scopes and their associated laws, obligations to aboriginal peoples, and regulatory mechanisms. Communication and engagement needs included best practices guidance on engagement and stakeholder cooperation, developing a “business case” for CMSP, and balancing top-down development with bottom-up engagement. Tradeoffs and valuation included science-based evaluation of plan compatibility, assessing social, economic, and environmental tradeoffs at varying scales, developing methods to address diverse values systems between groups, and identifying currency for comparing outcomes to alternative plans. Decision support included assessing necessary information for different plans; compiling data; developing open source and user-friendly tools for visualization, integration, and sharing; and establishing clear, measurable indicators of monitoring effectiveness and overall success.
McCann et al. 2013	McCann, J., Schudmann, S. with G. Fugate, S. Kennedy, and C. Young. The Rhode Island ocean special area management plan: managing ocean resources through coastal and marine spatial planning. University of Rhode Island Coastal Resource Center/Rhode Island Sea Grant College Program, Narragansett, R.I.	Yes	No?	<ul style="list-style-type: none"> Focused on Rhode Island state waters as managed by the Coastal Resources Management Council and offshore wind energy. Area of interest is dubbed a SAMP, or Special Area Management Plans, which are “ecosystem-based management strategies designed to preserve and restore ecological systems.” This particular tool was called the Ocean SAMP. This process had a large research component involving multiple departments within URI to lead tool development with special attention given to offshore wind energy strategic mapping. Fishers and Tribal groups were also contacted with fishers wanting more fisheries related research integrated into the proposed plan and Tribal representatives expressing concern that scientists would look at a resource as a researcher and not consider its value or significance to the Tribe. The policy process developed by URI is a five-step process designed to track ecosystem-based management projects in the near and long term. Step 1-3 were the focus of the Team. These included 4 main components: developing time-bound and measurable societal and Environmental goals; building support from well-informed users; developing sufficient capacity to develop and implement the Ocean SAMP; and obtaining formal adoption at state and federal levels. Project goals included promoting an environmentally healthy ecosystem that is also economically beneficial, enhancing existing uses, increasing coordination between state and federal management agencies, and encouraging development with local aspirations. Overall SAMP timeline was 2 years and involved three major steps: Issue identification/ assessment, SAMP preparation, and formal adoption.

Citation	Full Reference	Discusses the MSP Process?	Relevant to HCCC Pre-Planning?	Summary of Major Conclusions of the Document
				<ul style="list-style-type: none"> Major implementation considerations include encouraging appropriate development, providing adequate monitoring (including oceanographic processes, fisheries, ecological health, recreation, marine transportation, and cultural resources), and coordination. Assessing outcomes of coastal governance is broken down into four Orders of Outcomes (Olsen 2003) with First Order outcomes defined as the results from completing the first three previously mentioned steps for the project- have enabling conditions been assembled for the formal adoption of the Ocean SAMP. The second order examines implementation outcomes, the Third Order focuses on society and environmental goals, and the Fourth Order asks whether conditions achieved are contributing to a healthy, just, and equitable society that sustains the qualities of the ecosystem as a whole.
Smith et al. 2018 (unpublish)	Smith, J., V. Agostini, M. Beck, M. Eggars, F. Gheri, L. Hale, K. Hum, Leberer, T., Longley-Wood, K., Perdanahardja, G., Wagner, C., and Sims, H.. 2018. Evaluating the enabling conditions for marine spatial planning. The Nature Conservancy. Unpublished report. 6 pp.	Yes	Yes	<ul style="list-style-type: none"> Ten enabling conditions to determine readiness and feasibility in the marine spatial planning processes were developed during the 2016 Global Oceans retreat. These conditions may be adjusted or revised depending on project specifics. These conditions aren't ranked, yet the authors noted that they considered the driver to be the most important condition the MSP process success. Authority- what's the core legal authority to the plan (e.g. an Act or policy) Champion- Who is maintaining momentum and ensuring project completion? Driver- What is the central reason for planning (issues/need and specific goals) Funding- Is there adequate funding for all stages of the process (pre-planning, planning, and implementation)? Information, data, and Knowledge- what data/information is needed and what is currently available? Who is available to share knowledge? Process leadership- What agency will lead the process and implement the plan? Legal instruments- What instruments are in place to guide planning and implementation? Proponents and opponents- Who supports the process, who doesn't, and who may actively try to impede the process? Staff capacity to make the plan- Is there adequate capacity to do the work needed for planning and implementation? Stakeholder engagement capacity- How are stakeholder currently organized and do they have the ability to participate in a multi-year process? How can equity be addressed to ensure all stakeholders get adequate representation (e.g. minimizing financial barriers to participation). Ranking all 10 enabling conditions for the three separate process stages (pre-planning, development, and implementation) with "high", "medium", and "low" grades may indicate overall priority areas that need improvement and where changes need to occur with emphasis on those in decision-making and stakeholder engagement.
Smith et al. 2021	Smith, J.L., HE. Sims and A. de Comarmond. 2021. Seychelles - using marine spatial planning to meet the 30 percent marine protected areas target. Commonwealth Blue Charter. Case Study: Marine Protected Areas. February 2021.	Yes	Yes	<ul style="list-style-type: none"> Uses the Seychelles MSP as a case study to develop lessons learned for the MSP process. The case study looked at how MSP has been used to develop the recommendations to expand marine biodiversity protection in Seychelles. The Seychelles MSP Initiative was launched with three objectives: to expand protection of marine waters to 30 per cent, to address climate change adaptation and to support the Blue Economy. Lessons learned include: <ul style="list-style-type: none"> Getting support commitment from political entities. Establishing the right partnerships at the beginning. Trust-building to ensure that competing uses were identified and addressed in the MSP. Finding spatial data was vital. Providing Technical Working Groups for specific sectors and topics (e.g., fisheries, finance, climate change). Allowing enough time for participation. Providing a consistent effort to ensure that key partners were present during relevant discussions to make decisions transparent. Providing impartial facilitation for difficult discussions.
Beck et al. 2009	Beck, M.W, Z. Ferdaña, J. Kachmar, K. K. Morrison, P. Taylor and others. 2009. Best practices for marine spatial planning. The Nature Conservancy, Arlington, VA.	Yes	Yes	<ul style="list-style-type: none"> This document examines best practices and lessons learned for MSP as identified by The Nature Conservancy including those specific to the Pacific Northwest. Key issues were designated into 5 groups: geographic planning boundaries, planning scale and resolution, data collection and management, multi-objective planning including aims and outcomes, and interactive decision support Boundaries consisted of 3 recommendations: 1) the coastal boundary should be the farthest extent of saltwater influence or head of tide; 2) alongshore boundaries should weight ecological, social, and jurisdictional considerations; and 3) consider using existing jurisdictional boundaries for offshore edges Geographic Scale and Resolution recommendations were: 1) MSP projects should consider two scales and resolutions with one being a subregion scale with fine resolution, and a regional scale with coarser resolution and 2) be aware of data' scale and resolution when conducting analyses- don't scale up or down improperly Data Collection and Management recommendations were: 1) establish an independent panel of scientific experts to develop and approve MSP practices, 2) early development of planning objectives and data types needed assist in data collection, 3) data can be used analytically or illustratively in planning, 4) establish firm criteria for accepting datasets, 5) review dataset quality, 6) start with ecological data as it is usually the most comprehensive, 7) keep data in easily transferable formats, 8, authoritative databases may be needed, and 9) new data collects cannot normally be done within the timeframe of planning. Multi-Objective Planning recommendations were: 1) a high-level gov mandate is necessary, but not important to MSP development and success, 2) facilitate local bottom-up involvement for diverse stakeholders, 3) ensure that the burden of proof about human impacts is distributed appropriately among groups with differing objectives, 4) conduct formal cost-benefit analyses for management alternatives, 5) identify and quantify tradeoffs and highlight potential areas for reaching common ground, 6) develop forward thinking scenarios for alternatives, 7) create planning frameworks that account for short-term need for certainty and long-term need for flexibility, 8) focus planning efforts on a few overarching management objectives and then fill in detailed considerations, 9) develop an integrated plan for multiple objectives, and 10) for zoning identify all likely types and number of zones.

