

**Summary Report  
for  
Phase II: Spatial Prioritization Planning Workshop Part 1**

*MAPPING AND MODELING SUPPORT  
FOR MARINE SPATIAL PLANNING*

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**Submitted to  
STATE OF WASHINGTON,  
DEPARTMENT OF NATURAL RESOURCES**

**Prepared by  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE**

## Summary:

On October 27, 2014, NOAA conducted a Spatial Prioritization Planning Workshop (1) in collaboration with the State of Washington to support the State's efforts to conduct marine spatial planning. This one day workshop was held at the Department of Ecology, Lacie, WA as part of NOAA's technical support to the State to assist in spatially prioritizing seafloor mapping needs along the Pacific Coast of Washington. This Workshop and report represents the completion of Phase I and II components of this effort.

This workshop was preceded by *Phase I - Establish Technical Advisory Team and Spatial Prioritization Pre-Planning* which included tasks and objectives listed below.

A Technical Advisory Team comprised of key State and Federal members will be identified and charged with the Spatial Prioritization pre-planning efforts. It is anticipated that the Team will be comprised of 3-4 persons, one of which will be Tim Battista from NOAA. Phase I Pre-Planning tasks include, but are not limited to the following:

- Descriptions of Interim and Final outcomes developed.
- Descriptions of exercise Phases and draft timelines developed.
- Planning workshop Agencies and Participants identified.
- Approach for collecting participant input discussed.
- Tasks assignments made for next steps.
- Agenda, presentations, read-ahead materials, and logistics for workshop developed.
- Prepare data viewer of existing seafloor mapping information
- Invitations for Planning Workshop sent out.
- Begin coding development of web-based Spatial Prioritization Tool.

Key milestones included: the establishment of a Technical Advisory Team (TAT) to assist in the development of a technical approach, workshop planning, and frequent consultations. The TAT includes the following representatives: Jennifer Hennessey (WA Department of Ecology), Joe Schumacker (Quinault Indian Nation), Jennifer Hagen (Quileute Tribe), Rob Jones (Northwest Indian Fisheries Commission), Nancy Wright (NOAA Olympic Coast National Marine Sanctuary), George Kaminsky (WA Department of Ecology), and Tim Battista/ Ken Buja (NOAA Biogeography Branch). Activities included an onsite planning meeting with the TAT in WA August 7<sup>th</sup>, spatial prioritization tool development, and frequent teleconferencing.

The Phase II workshop was intended assemble individuals, agencies, tribes, and other groups engaged in WA marine spatial planning to present the approach developed during Phase I for spatially prioritizing seafloor mapping of WA's Pacific Coast. Over 85 individuals were invited from federal and State agencies, tribes, academic institutions, and non-governmental organizations. Fifty-seven individuals participated (40 in person and 17 via web-conferencing) (See Table 1). The following specifies the tasks and objectives of the *Phase II: Spatial Prioritization Planning Workshop Part I* as detailed in the Statement of Work:

The task entails planning, conducting, and summarizing a workshop to plan the activities and content of the Spatial Prioritization Exercise (Task 3). Participants will include the Technical Advisory Team as well as other key State, Federal, and additional parties. A one-day workshop will be conducted either on-site or via Webex (to be determined by the State). If the State prefers an on-site Workshop, they will arrange the logistics of the venue, any costs associated with using the venue, and travel associated with participants attending the Planning Workshop. The Planning Workshop tasks include, but are not limited to the following:

- Presentations from selected managers on seafloor mapping product needs.
- Presentations from Technical Experts on seafloor mapping technical approaches, product types, challenges, and considerations.
- Discussion on the proposed approach (i.e. Spatial Prioritization outcomes and objectives; timelines and phases; and next steps).
- Presentation on the proposed Spatial Prioritization Exercise approach and Data Viewer.
- Breakout exercises with managers to refine Exercise questionnaire and capture details on products needed to support marine planning.
- Agency representatives selected to conduct the spatial prioritization exercise.
- Compile Workshop findings and action items in report.
- Continue development of web-based Spatial Prioritization Tool.

A report with compiled findings and action items identified during the workshop will be delivered June 2015.

