



Community-Based Research (CBR) Project Proposal Form

U-Links Administration Only

Project Number (automatically generated by CBR database):

Recommended Courses and/or Disciplines (i.e. GEOG4030Y, FRSC4890Y, IDST3700Y/3710H/3720H, ERSC3160H, PSYCH or Alternatives):TBD

Recommended Faculty Advisors:TBD

PROJECT TITLE: Lakeshore Capacity Study of Gull Lake

A – CONTACT INFORMATION

Date: July 7, 2022

Contact person: Mike Thorne

Phone: 416-434-2326

Email: mgthorne1@gmail.com

B – COMMUNITY ORGANIZATION

- a) Organization's name and address:
Gull Lake Cottagers' Association
 - b) Briefly state the organization's purpose and the products or services offered:
To protect the health of Gull Lake.
 - c) Has an immediate supervisor or board approved this application?
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C - PROJECT SCOPE

- a) Full year undergraduate CBR projects are allotted 220 hours total, per 1-2 students on a single project. The condensed hours are similar to six weeks of full-time work. Full term students would be working on this project from September to April as part of a course, while balancing work from other courses as well. Does the scope of your project fit within this timeframe?

Yes • No • Comments:

b) Select the theme(s) for your project:

- Cultural
- Economic
- Environmental
- Social
- Other:

c) Based on the timeframe and complexity of your project, please indicate the potential project scale:

- Single year project
- Multi-year project (requiring follow up or several parts)
- Ideal for undergraduate students
- Ideal for graduate students (requires specialized knowledge/in-depth consideration of theory)

d) Is your project appropriate for a single student or a group?

Either

e) Describe the purpose of the project:

The Lakeshore Capacity Assessment Handbook was prepared by the Ministry of the Environment in partnership with the ministries of Natural Resources and Municipal Affairs and Housing. It was developed to provide guidance to municipalities and other stakeholders responsible for the management of development along the shorelines of Ontario's inland lakes within the Precambrian Shield. A Lakeshore Capacity Assessment can be used to predict the level of development that can be sustained along the shoreline of an inland lake on the Precambrian Shield without exhibiting any adverse effects related to high phosphorus levels.

The last time a Lakeshore Capacity Study was completed for Gull Lake was almost 10 years ago. Since, cottagers have increased time spent at the lake and short-term rentals have also risen (specifically in the last few years since the pandemic). Gull Lake has populations of lake trout which is one of the circumstances used to trigger a Lakeshore Capacity Study. The purpose of this study is to determine the Lakeshore Capacity of Gull Lake by incorporating changes in development and nutrient inputs since the last assessment.

f) How will the project benefit your organization and/or clients?

This study will provide the Gull Lake Cottagers' Association with valuable information to aid stakeholders and decision makers in land-use planning along Gull Lake shorelines to enhance water quality. It can also be used as an education tool for current property owners on the lake on limiting phosphorus inputs from their properties.

g) How will the results of this project benefit Haliburton County?

A Lakeshore Capacity Assessment will help protect the environmental, recreational, and economic resources of Haliburton County Lakes

D – RESEARCH DESIGN

a) What are the proposed research questions to be answered?

What is the Lakeshore Capacity of Gull Lake?

- What is the current shoreline development status of all lots surrounding Gull Lake? (i.e., the number of cottages and resort units and the nature of their usage: permanent/seasonal/extended seasonal/vacant)

- What is the land-use data for the watershed (i.e., the percent of the watershed that is composed of wetlands, agricultural or urban land use)
 - Collecting Dissolved Oxygen and Temperature Profiles of Gull Lake
 - Incorporation of Total Phosphorous concentrations from other sources
 - Collection of additional information needed to run the model (i.e., lake name, fetch, location, watershed area, etc.)
- b) What are your ideas on how these questions might be answered (i.e. survey, literature review, field work etc.)?**
- Field work
 - Literature review, collection of data required for the assessment
 - Application of the Lakeshore Capacity Assessment Handbook:
<https://www.ontario.ca/document/lakeshore-capacity-assessment-handbook-protecting-water-quality-inland-lakes>
- c) Do you have knowledge of or expertise with these types of research methods?**

E - SCREENING AND/OR TRAINING

- a) Do the students require any specific screening or training? (e.g. police checks, confidentiality agreements, CPR, WHMIS):**
- Health and Safety Training for field work.