Citation	Full Reference	Discusses the MSP Process?	Relevant to HCCC Pre-Planning?	Summary of Major Conclusions of the Document
				<ul style="list-style-type: none"> ▪ Interactive Decision Support recommendations were: 1) conduct a needs assessment to identify users and requirements, 2) enable users to develop potential alternative solutions themselves, 3) ease of use and transferability very important, 4) develop frameworks that could be used in data rich and data sparse areas, and 5) ensure systems are intuitive, concise, endorsed by gov (for authoritative data), have downloadable data, transparent explanations of data, have user support, and address ways the system can stay relevant. ▪ The document ends with a number of case studies from around the world to further examine differences between MSP projects.
Santos et al. 2019	<p>Santos, C.F., Ehler, C.N., Agardy, T., Andrade, F., Orbach, M.K., Crowder, L.B. 2019. Marine spatial planning. World Seas: An Environmental Evaluation Vol 3: Ecological Issues and Environmental Impacts. Elsevier Ltd. pp. 571-592</p> <p>https://doi.org/10.1016/B978-0-12-805052-1.00033-4</p>	Briefly	Skip to Challenges (Section 30.4)	<ul style="list-style-type: none"> ▪ This book chapter gives an excellent overview of what MSP is and what it involves (main phases), the global status, and what the major challenges currently are. It does NOT go in depth on the policy process. ▪ This chapter identifies 7 major phases of MSP: pre-planning, analysis for planning, plan development, plan completion, approval, implementation, and revision. ▪ MSP is occurring in 4 major ocean basins and 6 continents to varying phases. Most are still in early phases, but other areas like the northeast and northwest coasts of the United States, Belgium, the Netherlands, Norway, China, and Australia are in the final revision phase. ▪ Major identified challenges to MSP were Political and Institutional frameworks, Environmental sustainability and Ecosystem-based Management, performance monitoring and evaluation, stakeholder engagement, Human dimensions and Social Data, Transboundary issues, and global climate change. ▪ Political and institutional frameworks have caused the failure of certain MSPs if they don't support the initiative or if they are vulnerable to outside influences from specific sectors. ▪ "many of the current MSP processes are more about the growth of blue economy rather than really balancing conservation and development objectives. In these cases, marine conservation is often perceived as just "another" spatial use of the ocean—being treated at the same level as fisheries, shipping, renewable energy, etc.—and the balance is heavily weighted toward economic development (Qiu & Jones, 2013), with a real risk of social and economic factors overshadowing the importance of environmental conservation (Frazão Santos et al., 2014)." ▪ Performance monitoring and evaluation are important to measuring MSP success and to further adjust and adapt them, however there isn't a silver bullet approach and inconsistent use, and confusion between MSP components create challenges. Furthermore social, political, and cultural information should be analyzed as well, which may not be as straightforward as ecological data. ▪ Poor communication and the notion that the decision-making is inherently bias can lead to stakeholder exclusion and nonengagement. ▪ Social data has been overlooked in past MSPs, which has led to backlash.
Gopnik 2008	<p>Gopnik, M. 2008 Integrated marine spatial planning in US. waters: The path forward. Marine Conservation Initiative of the Gordon and Betty Moore Foundation.</p>	No	No	<ul style="list-style-type: none"> ▪ This report breaks down i-MSP (Integrated Marine Spatial Planning) based on a literature review and 30-hour long interviews with various agencies and stakeholder groups. ▪ The two newest ocean uses identified were renewable energy and aquaculture, which share many of the same concerns: technical challenges, environmental impacts, and management confusion. ▪ Major benefits of i-MSP a broken into groups: benefits of the process itself, tangible economic and social gains, and environmental improvements. ▪ Major I-MSP concerns voiced by interviewees were practicality concerns, complexity of its structure, uncertainty and the current limited level of knowledge, doubts surrounding cooperation between groups (e.g., agencies and NGOs), and that environmental concerns will be overlooked if there is competition with other sources. ▪ Comparing i-MSP to lessoned learned from land use management and zoning can be very useful in raising people's comfort levels surrounding mistrust of the marine spatial planning process.
HCCC 2016	<p>HCCC. 2016. Meeting summary for the HCCC Integrated Watershed Plan steering committee: IWP Update/LIO Ecosystem Recovery Plan</p>	No	Yes (tables on pressure ratings)	<ul style="list-style-type: none"> ▪ PSP and EPA are driving effort for Local Integrating Organizations to develop Ecosystem Recovery Plans for their Action Areas. HCCC is using this LIO Recover Plan effort as an opportunity to update the Integrated Watershed Plan. ▪ Focal components are broken down into ecological and social groups. Ecological components include beaches and nearshore, deltas and estuaries, rivers and floodplains, and marine deepwater. Social components include physical health, psychological wellbeing, cultural wellbeing, governance, social wellbeing, and economic wellbeing. ▪ 2016 IWP priority ecological pressures by focal components were rated based on scope, severity, and irreversibility. ▪ Climate change was rated very high for all 4 ecological previously mentioned focal points plus an additional focal point, forests. ▪ Transportation and Service Corridors had the second highest pressure rating, followed by Groundwater Withdrawal and Onsite Sewage Systems. ▪ With the exception of Marine Deepwater and Forests, which had a summary pressure rating of "high", all ecological focal points rated a "very high" summary score. ▪ Of note: Residential and Commercial Development, and Marine Shoreline Infrastructure both dropped from "very high" IWP summary rating in 2014, to a "medium" rating in 2016.
Smith 2016	<p>Smith, J. 2016. Lessons learned from Seychelles marine spatial planning. The Nature Conservancy Canada</p>	Yes	Yes	<ul style="list-style-type: none"> ▪ This is a summary of lessons learned and consists of 7 issues with the Seychelles MSP and how they were overcome. 1. Decision making and governance- originally insufficient governance framework was overcome by being transparent, communicating clearly, and developing Principals of Decision making for the MSP process to be endorsed and developed by all stakeholder groups in line with the steering committee in question. 2. Spatial Data- Data gaps were overcome through a centralized database and catalogue for all stakeholders, participatory mapping and models, and data centric workshops 3. Geographic scale of the plan- diversity of stakeholder groups and jurisdictions could make scope definition difficult, but this was overcome in Seychelles by starting out with a course regional scale for phase one of the process, and then refining with consultations for fine scale zoning of shallow waters 4. Timelines- Can get easily sidetracked and stagnate, keeping momentum through a two-phase approach to create milestones while still allocating sufficient time for consultation. 5. Integration and synergies- simultaneous and parallel initiatives or projects are best overcome by holding stakeholder meetings. 6. Stakeholder engagement- Ensuring proper presentation in a diverse area is important as some stakeholder groups may not have an adequate representative. Stakeholder support funding is an additional way to ensure that there isn't a paywall to representation. 7. Staff capacity and training- A common challenge that has not been completely overcome.
Ehler 2009	<p>Ehler, C. 2009. Marine spatial planning: A step-by-step approach toward ecosystem-based</p>	Yes	Yes	<p>This document goes into depth on the 10 steps of marine spatial planning and breaks them down into multiple tasks: Step 1: Identifying need and establishing authority</p>