The workshop agenda was designed to maximize the success of the spatial prioritization effort. Presentations included: 1) objectives and goals of the effort (J. Hennessy); 2) introduction to the spatial prioritization approach, exercise and timelines (T. Battista & K. Buja); 3) the state of existing seafloor mapping data along WA's pacific coast (C. Moegling); 4) demonstration of seafloor mapping to offshore regions (C. Goldfinger); 5) demonstration of seafloor mapping to nearshore regions (G. Kaminisky); 6) other application of seafloor mapping to management (C. Romsos); and NOAA Integrated Ocean and Coastal Mapping Program (A. Chappell). See Figure 1 below. In addition to the presentations, a break-out group discussion section was held to solicit feedback from participants to identify the most important management applications of seafloor mapping data within the offshore and nearshore regions. The results of those discussions are provided in Table 2 and 3.

Based on discussions at the Workshop with the participants and TAT, the following follow-up items will need to be addressed in advance of the Spatial Prioritization exercise:

1. Final coding modifications need to be incorporated into the web-based Spatial Prioritization tool including: finalized spatial prioritization selections, debugging, selecting base layers available for display, and training. The tool beta testing will be conducted in mid-December by a selected group of individuals. It is anticipated that an online training (multiple) will be held for participants in early January to familiarize them with who user input is implemented in the tool.

2. Final modifications to the spatial prioritization selection will be made and implemented into the tool.
3. The TAT will determine which groups will be invited to participate in the spatial prioritization effort and invitation letters will be sent out requesting the selection of a respondent that will be responsible for conducting and facilitating priority selections.
4. The Spatial Prioritization exercise is scheduled to begin in mid-January and be concluded by the end of January. NOAA will conduct analysis of results to prepare for Workshop II. The second Workshop is anticipated to be held in May 2015.
5. A summary of Workshop I and presentations given will be shared with all individuals invited.

**Table 1:** List of attendees at the WA Spatial Prioritization Workshop I.

## Seafloor Mapping Prioritization Workshop 1 - Attendance

October 27, 2014

Name	Affiliation	Email Address:	In-person	Web
Kelly Andrews	NOAA NMFS	Kelly.Andrews@noaa.gov	1	
Liam Antrium	NOAA OCNMS	Liam.Antrium@noaa.gov	1	
David Ball	BOEM	David.Ball@boem.gov		1
Tim Battista	NOAA NCCOS	Tim.Battista@noaa.gov	1	
Ken Buja	NOAA NCCOS	Ken.buja@noaa.gov	1	
Ray Cakir	WA DNR	recep.cakir@dnr.wa.gov		1
Kelly Carignan	NOAA NESDIS	Kelly.carignan@noaa.gov		1
Ashley Chappell	NOAA OCS	ashley.chappell@noaa.gov	1	
Guy Cochrane	USGS	GCochrane@usgs.gov		1
Steve Copps	NOAA NMFS	steve.copps@noaa.gov	1	
Jill Coyle	NOAA NMFS	Jill.Coyle@noaa.gov		1
Jeff Danielson	USGS	daniels@usgs.gov	1	
Jessi Doerpinghaus	WA DFW	jessi.doerpinghaus@dfw.wa.gov	1	
Tim Doherty	NOAA OCM	tim.doherty@noaa.gov	1	
Cinde Donoghue	WA DNR	Cinde.Donoghue@dnr.wa.gov	1	
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George Galasso	NOAA OCNMS	George.Galasso@noaa.gov	1	
Kelsey Gianou	WA DOE	kgia461@ecy.wa.gov	1	
Nadine Golden	USGS	ngolden@usgs.gov		1
Chris Goldfinger	OSU	gold@coas.oregonstate.edu	1	
Jennifer Hagen	Quileute	Jennifer.hagen@quileutenation.org	1	
Chris Harvey	NOAA NMFS	Chris.Harvey@noaa.gov		
Jennifer Hennessey	WA DOE	jennifer.hennessey@ecy.wa.gov	1	
Sam Johnson	USGS	sjohnson@usgs.gov		1
George Kaminsky	WA DOE	George.kaminsky@ecy.wa.gov	1	
Katrina Lassiter	WA DNR	Katrina.Lassiter@dnr.wa.gov	1	
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Miles Logsdon	UW	mlog@u.washington.edu		1
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Charlie Menza	NOAA NCCOS	Charles.Menza@noaa.gov	1	
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Lonnie Reid-Poll	USACE	Lonnie.m.reid-pell@usace.army.mil		1
Jamie Robertson	TNC	jrobertson@tnc.org	1	
Chris Romsos	OSU	cromsos@coas.oregonstate.edu	1	
Andrew Ryan	WA DNR	Andrew.Ryan@dnr.wa.gov	1	
Donna Schroeder	BOEM	Donna.Schroeder@boem.gov		1
Joe Schumaker	Quinalt	jschumacker@quinault.org	1	
Bradley Speidel	WA DFW	Bradley.Speidel@dfw.wa.gov	1	
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Sue Wolf	Makah	coswolf@earthlink.net	1	
Nancy Wright	NOAA NMSP	nancy.wright@noaa.gov	1	
Katie Wrubel	Makah	katiewrubel@gmail.com	1	

