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9 February 2025

Deal Lake Commission
399 Monmouth Rd,
Oakhurst, NJ 07755
Attn: Don Brockel, Chairman

RE : Summary of 2023 and 2024 Invasive Aquatic Plant Control Program
Sent by Email to DLC

Dear Commissioners:

The Deal Lake Commission (DLC) as part of its annual operating budget establishes a program to control on an as-needed-basis invasive aquatic plants (weeds). The weed control program is conducted by a NJDEP Category V licensed treatment company annually selected by the DLC through a competitive, publicly advertised request for proposal. Through this process the most qualified, lowest bidder is selected to implement the program. Actual program implementation is at the discretion of the DLC based on guidance provided by the DLC's lake manager, Clean Waters Consulting, LLC. The two primary factors determining whether or not the program is implemented are a) the density of weed growth and b) the extent to which weed growth is impacting the lake's recreational, aesthetic, water circulation and ecological attributes. The lake's weed control program is also highly selective, focusing on the control of invasive species, especially non-native plants. This approach supports the continued growth and maintenance of the lake's beneficial, native plants, which are critical to the lake's fishery. Unlike the invasive species, the beneficial, native plants provide critical spawning, nursery, feeding and refuge habitat for the lake's fisher any many of the other lake's aquatic and semi-aquatic species (turtles, frogs, otter and wading birds). Additionally, native aquatic plants help protect the shoreline from erosion by dissipating wind and wave energy. Consideration is also given to the timing of any weed control effort so as to avoid the large-scale release of nutrients (phosphorus and nitrogen) resulting from the die-off of the targeted plants. This nutrient load could stimulate a cyanobacteria harmful algae bloom.

Finally, the DLC's overall approach also helps to avoid unnecessary expenditures by ensuring weed control efforts are only conducted when actually needed. As such, it is not unusual for the weed control program to be scaled back or even curtailed if it is determined that weed densities have not reached problematic proportions.

Because most of the current weed problems occur in areas not accessible by mechanical harvesting equipment, the DLC's current weed control program is based on the proper application of NJDEP/USEPA approved aquatic herbicides. By regulation all of the aquatic weed control herbicides proposed for use in the lake have been determined through extensive USEPA testing to pose no direct health impacts to humans, birds, waterfowl, and/or aquatic organisms. Also the type and dose rate of the herbicides used to control plant growth are reviewed by NJDEP Pesticide Control Program as part of the State's permit application process. The public is informed by the applicator in advance of any treatment by means of a notice published in the Asbury Park Press and the Coaster. Following a treatment, the applicator also posts signage around the treated section(s) of the lake noting the time and date of the application and the type of herbicide that was used to conduct the treatment.

For the past decade or more the four invasive plants that have been targeted for control are:

- Eurasian water milfoil
- Coontail
- Parrot feather milfoil
- Nuphar (yellow water lily) and
- Nymphaea (pink and white water lily)

Of the above, emphasis is typically placed on the control of the milfoil, parrot feather and coontail. All three of these plants look fairly similar, growing below the water's surface in thick stands. Additionally, although yellow and pink/white water lily can reach nuisance densities requiring some degree of control, their treatment is typically limited because when growing at normal densities both plants are beneficial providing habitat for young fish and other aquatic organisms and helping to temper shoreline erosion.

Currently, the DLC's weed control effort focuses on three distinct areas of the lake:

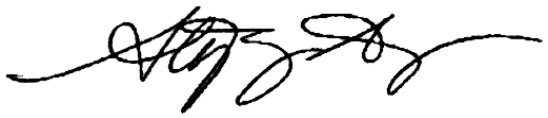
- Colonial Terrace arm – west of Wickapecko Drive
- Hollow Brook arm – west of Wickapecko Drive
- The western most section of the Sunset arm, an area typically extending 100-300' east of Wickapecko Drive

In 2023 and 2024, the winning contractor was Lake Management Sciences (LMS). In 2023, it was determined that weed growth in the Colonial Terrace and Hollow Brook arms had become dense enough to warrant a treatment. However, weed growth in the targeted area of the Sunset arm was not dense enough to be treated. In 2023, LMS used the fast acting, systemic herbicide ProcellaCOR to treat the Colonial Terrace and Hollow Brook arms. ProcellaCOR is a highly specific herbicide designed to control milfoil species. A single application of the herbicide was conducted in early summer. Post-treatment inspections of the treated areas conducted by both LMS and Clean Waters Consulting in July and August confirmed the treatment was effective and the targeted weeds had been effectively controlled. In the spring and early summer of 2024, multiple inspections of the three targeted areas were conducted by both LMS and Clean Waters Consulting. It was determined that weed densities were not great enough to warrant a herbicide application. As a result, no weed treatments were conducted in 2024. For 2025, the DLC will once again seek the services of a qualified Category V applicator. This year, because the NJDEP permit remains in effect for two (2)

calendar years, the selected applicator will be awarded a 2-year contract. The scope of work will be similar to that requested in 2023 and 2024. The earliest a treatment will be conducted (once again as based on weed densities and the extent of weed coverage) will be late-June / early July and no treatment will be conducted without the authorization of the DLC.

Should there be any questions regarding this summary report please feel free to contact me.

Sincerely,



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