Citation	Full Reference	Discusses the MSP Process?	Relevant to HCCC Pre-Planning?	Summary of Major Conclusions of the Document
	management. UNESCO Intergovernmental Oceanographic Commission Manual and Guides No. 53, ICAM Dossier No. 6.			<p>Step 2: Obtaining financial support Step 3: Organizing the process through pre-planning Step 4: Organizing stakeholder participation Step 5: Defining and analyzing existing conditions Step 6: Defining and analyzing future conditions Step 7: Preparing and approving the spatial management plan Step 8: Implementing and enforcing the spatial management plan Step 9: Monitoring and evaluating performance Step 10: Adapting the marine spatial management process</p>
Biedenweg and Hanein 2013	Biedenweg, K. and Hanein, A. 2013. Developing human wellbeing indicators for the Hood Canal watershed.	No	Yes	<ul style="list-style-type: none"> ▪ The Puget Sound Institute and Stanford University collaborated with the HCCC to develop human wellbeing indicators relevant to natural resource management in the Hood Canal watershed. ▪ Potential indicators were grouped into the six different domains of wellbeing: physical, psychological, governance, cultural, social, and economic. ▪ Local participants in 3 workshops were given 100 indicators to rank in importance. These were then sent to non-local scientists to determine practicality and robustness. ▪ 26 indicators were recommended with 15 ranking highly in all three workshops, 19 indicators ranked high by social scientists, and 10 indicators ranking high in both. ▪ Below is the breakdown by domain with indicators ranked high in both <u>underlined</u>: <ul style="list-style-type: none"> - Physical- exercise (<u>number of hours outdoors</u> and percent of safe swimming beaches), access to local food, safe drinking water, safe food, and air quality - Psychological- <u>positive emotions</u>, general subjective wellbeing, and place identity - Governance- Access (1) <u>Percent shoreline available</u> and 2) percent residents satisfied with shoreline access), communication, trust in government, effectiveness of public policies, and stewardship - Cultural- Cultural events, <u>traditional resource practices</u>, and rural character - Social- Trust, strong families and friendships, strong communities - Economic- Jobs (1) number of jobs and living wagers per worker by resource-based employment/industry categories and economic clusters by count, and unemployment rates; and 2) number of new jobs created by natural resource employment sector) and Industry (1) percent economic activity from natural resource small business; 2) <u>percent of revenue to local economy from agriculture, commercial shellfish, fishing, timber, non0timber products and tourism</u>; and 3) <u>number of local supporting businesses to industry by sector</u>
Lester et al. 2019	Lester, S.E., Stevens, J.M., Gentry, R.R., Kappel, C.V., Bell, T.W., Costello, C.J., Kiefer, D.A., Maue, C.C., Rensel, J.E., Simons, R.D., Washburn, L., and White, C. 2019. Marine spatial planning makes room for offshore aquaculture in crowded coastal waters. Nature Communications 9, 945. https://doi.org/10.1038/s41467-018-03249-1	No	No	<ul style="list-style-type: none"> ▪ This article examined the value of a marine spatial planning analytical model that strategically identified location, size, and type of offshore aquaculture farms in relation to current activities and environmental concerns. ▪ This study focused on finfish, kelp, and bivalve offshore aquaculture in the Southern California Bight. ▪ Environmental concerns addressed by the study were wild-capture fisheries, watershed quality, benthic pollution, and disease spread. ▪ Results showed that the analytical model identified over 250,000 solutions that minimized impact to existing sector and environmental concerns. ▪ These solutions were then further analyzed and filter to indicate potential priority locations for aquaculture that would have high value and low impacts. ▪ Dramatic tradeoffs were found to only be unavoidable at high levels of development, while modest development still yielded substantial economic return. ▪ One major caveat the authors noted was that this was based solely on single-use and did not address a multi-benefit approach. ▪ Another critique was that there could be many more costs associated with operations that the model did not address (e.g. interactions with other uses and social considerations).

