

## 1. DATA AND INFORMATION TYPES

### A. Provide a contextual description of the data stream.

Within Kachemak Bay, several organizations are involved in the study and monitoring of phytoplankton that can lead to harmful algal blooms (HABs). The Kachemak Bay National Estuarine Research Reserve and NOAA's Kasitsna Bay Laboratory conduct ongoing phytoplankton and HAB monitoring, especially during the summer months. The main goal of the program is to look for groups of phytoplankton that are known to carry toxins that can result in shellfish poisoning to humans. Phytoplankton samples are collected at numerous locations throughout Kachemak Bay. This information is used to produce weekly updates throughout the summer, informing people about the levels of potentially toxic phytoplankton in Kachemak Bay.

Website URL: Gulf of Alaska Portal: <http://portal.aos.org/gulf-of-alaska>

Kachemak Bay Research Reserve: Phytoplankton Monitoring data:

<http://portal.aos.org/gulf-of-alaska#metadata/77d06cdf-6058-43f0-aed9-1b8bfb2e6be/project>

NOAA Kasitsna Bay Lab Phytoplankton Monitoring data:

<http://portal.aos.org/gulf-of-alaska#metadata/10a4c344-0ac6-4ba3-81fe-dde011688280/project>

The Aleutian Pribilof Island Association (APIA) PSP research and monitoring project has been collecting PSP data since 2006 near many Aleutian Island communities. The program has developed methods for communities to monitor occurrence and distribution of PSP toxins, and is the only source of ongoing PSP monitoring in the Aleutian Island area.

<http://portal.aos.org/gulf-of-alaska#metadata/113ece2d-9fc9-45eb-87fa-73c1cab5b9ff/project>

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

At the moment, these data are not all public on the AOOS website.

The APIA data are, but not at a consistent set of sampling locations, which varies from year to year.

### C. What are the specific parameters of the data.

The parameters of this data include counts of phytoplankton cells by species and shellfish tissues testing from fixed monitoring locations.

PSP counts (need to state what the units of measure are for the APIA data).

**D. Provide information about the sampling platform or instrumentation.**

Data are generated using water collection by human with a micron-mesh filter. The shellfish toxin data are generated through testing in a laboratory.

**2. DATA PATHWAY**

**A. Is a data sharing agreement required?**

Any data shared on the AOOS site are available publically.

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

Data, maps and documents are provided as a XLS or PDF files directly from originator.

**C. How can the information be accessed?**

Kasitsna Bay does not offer any data through the portal, just metadata. In the spring of 2017, 5 years of phytoplankton data will be made available as part of this data stream and G-18, and the plan will be updated to reflect this update.

KBRR takes samples collected by members of the public and then analyzes those samples for phytoplankton presence. They upload a PDF report that provides the results of the samples. A few reports also have a PSP measurement of mussels or clams done by Southeast Alaska Tribal Ocean Research. These data are currently provided in report format only.

The Aleutian Pribolof Island Association is currently the only data provider that offers data files in MicroSoft XLS files with tabular and graphical formats.

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

Data records and reports are shared in the same format as submitted by the originator (shared data file format).

**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.**

Currently, only reports and sampling area maps are made available on the AOOS Data Portal from Kasitsna Lab and KBERR. XLS files are available for download from the APIA data sets.

When data are provided, they are uploaded by the originator to the AOOS Research Workspace using their secure user account. From there, 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 Gulf of Alaska data portal for public-access. Data are available in the AOOS Gulf of Alaska 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 CSV 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?**

Kachemak Bay Research Reserve  
NOAA Kasitsna Bay Lab  
APIA

**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)**

Federal, State agency, and Private industry

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

No

**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.**

N/A.

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

N/A

**E. What is the status of the reported data? (e.g. raw, some QC, incomplete, delayed mode processed but not QC'd)**

Some QC as delivered from the originator(s).

Methods and QA/QC procedures are described in the reports provided by the links in this data stream.

**F. Describe the data control procedures that were applied by the originator.**

Data collection and QC procedures for project-level data are provided by data providers as ISO-19115 metadata. (AOOS Data Management Team is currently working on ISO metadata in the new editor for the AK HAB map. Expected completion is May 2017).

**a. Provide a link to any documented procedures.**

Contact information to the report providers is provided to access any documentation of protocols. (Currently trying to get copies of these documents or links for easier access to QA/QC).

The Aleutian Pribilof Island sampling program has developed methods for communities to monitor occurrence and distribution of PSP toxins. (Currently trying to get copies of these documents or links for easier access to QA/QC).

**G. Describe the data control procedures that were applied by AOOS.**

None applied

**a. Provide a link to any documented procedures.**

N/A

**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.

Currently, there are limited data provided in this data stream, and most of the information is in the form of reports.

AOOS will facilitate data archival with NCEI. NCEI currently is not interested in this data stream as is. This may change as the expected incoming phytoplankton count data are added to the portal through the Gulf Watch Program (G-18). Through an agreement with the Gulf Watch Alaska program, AOOS is taking responsibility for archiving these data with DataOne and NCEI via a planned, automated pathway.

**B. Which long-term data storage facility will be used for preservation?**

DataOne and NCEI.

**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.