

MSP Projects Status Report 2012-2015



Mapping projects
Ecosystem assessment projects
Data and technical projects
Stakeholder engagement projects

Project	Contractor	Project Description	Deliverables	Contract cost	Progress as of July 1, 2014	Status
1	DNR and ECY	High resolution multibeam bathymetric and sediment characterization survey of nearshore subtidal, intertidal, and coastal areas around river mouths to assess sediment stability and natural resource limitations to laying power cables	*Summary report on all new data collected including multibeam backscatter, and lidar; *Processed data and data products including maps and images	\$ 386,000.00	Ecology and DNR completed multibeam surveys of the northern outercoast rivermouths and surrounding areas (Quillayute and Elwha) and submitted a final report that is available on the project page of the website.	Completed June 2013
2	DNR and ECY	Single beam cross-shore transects (wave runner) of intertidal nearshore areas around river mouths and priority nearshore regions. There will be survey transects set up to get a general sense of the bottom types.	*New nearshore bathymetry and beach topography profiles; *A report on data collection and recommendations for future work; *Provision of existing bathymetry and beach topography data		Ecology and DNR completed nearshore waverunner bathymetry data collection in the tributaries in Wahkiakum County, and they surveyed the mouth of the Columbia with the multibeam and waverunners. They and submitted a final report that is available on the project page of the website.	Completed June 2013
3	NCCOS Biogeography Branch	Scientific and technical assistance to the state to standardize and evaluate spatial data in support of marine spatial planning. Development of a seafloor mapping strategy for Washington's offshore waters.	*Identification and sharing of useful datasets; *A technical report to evaluate no more than 10 key physical and biological datasets based on how the datasets have been used by other marine spatial planners, potential alternatives, and advantages and disadvantages of using the particular dataset to meet state goals. *Geospatial data viewer for existing bathymetric geospatial data layers; *Strategic planning roadmap for prioritization of bathymetric data collection.	\$ 75,000.00	The Biogeography team provided DNR with a final report that evaluated 10 key physical and biological datasets. They also created a geospatial data viewer for bathymetric data and a blueprint for future phases of spatial prioritization.	Completed June 2013
4	NCCOS Biogeography Branch	Seafloor mapping and Marine mammal/seabird modeling	*Development of seabird and marine mammal species distribution models; *Evaluation of marine mammal datasets; *Spatial prioritization of outer coast for future seafloor mapping needs	n/a	NCCOS will be funding the marine mammal species distribution component. The deliverables of this project will be delivered in September 2015.	Contract under negotiation
5	NOAA	Mapping human uses through the BOEM/NOAA Pacific Regional Ocean Uses Atlas program	*Two participatory human use mapping workshops in April 2013 held in Aberdeen and Pt. Angeles and *Final maps (funded by NOAA)	\$ 6,500.00	Workshops were held in Port Angeles and Aberdeen in April 2013. Data and maps were delivered to DNR during the summer and autumn of 2013.	Completed October 2013
6	Northwest Indian Fisheries Commission	Mapping Tribal Commercial Marine Catch Data	*GIS data layers and shape files of the four Coastal Tribes' tribal commercial catch for the years 1980-2011		The NWIFC collected, analyzed, and reconciled tribal data. NWIFC staff developed GIS layers by management area, species, gear, catch, month and year.	Completed June 2013
7	Northwest Indian Fisheries Commission	Mapping tribal traditional and cultural areas: a) Marine fishing areas, b) Intertidal fishing and gathering locations, c) Culturally significant areas/locations	*GIS data layers and shape files of the four Coastal Tribes' traditional fishing and cultural areas along the outer coast	\$ 65,000.00	The NWIFC compiled data on utilized and significant species, including species of finfish, shellfish, plants, birds and mammals. Project staff developed a GIS layer of utilized species and sensitive species sites. Staff from the four coastal tribes were consulted to verify and expand upon these GIS layers.	Completed June 2013
8	Oregon State University / Olympic National Marine Sanctuary	Synthesis and stitching together of benthic habitat data from the northern portion of the Olympic Coast National Marine Sanctuary	*GIS data layers of benthic habitat data in the northern part of the National Marine Sanctuary and a scalable online Seafloor Atlas	n/a	N/A	Contract under negotiation
9	Pacific Northwest National Laboratories	Develop marine renewable energy suitability data layer that compiles information on energy resource potential (wave, tidal), energy industry needs, various technology types, and suitability factors such as economic, physical, and infrastructure preferences and requirements.	*Suitability data for wave, tidal, and offshore wind devices; conceptual models for energy device suitability; *8 final concept models (4 wave, 2 tidal, 2 offshore wind) with scoring models for each attribute; database, GIS dataset, and maps showing suitability for up to 8 energy device types; *Presentation to WCMAC and each of the MRCs	\$ 100,000.00	PNNL developed suitability models for wave, tidal, and offshore wind energy technologies - these are available on the projects page of the website and the data can be viewed on the mapping application.	Completed June 2013
