

SPALDING DEDECKER ASSOCIATES, INC.

905 South Boulevard East • Rochester Hills • Michigan 48307 • Tel 248 844 5400 • Fax 248 844 5404

MEMORANDUM

DATE: May 20, 2010

TO: David Galloway, Chairman

ORGANIZATION

NAME: Walled Lake Improvement Board

FROM: David L. Potter, PE, Vice-President

Municipal Engineering

RE: Lake Treatment Alternative Recommendations

JOB NO.: MN 09011

In response to your recent request that the SDA team comment on recent Board discussions and the request of several residents to consider the use of Milfoil Weevils as a lake management alternative, we offer the following comments:

- We are aware of the use of Weevils as a lake management alternative to manage the growth and propagation of Eurasian Milfoil. The use of Weevils was considered at the time of preparation of our final recommendations to the Lake Improvement Board.
- It should be noted that our study team does not have direct experience in specifying the use of Weevils for lake improvement projects, however we did consult and review information from the MDNR, US Army Corps of Engineers Aquatic Plant Control Program, EnviroScience, and Michigan State Extension. We offer the following observations:
 - The effectiveness of Weevils has been variable within Michigan Lakes and the benefit to Walled Lake would be uncertain to say the least. This presents the risk that this management option may not produce the desired or effective results.
 - During previous conversation with EnviroScience, they verbally quoted to SDA that the cost of treating 3 sites would be approximately \$35,000 including Weevils, travel time, and survey/monitoring. Permitting cost was not included because the state of Michigan does not regulate the use of native weevils. The size of a site quoted to SDA varied and typically ranged from 0.5 to 1 acre. With approximately 150 acres of Eurasian Milfoil growth in Walled Lake, we did not feel this would be a prudent initial cost effective measure and discontinued further consideration of the use of weevils in our final report.
 - Heavy boating can also disturb the effectiveness of the Weevils. Boating activities would need to be discouraged in areas of their use. We feel this would present many challenges due to the strong boating culture present on Walled Lake.
 - Depth may affect Weevil density and effectiveness. Their use appears to be better suited for smaller and shallower lakes.



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• The use of Weevils is a specific treatment for a single plant species (Eurasian Milfoil). With the recent identification of other invasive species in Michigan such as Starry Stonewort (an algae), we feel it is important to have a treatment plan which has the flexibility to address other plant and algae species. Starry Stonewort was not identified during in the aquatic weed study performed by ASTI but it has been recognized as rapidly moving throughout the Oakland County, Michigan lake systems. Starry Stonewort is a particularly aggressive species and is known to out-compete Eurasian Milfoil. It is anticipated that this may become a concern in the near future for Walled Lake, a threat that should be monitored by the Lake Improvement Board.

We understand that there are many lake management alternatives and that several other industry representatives and private interests may present their solution as the "best" alternative. Our original recommendations presented in the December 1, 2009 Lake Improvement Study for Walled Lake remains firm based on what we feel is the best and most conservative alternatives for beginning a long-term lake improvement program for Walled Lake. We believe it is a conservative recommendation and gives the Lake Board the flexibility to move forward and adjust the treatments in the future as necessary.

As I previously indicated at public Lake Board meetings, I do not recommend implementing too many lake management methods at one time, because it is difficult to document which treatment method is most effective. We feel that our final recommendations are both prudent and conservative and in the best long-term interest of the residents and users of Walled Lake. A "limited" aquatic plant herbicide treatment program combined with mechanical weed harvesting is a great start to such a program.

If you have any questions, please feel free to contact our office.