

# Sandy Lake Water Protection Working Group Inc.

## Improving Water Quality Initiative

We have created a project to improve the water quality of Sandy Lake and in the process develop a document to assist other communities that are facing similar water quality issues.

This is a 2 year project with a budget of \$120,000.

The project title is:

### Implementing a community-based, eutrophic lake remediation pilot program

There are two major funding opportunities available:

1. Lake Winnipeg Basin Program and
2. The Conservation Trust (a Manitoba Climate and Green Plan Initiative).

Each of these programs will fund up to 1/3 the value of our project and the remaining dollars will come from fund raising or in-kind donations of materials, equipment use and volunteer time.

The application process has two parts:

1. a Letter of Interest (LOI) must be submitted
2. If the LOI is acceptable, you are invited to submit an application.

We have submitted a LOI to both programs and were asked by both programs to submit an application. Funding applications were submitted to both programs and we are waiting to hear if our applications one or both of them will be funded.

### Project Description:

This project is intended to serve as a model for other similar communities.

#### Objectives:

- Develop an evidence-based plan for nutrient reduction in Sandy Lake
- Create a monitoring and engagement model for similar communities to adapt

#### Activities:

1. Develop literature, signage and a presentation that can be used to undertake a public awareness campaign. This information will be in plain language and target a small sub-watershed like Sandy Lake where there is considerable human activity.
2. Engage stake holders with a public awareness campaign to gain support for implementing measures that will reduce nutrients entering the watershed
3. Establishing a baseline nutrient budget for Sandy Lake to:
  - Measure progress against
  - Identify point and non-point nutrient sources
  - Determine mitigation strategies that can be implemented

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4. Implement an aeration / water circulation unit as an experiment for 5 acres of Sandy Lake which includes the swimming beach and boat launch areas. Measurements will be taken in the area treated as well as a control area to determine the effectiveness of this technology.  
[One Solution \(AerationPlus 1800 Circulator\)](#)
5. Encourage re-establishing riparian buffer zones in developed areas of the lakeshore.
6. Investigating geotextile filtering material to remove nutrients.
7. Investigate methods to recover nutrients from Sandy Lake for reuse in a circular economy by:
  - o Harvesting cattails.
  - o Creating movable riparian filters that can be removed and harvested. These floating cattail islands could be installed at point source locations such as the golf course creek, municipal drains and creeks that are not already protected.  
[IISD Floating Treatment Wetlands Webpage](#)
  - o Removing nutrient rich water from Sandy Lake for irrigation applications such as golf courses, residential lawns & gardens and agriculture.
  - o Harvesting lake sediments using low environmental impact methods.

#### Outcomes:

1. A document that can be shared with similar like-minded groups to give them a starting point that they can adapt to their community's requirements in order to implement nutrient reducing actions for themselves.
2. A nutrient remediation plan for Sandy Lake based on data and lake loading models and informed by scientific community consultation.

#### Project Partners:

1. Riding Mountain Biosphere Reserve
2. Municipality of Harrison Park
3. The Little Saskatchewan River Conservation District
4. Manitoba Sustainable Development
5. International Institute of Sustainable Development (IISD)
6. Friends of Sandy Lake

We may be successful in attracting significant funding from one or both of these sources but in any case, we plan to accomplish as much of the project as possible with the resources we are able to obtain.