10	UW Oceanography	Mapping and modeling of coastal oceanographic conditions and trends	*Spatial data on plankton productivity and bottom oxygen levels (hypoxia); *Seasonal maps of speed over the coast; *Map of bottom bathymetry gridded to 1km; *Presentation of relevant data to WCMAC as needed	\$ 211,000.00	The UW team finalized models using the oceanographic data and formatted the data into GIS layers. These models and data were provided to DNR and the summary report can be found on the projects page of the website.	Completed June 2013

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11	Pacific County mapping	UW Olympic Natural Resources Center	Pacific County projects - mapping shellfish growing areas, mapping beneficial use areas, mapping invasive species, mapping shoreline designations, integrating seafloor mapping and shellfish areas	*GIS data on commercial, private, tribal, and public shellfish growing areas; *GIS layers of beneficial use areas; *GIS data of invasive species (spartina, knotweed, japanese eelgrass, burrowing shrimp); *shapefile of shoreline designations; integration of existing seafloor mapping data	\$ 76,000.00	The ONRC digitized the Shoreline Environmental Designation maps from Pacific County; generated a spreadsheet of all relevant datasets currently in our archives and have contacted local collaborators to compile as wide a list of readily available datasets as possible; and are assisted the UW Coastal Study Group in converting their model output into ARC GIS format.	Completed June 2013
12	Student economic baseline project	UW Program on the Environment	Marine economic baseline for the coast - basic update and assessment of current status of coastal marine based economy	*Final report that provides a high level look at the marine based economy of the outer coast; *webinar of the study findings available to the public; *project website with webinar presentation and downloadable copies of reports generated by the project	\$ 150,000.00	The student team completed their project, which included interviewing coastal stakeholders, compiling economic data from the coastal counties, developing a project website, and writing a report with recommendations. The report can be found on the project website at http://wa-working-coast.wix.com/wa-workingcoast .	Completed April 2013
13	Commercial fishing mapping	WDFW	Mapping Commercial Fishing and Fish and Wildlife Resources	*Comprehensive GIS maps of coastal commercial fishing activities	\$260,000.00 *includes year 1 forage fish survey	Data collected and incorporated into the MSP mapping tool.	Completed June 2013
14	Recreational fishing mapping	WDFW	Mapping recreational fishing data	*GIS data layers and maps of fishing locations and areas of importance (for specific trip types) for recreational fisheries		Data collected and incorporated into the MSP mapping tool.	Completed June 2013
15	Forage fish mapping	WDFW	Mapping forage fish distribution	*GIS map of forage fish distribution based on approximately 500 spawning beach surveys; *2012-2014 Forage fish survey GIS layers; *first year survey report; *final report	\$ 350,000.00	WDFW and the Tribes have sampled approximately 240 sites and documented 9 smelt spawning sites, 3 of which are newly documented (i.e. sites that were not documented in year 1 sampling or prior). Based on year 1 and year 2 results to date, smelt spawning occurs from January to October. Results are pending data from Quileute (October 2013 – April 2014) and Makah (January 2014 to April 2014).	Ongoing through December 2014
16	Seabird and marine mammal database	WDFW	Create seabird and marine mammal geodatabase	*Seabird colony and haul out geodatabase data layers; *species density GIS layers; *coastal winter bird abundance GIS layers	\$ 74,000.00	WDFW staff have obtained and integrated the following available datasets in the WDFW seabird catalog: black oystercatchers; Gulls; Gull data for Protection Island; and Rhinoceros auklet surveys for Smith, Protection and Destruction Island. Additional vetting of the Catalog has been conducted to verify accuracy of the original data entered by Crescent Coastal Research (cormorants, gulls, tufted puffins, and others). WDFW is assembling winter and summer marine bird survey data into ArcGIS format. Staff have geo-referenced and entered sea otter point locations from 2012 & 2013 WDFW aerial surveys in the WDFW corporate database. Based on haulout revisitation survey data from 1998 to present, staff has delineated haulout polygons for Washington. This includes haulouts on the Columbia River, the outer coast and Puget Sound. All data has been or is being reviewed for accuracy.	Ongoing through December 2014
