

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:

Hudson River Sub\_Bottom Profile Data - Raw SEG-Y Files (\*.sgy)

### 1.2. Summary description of the data:

Hudson River Estuary Shallow Water Surveys. Subbottom data was collected November 5 to December 15, 2009, in the estuary north from Saugerties to Troy. Data Collection and Processing: Subbottom Data - Fugro utilized the EdgeTech SB216 Chirp subbottom profiler system for seismic data collection. This system was operated using a swept frequency range of 2-16 KHz, maximizing subsurface resolution within the very shallow near-surface material (1- 5 m beneath seafloor). Subbottom data was processed and interpreted using Discover and SMT Kingdom software. The intent of the processing was to provide the NYSDEC with SEG-Y files that were properly filtered and spatially oriented to allow for near-surface interpretation of sediments in the Hudson River. Processing steps for the subbottom data included swell filtering to compensate for sea conditions during survey operations, compiling correct shotpoint navigation, and adjusting data gains for optimal interpretation. An isopach (sediment thickness) of the unconsolidated surficial sediments was created from the seafloor and mapped sediment horizon base using an acoustic two-way travel time of 1500 meters/second. Subbottom data was used to assist in selecting sediment sampling locations. Graphical sub-bottom profiles for areas of interest were produced and descriptive results will be included in the final report. Points were created every 300th shot (approximately 100 meters).

Original contact information:

Contact Name: John Ladd

Contact Org: Hudson River National Estuarine Research Reserve, NYS DEC

Phone: 845-889-4745

Email: jxLadd@gw.dec.state.ny.us

### 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:**

2009

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

W: -73.933423, E: -73.685289, N: 42.752039, S: 42.06449

**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:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.4. E-mail address:**

coastal.info@noaa.gov

**2.5. Phone number:**

(843) 740-1202

**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:****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:

- 2010-01-01 00:00:00 - The position recorded in the header of the SEG-Y file comes from the GPS navigation system interfaced to the sub bottom profiler computer, whereas the time comes from the sub bottom profiler computer clock. It has been determined that the time of the sub bottom profiler PC clock was offset from GPS time (as collected by the side scan sonar system). The positions found in the SEG-Y file headers and the SBP\_points attribute tables represent the position of the subbottom profiler source at the GPS times for that position as found in the XTF headers and the Sidescan Sonar ping shape file attribute table. Users should not use time but rather geographic positions to compare the sub bottom profile and side scan sonar datasets. Subbottom data was processed and interpreted using Discover and SMT Kingdom software. The intent of the processing was to provide the NYSDEC with SEG-Y files that were properly filtered and spatially oriented to allow for near-surface interpretation of sediments in the Hudson River. Processing steps for the subbottom data included swell filtering to compensate for sea conditions during survey operations, compiling correct shotpoint navigation, and adjusting data gains for optimal interpretation. Ship GPS data were acquired using a Trimble AG332 GPS receiver, operating at 1 Hz. The GPS position of the sub bottom fish was calculated in the Discover software on the XStar topside processor by applying a layback (the offset of the towfish from the GPS antenna). The raw GPS data were viewed in ArcGIS for any outliers, and the processed data were applied to the SEG-Y files in Kingdom. Final corrected positions are accurate to  $\pm 1$  meter.

- 2010-01-01 00:00:00 - The position recorded in the header of the SEG-Y file comes from the GPS navigation system interfaced to the sub bottom profiler computer, whereas the time comes from the sub bottom profiler computer clock. It has been determined that the time of the sub bottom profiler PC clock was offset from GPS time (as collected by the side scan sonar system). The positions found in the SEG-Y file headers and the SBP\_points attribute tables represent the position of the subbottom profiler source at the GPS times for that position as found in the XTF headers and the Sidescan Sonar ping shape file attribute table. Users should not use

time but rather geographic positions to compare the sub bottom profile and side scan sonar datasets. Subbottom data was processed and interpreted using Discover and SMT Kingdom software. The intent of the processing was to provide the NYSDEC with SEG-Y files that were properly filtered and spatially oriented to allow for near-surface interpretation of sediments in the Hudson River. Processing steps for the subbottom data included swell filtering to compensate for sea conditions during survey operations, compiling correct shotpoint navigation, and adjusting data gains for optimal interpretation. Ship GPS data were acquired using a Trimble AG332 GPS receiver, operating at 1 Hz. The GPS position of the sub bottom fish was calculated in the Discover software on the XStar topside processor by applying a layback (the offset of the towfish from the GPS antenna). The raw GPS data were viewed in ArcGIS for any outliers, and the processed data were applied to the SEG-Y files in Kingdom. Final corrected positions are accurate to  $\pm 1$  meter.

**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)
- 3.1. Responsible Party for Data Management
- 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
- 7.3. 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/47919>

**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:**

NOAA Office for Coastal Management (NOAA/OCM)

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

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

[ftp://ftp.coast.noaa.gov/pub/benthic/Sub-Bottom\\_Profile\\_Data/NY\\_HudsonRiver\\_sbp.zip](ftp://ftp.coast.noaa.gov/pub/benthic/Sub-Bottom_Profile_Data/NY_HudsonRiver_sbp.zip)

**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):**

Office for Coastal Management - Charleston, SC

**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.*