A light blue, abstract, curved shape that resembles a stylized arrow or a swoosh, pointing from the left towards the right. It is positioned behind the text.

Appendix B

Workshop 1 Presentation and Meeting Notes

Appendix B
HOOD CANAL MARINE SPATIAL PLANNING PROJECT:
WORKSHOP 1 PRESENTATION AND MEETING NOTES

Prepared for:

Hood Canal Coordinating Council
17791 Fjord Drive NE, Suite 118
Poulsbo, WA 98370
Attn: Haley Harguth, Nate White, and Scott Brewer

Authored by:

Confluence Environmental Company



Pacific Shellfish Institute



October 2021

INTRODUCTION

The Hood Canal Coordinating Council (HCCC) initiated a pre-planning phase for a new Hood Canal Marine Spatial Planning (MSP) Project. The proposed geography for the plan is the entire Hood Canal, although additional geographic segments could be developed for the plan itself. The Hood Canal MSP Project was a recommendation from the Hood Canal Shellfish Initiative (HCSI), to further the goal of balancing Hood Canal's shellfish aquaculture uses while protecting tribal treaty rights and high value ecosystem functions and locations. Confluence Environmental Company (Confluence) and the Pacific Shellfish Institute (PSI) provided support for HCCC during the pre-planning phase of this work.

This appendix provides the presentation and meeting notes from workshop 1. Workshop 1 was focused on establishing what marine spatial planning meant for Hood Canal and addressing potential concerns and opportunities identified by invited tribal partners and stakeholders. The introduction presentation defined the previously mentioned purpose and goals identified by the HCCC and then was followed by a general overview of what marine spatial planning can accomplish when implemented effectively. Time was also allocated to allow the Port Gamble S'Klallam and Skokomish Tribal partners to address marine spatial planning from an indigenous perspective with emphasis following the previously mentioned 7 Rs Rules/Guidelines.

Workshop 1 included 2 breakout sessions where participants were split up into groups for 30 minutes to discuss topics prompted by a facilitator from the Hood Canal MSP pre-planning working group. Groups then returned to the main presentation room to report out discussions to the rest of the workshop participants. Breakout session 1 examined general concerns and opportunities surrounding marine spatial planning in Hood Canal while breakout session 2 focused in on how this tool could specifically be utilized beneficially and effectively.



This page is intentionally left blank.

HOOD CANAL COORDINATING COUNCIL – MARINE SPATIAL PLANNING WORKSHOP 1 MEETING NOTES

August 16, 2021

1-4 pm (Zoom Meeting)

Meeting Notes and Summary

Participants (total = 39):

Organization	Participant
Hood Canal Coordinating Council	Scott Brewer
Hood Canal Coordinating Council	Nate White
Hood Canal Coordinating Council	Haley Harguth
Hood Canal Environmental Council	Phil Best
Hood Canal Salmon Enhancement Group	Andy Hokit
Confluence Environmental Company	Phil Bloch
Confluence Environmental Company	Marlene Meaders
Confluence Environmental Company	Geneva Faulkner
Pacific Shellfish Institute (PSI)	Bobbi Hudson
Pacific Shellfish Institute (PSI)	Kalloway Page
Baywater Shellfish	Joth Davis
Jamestown S’Klallam Tribe	Liz Tobin
Jamestown S’Klallam Tribe and Jefferson County MRC	Neil Harrington
Jefferson Co. Public Health	Jacquelyn Stenman
Jefferson County Department of Community Development	Donna Frostholm
Kitsap County	Kathy Peters
Kitsap County	Kirvie Mesebeluu-Yobech
Kitsap Public Health District	Leslie Banigan
Mason Conservation District	Evan Bauder
National Marine Fisheries Service	Dan Tonnes
National Marine Fisheries Service	Jeff Vanderpham
North Olympic Salmon Coalition	Rebecca Benjamin
North Olympic Salmon Coalition	Sarah Doyle
Pacific Seafood	Miranda Reis
Port Gamble S’Klallam Tribe	Paul McCollum
Puget Sound Partnership	Rebecca Hollender
Puget Sound Restoration Fund	Jodie Toft
Skokomish Indian Tribe	Dana Sarff
Skokomish Indian Tribe	Julian Sammons
Skokomish Indian Tribe	Lisa Belleveau
Taylor Shellfish	Bill Dewey
U.S. Department of the Navy	Allison Satter
U.S. Department of the Navy	Maggie Dour
U.S. Environmental Protection Agency	Angela Adams
U.S. Fish and Wildlife Service	Carrie Cook-Tabor
Washington State Department of Agriculture	Laura Butler
Washington State Department of Ecology	Alena Reynolds
Washington State Department of Health	Scott Chernoff
Washington State Department of Natural Resources	Cyrilla Cook

