

Please provide the following information, and submit to the NOAA DM Plan Repository.

### Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

## 1. General Description of Data to be Managed

### 1.1. Name of the Data, data collection Project, or data-producing Program:

Outer Coast of Washington and Oregon 2014 ESI BENTHIC Polygons

### 1.2. Summary description of the data:

This data set contains sensitive biological resource data for marine and estuarine submerged aquatic vegetation (SAV), and deep sea corals for the Outer Coast of Washington and Oregon. Vector polygons in this data set represent eelgrass, surfgrass, macroalgae, coral, and kelp distributions. Species specific abundance, seasonality, status, life history, and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the ESI data for Outer Coast of Washington and Oregon. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

### 1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

### 1.4. Actual or planned temporal coverage of the data:

2013 to 2014

### 1.5. Actual or planned geographic coverage of the data:

W: -125.6816, E: -123.5192, N: 48.5059, S: 41.9967

This reflects the extent of all land and water features included in the overall Outer Coast of Washington and Oregon ESI study region. The bounding box for this particular feature class may vary depending on occurrences identified and mapped.

### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)  
Map (digital)

### 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys,

*enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

ESI Program Manager

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

orr.esi@noaa.gov

**2.5. Phone number:**

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

ESI Program Manager

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

### 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2015-10-01 00:00:00 - Kelp distributions in Oregon were created using data provided by the Oregon Department of Fish and Wildlife (ODFW) for the years 1990, 1996, 1999, and 2010. Data for Washington kelp distributions was provided by the Washington Department of Natural Resources (WDNR), and contained compiled data from 1989 through 2012. Surfgrass distributions were mapped based on expert knowledge and both surfgrass and eelgrass distributions were mapped with data from the Washington and Oregon ShoreZone products. Eelgrass data was also incorporated from the EPA's Office of Research and Development's remotely sensed eelgrass estimations in Oregon estuaries. Non-kelp macroalgae were mapped using expert knowledge from Olympic Coast National Marine Sanctuary (OCNMS) and ODFW. Deep sea corals were mapped using survey data from OCNMS. Kelp distributions in Oregon were mapped using all four years of estimation: 1990, 1996, 1999, and 2010. The 2010 data was originally derived from remote sensing operations and had a much finer level of detail than the manually digitized distributions from earlier years. This 2010 data set was buffered by 50 meters and merged back with the previous estimations from 1990, 1996, and 1999 to create a more generalized and cohesive estimation of kelp in Oregon marine waters.
- 2015-10-01 00:00:00 - In Washington waters, kelp distributions were provided as a composite layer from data beginning in 1989 and ending in 2012. Each polygon was attributed with a tally of the number of years that one of the two species, giant kelp or bull kelp, were present in the 23 year span. Both giant kelp and bull kelp were mapped in the WDNR product, but were generalized to "Canopy kelp" for ease of interpretation. EPA eelgrass was incorporated after removing polygons smaller than 250 m<sup>2</sup> and filling in gaps less than 500 m<sup>2</sup>. In Siletz and Nestucca estuaries, the EPA data was quite sparse and close to the shoreline. In these cases shoreline adjacent to the EPA data was buffered by 50m and included as a substitute. Eelgrass and surfgrass distributions incorporated from ShoreZone products were mapped along the ESI shoreline with an onshore/offshore buffer of 50 m. Non-kelp macroalgae and surfgrass were included in all rocky intertidal areas based on expert knowledge. Subtidal non-kelp macroalgae was mapped on hard bottom areas from the edge of the intertidal zone out to 30 m depth, based on expert knowledge. (Benthic substrate data provided by Chris Romsos, Active Tectonics and Seafloor Mapping Lab, Oregon State University.) Deep sea coral communities were mapped using benthic survey data from OCNMS. OCNMS has surveyed Sanctuary waters for these unique communities, but they have not yet surveyed all Sanctuary areas or the broader region. Thus, confirmed deep sea coral sites have been mapped in the ESI, but these data indicate presence only, not absence. They are included in both the "Benthic" and "Invertebrate" ESI layers. Areas not mapped as deep sea coral communities may contain undiscovered deep sea coral sites.
- 2015-10-01 00:00:00 - The above digital and/or hardcopy sources were compiled by

the project biologist to create the BENTHIC data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: 1) information gathered during initial interviews and from hardcopy sources are compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles and digitized; 2) hardcopy maps are digitized at their source scale; 3) digital data layers are evaluated and used "as is" or integrated with the hardcopy data sources. See the Lineage section for additional information on the type of source data for this data layer. The ESI, biology, and human-use data are compiled into the standard ESI digital data format. A second set of interviews with participating resource experts are conducted to review the compiled data. If necessary, edits to the BENTHIC data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

## 6. Data Documentation

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:****6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/54901>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

Office of Response and Restoration (ORR)

**7.2.1. If data hosting service is needed, please indicate:****7.2.2. URL of data access service, if known:**

[https://response.restoration.noaa.gov/esi\\_download](https://response.restoration.noaa.gov/esi_download)

**7.3. Data access methods or services offered:**

Data can be accessed by downloading the zipped ArcGIS geodatabase from the Download URL (see Distribution Information). Questions can be directed to the ESI Program Manager (Point Of Contact).

**7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

**8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:****8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:****8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office of Response and Restoration - Seattle, WA

**8.3. Approximate delay between data collection and submission to an archive facility:****8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*