

Introduction

In October, the city of Newton distributed a request for proposals from area high schools to develop a recommendation for implementing a floating island in Crystal Lake to improve water quality of the Lake.

The Greengineering students at Newton North, in collaboration with city officials, will do the following:

Background (Ariel / Will)

- History of algae blooms in crystal Lake
- Other water quality issues
- What have other towns done to reduce algae blooms? Find BRIEF examples / data from other municipalities that have implemented floating islands and rain gardens to mitigate algae blooms

Proposed Solutions:

Phase 1: Understanding the Problem

- Create a database of historical data to allow for simplified access to historical trends - Sophia describe what is typically analyzed and why and how it's measured (Dr. Tupper Mr. Rooney)
 - Include plan for maintaining database and adding data / records
- Correlate water quality data with algae blooms
- Create a report on floating island technology and shoreline restoration strategies - Julian
 - Research existing floating island technology and summarize data on effectiveness
 - Provide at least 3 quotes from companies that make floating islands, including installation and maintenance needs
 - Research rain gardens and summarize data on effectiveness and detail cost, installation, and maintenance needs

Phase 2: Select mitigation strategy and create action plan for installation