

DATA MANAGEMENT PLAN

The anticipated data products will be separate from but related to data from the Santa Barbara Coastal (SBC) LTER program at UC Santa Barbara, and so that project has agreed to provide data archival and web access through the SBC and LTER Network Data Catalogs, with federation by DataONE. The SBC LTER Information Management System (IMS) will facilitate the cataloging of our data for long term preservation to enable the discovery of our fully documented data, and enhance their suitability for synthesis with other SBC LTER data and by others. The IMS will also facilitate linkage of project data to BCO-DMO by means of a project page describing this study and pointing to the SBC local catalog as for other OCE LTER projects until BCO-DMO:DataONE linkages are established.

Data Access Policy and Data Distribution. Data packages will be subjected to the same data access policy and data distribution schema as the SBC LTER, which also conform to LTER Network policies and uses “Type I versus Type II” terminology. There is no delay in releasing Type I (publically available) data once quality assurance has been verified.

Anticipated Data Products. We anticipate that this study will produce three to five new data sets containing: physical and bulk properties, and concentrations of several forms of organic material from sediments and/or their pore waters; dissolved inorganic and organic nitrogen from pore and stream water; and results from pore water DOM bioavailability assays and microbial biomass. The exact content number and design will be determined as the project progresses, and data set design will mirror the patterns established by the SBC LTER. Data quality assurance and metadata assembly will be carried out by a data management assistant, who will work closely with the SBC Information Manager (Margaret O’Brien).

Metadata. Data packages will cataloged with metadata in Ecological Metadata Language (EML) conforming to the most recent version of Best Practices for LTER Datasets. Metadata features will include either embedded or online links to methods and protocols, full temporal, spatial, and taxonomic coverage, keywords from the appropriate vocabularies (e.g., SBC, LTER, NBII thesaurus, GCMD) and new units registered with the LTER Unit Dictionary. All data tables will be congruent per current LTER EML Congruence Checker rules. As appropriate, datasets may provide explicit indexing keys and table-joining keys to facilitate cross-dataset synthesis.

Dataset Management (Data Life Cycle). To assure immediate and long term usefulness of project data requires metadata of the highest quality. Quality control (QC) will be done both during processing within the database, and manually by inspection. The SBC Information Manager will work with us regarding naming conventions, guidance for file organization and format, and designation of space on the server to back up raw files from the field. The data management assistant will be responsible for ensuring data appear in catalogs in a timely fashion, and that the project page at BCO-DMO is configured correctly.