

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:

North-central California Coast Salmonid Intrinsic Potential GIS Data

### 1.2. Summary description of the data:

This geodataabase provides an estimate to the spatial distribution of potential historical habitat for California Coastal Chinook Salmon, Central California Coast Coho Salmon, Northern California Steelhead and Central California Coast Steelhead.

Intrinsic potential measures the potential for development of favorable habitat characteristics as a function of the underlying geomorphic and hydrological attributes, as determined through a Digital Elevation Model (DEM) and mean annual precipitation grid. The model does not predict the actual distribution of "good" habitat, but rather the potential for that habitat to occur, nor does the model predict abundance or productivity. Additionally, the model does not predict current conditions, but rather those patterns expected under pristine conditions as related through the input data. Thus, IP provides a tool for examining the historical distribution of habitat among and within watersheds, a proxy for population size and structure, and a useful template for examining the consequences of recent anthropogenic activity at landscape scales.

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

Ongoing series of measurements

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

2017 to Present

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

W: -124.423876, E: -121.34395, N: 41.457008, S: 36.943085

### 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:**

Charleen A Gavette

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

charleen.gavette@noaa.gov

**2.5. Phone number:**

707-575-6017

**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:**

Charleen A Gavette

**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"):**

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:

- Calculating IP is a multi-step process that occurs both outside and inside a GIS. The first step creates a stream network from the Digital Elevation Model (DEM) and precipitation data that defines individual reaches and calculates values of gradient, valley floor width, and discharge for each. The second step creates suitability curves for these three variables based on life-history and habitat association of each species and life-stage. To construct a stream network, we implemented a model developed by Miller (2003 (Miller, D. 2003. Programs for DEM analysis)) that synthesizes grid-based data on topography derived from a 10 m resolution DEM and mean annual precipitation derived from the PRISM model (Daly et al., 1994). To run the model (Miller, 2003) (which is implemented outside of a GIS in a series of Fortran programs), we generated binary files of regional-scale elevation and precipitation grids. Beginning with these grids, we clipped the DEM and precipitation files to the watershed boundaries. The last input needed is a parameters file, and the only substantial change to the default inputs was to include regionally-specific equations relating precipitation to discharge. In the course of constructing the stream network, the model dynamically defines reaches on the order of 50-200 meters long, basing reach breaks on changes in gradient. In the resulting stream network, each reach is characterized by its gradient (averaged over the entire reach), valley width, and mean annual discharge (calculated at the downstream end of the reach).

**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?
- 5.2. Quality control procedures employed

- 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
- 8.3. 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/56775>

**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?**

Yes

**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:**

West Coast Regional Office (WCRO)

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

**7.2.2. URL of data access service, if known:**

[https://archive.fisheries.noaa.gov/wcr/maps\\_data/maps\\_and\\_gis\\_data.html](https://archive.fisheries.noaa.gov/wcr/maps_data/maps_and_gis_data.html)

**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):**

West Coast Regional Office - Long Beach, CA

**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.*