F – RESEARCH ETHICS

- a) Does the research involve human subjects? (i.e. surveys, interviews)**
 Yes • **No** •
- b) If your project involves collecting human subject data (i.e. interview transcripts), would you like access to that “raw” data at the end of the project, in addition to receiving the “summary” of data in the final report?**
 Yes • No •
- c) Does the organization/employer have policies about research ethics approval?**
 Yes • No •

If yes, please explain:

G – PROJECT TASKS AND TIMELINE *(This section should be completed by the final draft)*

- a) Please outline the major tasks and timelines involved in completing the project.**

Task: Set initial meeting with host organization and students

Objective: Familiarize students with project

Date: Early September

Task: Complete Project Agreement

Objective: Finalize responsibilities, logistics, etc. for each party

Date: Early September in conjunction with initial meeting and prior to any site visits

Task: Field Work

Objective: Conduct DO/Temp profile of the Lake

Date: Mid-September

Task: Data Collection

Objective: Use different sources to collect information needed to complete the capacity study.

Date: September - November

Task: Progress Report

Objective: Have students show their work and ensure that all parties are satisfied and that the report is meeting the needs of the host organization. Allows for early comments by the host organization.

Date: Early November

Task: Complete poster for Celebration of Research

Objective: Students will finish poster for celebration of research in time for U-Links to send to the printing company. Early drafts will be sent to host organization for review prior to deadline.

Date: Mid November

Task: Final Draft

Objective: Have final draft completed prior to Celebration of Research to give host organization enough time to comment on results and make changes where necessary.

Date: Late November

Task: Host review and feedback on Final Draft

Objective: Provide feedback to students on the final draft of the report so that revisions can be made

Date: Comments due by Late November

Task: Final Report

Objective: Publication of report and other documents on the U-Links website and Haliburton County Collection database. Hosts will receive final report and other deliverables for final approval prior to publishing.

Date: Early December

Task: Participate in the Celebration of Research

Objective: Share research and knowledge with the public; make connections

Date: TBD, 2024

b) Indicate important start and end dates for the project, if applicable:

September 2024 through December 2024

NOTE: All known and needed resources should be listed in this section (e.g. for project coordination, data collection and analysis, software, hardware, photocopying, office supplies, workspace, travel expenses, food and refreshments, training, etc.). Students' travel expenses are reimbursed by U-Links at the end of the term.

- a) **What resources are needed to support the research – financial or otherwise? Please indicate what, if any, resources your organization might be able to provide.**

Access to the site via boat – GLCA

DO/Temp Meter - GLCA

- b) **Do you anticipate needing funding or other types of resources? If so, please explain (including any ideas on where resourcing may be obtained):**

No

I – KNOWLEDGE SHARING

- a) **How are the project results to be circulated and made useful to the broader community? Please indicate all that applies from the list below:**

- Academic article
- Conference/forum
- Manual
- **Marketing, promotional, newsletter, outreach materials**
- Policy brief
- **Report**
- Roundtable
- Video
- Workshop
- Presentation to the host organization
- Not sure of the above, let's talk some more

- b) **If there are special circumstances where results might not be made public, please explain:**

J - ACKNOWLEDGEMENT

- a) **Are you able to credit U-Links when utilizing project results for the development of new programs, funding applications, policy, and other community endeavors?**

Yes

- b) Following successful completion of the research project, with results beneficial to the goals of your organization, would you consider a financial contribution to U-Links? Yes No Possibly
- c) Can we highlight your project on our website and in social media? Yes No
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K – PROJECT PROMOTION

Please “insert” an image below to help promote your project proposal.