Introduction

- Looking to explore how MSP can benefit us in Hood Canal
- Purpose
- Agenda discussion + house-keeping information
- Introductions

Tribal Partnerships

- The 7Rs to Tribal Partnerships
- Paul McCollum (Port Gamble S'Klallam) –Mapping and GIS tools and strategize areas for nearshore activities; collaborative restoration is the best place to understand how to build from past work; tribes have a long history and expertise to assist and provide knowledge; very interested in this process
- Dana Sarff (Skokomish Tribe) – Want to listen and learn
- Liz Tobin (Jamestown S'Klallam Tribe) – Here to listen and learn; provide input with feedback. Looking to protect tribes treaty rights; also focused on quarterly harvest and management of shellfish resources; how that interfaces with MSP is of interest to the Tribe

Overview (See attached presentation)

- Group shared information about Marine Spatial Planning on Washington Coast (<https://www.msp.wa.gov/>) and efforts by The Nature Conservancy (https://marineplanning.org/overview/tnc_approach/what-is-marine-spatial-planning-msp/)
- TNC did an effort in the early 2000s to look at Ecoregional Planning for Hood Canal; Washington DNR looked at Marine Conservation Priorities in the early 2000s.
- When we think about what that would look like in Hood Canal – can pull together the data sources from the Washington Coast MSP; pull together a common set of data resources that would be useful to support decision making.
- Hood Canal = restricted water source with various resources that are used/desired for use.
- Break-out session (3 rooms) – Each had a facilitator and note-taker.

Break-Out Session #1:

What are the opportunities?

- MSP will be cross jurisdictional, involving multiple agencies and decision makers
 - Framework to balance different goals and perspectives
 - In addition to shellfish MSP could inform kelp/eelgrass, aquatic reserves, tribal resource, and other natural resource management

- Forge partnerships and collaboration between management agencies
- Greater coordination of resources
- Potential Navy involvement
- A way to engage partners, stakeholders, and communities
 - Potential to dispel misinformation
 - Connect efforts with the public to build community
 - Ease social license concerns associated with shellfish growing
 - Consider upland use and engage communities and businesses
- Hood Canal and shellfish growing
 - HC is a good area to grow shellfish- economic and environmental opportunity
 - MSP could be used to ID how/where to grow while reducing use conflicts
 - Better inform permitting
 - ID priority areas to grow based on shared environmental data
 - Explore IMTA applicability within Hood Canal
 - Mapping active shellfish areas and overlaying with closure areas would be high value to support high priority areas and/or closure areas
 - MSP can identify Bush/Callow Act lands for the purpose of growing shellfish
- Excellent opportunity for compiling data and sharing
 - Connect data sources from different agencies
 - Identify priority data gaps
 - Use for routine SMP updates
 - Use to take inventory
 - Support cumulative impact analysis
- Can apply to restoration
 - Find areas of focus
 - Can have nearshore restoration as part of the “buy in” for MSP by partners
 - Further examine ecosystem services (generally and shellfish specific)
 - Map kelp and eelgrass beds
 - ID areas for water quality mitigation
 - Partner with salmon restoration and water quality groups
 - ID priority areas of funding for restoration and acquisitions
 - Can be used to track impacts from activities (not just shellfish growing)
 - Ensure resources aren’t being displaced

What are the concerns?

- Management and stakeholder synergy
 - Not everyone has the same value system (may prioritize different actions)
 - Diverse stakeholder engagement needs to be actively sought out moving forward

- Missing members? What about recreational and marine mammal perspectives? (WDFW and/or the Northwest Trade Organization to cover recreational perspectives?)
- Kayak and dive groups should be contacted
- Not everyone wants their info on a map (e.g. Tribes and growers)
- Concern about balance to manage permit requirements for eelgrass/salmon habitat and manage on a landscape scale with shellfish beds.
- How to incorporate shoreline property owners early on (example of success Burley Lagoon)
- Make people feel heard early on
- Tribal interests not supportive of off bottom culture due to access to fishing grounds
- Should MSP in Hood Canal be shellfish centric or should other activities and data layers be looked at as well?
- Unlooked for outcomes
 - Local jurisdictions don't have a process to incorporate MSP outcomes, will HCCC facilitate this? Or will it be business as usual?
 - Prioritizing one area might deprioritize another
 - Some commercial processes continue past when they should
 - Need to clearly articulate what MSP is and what the tool isn't. MSP is NOT a reg approval process, greenlight, or streamlining tool to bypass NEPA SEPA requirements. The normal review and permit processes still apply
 - MSP might make people think of or lead to "zoning"
 - MSP shouldn't lead to zoning for shellfish aquaculture
 - A non-regulatory process followed by a change of intent could lead to that process becoming regulatory
- Data accuracy
 - Tough to display temporal variability
 - Recreational shellfish harvest data needed from WDFW
 - Having current data is important, out of date data shared with other agencies could misinform their decisions
 - Misinterpretation of data by outside agencies could be detriments. Keeping source agency language and robust metadata/ data layer descriptions may help offset this

How this tool can address those concerns?

- Management support
 - Use as a guide and not a box; not meant to limit opportunities but provide support to understand a limitation of conflicts.
 - Inform upland planning and land used that impact water quality

- HCCC wants to know how to share outcomes to best use information (how to trickle down)
- Allow for adaptive management and monitoring
- What is the prioritization?
- What is the scope of MSP in Hood Canal and how can this support cumulative impact analyses?
- Incorporate a science-based process
- Examining environmental conditions
 - ID existing conditions and impacts of existing uses
 - Incorporate oceanographic data sets from buoys (UW Oceanography, Ecology, NANOOS) and hydrographic data
 - Highlight missing data due to past technological barriers
 - Highlight needs for resources to promote aquaculture, restoration, conservations activities
 - Accommodate climate change associated changes
 - Identify areas where nutrients are an issue for mitigation opportunities

Break-Out Session #2:

How can this tool inform future opportunities for economic growth, ecological sustainability, and bettering human quality of life?

