

## **GIS/Bathymetry/Fisheries Work Opportunity**

**Position:** 2 available –GIS/Bathymetric Tech Project CO-OP Student. – GIS/Bathymetric Tech STEP \*

**Location:** Manitoba Sustainable Development, Wildlife & Fisheries Branch, Winnipeg, MB

**Terms:** April 2019 to March 2020 (CO-OP), 20 Weeks (STEP)

**Hours:** 40 hrs/week

**Closing Date:** Submit your resume to the following by April 1, 2019

**Apply to or for more information contact:**

Robert Moszynski  
Manitoba Sustainable Development, Wildlife & Fisheries Branch  
Winnipeg, MB  
Office: 204 945-2916  
Email: [Robert.Moszynski@gov.mb.ca](mailto:Robert.Moszynski@gov.mb.ca)

**\*Notes:** Must be registered with STEP (<http://www.gov.mb.ca/cyo/studentjobs/>), Extended travel is required

**Description:**

With an approximate 60/40 percent split between field work and office you have the opportunity to conduct a project from planning & preparation to analysis, final reporting and presentation. With a strong GIS working background you will conduct detailed bathymetric analysis by boat on various waterbodies throughout Manitoba, compile and analyse then create contour data sets for use in Recreational Angling. There is a heavy emphasis on using the various ESRI suite of products for the analysis and production of Geo Databases, contour mapping and creation of a hosted interactive AGOL site used by the public.

**Qualifications:**

- Must have course work and experience in a combination of the following :Geographic Information Systems(GIS), Geography, Computer Science & Environmental Studies
- Significant boating, trailer towing skills and basic mechanical experience is required
- Valid Manitoba Class 5 safe driving record, Boaters Certification and able to travel extensively
- Skilled in ESRI ArcGIS , Arc Catalog, AGOL, geodatabase principles
- Experience in database design and proficient in Microsoft Access, Excel, and PowerPoint
- Strong data analysis, GIS, writing and communication skills
- Knowledge and understanding of bathymetry, GPS technologies, outdoor skills
- Ability to work effectively independently and in a team environment
- Must be physically capable of performing field duties and able to lift heavy objects (i.e. 50lbs)
- Recent First Aid/CPR Certification, and satisfactory Criminal Record Check

**Duties:**

- Operate boats & use Garmin sounders on lakes throughout Manitoba to conduct bathymetric surveys, collect and analyse data
- Setup & maintain GPS equipment and backup data to safeguard it while in the field
- Compile and produce 2D & 3D contour lake files and modelling from sounding data using the various ArcGIS Suite of products
- Create electronic contour files for upload to GPS and depth sounder equipment
- Develop, update and modify Geo Databases, create system procedures, tables, queries and reports
- Troubleshoot data issues, create procedure/help documentation and compile final report
- Develop an interactive ESRI AGOL site to host report and query bathymetric maps & data
- Assist Branch staff with other Fisheries projects and duties as assigned