## Data Management Plan

During the proposed cruises in 2015, 2016, 2017, and 2018, we will be collecting and analyzing field profiles of bulk DOM and dissolved combined neutral sugars as well as experimental microcosm samples of microbial abundance and diversity and DOM. All field and experimental data will be submitted to the Biological and Chemical Oceanography Data Management Office (BCO-DMO) to archive our collected data. The data will be contributed to BCO-DMO within 2 years of their production to comply with NSF OCE data dissemination and archiving policy (NSF OCE Sample and Data Policy, May 2011). The data will be accompanied by all relevant metadata (station location, ancillary data parameters and protocols used). The PI is already in contact with Cynthia Chandler, the BCO-DMO data manager, and understands the required metadata standards as well as the optimum formats for data submission. Carlson's group is familiar with this process and has been submitting similar data from prior projects to BCO-DMO.

Data sets and associated metadata will be made available in Microsoft<sup>™</sup> Excel<sup>™</sup>compatible spreadsheets. Where appropriate, metadata will be submitted on the metadata forms developed by BCO-DMO. Metadata will include variable names, derived units, experimental set-ups, analysis methods, descriptions of synthesis and calibration procedures where appropriate, data location, season information, and quality control information. Variable names, keywords, and metadata standards will follow quidelines available from the Marine Metadata Interoperability Project (marinemetadata.org) and National Oceanographic Data Center. Adherence to these standards will allow metadata to be shared and to be searchable between different databases.

Our data will also be made directly available to all NASA *NAAMES* PIs and collaborators.