

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: Puget Sound and Strait of Juan de Fuca, Washington: SOCECON (Socioeconomic Resource Points and Lines)

### 1.2. Summary description of the data:

This data set contains points that represent the following sensitive human-use socioeconomic sites in Puget Sound and the Strait of Juan de Fuca, Washington: access locations, airports, aquaculture sites, archaeological sites, artificial reefs, beaches, boat ramps, U.S. Coast Guard stations, dive sites, spill response equipment storage sites, ferry terminals, hatcheries, hazardous waste sites, locks and dams, marinas, and parks. Also included are lines that represent the international boundary, bridges, and ferry routes. Location-specific type and source information is 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 Environmental Sensitivity Index (ESI) data for Puget Sound and Strait of Juan de Fuca, Washington. 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. See also the MGT (Management Area Polygons) data layer, part of the larger Puget Sound and the Strait of Juan de Fuca ESI database, for additional human-use information.

### 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:

1996 to 2006

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

W: -124.751, E: -122.126, N: 49, S: 47

### 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:

- 2006-03-01 00:00:00 - ACCESS LOCATIONS: Three sources of data were used to depict locations where the shoreline can be accessed by foot or by vehicle: (1) Washington State Department of Ecology BEACH database (Ecology), (2) Lummi Indian Business Council, and (3) a local resource manager. From Ecology's BEACH database, we extracted points depicting access locations. Approximately 79% of these points were repositioned to ensure that the locations more closely matched their actual position on land. The positions used in this database were identified using the HYDRO layer and 1-meter black-and-white digital orthophotographs. Not all access points identified in the BEACH database were included. Access points provided by the Lummi Indian Business Council were repositioned to fall within the land portion of the HYDRO layer. Four additional access points were provided by a local resource expert. These points were collected on, and digitized off of, hardcopy base maps with a scale of 1:24,000. AIRPORTS: Digital points representing non-military airports were provided by Washington State Department of Transportation (WSDOT). AQUACULTURE SITES: Digital points representing aquaculture sites (net pens) were acquired from the StreamNet website. ARCHAEOLOGICAL SITES: Local resource managers provided locations of archaeological sites on hardcopy 1:24,000 scale base maps. These data were digitized off of the hardcopy maps to produce point features. ARTIFICIAL REEFS: Geographic coordinates for artificial reefs were provided by Washington Department of Fish and Wildlife via personal communication. The latitude and longitude coordinates were used to generate digital point features. BEACHES: Three sources of data were used to depict locations of recreational beaches: (1) Washington State Department of Ecology BEACH database (Ecology), (2) Lummi Indian Business Council, (3) local resource experts. Approximately 88% of points included from Ecology's BEACH database were repositioned to ensure that each location more closely matched its actual position on land. The positions used in this database were identified using the HYDRO layer and 1-meter black-and-white digital orthophotographs. Not all beaches identified in the BEACH database were included. Beach points provided by the Lummi Indian Business Council were repositioned to fall within the land portion of the HYDRO layer. Four additional beach points were collected from local resource experts using hardcopy base maps with a scale of 1:24,000. These points were digitized off of the hardcopy maps. BOAT RAMPS: Four sources of data were used to depict locations of boat ramps: (1) Washington State Interagency Committee for Outdoor Recreation (IAC), (2) Washington State Department of Ecology BEACH database (Ecology), (3) Lummi Indian Business Council, and (4) local resource experts. Digital points provided by the IAC and Ecology's BEACH database were repositioned to ensure that each

location more closely matched its actual position on land. The positions used in this database were identified using the HYDRO layer and 1-meter black-and-white digital orthophotographs. Not all boat ramps identified in both datasets were included. Digital points provided by Lummi Indian Business Council were repositioned to fall within the land portion of the HYDRO layer, where necessary. Additional boat ramp points were provided by local resource experts using hardcopy base maps with a scale of 1:24,000. These points were digitized off of the hardcopy maps. BRIDGES: Digital lines were provided by Washington State Department of Transportation. Due to cartographic limitations, not all bridges identified in the original dataset were included.

- 2006-03-01 00:00:00 - COAST GUARD STATIONS: Digital points representing U.S. Coast Guard stations were provided by the Portland Sector of the U.S. Coast Guard. DIVING SITES: Geographic coordinates for diving sites were collected from three locally well-known diving information websites. The latitude and longitude coordinates were used to generate digital point features. Many of the points represent land-based dive site entry locations. EQUIPMENT: Two sources of digital data points were used to depict locations of storage for, or availability of, spill response equipment: (1) Regional Response Team Northwest Area Committee and (2) Lummi Indian Business Council. Additional boat ramp points were provided by a local resource expert using hardcopy base maps with a scale of 1:24,000. FERRY ROUTES: Digital lines representing paths of ferry travel were provided by Washington State Department of Transportation. FERRY TERMINALS: Digital points representing ferry docking areas/terminals were provided by Washington State Department of Transportation and Washington State Department of Ecology ( BEACH database). HATCHERIES: Two sources of digital data points were used to depict locations of hatcheries: (1) StreamNet website and (2) Lummi Indian Business Council. HAZARDOUS WASTE: Digital points representing Federal ( Superfund) Cleanup Sites (FCS) were provided by Washington State Department of Ecology. All spatial duplicates were removed. INTERNATIONAL BOUNDARY: The line that marks the boundary between the United States (Washington) and Canada ( British Columbia) was provided by Washington Department of Natural Resources. LOCKS AND DAMS: Digital points representing locks and/or dams were provided by the StreamNet website. Only those dams associated with streams were included. LOG STORAGE: Local resource managers provided locations of log storage sites on hardcopy 1:24,000 scale base maps. These data were digitized off of the hardcopy maps to produce point features. MARINAS: Four sources of data were used to depict locations of marinas: (1) Washington State Interagency Committee for Outdoor Recreation (IAC), (2) Washington State Department of Ecology BEACH database ( Ecology), (3) Lummi Indian Business Council, and (4) a local resource expert. Digital points provided by the IAC and Ecology's BEACH database were repositioned to ensure that each location more closely matched its actual position on land. The positions used in this database were identified using the HYDRO layer and 1-meter black-and-white digital orthophotographs. Not all marinas identified in both datasets were included. Digital points provided by Lummi Indian Business Council

were repositioned to fall within the land portion of the HYDRO layer, where necessary. These points were digitized off of the hardcopy maps. PARKS: Digital points representing parks were provided by Washington State Department of Ecology (BEACH database).

- 2006-03-01 00:00:00 - The above digital and/or hardcopy sources were compiled by the project biologist to create the SOCECON 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.

- 2006-05-01 00:00:00 - 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 is conducted to review the maps. If necessary, edits to the SOCECON 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/40620>

**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:**

**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 a wider community of GIS/mapping users. Distribution formats include a Geodatabase; ARC export, MOSS, and Shape files; and MARPLOT map folders. An ArcMap .mxd file, an ArcView 3.x ESI project, and an ESI\_Viewer product are also included on the distribution CDs 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.*