- Ecological/environmental
 - Aid Navy in protecting aquatic lands where they are working
 - Develop information as tools for protecting aquatic lands
 - Tool for cumulative effects and processes
- Social and cultural wellbeing
 - ID co-benefits of projects and built out projects that have community engagement and restoration associated benefits
 - Better understand perspectives for use of Hood Canal
- Economic and regulatory
 - Aid in good decision making and planning for nearshore activities
 - Use as a model for other Puget Sound basins
 - Potential to sustain/preserve and increase acres and production for shellfish cultivation
 - Reduce time/cost to obtain a permit
 - Best explore shellfish implementations strategies using economists, social scientists, and ecologists
 - Assist in getting grants and other funding
 - Create a broader picture
 - Show past work of shellfish activities and be able to adjust

- Show more ways to increase tourism of new oyster saloons
- Use to describe work overtime
- Prompt: there are two approaches to MSP: (1) show all data layers and the user can look at what overlays they are interested in viewing, or (2) draw circles on a map and use the data to interpret if it's a good area for that activity; which approach is more appealing?
 - o identify areas that are appropriate for certain methods (e.g., off-bottom structures may not work for tribal fishing vs. bottom culture methods)
 - o WA Coastal Atlas and other mapping tools are available; identifying areas that are important for shellfish growing is important; what areas work, what are the current resources, what habitat is not appropriate, areas of conflict down the road – are there ways to head off the potential conflict; need some interpretation into the MSP tool
 - o probably need both approaches; need to be transparent if you use a more interpretive approach and show the data that went into it
 - o can provide a score based on an area using the data to evaluate the area; create a heat map (Bill Dewey) for the results; may not be able to be random but look at embayments (Leslie); use drift cells to unify the locations?

Potential uses of MSP in project development and review after project is proposed.

- Aquaculture permit has venues where MSP would be useful (e.g. public hearings, comments, & need agency to respond to public comments, & communications to other agencies)
- ID areas of interest and conflicts to ensure project success
- Vet projects by the community to increase chances of project funding
- Could incorporate a project into a SMP
- Could inform land trust activities (allowed or encouraged)
- Could inform priorities to include in ecosystem recover plans and where investments can be made (PSP Vital Signs; maybe salmon recovery planning; overlay project impacts & benefits to ID; need awareness of all local existing plans)
- Use to inform location for mitigation projects
- Use by planning department as a tool to understand why/why not a project will work in the proposed area
- There are a number of parameters that are looked at when permitting aquaculture; tiered level of information such as WQ, used by migratory birds, how close to other projects; broken down by the type of concern/resource; potential to decrease likelihood of development that is in conflict with aquaculture and could be used for periodic review of shoreline regulations
- Use to communicate water quality trends and potential need for certification

- Have a purpose statement (e.g., agencies that use the data that coordinate for use of resources) to create partnerships for project sponsors or others involved; add funding to continue the efforts; how to create a system that evolves
- Use in permit development and see if it is a high potential shellfish aquaculture area; might influence other shoreline development proposals and protect those habitats
- Could serve as a project baseline
- Process could be continuous (i.e. adaptive management) with a positive feedback loop to tweak management based on continued MSP data
- Could be used to determine whether a project should be re-permitted or if the controls should change (e.g. conditional use permits).

Closing Thoughts:

Who's missing?

- Recreational users are a missing component. Potential to incorporate recreation user groups and individuals in future workshops. WDFW identified as an agency with a mandate to represent recreational users.

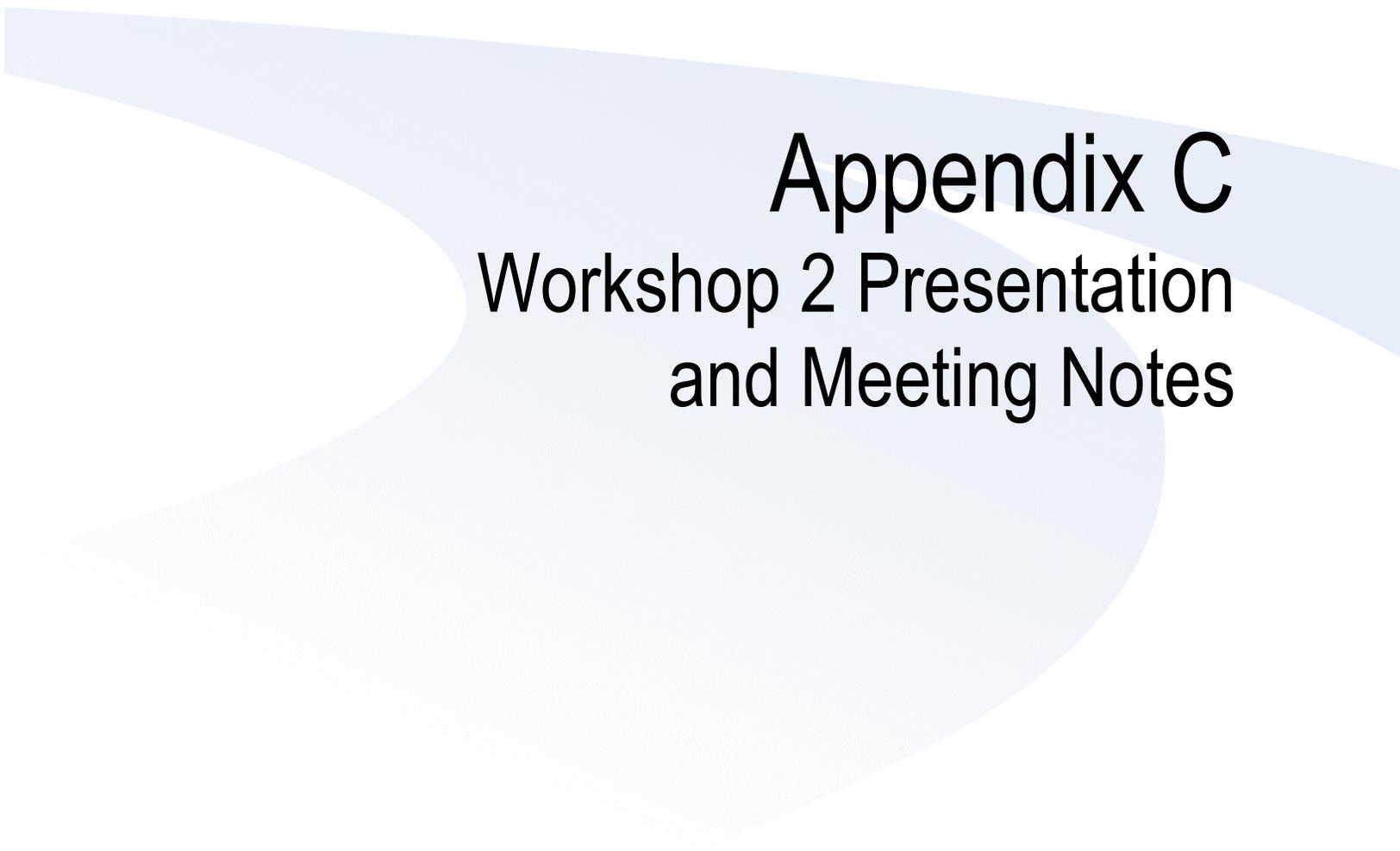
How to improve the workshop?

