

Alaska BioMap, Inc. is recruiting a **Water Quality Specialist** to support NOAA researchers at the AFSC Kodiak Laboratory with projects related to seaweed mariculture and the development of kelp farms in the Kodiak Archipelago. In order for kelp farms to be commercially viable, they must be sustainable. Sustainability requires that farms be located where local conditions are ideal for kelp growth. To this end, water quality (e.g., temperature, salinity, primary production, and light levels) and kelp seed studies are needed in the Kodiak area. The focus of this position is to assess and monitor water quality on a regional (Kodiak Archipelago) and local (0.04 km² farms) scale and support lab and field studies on the physiological responses of kelp seed to environmental conditions.

Job Description

The incumbent will perform a variety of laboratory and field activities with a focus on water quality in relation to kelp. Specific tasks are expected to include the following:

Water Quality Lab Equipment Operation and Maintenance

- Run a Burkolator carbonate chemistry instrument and accompanied instruments to measure ocean acidification, temperature, salinity, and production according to lab protocols.
- Clean, maintain, and calibrate the Burkolator and accompanied instruments in accordance with lab protocols.
- Maintain and update Burkolator documentation as needed with guidance of project leader.
- Manage and analyze data on seawater chemistry.
- Update existing databases and provide monthly reports on hourly and monthly trends in seawater chemistry.

Water Quality Monitoring

- Support and continue development of a field collection system to assess and monitor seawater quality in the Kodiak Archipelago.
- Collect temperature, salinity, and turbidity, and water samples from multiple point sources (i.e., city of Kodiak and 5 villages in the surrounding area) for analysis of the carbonate chemistry.
- Collect temperature, salinity, and turbidity, and water samples in and around local macroalgae farms to assess how water quality affects kelp productivity and how kelp farms affect water chemistry.
- Provide support and training as necessary to volunteer field samplers to ensure that protocols are strictly followed and that data collection is consistently high quality.
- Maintain environmental monitoring instruments and ensure that adequate sampling supplies are maintained at remote sites.
- Analyze water samples taken (including carbonate chemistry and salinity).
- Collect and collate data, perform QA/QC, and enter data into Microsoft Excel and a Microsoft Access database.
- Provide monthly reports on spatial and temporal trends with guidance from project leader

Analysis and Support of Laboratory Sampling

- Support laboratory and field experiments through the collection and analysis of water samples, database maintenance, providing field sampling while in the field (when not water sampling), or by assisting with the set up or execution of laboratory experiments.
- Work with laboratory experimental personnel to provide data in various formats or reports as needed.

Place and Period of Performance

- NOAA Fisheries Kodiak Fisheries Research Center, 301 Research Ct., Kodiak, AK
- September 15, 2020 through September 14, 2021
- Possible extension through 2025 dependent on performance and funding

Compensation and Inclusions

- Hourly rate commensurate with qualifications and experience
- ¾-time with 1,400 billable hours distributed through the year
- Full benefits
- Reimbursement of work-related travel

Minimum Qualifications

- Bachelor's degree plus 3 years of experience relevant to this position OR
- Master's degree and 1 year of relevant work experience
- 1 year experience troubleshooting analytical instruments in a laboratory setting
- Experience with review, validation, and certification of data collected from analytical instruments
- Ability to pay attention to detail
- Ability to work well with others and alone
- Ability to follow research protocols
- Ability to follow all safety protocols, including procedures to minimize the risk of COVID-19 infection
- Ability to pass federal background check to receive credentials to access government facilities and computers

Preferred Qualifications

- Experience collecting water samples at the surface and at a range of depths
- Experience entering data into databases, preferably Microsoft Access
- Experience performing basic data analyses and graphing

How to Apply

- Prepare a single PDF document that includes the following:
 1. Cover letter (1 page max) that specifies:
 - the position to which you are applying
 - your level of knowledge, skills, abilities, and experience as they pertain to the duties and qualifications of the position
 2. Resume (3 page max) targeted specifically towards the duties and qualifications of the job; and
 3. Phone and email contact information for at least 2 references who can provide a knowledgeable assessment of your job-specific qualifications.
- Name the PDF in the format of Lastname-Firstname_Application_Kodiak-WQS.
- Send the PDF to jobs@akbiomap.com with Kodiak-WQS in the subject line.
- Applications will be reviewed upon receipt. A selection is anticipated no later than 22 July.
- Please contact Darcie at darcie@akbiomap.com or (907) 321-2908 with questions.