Aquatic Vegetation Management Plan for Nashawannuck Pond.

Nashawannuck Pond has a long, problematic history with excessive macrophytes (large aquatic plants) and algae. Despite the implementation of a wide variety of Best Management Practices (BMP's), the Pond continues to suffer from a proliferation of aquatic vegetation, both native and non-native. A large watershed combined with a high nutrient budget and rich organic sediments have made it abundantly clear that additional in-lake measures are necessary to control this vegetation. Several vegetation management techniques were considered before deciding to apply herbicides and algaecides to the Pond.

The use of herbicides/algaecides for control of excessive and invasive macrophytes and algae is one of the most common and potentially effective management strategies. This method is particularly effective for the reduction for "selective thinning" or reducing an over-abundance of native plant species and controlling new or established infestation of non-native exotic species such as *Myriophyllum spicatum* (Eurasian watermilfoil).

The goals of the Aquatic Vegetation Management Plan are:

- The removal of aquatic nuisance vegetation to retard pond eutrophication
- The thinning of vegetation to improve habitat value
- In stream habitat enhancement

The project received a tremendous boost when Florence Savings Bank pledged \$10,000 towards the permitting and treatment of the water.

On July 6[,] 2016, a licensed herbicide applicator applied two different chemicals to approximately 15 acres of the Pond. A noticeable reduction of macrophytes and algae was evident in the days that followed. All indications are that the initial application was a huge success in meeting the goals of the project.

Future applications will be necessary to maintain the success of the initial treatment. With due diligence, it is probable that the necessity of these applications will become less frequent and treatment acreage will be reduced.