Aquatic Monitoring Crew Leads, Technicians, and Riparian Botanists

O'Connor Center for the Rocky Mountain West

The University of Montana (UM) O'Connor Center for the Rocky Mountain West (OCRMW) is partnering with the Bureau of Land Management (BLM) to implement their Aquatic Assessment, Inventory, and Monitoring (AIM) strategy. This protocol is targeted at collecting standardized inventory and long-term hydrologic and biological data at multiple scales across BLM Districts in the Western U.S.

We are currently recruiting **Crew Leads, Technicians and Riparian Botanists** with experience in fisheries, hydrology, ecology, and/or botany for data collection in **Idaho, Nevada, and Wyoming** from **April through August/September** (exact dates vary by project, see below).

Data collection will follow the AIM National Aquatic Monitoring Framework, specifically: 1) site evaluation, 2) water quality, 3) physical habitat and canopy cover, 4) macroinvertebrates, 5) photos, and 6) human influences. We will also implement vegetation assessment elements of the Multiple Indicator Monitoring (MIM) protocol. The field crews will consist of a Crew Lead, Technician, and Riparian Botanist. All crews will be supported by Crew Managers and other professional EMMA staff. We ask seasonal staff to commit to the entire field season, practice safety awareness, and contribute to building a healthy, productive, and enjoyable work environment.

All positions are field-based and require primitive camping. Sampling sites may sometimes be near a town, but often the towns will have few amenities or entertainment, and crew members should plan to bring all their food with them each hitch. Expect that cell phone service from any carrier is poor to non-existent in many areas. Applicants should also understand that this is physically demanding work. Crews typically work eight consecutive 10-hour days, followed by a 6-day break, in all kinds of weather, and frequently must navigate sketchy roads or carry awkward and heavy equipment across uneven terrain to access a site. The wadeable streams sampled range from a few inches deep to fast-flowing small rivers that require good balance and a willingness to be waist or chest deep in water.

UM supplies all necessary monitoring equipment, including vehicles, to carry out the work. We provide some group camping gear (stoves, coolers); however, individuals are responsible for their personal camping gear (tents, sleeping bags). We can lend camping gear on a case-by-case basis.

The University of Montana is an Affirmative Action/Equal Opportunity employer and has a strong institutional commitment to the principle of diversity in all areas. Applicants with diverse backgrounds, experiences, ability, and perspectives are encouraged to apply.

Position Details

- Position is full time, temporary (< 4 months).
- Compensation is based on qualifications and experience.
  - Monitoring Technicians earn $18-19 an hour
  - Crew Leads earn $20-22 an hour
  - Riparian Botanists earn $20-22 an hour
- All positions include (tax-free):
  - $268 meal per diem per 8-day hitch
  - Waders and boots (kept by employee on completion of the season, a ~$300 value)
  - Field/camping equipment (kept by employee upon completion of field season, ~$300 value)
- Benefits include Worker's Compensation coverage, paid holidays, and accrual of sick leave (sick leave).

