Algae have been proven to be effective at removing nitrogen and phosphorus from wastewater while simultaneously contributing feedstock for biofuel production.

My objective is to study the potential for using a clarifier to remove a large fraction of the algae prior to using an energy intensive method. Sedimentation columns were used to identify the effectiveness of algae settling. The data from these tests will then be utilized in the design of secondary clarifiers. The purpose is to create an economical and environmentally sound harvesting technology that has low energy requirements. The algae used in the clarifiers are unique to the Logan Lagoons and are grown in the raceways currently operating at the treatment plant.

Clarifiers appear to be economical, environmentally sound, and have potential to remove algae and contribute toward the production of biofuels.