

Data Management Plan

The bulk of this project will be conducted using publicly available data. The sole exception is the update to the mid-Atlantic continuous plankton recorder (CPR) time series. The samples are currently stored in the Marine Biological Association (MBA) of the UK (formerly Sir Alistair Hardy Foundation for Ocean Sciences) facility in the UK as part of their global CPR archive. MBA staff will enumerate the mid-Atlantic samples (2013-17) and will deliver the standard phytoplankton and zooplankton counts to the project team at GMRI.

Andrew Allyn from GMRI will serve as project data manager who will maintain a clean database of the CPR data used for this study. This will include merging the data from MAB with the existing data from NMFS. A single merged data set will be delivered to BCO-DMO during the second year of the project. In addition to the raw data, the project will produce bi-monthly and annual abundance anomaly time series according to procedures in Pershing et al. (2005). These time series will be produced for the two reference regions indicated in the text. We regularly receive requests for these time series, and we will make these time series available through BCO-DMO within the second year of the project.

The majority of the data used by our project will consist of physical, biological, and economic data collected and archived by other organizations, such as NOAA and NASA. Our data management efforts will focus on ensuring the repeatability of our work.

The project team will use the GMRI GitHub repository to store the code (written in Matlab and R) to conduct the analyses and simulations described in the proposal. This will facilitate collaboration among the team members and will provide version control that will allow us to clearly extract the code used for the runs that appear in our expected publications.

We will set up a BCO-DMO page for the project. The page will store the model output that appears in any publications generated by this project. The model output will be linked with the version of the models used to generate it.