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:

Bocaccio Puget Sound Georgia Basin DPS critical habitat for use in ESA/FIFRA consultations

1.2. Summary description of the data:

These data represent the nearshore and deepwater critical habitat for bocaccio (Puget Sound/Georgia Basin DPS) designated under the Endangered Species Act (ESA) on November 13, 2014 (79 FR 68042). The critical habitat designation for bocaccio (Puget Sound/Georgia Basin DPS) includes nearshore areas, from the extreme high water line out to a depth of 30 meters relative to mean lower low water, and areas deeper than 30 meters that contain or are adjacent to highly rugose habitat. The critical habitat designation includes the marine waters above (the entire water column) the nearshore and deepwater areas. These data do not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands or certain additional DOD sites. No areas were excluded based on economic impacts. See the regulatory text in the final rule (79 FR 68042) for descriptions of ineligible and excluded areas.

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

1.4. Actual or planned temporal coverage of the data:

1.5. Actual or planned geographic coverage of the data:

W: -123.288217, E: -122.227439, N: 49.002153, S: 47.105103 W: -123.288217, E: -122.227439, N: 49.002153, S: 47.105103 W: -123.288217, E: -122.227439, N: 49.002153, S: 47.105103 W: -123.353354, E: -122.192987, N: 49.138017, S: 46.984239

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:

Karrin Goodman

2.2. Title:

Metadata Contact

- 2.3. Affiliation or facility:
- 2.4. E-mail address:

karrin.goodman@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:

Karrin Goodman

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:

- 2013-06-04 00:00:00 - Nearshore critical habitat is defined as occurring from the shoreline from extreme high water out to a depth no greater than 30m (98 ft) relative to mean lower low water. These geospatial data show it extended out to 30 meter depths as defined by the 30 meter contour developed using gridded depth data from The Nature Conservancy. This 30 meter depth contour was also used to define where the nearshore critical habitat aligns with designated deepwater critical habitat. These data were created through a series of processing steps. The initial source data were a depth grid obtained from The Nature Conservancy in 2013. It is a compilation of depth data from 4 different source data sets. It included data from Tombolo / the Canadian Hydrographic Survey / NOAA (Aschoff et al., 2013), NOAA's National Geophysical Data Center (NGDC) Tsunami DEM (Lim et al., 2012), D. Finlayson's topography / bathymetry (2005), and NOAA's National Geophysical Data Center's (NGDC's Coastal Relief Model, 2003). Using ArcGIS Advanced version 10.1, Spatial Analyst (an extension to ArcGIS), and the Benthic Terrain Modeler (BTM), also an extension to ArcGIS (Wright D.J., et al. 2012), the 30 meter grid was run through the Vector Ruggedness Measure (VRM) script resulting in a rugosity grid data set. These gridded rugosity values (30 meter resolution) were developed using a neighborhood analysis with a 3 grid cell neighborhood. The resultant rugosity values were grouped into two bins using the geometric interval method (Price, 2011). Rugosity values of 0.001703 or higher were deemed to be " high rugosity". They served as anchor points for deepwater critical habitat. Three geoprocessing generalization tools were used on the high rugosity areas to develop deepwater critical habitat designations. High rugosity grid cells were converted to polygons. Then, the Smooth Polygon tool with the polynomial approximation with exponential kernal smoothing algorithm was run on these polygons with a 600 meter tolerance. The results of this procedure were then buffered using 200 meters. The buffered results were aggregated using the "aggregate polygons" tool with an aggregation distance of 600 meters. In some cases, this last step produced very thin corridors between larger critical habitat designations. Where the corridors were less than 100 meters in width, they were eliminated. In the San Juan Islands area, rocky habitat was mapped by Greene et al. If these areas were not already included in the critical habitat designation, they were included in by either: 1) incorporating mapped rock into immediately adjacent deepwater critical habitat or 2) a 200-meter buffer was run on those rocky areas that were immediately adjacent to areas already defined as critical habitat and those buffered areas were included into deepwater critical habitat. NOAA Fisheries / WCR collected credible fish observations. In some instances, these points fell in locations that had not been captured in the designations in the previous steps. Where that was the case, the fish

observation points were buffered by 200 meters and the resultant areas were incorporated into the final designation areas. Some additional steps were performed. Where there were small resultant non-adult critical habitat polygons that were 0.25 square miles in area or less in waters deeper than 30 meters and having low rugosity, these areas were incorporated into surrounding "deepwater" critical habitat. Also, isolated polygons representing depths deeper than 30 meters that were smaller than 0.25 square mile in area and entirely surrounded by only nearshore critical habiat were incorporated into nearshore critical habitat (for bocaccio) making those areas more cohesive. Deepwater critical habitat designations are in 30 meter depths or deeper. The gridded depth data from The Nature Conservancy mentioned above was used to generate a 30 meter depth contour which was used to define where nearshore critical habitat (for boc - 2023-03-30 00:00:00 - As described above, this species' HUC-based critical habitat dataset was modified from the polygon-based species "agency-official" NMFS critical habitat data. This HUC-based critical habitat file represents the HUC-12 watersheds (USGS Watershed Boundary Dataset; https://www.usgs.gov/nationalhydrography/watershed-boundary-dataset) that intersect with the "agency-official" critical habitat polygon-based data. The data were reviewed and revised to add any additional HUC-12 watersheds that were determined to have hydrologic connectivity to the critical habitat.

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:

- 1.3. Is this a one-time data collection, or an ongoing series of measurements?
- 1.4. Actual or planned temporal coverage of the data
- 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
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.2. Data storage facility prior to being sent to an archive facility
- 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/72739

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:
- 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):
- 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.