- Mix people up in the breakout rooms. Stretch break; we got a lot accomplished.

Next workshop:

- September 10, 2021 (1-4 pm).
 - Update on results from workshop 1
 - Review what we heard and actions we've taken on those
 - Present draft scope for marine spatial planning for Hood Canal for group feedback.

This page intentionally left blank
for double-sided printing

A light blue abstract graphic element consisting of several overlapping, curved shapes that create a sense of depth and movement, primarily located in the lower half of the page.

Appendix C

Workshop 2 Presentation and Meeting Notes

Appendix C
HOOD CANAL MARINE SPATIAL PLANNING PROJECT:
WORKSHOP 2 PRESENTATION AND MEETING NOTES

Prepared for:

Hood Canal Coordinating Council
17791 Fjord Drive NE, Suite 118
Poulsbo, WA 98370
Attn: Haley Harguth, Nate White, and Scott Brewer

Authored by:

Confluence Environmental Company



Pacific Shellfish Institute



October 2021

INTRODUCTION

The Hood Canal Coordinating Council (HCCC) initiated a pre-planning phase for a new Hood Canal Marine Spatial Planning (MSP) Project. The proposed geography for the plan is the entire Hood Canal, although additional geographic segments could be developed for the plan itself. The Hood Canal MSP Project was a recommendation from the Hood Canal Shellfish Initiative (HCSI), to further the goal of balancing Hood Canal’s shellfish aquaculture uses while protecting tribal treaty rights and high value ecosystem functions and locations. Confluence Environmental Company (Confluence) and the Pacific Shellfish Institute (PSI) provided support for HCCC during the pre-planning phase of this work.

This appendix provides the presentation and meeting notes from workshop 2. Workshop 2 was focused on taking feedback and experiences from workshop 1 and prompting participants to define a shared vision for the Hood Canal MSP. The introduction presentation showed a slightly modified version of HCCC purpose and goals based on feedback from the previous workshop and efforts conducted during the HCSI before addressing main messages from workshop 1 and highlighting the breakdown schedule of developing a Hood Canal MSP. The presentation then examined definitions, benefits, and best practices for developing an MSP before prompting participants with 2 scenarios that a Hood Canal MSP could facilitate. The first scenario was on the arduous permitting process for shellfish aquaculture within Puget Sound and how this tool could aid in the pre-planning process. The second scenario was on salmon habitat restoration within Hood Canal, and trying to identify potential conflicts before grant funding is spent on project design. Finally, where the Hood Canal MSP was relative to the 12 steps identified by The Nature Conservancy for MSP development was identified (i.e., create a vision) and participants were asked to “bring it all together.”

Workshop 2 did not have designated break-out rooms, but rather had breaks in the discussion where the Hood Canal pre-planning working group presenters could facilitate roundtable discussions. These breaks occurred at the end of the introductory slides, during scenario 1, during scenario 2, and at the final group discussion on creating a shared vision. This final discussion was further broken down into: (1) principles, goals, and objectives – what MSP is intended to solve and specific, measurable, attainable, relevant, and time based (SMART) objectives, and (2) tribal partnerships and stakeholder participation – hearing from as many different perspectives as possible.



This page is intentionally left blank.

HOOD CANAL COORDINATING COUNCIL – MARINE SPATIAL PLANNING WORKSHOP 2 MEETING NOTES

September 10, 2021

1-4 pm (Zoom Meeting)

Meeting Notes and Summary

Participants (total = 52):