17	Marine mammal aerial surveys	WDFW	Conduct marine mammal aerial surveys	*Pinniped haul out and sea otter concentration areas GIS layers and *final report	\$ 77,000.00	WDFW staff conducted the first aerial survey of the outer coast for California and Steller sea lions on April 1; both species were abundant from the Columbia River to Tatoosh Island at the entrance to the Strait of Juan de Fuca. A second set of aerial surveys were conducted June 1-3 for harbor seals stock assessment covering the lower Columbia, Willapa Bay, Grays Harbor, and Olympic Peninsula coast. Steller sea lions were abundant at South Jetty, Split Rock, Sea Lion Rock, Carroll Island, Bodelteh Islands and Tatoosh Island. California sea lions were abundant in the East Mooring Basing and Bodelteh Islands. Staff also continued working on counting digital images and preparing data for uploading to the portal.	Ongoing through December 2014
18	Ecologically important areas	WDFW	Identify Ecologically Important Areas	*Map and analysis of Ecologically Important Areas off the Washington coast	\$ 149,000.00	WDFW science staff have held several meetings to discuss data on fish, wildlife, and habitat and to discuss how to develop criteria to identify ecologically important areas.	Ongoing through June 2015
19	Shipping sector analysis	BST Associates	Sector analysis	*Sector analysis report for shipping	\$ 15,000.00	Interviews and literature review complete. Contractor will present draft findings at July 2014 WCMAC meeting.	Ongoing through August 2014
20	Recreation/tourism, fishing, renewable energy, and aquaculture sector analysis	Industrial Economics	Sector analyses	*Sector analysis reports for recreation/tourism, fishing (commercial/recreational), marine renewable energy, and aquaculture	\$ 60,000.00	Interviews and literature review complete. Contractor will present draft findings at July 2014 WCMAC meeting.	Ongoing through August 2014
21	Ecosystem indicators: phase I	NOAA Northwest Fisheries Science Center	Ecosystem indicator and conceptual models; ecosystem indicator workshop	*Ecosystem indicator workshop to result in a broad understanding of ecosystem indicators; *a draft conceptual model; *a process for establishing indicators; *identification of information gaps	\$ 50,000.00	This workshop was held for scientists and managers on May 13th, 2013. The Northwest Fisheries Science Center developed draft conceptual models of the marine waters of the Washington coast, a list of potential ecosystem indicators, and a process for evaluating candidate indicators.	Completed June 2013

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22	Ecosystem indicators: phase II	NOAA Northwest Fisheries Science Center (NWFSC)	Ecosystem Indicators and Modeling	*Conceptual models for Washington coastal and estuarine habitats; *candidate indicators for the coast and estuaries; *maps linking habitat attributes and indicators on the seascape; *presentations to SOC and WCMAC; *report on status and trends of ecological indicators; *PDFs of each model and map	\$ 250,000.00	The NWFSC is preparing a webinar on estuarine indicators for July 2014.	Ongoing through June 2015
24	Social science indicators	Washington Sea Grant	Social science indicators and conceptual model development	*Document analysis of local human values and activities; *candidate social science indicators and draft conceptual model; *ecosystem assessment outreach materials	\$ 93,000.00	Washington Sea Grant staff started a synthesis and review of human values mapping approaches for marine spatial planning from the social sciences literature. Over 80 publications were identified for the review, each tests and spatially analyzes at least one human dimension component. The studies are being evaluated for their relevance, robustness, ecological and spatial compatibility to WA Coast, and for data availability. WSG staff are also building a set of potential indicators for use in MSP that link to human dimensions. A document analysis from local WA Coast workshops held in 2013 is currently underway and will contribute to the social science indicator development process.	Ongoing through June 2015
24	Economic analysis	TBD	Economic analysis of the Washington coast	*Scoping process and *economic analysis with details TBD	\$30,000 plus TBD	The Department of Natural Resources released the RFP in June 2014 and proposals will be due at the end of July 2015. Proposals will be reviewed and evaluated by DNR, Ecology, and the WCMAC chair.	RFP released
23	Recreational use study	Surfrider	Recreational Use Study	*A baseline characterization of coastal recreation participation rates and trip expenditures and *a spatial baseline of coastal and ocean recreation use patterns on the outer Pacific coast of Washington	\$ 170,000.00	The Surfrider Foundation and its partners launched the opt-in survey and a survey dashboard to monitor survey participation. They conducted outreach to stakeholders to discuss the survey and how to participate, distributed outreach material to 28 recreation businesses and groups, posted information about the survey on several websites and through social media. They conducted 45 phonecalls and 3 presentations to recreational businesses, groups, and associations.	Ongoing through June 2015
25	MSP mapping tool	DNR	MSP mapping tool - provide a decision support tool to access data. Viewable in a map format and accessible without GIS expertise.	*An interactive map system, accessible through the website to view and manipulate GIS data layers; *subscription to ArcGIS Online to allow for secure users	\$ 130,000.00	The state completed its first wave in the development of the mapping application in June 2013 and is now working on functionality. In April 2014, the state hosted a webinar on how to use the mapping tool.	Phase I complete. Further development ongoing through June 2015.
