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:
Sensitivity of Coastal Environments and Wildlife to Spilled Oil: Southern California: ESI (Shoreline Types - Lines and Polygons)

1.2. Summary description of the data:
This data set contains vector lines and polygons representing the shoreline and coastal habitats of Southern California, classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for Southern California. 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:
1977 to 2009

1.5. Actual or planned geographic coverage of the data:
W: -120.601, E: -117.001, N: 34.5, S: 32.445

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
vector digital data

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:
- 2010-03-01 00:00:00 - The shoreline habitats on the original ESI maps, published in
were re-examined and updated using the following methods: interpretation of
the 2008 contiguous aerial photography (California Coastal Records Project), U.S.
Fish and Wildlife (USFWS) Wetland coverages (used to classify marshes and
swamps), Google Earth in areas where no other current data could be obtained, and
through verification via overflights conducted in October 27-30 of 2008. Flights
were conducted using fixed-wing aircraft flying at slow air speeds at altitudes of
400-600 feet, excluding areas near military installations (San Nicholas) where the
altitudes of overflight were 1000 feet. All flights were scheduled to maximize
optimal low tide conditions, flying approximately 2.5 hours preceding and 2.5 hours
following peak low tides. During these flights a geomorphologist utilized a digital
SLR camera to capture a continuous set of overlapping oblique images of the
intertidal zone. Throughout the overflight mission a Global Positioning System (GPS)
receiver collected and recorded flight path data. Following completion of the
overflight mission, all digital photographs of the intertidal zone were georeferenced
using photo-mapping software and the GPS flight path data. With Geographic
Information System (GIS) software a geomorphologist reviewed each georeferenced
oblique image of the intertidal zone and assigned ESI rankings to the digital
shoreline. Where appropriate, multiple rankings were assigned. The above digital
and/or hardcopy sources were compiled to create the ESI data layer. Depending on
the type of source data, three general approaches are used for compiling the data
layer: 1) hardcopy maps are digitized at their source scale; 2) digital data layers are
evaluated and used "as is" or integrated with the hardcopy data sources; and 3)
overflight changes are digitized from the scanned and registered hardcopy field
maps or aerial photography. After the initial shoreline classification, these data are
edgematched and checked for logical consistency errors. Review maps are plotted
at 1:24,000 scale for verification of polygonal and linear attributes. See the Lineage
section for additional information on the type of source data for this data layer. The
compiled ESI, biology, and human-use data are plotted onto hardcopy draft maps.
Following the delivery of draft maps to the participating resource experts, a second
set of interviews are conducted to review the maps. If necessary, edits to the ESI
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
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 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/40817

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

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:

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

7.3. Data access methods or services offered:
Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to the widest community of GIS/mapping users. Distribution formats include Geodatabase; ARC export, MOSS, and Shape files; and MARPLOT map folders. An ArcMap .mxd file, an ArcView 3.x ESI project, and an ESI_Visualizer product for use with the MARPLOT data are also included on the distribution CDs/DVDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats;

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 - Silver Spring, MD

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.