MAKAH TRIBE
P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201

January 21, 2026

Announcement: Request for Bids for Eelgrass Surveys in Neah Bay, WA
Project Time Frame: May–October 2026
Point of Contact: Adrianne Akmajian, (360) 645-3079, marine.ecologist@makah.com
Bid Opening: January 22nd, 2026 at 8 AM
Bid Closing: February 5th, 2026 at 5 PM
Maximum Bid Amount: $120,000

Overview

The Makah Tribe Fisheries Management Department is seeking qualified applicants to perform boat-based surveys for eelgrass detection in Neah Bay, WA. Surveys will require both hydro acoustics (BioSonics MX Aquatic Habitat Echo Sounder (or equivalent)) and towed underwater video to record the presence of eelgrass as well as the ability to take grab samples of eelgrass. Specifications on the equipment needed are described below; the successful bidder must meet the minimum required equipment (or equivalents) and demonstrate experience with similar projects and the ability to complete the requested deliverables. Surveys will take place in polygon study sites shown in Figure 1. The Makah Tribe will provide the successful bidder with a pre-determined sampling plan of transects. Additional transects or reconnaissance tracks may be requested where eelgrass is found to better determine the bed area and depth extent. Bidders may include an additional section to the bid indicating the ability to provide dive support (if available) and the additional cost for the dive team mobilization and daily rate in the case where the Tribe may want supplementary information about the eelgrass beds (e.g. surveys of shoot density). Successful bidders will be expected to review and comply with a forthcoming Quality Assurance Project Plan (QAPP) for this project.

Required Equipment

The bidder must have a vessel that meets US Coast Guard safety standards and is insured and that can conduct towed underwater video sampling in shallow subtidal and intertidal waters in a semi-enclosed bay. The vessel must have a shallow enough draft (~1 m) to adequately sample the shallow edge of the eelgrass beds throughout the study area and must be able to conduct transect lines at low speed (1-2 knots) during variable tide and weather conditions. The vessel must be equipped with a weighted towfish (or similar) capable of deploying an underwater camera system and must have the ability to keep the camera at approximately 1 m above the seagrass canopy while surveying transects from the low intertidal (+1.2 m relative to mean lower low water (MLLW)) to -6.1 m MLLW. The vessel should be equipped with a grab sampler to be able to take samples of subtidal eelgrass at depths of -6.1 m MLLW. The bidder vessel must be able to accommodate one to three (1–3) Makah Tribe scientists being on their vessel during sampling.

The bidder should have depth sounder(s) and differential Global Positioning System (DGPS). The bidder must have an echo sounder capable of acquiring submerged aquatic vegetation, substrate, and bathymetry data (e.g. BioSonics MX Aquatic Habitat Echo Sounder, or equivalent).

The vessel should have a second on-board depth sounder (e.g. standard dual frequency transducer). Both depth sounders should be able to link to the on-board computer or laptop to integrate depth measurements into the data files generated during the surveys. The vessel should have a DGPS unit that is accurate to <3 m (horizontal) or better and that can be deployed to accurately reflect the position of the video camera. The DGPS will be linked to the computer to integrate data (i.e. date, time (hh:mm:ss), latitude and longitude) into the survey data file at one second intervals.

The bidder should have an on-board laptop, or computer with monitor, equipped with word processing, spreadsheet, navigation, tide prediction, Geographical Information System (GIS), and navigation software capable of accepting uploaded geographical site data with real time navigation and drawing capabilities. At a minimum, the laptop must have software that allows for geographical data upload, drawing a sample area and transects on a real time navigation screen, a mechanism to designate marine vegetation presence, and way to integrate of all data into a data file (comma delimited format). The computer should be equipped with a video overlay controller and real-time data logging software that can integrate DGPS data, user supplied transect information (e.g. transect number and site code), and the video signal at one second intervals. The bidder must have computer storage capability (internal or external hard drives) for up to 20 TB of data, in order to keep a copy of all recorded video files after data collection.

The underwater camera should be able to capture clear video footage in low-light environments up to a depth of -6.1 m (MLLW) with footage of sufficient quality to identify eelgrass species and other marine vegetation. A mounted underwater light is not required, but if available may improve video during dawn/dusk surveys or higher turbidity scenarios. Mounted lights should use a wide beam angle (at least 100˚) and high brightness (1000 lumens or more). Parallel lasers are required to provide a scaling reference in the video image and should be mounted 10 cm apart on the towfish. The bidder must have a digital video recorder to be able to record the video with overlays on to portable hard drive(s) (provided by the Makah Tribe).

Figure 1. Study area showing site polygons developed by WA DNR Submerged Vegetation Monitoring Program and study site boundary at the mouth of Neah Bay (yellow line); all surveys will be conducted within Neah Bay, west of the boundary line. The Makah Tribe will provide the successful bidder with a sampling map/GIS shapefiles with expected transect lines for each site polygon; actual survey areas will not include the entirely of the above polygons, but will be modified to exclude obstructions and/or areas outside of the project scope. Note the imagery shown was captured at <-2 ft low tide and shows the low intertidal extent.

