

Data Management Plan:

We will conform to the NSF Ocean Sciences Data Policy to manage, preserve and make data collected on this project publicly accessible. The sociocultural data that will be generated from this project will be considered a sensitive dataset. Therefore, management of this data is described in a separate section below. All annual and final reports submitted by the SEES Fellow will include updates and progress related to data management.

Expected Data

This project will generate oceanographic and sociocultural datasets from Southeast Alaska. Oceanographic datasets will include ocean physical data (e.g., temperature, salinity, depth and fluorescence), ocean chemical data (e.g., nutrients), and ocean biological data (e.g., chlorophyll, phytoplankton abundance and biotoxins) from direct measures and collected seawater/sediment samples. Sociocultural datasets will include basic demographic data, and records of cultural values/practices and local/traditional ecological knowledge.

Project Data Management

The SEES Fellow, Elizabeth Tobin, will be responsible for data management and quality control for both the oceanographic and sociocultural datasets. Day-to-day data management will involve: sample inventory, data creation and inventory, and data storage. The SEES Fellow will receive and manage data collected by undergraduate research assistants on a regular basis. All oceanographic data will be stored in physical laboratory and field notebooks, entered into a database on a laboratory computer and automatically backed up onto external hard drives for long-term preservation.

Data Archive

The SEES fellow will submit all relevant oceanographic data collected during this project to the National Oceanographic Data Center (NODC; <http://www.nodc.noaa.gov>). Data types that cannot be submitted to NODC, primarily biological data, will be archived using software tools provided by the Knowledge Network for Biocomplexity (<http://knb.ecoinformatics.org>). The open-source software package, Morpho (<https://knb.ecoinformatics.org/morphoportal.jsp>), is a data management application that is integrated with the Knowledge Network for Biocomplexity. This cross-platform application allows for easy creation, management and sharing of metadata, as well as archiving data. All data and metadata can be cataloged for easy access and editing. Phytoplankton data will also be submitted to the NCCOS Phytoplankton Monitoring Network (<http://products.coastalscience.noaa.gov/pmn/>). All data will be archived through one of the above platforms as soon as possible, but no later than two years after the data is collected, to make it publicly accessible.

Metadata

Inventories (standardized description) of all oceanographic data will be submitted to the appropriate data center (noted above) within sixty day after the observation period. For ongoing monitoring, metadata will be updated if there is a significant change in location, type or frequency of sampling.

Sociocultural data

In order to protect privacy rights and maintain the confidentiality of respondents, sociocultural data will not be made publicly accessible. Survey data will be entered into a database on the SEES Fellow's computer and categorized. Audio recordings of focus group meetings and interviews will be transcribed, coded and stored on the Fellow's computer. All digital data files will be backed up onto external hard drives for long-term preservation. Hard copies of the data collection tools (surveys, recordings and scripts) will be stored in a safe location for no less than 5 years after the completion of the project.

Data management reporting

Annual reports will address progress on data management and sharing, and compliance with the NSF Ocean Sciences Data Policy. In cases where the final report is due before the data is submitted to the data center, the SEES Fellow will report on the metadata submission and plans for final data submission. The Fellow will notify the Program Officer by e-mail once final data is archived.