Organization	Participant
Hood Canal Coordinating Council	Scott Brewer
Hood Canal Coordinating Council	Nate White
Hood Canal Coordinating Council	Haley Harguth
Confluence Environmental Company	Phil Bloch
Confluence Environmental Company	Marlene Meaders
Confluence Environmental Company	Geneva Faulkner
Confluence Environmental Company	Todd Nixley
Pacific Shellfish Institute (PSI)	Bobbi Hudson
Clallam County	Cheryl Baumann
Community Member	Anthony G.
Community Member	Jenn Steele
Community Member	Marilyn Showalter
Community Member/Jeff MRC	Sarah Fiske
Hama Hama Oyster Company	Adam James
HC Snail	Daniel Hanson
Hood Canal Environmental Council	Phil Best
Jamestown S'Klallam Tribe and Jefferson County MRC	Neil Harrington
Jefferson County	Tami Pokorny
Jefferson County Conservation District	Joe Holtrop
Jefferson Land Trust	Sarah Spaeth
Kitsap Conservation District	Joy Garitone
Kitsap County	Kathy Peters
Kitsap County	Kirvie Mesebeluu-Yobech
Kitsap Public Health District	Leslie Banigan
Kitsap Water Stewardship Programs	Amy Smalley
Long Live the Kings	Joy Lee Waltermire
Mason Conservation District	Evan Bauder
National Marine Fisheries Service	Dan Tonnes
National Marine Fisheries Service	Grace Adams
Pacific Shellfish Institute (PSI)	Kalloway Page
Point No Point Treaty Council	Cynthia Rossi
Puget Sound Restoration Fund	Jodie Toft
Skokomish Indian Tribe	Alex Gouley
Skokomish Indian Tribe	Blair Paul
Skokomish Indian Tribe	Dana Sarff
Skokomish Indian Tribe	Johnathon Wolf
Skokomish Indian Tribe	Joseph Pavel
Taylor Shellfish	Bill Dewey
U.S. Department of the Navy	Allison Satter

Organization	Participant
U.S. Department of the Navy	Curtis McFeron
U.S. Department of the Navy	David Grant
U.S. Department of the Navy	Maggie Dour
U.S. Department of the Navy	Nancy Sandburg
U.S. Environmental Protection Agency	Angela Adams
U.S. Environmental Protection Agency	Michael Rylko
U.S. Environmental Protection Agency	Peter Murchie
U.S. Fish and Wildlife Service	Carrie Cook-Tabor
Washington Department of Fish and Wildlife	Aaron Dufault
Washington Department of Fish and Wildlife	Brady Blake
Washington State Department of Agriculture	Laura Butler
Washington State Department of Health	Clara Hard
Washington State Department of Health	Scott Chernoff

Introduction

- Some resources may not be mappable. Tribal interests may “not want information on a map” due to sensitive resources or Tribal privacy issues.
- Landowner representation is a current gap in stakeholder engagement, although targeted outreach is planned.

Scenario 1 Discussion: Aquaculture Site Planning and Project Development

- MSP can inform which areas are most appropriate for different growing methods.
- Floating and off-bottom aquaculture presents potential concerns to tribal treaty rights due to perceived or actual conflicts with the ability to do treaty reserved activities in those areas.
 - Concerns surrounding Skokomish and other tribal treaty rights under the Treaty of Point No Point access include: climate change threats, threats to freshwater and marine habitats, and individual case by case projects and cumulative threats that physically limit access by tribal members to all marine waters at any time. These can hinder reserved rights for gathering, fishing, hunting and practice of social and cultural Tribal Treaty Rights.
- MSP may be used to incorporate and inform actions.
- MSP may also be used to track potential impacts (e.g. floating organics and other waste material, invasive species transference, and physical displacement) to downstream sites.
- Mapping risk as it exists as well as risk from different scenarios to compare and understand different levels of risk would be beneficial to different users.
- Native species seeding vs. economically robust species may be more viable in different areas.
 - Olympia oysters do have a viable niche in Hood Canal with additional areas.
 - PSRF is currently working on an assessment pathway to determine priority areas for restoration.

- Skokomish Tribe not currently interested in discussing treaty rights mapping or delineating extent of tribal fishing areas. They would rather take individual proposals as they come.
- From a regulatory standpoint, incorporating data needs into a single platform has been proven to be very difficult based on previous attempts.

Scenario 2 Discussion: Salmon Restoration Within a Pocket Estuary

- MSP isn't limited to one type of activity; there is room for both shellfish and restoration ventures for this tool within Hood Canal. MSP is a tool to facilitate multi-benefit projects to maximize general benefits.
- Addressing both scenarios could be a good way for both growers and restoration partners to foresee areas of differing interests early on and identify additional partners.
 - This can help projects move from the site identification to pre-planning or design phase.
 - This can also promote early communication between groups as well as a pathway on how to approach different groups.
- MSP works in a variety of scopes and developers can decide what to include in a tool to ensure sufficient breadth is covered for projects of interest.
- It would also be useful for this tool to integrate impacts due to climate and other important environmental thresholds.
- This tool can also help provide information to address concerns about cumulative impacts that could be used in the process.

Discussion Topic 1:

Principals, Goals, and Objectives- What is MSP Intended to Solve and SMART Objectives

- MSP tool development could occur in two major phases in terms of problems it could solve with the first being gathering all relevant data and the second focusing on impacts surrounding human activities.
- This tool can assist in prioritizing; limited funds for acquisition and restoration, enhanced public access to existing public tidelands for recreational harvest, and coordination of other potentially conflicting uses.
- This tool can provide a framework for long-term monitoring of what does/doesn't work.
- From a shellfish perspective reduced time to get permits, and reduced conflicts are good yardsticks to measure success.
- Before defining a vision, shared values are needed.

Values

- While values can vary based on individual perspectives recurring values stated in the workshop were:

- Preservation of water quality and associated habitats to ensure ecosystem services
- Protection of Tribal Treaty Rights
- Ability to continue recreational activities on/in Hood Canal and along the waterfront
- Support for local businesses and sustainable aquaculture and better informing permitting
- Ensure these opportunities get passed along to future generations
- Seeking multi-benefit approaches will protect broad beneficial uses as opposed to a single use.

Discussion Topic 2: Stakeholder Participation

- The following stakeholders were identified as people/groups who should be part of the process:
 - Private landowners
 - Local community groups
 - Land trusts
 - Recreational interests
 - Corps regulatory representatives
 - Representatives from larger recovery efforts
 - Congressional/tribal perspective

Closing Comments

- More input from landowners is desirable.
- Discussed creating and distributing a survey for landowner groups.
- Project team will follow up with targeted individuals to expand on lessons learned for successful Marine Spatial Planning processes
- HCCC plans to receive scoping report for Marine Spatial Planning in Hood Canal in early October.
- Hood Canal Coordinating Council board may consider future MSP steps in November or December meetings.