



MS Graduate Research Assistantship



Agency/State: Bemidji State University, Bemidji, Minnesota, Red Lake Department of Natural Resources, Red Lake, Minnesota

Job Description: The Red Lake DNR in cooperation with Bemidji State University, seek a motivated student to complete a MS project that focuses on quantifying mercury loads to Upper and Lower Red Lake from adjacent wetlands. Previous work shows that mercury concentrations in Upper and Lower Red Lake walleye differ significantly and the proposed work aims to determine the source of these differences. This work is part of a multi-year project that starts spring of 2022. Successful applicants will work with Red Lake DNR and Bemidji State University to complete laboratory and field work. If you are interested in pursuing a MS degree in which you will collect flow, water level, water chemistry, physical water measurements, and invertebrate samples from streams and wetlands on the Red Lake Reservation you are encouraged to apply.

Position Tasks:

- Conduct literature review to determine appropriate sampling techniques for water parameters and invertebrates for mercury.
- Perform stream reconnaissance to determine appropriate sampling locations.
- Develop sampling protocols for field parameters.
- On a weekly basis from snowmelt to freeze up, measure flow, water levels, water chemistry, and physical water measurement on streams and wetlands the Red Lake Reservation.
- Collect and process invertebrate samples for mercury from streams and wetlands on the Red Lake Reservation.
- Conduct laboratory analysis on collected samples.
- Synthesize data into appropriate reporting mechanisms.

Qualifications:

Minimum:

- B.S. in Ecology, Environmental Studies, or closely related field.
- Ability to work in the field under a variety of conditions.
- Minimum academic qualifications include a 3.0 GPA (on a 4.0 system) with strong statistics and writing skills.

Preferred:

- Experience collecting environmental samples.
- Experience analyzing environmental samples.
- Experience operating field and lab equipment such as:

- Trucks
- Boats
- Kayak/canoes
- Sondes
- Continuous loggers
- Hydrology equipment
- General titrations
- Computer software (Excel and R)

Salary: \$14,560 per summer for two summers plus a one semester graduate assistantship (tuition and student fees) at Bemidji State University. Project administrators are working to secure graduate assistantships for subsequent semesters through the Center for Sustainability Studies.

Start Date: Spring semester 2022

Ad Closing Date: Opened until filled

Contact/Email: Email unofficial transcripts, resume, GRE scores, and a cover letter to Tyler J. Orgon, tyler.orgon@redlakenation.org.

Web link(s): <https://www.bemidjistate.edu/directory/facstaff/au5656vd/>

<https://www.redlakednr.org/>