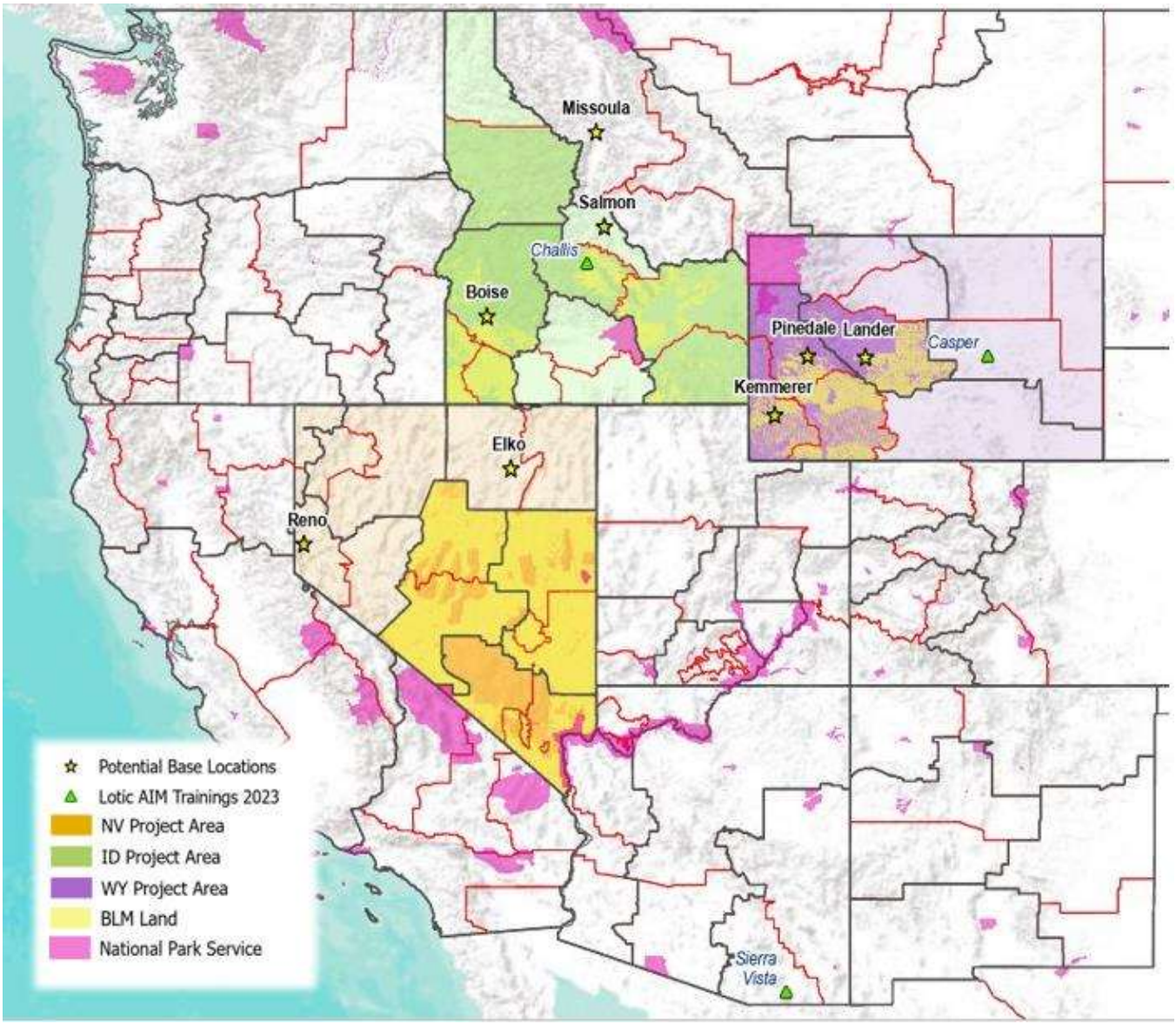
Locations

Crews will be based out of a BLM field office to be determined in Spring 2024 based on where data will be collected. Below are the anticipated locations of the base cities and timeline of work. All start dates are dependent on BLM trainings.

NEVADA: Elko, Las Vegas, or Ely, NV working in central, eastern, and southern Nevada. Work will begin on April 13th with the BLM training in Safford, AZ and continue until all points are completed, which is estimated to be late July to early August.

WYOMING: Lander, Pinedale, or Kemmerer, WY working in central, west, and southwestern Wyoming. Work will begin on May 4th with a BLM training in Casper, WY and continue until all points are completed, which is estimated to be early to mid-September.

IDAHO: Missoula or Boise, ID. Sampling will occur across the southern portions of western (Boise) and eastern (Pocatello) Idaho in addition to the northern central portion of Idaho near Lewiston. Work will begin on June 1st with the BLM training tentatively in Challis, ID and continue until all points are completed, which is estimated to be late September.



Required Qualifications

1. Aquatic Monitoring Field Technician

- A Bachelor's Degree or higher in Aquatic Ecology, Fisheries, Hydrology, Water Resources or related subject. Experience may be substituted for up to two years of education.
- A minimum of one season of field data collection. Several lab courses with extensive field work can satisfy this requirement. However, preference will be given to people who have collected aquatic or hydrologic data in a work setting.

2. Aquatic Monitoring Field Crew Lead

- A Bachelor's Degree or higher in Aquatic Ecology, Fisheries, Hydrology, Water Resources or related subject.
- A minimum of one full year or two full seasons of fish, macroinvertebrate, hydrology, or water quality field data collection. A completed M.S. degree with field work can satisfy this requirement.
- Experience characterizing aquatic habitats in the field using standardized protocols, including establishing transects and thalweg profiles, determinations of bankfull width, stream classification (Rosgen or other), habitat complexity, and riparian vegetation.
- Experience with macroinvertebrate collection and water quality sampling.
- Experience supervising technicians, volunteers or undergraduate students. Leadership in a volunteer or community organization, or in the military, can satisfy this requirement.
- Experience managing gear and equipment for a crew, lab class, team, or other organizational unit.