**Figure 1:** WA Spatial Prioritization Workshop I Agenda.

**Prioritizing Seafloor Mapping for Washington’s Pacific Coast**

Workshop 1 (October 27, 2014) 9:30am-3:30pm

Department of Ecology, Lacey, WA

On-site Host Contact: Jennifer Hennessey, [Jennifer.Hennessey@ecy.wa.gov](mailto:Jennifer.Hennessey@ecy.wa.gov), 360-407-6595

9:30-9:45	J. Hennessey	Charge, Agenda, Around the Room Introductions
9:45-10:15	T.Battista & K. Buja	Spatial Prioritization Process and Selection Criteria
10:15-10:45	N. Wright & C. Moegling	“State” of the State of Seafloor Mapping Data in WA
10:45-11:00	Break	
11:00-11:30	C Goldfinger	Offshore Mapping
11:30-12:00	G. Kaminsky	Nearshore and Shoreline Mapping
12:00-1:00	Lunch (On your own in cafeteria)	
1:00-1:30	Chris Romsos	Other Applications of Mapping to Management
1:30-2:00	All	Breakout Group: General Product Priorities (Shoreline/Nearshore, and Offshore)
2:00-2:15	A. Chappell	IOCM, CMECS, Data Portal, Standards
2:15-2:30	Break	
2:30-2:45	All	Discussion of Spatial Prioritization Exercise Definitions (see handout)
2:45-3:30	J. Hennessey & T. Battista	Next Steps, Action Items, & Discussion

**Table 2:** Priority seafloor mapping applications to Management Needs (Offshore).

**Identify Greatest Management Needs for Seafloor Mapping**

**Offshore Group**

Moderator: N Wright

Management Need	Specific Examples
Regulatory Review	Sand mining. Dredge material disposal. Damage assessment (seafloor). Permits.
Coastal Inundation for Tsunami	Seaward (3 miles) of all towns.
Living Resource Management	Finer quality EFH impact maps. Improved habitat models, surveys, species models, HSM, carrying capacity, rockfish, sponge/coral habitat. Travel(?) impact habitat recovery.
EBM	Understanding ecosystem health for long-term planning.
Spill Response	Better bathymetry for oceanographic models.
Safety and Navigation	AIS - No lead line.
Defense & Homeland Security	Baseline for mines.
Cultural Heritage & Historic Resources	Ship wrecks. Paleo shoreline.
Coastal Erosion	Coastal erosion.

**Table 3:** Priority seafloor mapping applications to Management Needs (Shoreline/Nearshore).

**Identify Greatest Management Needs for Seafloor Mapping**

**Shoreline/Nearshore Group**

Moderator: C.

Menza

<b>Management Need</b>	<b>Specific Examples</b>
Living Resource Management	Kelp distribution and variability. Rock refuges. General habitat. Aquaculture. Macroalgae distribution and intertidal. Subtidal forage area. Gray whale and sea otters.
Coastal Inundation	Tsunami. Storm surge. Sea level rise* and tidal datum. 1/3 arc second model topobathy LIDAR. Nuclear plant. Hydrological modeling*.
Land Management	Leasing permits. Ownership delineation and jurisdiction. Shoreline master program. Infrastructure. Tidal datum.
Spill Response	Prioritize response. Assess risk. Intertidal species baseline.
Sediment Management	Beach restoration. Sand resource. Sediment transport. Shoreline change. Shoreline armoring.
Cultural Heritage	Paleoshore mapping. Discovery of archeological sites.
Research	State lands.
Safety and Navigation	Charting. Infrastructure.
Regulatory	Ownership. Jurisdiction. SMPs. Protected species. Baselines*