

## **Spring Lake Improvement Program Overview**

The Spring Lake Improvement Program has been ongoing since 1999. The program is administered by the Spring Lake – Lake Board under provisions of Part 309 (Inland Lake Improvements) of Michigan's Natural Resources and Environmental Protection Act (PA 451 of 1994). Under provisions of the act, the lake board includes a representative from each of the governmental units bordering Spring Lake as well as a waterfront property owner and representatives from both Ottawa and Muskegon Counties. Several lake board members are Spring Lake residents.

In accordance with the act, formal public hearings were held in August and September of 2023 and the lake board approved a new ten-year improvement program for Spring Lake. The budget for the program along with a brief overview of each element of the program is provided below.

## Spring Lake Improvement Program Annual Budget 2024 – 2033

Improvement	Annual Cost
Aquatic Plant Control	\$100,000
Aquatic Plant Control Coordination/Field Evaluations	\$14,000
Water Quality Monitoring	\$12,000
Information and Education	\$6,000
Watershed Management	\$10,000
Lake Alum Treatment	\$468,000
Administration and Contingency	<u>\$60,000</u>
TOTAL	\$670,000

Aquatic plant control focuses on controlling invasive plants, such as Eurasian milfoil, with the select use of herbicides. The treatments are conducted by a licensed, professional applicator. The amount of herbicide use in any given year depends on the type and distribution of aquatic plants in Spring Lake and Department of Environment, Great Lakes, and Energy permit conditions.

Plant control activities are coordinated under the direction of the Spring Lake – Lake Board's environmental consultant. The consultant is responsible for preparing contract documents for the plant control work, conducting GPS-guided surveys of the lake to determine the scope of work to be performed by the plant control contractor, and conducting follow-up surveys to evaluate treatment effectiveness. The consultant reports to the lake board and maintains a written record of the timing, scope, and cost of plant control activities.

As part of a long-term water quality monitoring effort on Spring Lake, the consultant collects samples annually from the surface, mid-depth, and bottom at seven locations in Spring Lake during spring and summer to measure temperature, dissolved oxygen, and total phosphorus. In addition, water transparency and chlorophyll-a are measured in the upper strata of water during each sampling period. These data are analyzed and compared to historical data collected from the lake over the past 20-plus years.

The consultant posts information regarding the Spring Lake Improvement Program on the Spring Lake – Lake Board's website (<a href="www.springlakeboard.org">www.springlakeboard.org</a>). The website is updated annually to include information regarding project activities, aquatic plant control, water quality monitoring results, and links to pertinent reports and information sources.



Watershed management includes programs to reduce pollution inputs to Spring Lake over the long term. Watershed management activities focus on both the developed shorelands areas bordering the lake and the agricultural lands in the upper portion of the watershed.

The lake alum treatment is designed to control the release of phosphorus from the deep-water sediments in Spring Lake to help control the frequency and duration of nuisance algae blooms. An alum treatment of Spring Lake conducted in 2005 improved conditions in Spring Lake for nearly 15 years. The second alum treatment is scheduled for the late-summer of 2024 and is being financed over 10 years.

Project administration and contingency includes costs related to public hearing proceedings, legal services, postage, mailings, meetings, copies, and contingent expenses.

## **Project Financing**

The Spring Lake Improvement Program is funded through special assessment of properties within the Spring Lake Special Assessment District. The special assessment district includes all properties bordering Spring Lake and back lots with deeded or dedicated lake access.

Developed lakefront properties are assessed one unit of benefit and developed back lots are assessed one-half unit of benefit. Undeveloped lakefront properties are assessed one-half unit of benefit and undeveloped back lots are assessed one-quarter unit of benefit. Contiguous lots in common ownership are assessed as one parcel provided only one house exists on the parcel. Marinas are assessed based on the number of boat slips. A breakdown of costs for the program based on these criteria is as follows:

## Spring Lake Improvement Program Annual Cost Breakdown 2024 to 2033

Parcel Type	Units of Benefit	Approximate Annual Assessment
Developed Lakefront	1	\$600
Undeveloped Lakefront	1/2	\$300
Developed Back Lot	1/2	\$300
Undeveloped Back Lot	1/4	\$150
Commercial Lakefront	1.5	\$900
Commercial Back Lot	1	\$600
Marina: < 50 Slips	2	\$1,200
Marina: 50 - 100 Slips	4	\$2,400
Marina: 101 - 150 Slips	6	\$3,600
Marina: 151 – 200 Slips	8	\$4,800
Marina: > 200 Slips	10	\$6,000