REGIONAL DATA STREAM PLAN: OCEAN ACIDIFICATION MEASUREMENTS: GULF OF ALASKA SEWARD LINE AND PRINCE WILLIAM SOUND, AUGUST 2016

1. DATA AND INFORMATION TYPES

A. Provide a contextual description of the data stream.

These data track the seasonal and inter annual changes in marine carbonate chemistry along the Seward Hydrographic Line and within Prince William Sound, Alaska.

Final data are in submission phase, and currently this data stream is limited to preliminary files of bottle binned ocean acidification data and depth binned ocean acidification and CTD data collected in May and September 2014..

Website URL: Ocean Acidification Measurements
http://portal.aoos.org/#metadata/f33694d7-217f-4776-95a9-67d37b3e20c1/project

Website URL: Gulf of Alaska Data Integration Portal: Seward Line (other parameters) (see also (G-18, Exxon Valdez Oil Spill Trustee Council, Gulf Watch Alaska Long-Term Monitoring Program):
http://portal.aoos.org/gulf-of-alaska#metadata/e25fe1f2-1c98-44f6-856f-5d61c87c0384/project

B. How many station locations are there for this data stream?

N/A

C. What are the specific parameters of the data.

The parameters include: station number, time, latitude, longitude, bottle, bottom_depth, water_pressure, water_temperature, salinity, phosphate, silicate, nitrite, ammonia, nitrate, dissolved_inorganic_carbon, total_alkalinity, pH, pCO2, omega_calcite, omega_aragonite, dissolved_oxygen, depth.

D. Provide information about the sampling platform or instrumentation.

The sampling platforms include CTD and bottle sampling of ocean water at various depths.

2. DATA PATHWAY

A. Is a data sharing agreement required?

Data will be available publically.

B. In which format(s) were data received by AOOS?

Data are provided in their native file formats directly from originator. The originator submits data to the AOOS Research Workspace and then uses an auto-publication pathway to make the data publically available through the AOOS Gulf of Alaska data portal (See Data Stream Plan G-18).

C. How can the information be accessed?

This project-specific data are available through the AOOS data portal in the native file formats provided by the data owner.

D. What file formats will be used for sharing data, if different from original?

Data are shared in the original native file format as submitted by the originator. Data are currently only available for download in the public-facing AOOS Gulf of Alaska portal, but not by exploration via interactive, graphical visualizations.

E. Describe how the data are ingested(e.g. the flow of data from source to AOOS data portals) and any transformations or modifications made to share data in the AOOS data portal.

AOOS is currently working with the project PI on complete data submittal requirements for these historical records.

Data will be uploaded by the originator to the AOOS Research Workspace using their secure user account. Data files are stored on servers in the AOOS data management system. The user elects data files to push from the Workspace to the AOOS Ocean Data Explorer portal for public-access. Data are available in the AOOS portal through the access point but not via graphic display. Data files may be downloaded by the user from the AOOS data portal. A user request for a particular file pulls the data from the server cache.

F. What metadata or contextual information is provided with the data?

Data are shared in the AOOS portals with descriptive project and file metadata describing the data and accompanying fields.

G. Are there ethical restrictions to data sharing?

No

   a. **If so, how will these be resolved?**

   N/A

H. Who holds intellectual property rights (IPR) to the data?

University of Alaska Fairbanks, Ocean Acidification Research Center (OA data)
University of Alaska Fairbanks, School of Fisheries and Ocean Sciences (SFOS), other oceanographic data

I. Describe any effect of IPR on data access.

None

3. DATA SOURCE AND QUALITY CONTROL

A. Indicate the data source type (i.e. Federal, Non-Federal, University, State Agency, Local Municipality, Military Establishment (branch), private industry, NGO, non-Profit, Citizen Science, Private individual)

University

    a. **If Federal data source, were changes applied to the data?**
      N/A

    b. **If Yes, describe any changes to the data that require documentation?**
      N/A

B. Indicate the data reporting type (e.g. real-time, historical).
Historical

C. If real-time, list the QARTOD procedures that are currently applied.
No Required.

D. If real-time, list the QARTOD procedures that are planned for implementation.

E. What is the status of the reported data? (e.g. raw, some QC, incomplete, delayed mode processed but not QC'd)
QC by originator, and will accompany data with metadata.

F. Describe the data control procedures that were applied by the originator.
Details on QC are available from the originators of the data, but will be made available with the metadata once submission is completed.

See Data Stream G-18: QC methods are described by project in the field sampling protocols. Protocols are published to the AOOS data portal alongside data files and reported in the metadata.

    a. **Provide a link to any documented procedures.**
      N/A

G. Describe the data control procedures that were applied by AOOS.
N/A

    a. **Provide a link to any documented procedures.**
      AOOS Data Assembly Center and Data Management Subsystem Plan, Section 4.4.4.

H. List the procedures taken for data that could not be QC'd as directed.
N/A

4. STEWARDSHIP AND PRESERVATION POLICIES
A. Who is responsible for long-term data archiving?

Data are aggregated for visualization and exploration with other layers in the AOOS data portal. AOOS stores the real-time and historical data internally using the AOOS data servers.

AOOS will facilitate data archival with NCEI, once confirmed that the PI has not already archived these data (PI is Jeremy Mathis currently with NOAA). AOOS is working with Jeremy Mathis on completing data submittal requirements for these historical records and identifying who will archive the data with NCEI.

To facilitate archival of the valuable assets not of interest to NCEI, AOOS is developing a simplified pathway to get data into from AOOS scientists into DataONE through the Ocean Workspace. More information about DataONE can be found in the Data Management Plan (section 4.4.7) and at https://www.dataone.org/

B. Which long-term data storage facility will be used for preservation?
NCEI and DataONE

C. Describe any transformation necessary for data preservation.
Transformations of data will be to non-proprietary file formats to facilitate long-term preservation, including CSV, TXT, XLS, AND NetCDF.

D. List the metadata or other documentation that will be archived with the data.
ISO-19115 or .xml FGDC CSDGM metadata records will be provided by the data collectors prior to archive. Field sampling protocols will also be archived with the data files.