26	Data catalog	DNR	GIS data catalog for Marine Spatial Planning to provide access to raw datasets and complete metadata for data that are in the mapping tool	*A data catalog for accessing MSP datasets	\$ 150,000.00	The data catalog allows users to access and download the datasets that populate the mapping application. New data becomes available on the data catalog when it is added to the mapping application. The data catalog is available on the Explore page of the website.	Phase I complete. Further development ongoing through June 2015.
27	MSP website	DNR	Public website for Washington marine spatial planning (with TNC)	*A public website with all relevant information about MSP in Washington - including news, projects, background documents, and upcoming events		The website was launched and demonstrated to the WCMAC in April 2013. Updates and edits to the website content are ongoing.	Completed June 2013
28	Website management and planning support - project position	DNR	Coastal and marine planner position	*Website management; *mapping tool outreach; *planning support	\$ 177,000.00	Position in place since January 2014. Planner has made updates and improvements to the website, conducted contextual research, developed draft outreach materials, and participated in the state planning team. Planner has tracked down datasets to fill data gaps including the crabber tow boat lanes, state and federal boundaries, oceanography data, albacore tuna data, and others.	Ongoing through June 2015
29	Plan research and development - project position	ECY	Plan research and writing position	*Research for plan development (ie. providing socioeconomic use and environmental contextual information) and *draft chapters of the plan	\$ 100,000.00	Position began in mid-June 2014.	Ongoing through June 2015

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30	Identification of data standards and gaps	Washington Sea Grant	Facilitation of scientific input from issue based groups to provide technical input on development of data tools	*Identification of area-specific experts; *formation of technical committee to provide scientific feedback; *teaching of a course on MSP that utilizes expertise of UW experts and graduate students to provide feedback on data standards and data gaps	See WA Sea Grant items in yellow	Washington Sea Grant organized a graduate course for the Spring 2013 quarter in which the students looked at existing and new data, and contacted issue area experts to review the data and identify data gaps. Students reported to the state agencies and the WCMAC in June 2013. The report is available on the projects page of the website.	Completed June 2013
31	Scientific input coordination	Washington Sea Grant	Science coordination through a Science Advisory Panel	*2 - 4 Science Advisory Panel meetings per year and *ongoing feedback from the Science Advisory Panel	\$ 60,000.00	Washington Sea Grant conducted a scoping process for the science panel and identified experts to participate as members of the science panel. Sea Grant is coordinating feedback on oceanography data with Miles Logsdon (UW) and coordinating economic feedback from Todd Lee (economist, NWFSC).	Ongoing through June 2015
32	Website and data catalog development and data tool outreach	The Nature Conservancy	Data tool outreach and training to stakeholders and tribes; assistance with website and data catalog development; participation in technical and planning committees	*TNC participation on GIS tool development committees; *design and launch of public website; *integration of data catalog into the website; *outreach on the GIS tool; *data from TNC's Pacific Northwest Coast ecoregional assessment	See Nature Conservancy item in green	TNC worked with DNR, Ecology, and the rest of the State Ocean Caucus on planning tool development, the website, and outreach throughout 2013. TNC and Ecotrust designed and launched the website, and collaborated with the state to help develop the mapping application.	Completed June 2013
33	MRC workshops on goals and objectives	The Surfrider Foundation	Coastal marine resource committees (MRCs) workshops to gather community input on the MSP goals and objectives, with staff support from Surfrider and The Nature Conservancy.	*Summary report that captures input from the public that can inform the MSP goals and objectives setting process, and will be available as a public record.	\$ 19,000.00	The MRCs conducted outreach in April 2013 and Surfrider produced a summary report that is available on the project page of the website.	Completed June 2013
34	MSP 101	Washington Sea Grant	Coordination of MSP short course (MSP 101)	*MSP outreach materials and standard curriculum and *outreach activities on the coast	\$ 125,000.00	In 2013, Washington Sea Grant produced outreach materials and conducted a series of MSP 101 outreach events in coastal communities.	Completed June 2013
35	Goals and objectives workshops	Washington Sea Grant	Coordination and facilitation of work sessions to draft marine spatial planning objectives	*Coordination and planning of a series of three workshops to engage stakeholders in the development of objectives for the MSP process		Washington Sea Grant held three objective setting workshops in the spring of 2013. The final workshop report is available on the projects page of the website.	Completed June 2013
36	General MSP outreach	Washington Sea Grant	Coordination and facilitation of marine spatial planning outreach	*Summary of 2012-2013 outreach activities; *10 public outreach meetings; *10-15 MSP short courses; *outreach materials; *summaries of outreach meetings	\$ 149,000.00	Washington Sea Grant completed a summary of 2012-2013 outreach activities. Sea Grant hired a coastal outreach specialist, Kevin Decker, who started in June 2014. The coastal outreach specialist will conduct outreach events on the coast.	Ongoing through June 2015