Project Tasks and Requirements

1. Sampling Plan Review

The Makah Tribe will provide the successful bidder with the approved QAPP, a draft sampling plan that contains all sampling methods, and a map/GIS shapefiles of the expected transects and sampling areas. The successful bidder will review and provide a written comment to the Makah Tribe that recommends adjustments to the sampling methods based on their research vessel and sampling equipment considerations, experience conducting underwater video sampling, and/or

due to safety considerations. In addition, the successful bidder will provide the Tribe with a sampling schedule for all the sample sites listed in the sample plan. The sampling schedule should include the entire sample season as potential sample days, however early season (May–July) surveys are preferred by the Tribe to align with other project objectives. Please note that changes to the sampling schedule may be necessary based on other tribal priorities and projects in the bay (pre-planned or otherwise).

2.Field Sampling

The successful bidder will provide a research vessel(s), licensed skipper, sampling equipment as described above, and optional deck hand or field technician to assist with running the equipment (as determined/demonstrated necessary/unnecessary by the bidder). The bidder will be responsible for the daily operations of the vessel, equipment, skipper, and technician, including all navigation to and from sampling sites, moorage, fuel and maintenance expenses, and food/lodging for the skipper and technician. The bidder will supply a DVR to record video and should have sufficient data storage capability to keep a backup copy of all recorded video files and csv files of transect/track data after data collection (up to 20 TB of data). The Makah Tribe will provide portable hard drives to transfer data from the bidder computer/hard drives to Makah Tribe computers/servers.

All field sampling will be completed between May through October and will be conducted during suitable tide windows to conduct the work. The specific dates/times, sites to be sampled, total number of sampling days, and sampling methods will be agreed upon by the Makah Tribe and bidder. The Makah Tribe will supply all geographic site electronic data, field data sheets, and a minimum of one scientist for all field sampling. The Makah Tribe scientist will be responsible for tracking all sampling parameters (e.g. transects, grab samples, etc.) at each site, conducting a real-time preliminary analysis of eelgrass and other marine vegetation presence/absence, and recording observations on field data forms.

The successful bidder will be asked to conduct across-shore transects to obtain eelgrass area and depth distribution in Neah Bay. The Makah Tribe will provide a sampling map/GIS shapefiles of the expected transects for each site polygon in Figure 1; note that site polygons will be modified to exclude obstructions and/or areas outside of the project scope. The bidder should expect to conduct three types of transects/tracks: 1) ten (10) stratified random transects (est. 50 total) for each 1000 m of shoreline following methods developed by WA DNR's Submerged Vegetation Monitoring Program (SVMP) (Dowty et al. 2022); 2) an additional 175–200 transects spaced more finely (~20 m apart) throughout the navigable portions of the polygons (average transect lengths 120 m (range 100–500 m); 3) on request, when eelgrass is found, additional fine-scale transects (~5 m apart) or other reconnaissance tracks to better capture area and depth distribution.

3. Data File Post-Processing

At the end of each sampling day, the vessel captain will collate and save all tracks from the day using a naming convention provided by the Tribe. Expected real-time data logged on the

computer should include the site code and transect/track information input by the Makah scientist, the time, date, position information, and depth, and (if available with the bidder equipment) real-time logging of eelgrass (based on the Makah scientist inputs when eelgrass is visually detected using video and/or echosounder data). The successful bidder will post-process all files to correct depth to MLLW and, using the MX Habitat Echosounder output, to identify where eelgrass was detected along the transects/tracks. The eelgrass detected by the echosounder will be input as an added column in the .csv file. All video files and .csv files from the surveys will be sent to the Makah scientist within one week or as otherwise agreed between the Makah scientist and successful bidder and the Makah Tribe with post-process the video files to confirm eelgrass presence for each one second of video.

Project Deliverables

1. Within one week after receiving the Tribe's preferred sampling plan, QAPP, and sampling methods:
    a. A written comment to the Makah Tribe that recommends adjustments to the sampling methods based on their research vessel and sampling equipment considerations and/or due to safety considerations.
        i. The Makah Tribe shall consider adjustments, and the Tribe and successful bidder will agree upon (in writing) acceptable terms that accomplish the project goals while maintaining personnel and equipment safety and that comply with the approved project QAPP.
    b. A sampling schedule for all the sample sites listed in the sample plan, including times and tide heights appropriate to conduct the work. The sampling schedule should include the entire sample season as potential sample days, however early season (May–July) surveys are preferred.
2. Within one week after each sampling period, or on an otherwise agreed schedule between the Tribe and bidder:
    a. All video files from the transects/tracts
    b. All post-processed csv files
    c. A written document that includes any additional information necessary to properly document all procedures including, but not limited to, equipment model/specifications/settings used, modifications to the original sampling plan that occurred while in the field, and any issues or incidents of note that occurred during field sampling or post-processing

Bid submission must include:

- Full name
- Permanent mailing address
- Social Security Number

- Tribal Enrollment Number (if applicable)
- Phone number and e-mail
- Description of experience/qualifications
- Bid Amount

NOTE: TERO and other Tribal Requirements may apply

Any questions on this bid can be addressed to the Tribal Contract Representative, Adrianne Akmajian, (360) 645-3079, marine.ecologist@makah.com.

Please send bids to Laurette Venske in a sealed envelope clearly marked Neah Bay Eelgrass Surveys on the outside of the envelope.

Bids may be hand delivered to the Makah Finance Building or mailed to:

Makah Tribe
Attn: Laurette Venske
161 Resort Drive/ PO Box 115
Neah Bay, WA 98357

Deadline for submission: February 5th, 2026 at 5 PM