

## Mayhew Lake Survey or Reduction Strategies

In order to meet the water quality goals for Mayhew Lake a 78 percent reduction in nutrient inputs is required. This is a difficult goal to reach but doable. The quality of water will improve with the implementation of each best management practice. It will be up to everyone to help improve water quality. We want to develop an implementation plan that works for both the SWCD and the landowners who will be implementing the practices. This is not going to be a plan that sits on the shelf, this is going to be a working document, please do your part and fill out the survey below to help us effectively develop our strategies. Please answer each question as it pertains to you. For each question please let us know what "barriers" you may have to implementing the practice.

### Would you be interested in:

#### Agricultural Landowners:

1. Developing a comprehensive manure/nutrient management plan:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

2. Participation in Grid based Soil testing and precise fertilizer application:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

3. Winter stockpiling or storage of manure:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

4. Planting of a late season cover crop:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

5. Installing a buffer of native vegetative cover (instead of cropping or pasture) along river, lake, or ditch:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

6. Developing an alternative source for watering livestock:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

7. Having my Feedlot Evaluated:

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

#### Everyone

1. Upgrading a septic system

Yes    Maybe    No    Have done this

Barriers: \_\_\_\_\_

2. What are preferred methods to educate the public on Best management practices needed to improve water quality? \_\_\_\_\_

Other/Comments: \_\_\_\_\_

If you would like to be contacted to learn if you qualify for a best management practice please give us your name and phone number, someone will contact you as soon as possible.

**Thank you for participating in developing this plan to improve water quality!**

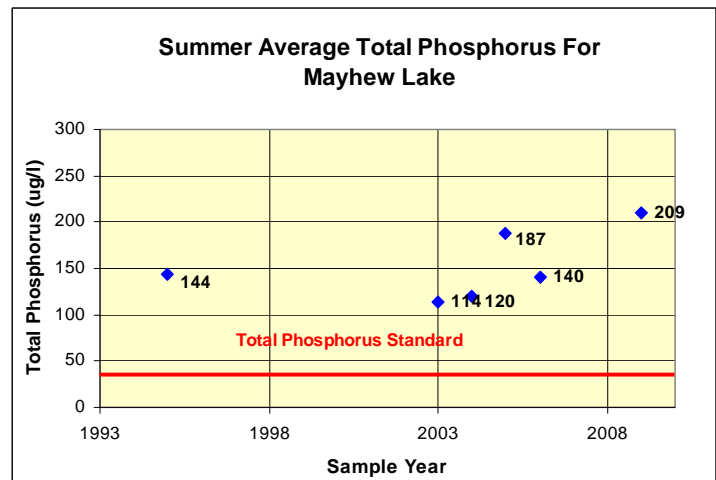
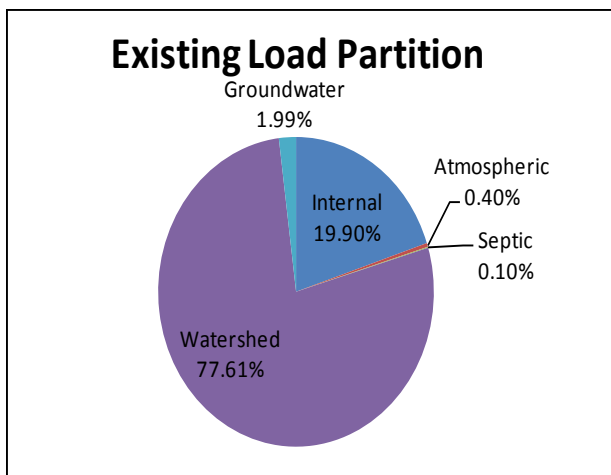
# Mayhew Lake

*Impairment: Excessive Nutrients (phosphorus)*



The lake was listed as impaired as a result of mean summer phosphorus values that exceeded 40 µg/l, the standard for recreational waters. Excess nutrients leads to algae blooms which limit recreation and can cause fish kills. This study focuses on reductions in phosphorus because it is the limiting nutrient for aquatic plants and algae.

Intensive monitoring and corresponding data analysis indicate that the total phosphorus reduction required to achieve state water quality standards is 78%. The state standard and goal for Mayhew Lake is 40 µg/l.



## Reduction Strategies For Total Phosphorus

Phosphorus reduction strategies for Mayhew Lake will focus on reducing watershed nutrient input during the spring, from riparian areas (areas near rivers, ditches and lakes) and from internal sources including:

### Watershed :

- Winter manure stockpiling or storage
- Late season cover crops
- Vegetative buffers along ditches, streams and lake
- Alternative watering sources
- Manure and nutrient management
- Septic system compliance

### Internal :

- Alum treatments
- Hypolimnetic aeration or withdrawal
- Native aquatic plant establishment
- Rough fish management

### Other:

- Education
- Capital projects