

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:

AFSC/RACE/GAP/Nichol: Archival tag depth and temperature data from Pacific cod

### 1.2. Summary description of the data:

Data from 250 recaptured (624 released) depth and temperature recording archival (data storage) tags attached to Pacific cod off Kodiak Island and in the eastern Bering Sea from 2001 to 2003, were used to describe the vertical movement patterns of Pacific cod. Three publications resulted from the research with subject matter including: 1) P. cod behavior as related to barotrauma; 2) P. cod vertical distribution as related to survey trawl catchability; 3) P. cod diel vertical migration. Please see publications for more detail.

### 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:

2001 to 2005

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

W: -173, E: -152, N: 60, S: 54

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

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)  
Table (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:****2.2. Title:**

Metadata Contact

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

Dan Nichol

**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?**

No

**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):*

Lineage Statement:

: A total of 624 Pacific cod were tagged with electronic data storage tags off Kodiak Island in the Gulf of Alaska, and off Unimak Island in the eastern Bering Sea from 2001 to 2003. There were two release sites off Kodiak Island (inside Kupreanof Strait and near Ugak bay), and three release sites off Unimak Island (off Cape Sarichef, off Amak Island, and

off Akun Island). Cod were initially captured with pots and hook and line gear at bottom depths ranging from 32 to 127 m near Unimak Island (Table 1). Pots were steel-frame d with dimensions of 2.1 × 2.1 × 0.9 m or 2.3 × 2.3 × 1.2 m, and 4 × 4 cm to 6 × 6 cm stretche d nylon mesh. Pots were “soaked” during both daylight and night-time hours from 5.2 - 22 h off Kodiak Island and from 3.8 - 102 h off Unimak Island. Both pots and hook and line g ear were retrieved at minimum rate of 20 m min<sup>-1</sup>. Captured cod were transferred to a tank supplied with running sea-water and were retained in the tank only long enoug h to determine if they could maintain buoyancy near the bottom of the tank without appa rent difficulty and if they lacked serious external damage. Data storage tags were a ttached externally, beneath the anterior dorsal fin, using 0.5 mm stainless steel wire as de scribed in Nichol and Somerton (2002). Cod were measured to the nearest centimeter tota l length (TL). Sizes of tagged cod ranged from 49 to 85 cm TL. Cod were released at t he site of initial capture immediately after tagging. Data storage tags, Lotek Wirel ess LTD-1100, recorded depth and temperature. The tags had a maximum recording d epth of 600 m, with accuracy of + 1.5 m if fish remained in less than 150 m, + 3 m if fish e xceeded 150 m, and + 6 m if fish exceeded 300 m. Water temperature was recorded with an accuracy of + 0.3 °C. Frequency of data recordings decreased with time at liberty, starting at 14 s intervals and decreasing to 30 min intervals after 341 days. The average r ecording interval for tags in this study was 13 min. Tagged fish were captured in co mmercial trawl, pot, long-line and jig fisheries. A cash reward was provided as an in centive for returning tags. Capture information included latitude, longitude, depth , and date of capture. Specimen information included fish length, sex, and fish weight.

**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):**  
unknown

## 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)
- 2.1. Point of Contact Name
- 2.4. Point of Contact Email
- 7.2. Name of organization of facility providing data access

**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/28006>

**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?**

No

**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?**

No

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

There are no legal restrictions on access to the data. They reside in public domain and can be freely distributed.

**7.2. Name of organization of facility providing data access:****7.2.1. If data hosting service is needed, please indicate:**

Yes

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

[https://console.cloud.google.com/storage/browser/\\_details/nmfs\\_odp\\_afsc/RACE/GAP/2001-2005%20A](https://console.cloud.google.com/storage/browser/_details/nmfs_odp_afsc/RACE/GAP/2001-2005%20A)

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

unknown

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

Unknown

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

No delay

**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)*

NCEI\_MD

**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):**

Alaska Fisheries Science Center - Seattle, WA

**8.3. Approximate delay between data collection and submission to an archive facility:**

unknown

**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*

IT Security and Contingency Plan for the system establishes procedures and applies to the functions, operations, and resources necessary to recover and restore data as hosted in the Western Regional Support Center in Seattle, Washington, following a disruption.

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

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