CHARLES Aquatics INC.

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Service Report

Date: February 27, 2008 **Biologist**: Doug Charles

Client: Lake Asbury Municipal Service

Contact: Mr. Larry Pitts

Waterways: North and South Lake Asbury

Comments:

North Lake Asbury
Today we applied by two airboats a total of 463 gallons of Aquathol K into the six treatment blocks of North Lake Asbury. These treatment blocks are highlighted on the attached map. The blue block is approximately 10 acres and had 129 gallons of Aquathol K applied, the red block is approximately 8 acres and had 103 gallons applied, the green block is approximately 2 acres and had 30 gallons applied, the orange block is approximately 11 acres and had 141 gallons applied, the yellow block is approximately 2 acres and had 30 gallons applied and the brown block is also approximately 2 acres and had 30 gallons applied.

This Aquathol treatment was applied in six treatment blocks rather than spreading it over the entire lake for several reasons. In order to prevent oxygen depletion and a potential fish kill, the Aquathol was applied in such a way to kill the hydrilla at different times. First we expect the hydrilla in the six treatment blocks to die, then the hydrilla in the main body of the lake, then some of the hydrilla along the north dam. As the hydrilla dies it will no longer be producing oxygen and furthermore, the decaying hydrilla will be

consuming oxygen. The northwest cove was not treated this time in order to give the fish a refuge in case of low oxygen conditions occur. This treatment strategy achieves the most cost effective application and limits the potential for oxygen depletion fish kill.

The time it will take for the hydrilla to die will be relatively quick as far as lake treatments are concerned. I expect in 4 to 6 weeks we will observe most of the results on the hydrilla. The weather will have a major impact on the hydrilla death rate; however we have taken precautions to ensure we get the optimal results,(partial draw down and the winter time application).

A Hydrolab was also installed into the lake to track oxygen, temperature, pH and conductivity. The oxygen content will be tracked very closely. If we observe trend towards very low oxygen content (below 3ppm) we may want to open the South Lake's valve and allow water with higher oxygen content into the North Lake.. We expect the oxygen to begin to drop below normal levels in seven days after today's application. The oxygen level readings will be submitted to you as they become available.

Water samples were taken also to track the concentration of Aquathol. More samples will be taken to track the Aquathol concentration over time.

While we were on site today to took advantage of the low water levels and fixed and reinforced the fish barriers. Several grass carp were observed as well.

We are planning on a follow-up treatment in the northwest cove. The timing of the follow-up treatment will be determined by the results obtained from the Hydrolab. If the oxygen never goes below 5ppm then we would want to apply the follow-up treatment as soon as two weeks from now to take advantage of the residual of the initial treatment.

Please be advised that this treatment took considerable pre-planning and many discussions. Special thanks goes to Dr. Bill Haller of the University of Florida for formulating the treatment plan and attending two meeting, Dr. Mike Netherland of the University of Florida for the use of the Hydrolab, Mr. Ryan Hamm and Mr. Patrick McCord of the Florida Freshwater Fish & Conservation Commission for help measuring the size of the lake and attending site meetings, Mr. Dharmen Setaram for finalizing the treatment plan, assisting in the application, setting up and training of the Hydrolab and

also for conducting Aquathol assays. We would also like to thank Sue Sheahan, Tim Fogorty and Butch Windham for helping with the Hydrolab and water sampling as well as all the Lake Asbury Service Board members who have spent many hours of their own time working on the hydrilla problem.

South Lake Asbury
We also inspected the south lake for hydrilla. We did find some hydrilla and recommend stocking more grass carp.

We are presently working with the Game Commission to separate the three grass carp permits so we can stock more carp as needed.

Please feel free to call or email with questions or comments to our new email address at customerservice@charlesaquatics.com

Doug Charles