3. Riparian Botanist

- Coursework in Botany, Ecology, Range Science, Wetland Ecology, Plant Taxonomy or closely related subject. A completed B.S. or B.A. degree in a related subject preferred. Herbarium, horticultural, restoration or other related field experience may substitute for academic qualifications.
- Ability to identify riparian graminoids, forbs, shrubs and trees to species using dichotomous keys. Knowledge of wetland and riparian plants of the Rocky Mountains and/or Intermountain West is preferred although those without wide experience in the West or in riparian environments are still encouraged to apply.

Preferred Qualifications

- A basic understanding of how field protocols are used to conduct sampling and field data collection at assessment and monitoring sites.
- Experience with data entry and management using personal computers or tablets. Experience with Microsoft Office (Word, Excel) and preferably with ArcGIS Field Maps and Survey123.
- Experience navigating and collecting coordinates with hand-held GPS units.
- Experience with using Google Earth or GIS to examine aerial imagery.
- Experience driving and maintaining 4WD trucks and other vehicles, especially on rough and unmaintained roads. Valid driver's license and clean driving record (DUI or other serious convictions need not apply).
- Demonstrated ability to work productively as part of a team to accomplish mutual goals and to work independently as required.
- Experience in and willingness to spend multiple days camping in the field where multiple hazards (snakes, bears, deadfall, lightning, poison ivy, fires, etc.) may be encountered.
- Willingness to work irregular hours in harsh environments and challenging weather and carry 40-50 pounds in a backpack over uneven terrain.

Training

These positions are ideal for people who are committed to ongoing learning and development. You will receive paid training on AIM protocols and associated methodology. The BLM hosts AIM trainings across multiple western

states each year and participation is required by everyone who plans to collect AIM data during that calendar year and before any data is collected. UM ecologists will also provide additional training on protocols for the area in which you will be working and you will have ongoing field-based support and training from specialists during the field season. You also can interact with seasoned staff scientists from both the BLM and UM throughout training and field work.

About UM and the Ecological Mapping, Monitoring and Analysis group

The University of Montana is a flagship research institution with approximately 10,000 undergraduate and graduate students. The Ecological Mapping, Monitoring and Analysis group (EMMA) is part of the O'Connor Center for the Rocky Mountain West, a regional studies and public education program. EMMA staff are engaged in mapping wetlands across the western US, including Alaska; and in carrying out inventory and monitoring projects for federal, state and tribal agencies.

To learn more about the University of Montana and EMMA, please visit the links below.

University of Montana EMMA Home Page

Criminal Background Investigation is required prior to Offer of Employment. In accordance with University policy, finalists for this position will be subject to criminal background investigations. ADA/EOE/AA/Veteran's Preference. Reasonable accommodations are provided in the hiring process for persons with disabilities. For example, this material is available in alternative format upon request. As an Equal Opportunity/Affirmative Action employer, we encourage applications from minorities, veterans, and women. Qualified candidates may request veterans' or disabilities preference in accordance with state law. References not listed on the application materials may be contacted; notice may be provided to the applicant. Testing Individual hiring departments at UM may elect to administer pre-employment tests, which are relevant to essential job functions. Employment Eligibility: All New Employees must be eligible and show employment eligibility verification by the first date of employment at UM, as legally required (e.g., Form I-9)

How to Apply

Please submit the following application materials to loticaim@umontana.edu. The subject line of the email should read "**2023 Lotic AIM Application**". Please combine all application materials into 1 document (.pdf preferred) titled "**{your name} - {position applying for}**" (e.g. Jane Doe - Technician).

1. Letter of Interest – addressing the stated required skills for the position
2. Detailed resume listing education and describing work experience
3. Names and contact information for three (3) professional references
4. Answers to Supplemental Questions
    a. What is your preferred location and earliest start date?
    b. Which position are you applying for (Crew Lead, Technician, or Riparian Botanist)?
    c. Have you applied for any other positions with the O'Connor Center for the Rocky Mountain West?

Application review will be ongoing and will continue until all positions are filled. All applicants will be notified of receipt of their application and the results of the preliminary review (rejected due to failure to meet minimum qualifications or transmitted to hiring team). If you qualify for an interview, you will have the opportunity to speak with staff who worked as AIM crew members in previous years.