

All

First let me say thank you to everyone who was able to attend the public meeting Tuesday. It was a pleasure to finally get to meet many of you. I thought we had some good discussions and I appreciate your participation. I have put together the summary below to keep you all up with events. Please feel free to contact me directly if you have any questions or concerns.

We have set the fall treatment date during the duck season split for November 26-30<sup>th</sup>. I expect it to take 2-3 days – flying likely three helicopters, to apply Aquathol K liquid herbicide over the hydrilla treatment blocks. The attached map provides a quick overview of the final plan. The khaki lines are the November treatment Plots totaling 2300 acres- about 1000 acres less than the original plan for Nov/Dec. The orange lines are February (3100 ac). This will be a helicopter application of aquathol K liquid and 200ac clipper/diquat by airboat.

The Istokpoga management team has been working diligently to expand outreach and improve communications with stakeholders. Meetings with several stakeholders and groups over this past year provided us with valuable information used to formulate this 2012-13 hydrilla management plan. This final plan presented to stakeholders at the October 30<sup>th</sup> hydrilla meeting was the result of months of effort that began back in May with multiple lake surveys, agency meetings, stakeholder and interest group meetings, communications and input, and review of previous and current management practices. I believe the result of these efforts is a plan that is fair and well balanced between the many recreational and ecological interests and priorities associated with Lake Istokpoga hydrilla management, is representative of successful compromise, and is a plan that we can all be proud to say we collaborated on.

The management plan details are:

**November blocks:**

There will be 2300 acres of hydrilla treated around the littoral and near-shore areas of the lake by helicopter application of Aquathol K liquid herbicide. This is 1000 acres less than was previously proposed for November. The reduction in block sizes was in response to the following concerns:

- Many from the waterfowl community felt that too much hydrilla was being treated too early and in key waterfowl hunting, refuge, and foraging areas around the lake.
- Clipper herbicide test plots were proposed in several areas late in the decision process that would require airboat application and monitoring potentially into duck season.

Several stakeholder meetings and communications assisted in the revisions for November, and the changes made were as follows:

- The open water blocks for February were increased in size to reduce the near-shore November blocks
- Some key waterfowl areas were cut from the November treatment and postponed until February

- Two Clipper test plots were added on the east side of big island and the eastern shoreline to examine and consider whether Clipper may be added as a new and effective tool for the Istokpoga hydrilla and floating plant management toolbox. Now is the ideal time to conduct these trials while (1) we have lots of hydrilla area to choose from to best place the plots, and (2) to give us time to interpret data and results to determine if clipper will be a tool we can add for Istokpoga next year. These plots are planned to be treated by airboat on November 15<sup>th</sup> prior to the start of duck season. The plots will be monitored and if needed, re-treated if adequate control of the hydrilla in the area was not achieved with the initial treatment. Re-treatment if required would occur during water fowl hunting season, and limited to the test plots as shown on the treatment map in dark blue for Clipper.
- leaving 1000 acres of hydrilla out of the November treatment resulted in an agreed upon compromise to allow some limited airboat application control of hydrilla as needed around the littoral and near-shore areas during duck season. These activities will only be conducted to mitigate navigation or access issues that may arise, or conflicts with potential snail kite areas that cannot be delayed into the spring. Most potential duck season hydrilla control if deemed necessary would occur in access areas as agreed upon due to the risk posed to navigation and open water access. Some control in non- populated areas could also occur, but only if necessary due to clipper test plots as described above, or snail kite activities and/or issues that may develop concerning a specific area which indicates that waiting until the spring to treat could interfere with kite use of the area.
- Consideration was given to ensure that these changes did not compromise the management objective to avoid treatment of sport fish spawning areas during the height of the spring spawn. Discussions are beginning now to plan for the February treatment blocks as early as possible after duck season in spring of 2013 to schedule operations.

#### **February 2013 treatment:**

Early in the spring or late winter of 2013, as soon after duck season as operations can be scheduled, approximately 3100 acres of open water hydrilla will be treated by helicopter, using aquathol K liquid herbicide. The acres for this treatment could vary slightly up or down depending on results from the November blocks, and program funds still available at the time of treatment. The main objectives of this treatment are:

- Treat as early as possible to avoid impacting the spring sport fish spawn, and before native submersed vegetation begins to come out of dormancy and actively grow.
- Large block open water hydrilla treatments are most effective this time of year when the water is cold and the sun is less intense. The contact time of the aquathol K to the hydrilla is maximized as is drift of the product in target areas. This allows us to maximize the amount of control we can achieve in open water on a very limited budget.
- The center island hydrilla limited control area will be evaluated to determine the need for trails. Trails will be cut in the spring if needed and if funding is available.

The hydrilla limited control area is being mapped and studied to determine the effects if any of leaving large standing crops of uncontrolled hydrilla in the lake, and the likely displacement of native submersed vegetation beds in the immediate area.

There is also a clipper block in the big island marsh (total 100ac) scheduled for treatment in late spring. The timing of this treatment is intended to maximize control of both hydrilla and the floating leaved plants lotus and spatterdock in the trail through big island. This area is developing large amounts of tussock material due to the stagnant, mucky, high nutrient conditions. It has proven difficult to impossible to keep the area sprayed open adequately through the growing season to allow for good water flow and light penetration. Consequently, the area has become choked with tussock islands and hydrilla. Native submersed aquatic vegetation such as eelgrass and naiad have been limited in expansion into the area, and organic material and muck does not get adequately flushed through. Clearing this area in the late Spring will maximize control of the newly emerging lotus and spatterdock. This along with hydrilla control should establish conditions more favorable to native submersed vegetation expansion into the area. The AHREs section will be following up behind this herbicide work with tussock harvesting to further improve conditions that encourage the establishment of more diverse native vegetation and less intensive trail maintenance efforts.

We also reviewed changes to hydrilla control strategies for the summer months targeting the near shore and littoral areas of the lake. Highlands County will be conducting small scale, airboat application hydrilla control operations throughout the growing season to target developing pockets and patches of hydrilla in these areas. A mix of control tools and application strategies will be used with an integrated management approach. The goal is to limit the expansion of large block hydrilla into open water areas of the lake. If successful, this management practice may significantly reduce the acres of large block near shore and open water hydrilla requiring treatment in the fall of next year. This could potentially allow us to cut back to one large scale aerial treatment conducted in the spring, rather than one fall and one spring, as is our current practice. This would reduce the amount of herbicide required to manage Istokpoga on an annual basis, reduce or eliminate the need for a large aerial treatment just before duck season or in the split every year, and reduce the amount of treatment required annually in the littoral and near shore areas of the lake, which would benefit the expansion of more desirable aquatic native submersed vegetation in these areas.

Concern for Hydrilla expansion around the lake and particularly in the north end where it has been historically considered a hydrilla free zone was a key meeting topic. Because hydrilla has become resistant to an herbicide used in the past we currently have only one tool to control hydrilla on Lake Istokpoga. Aquathol K is effective at taking out existing hydrilla infestations and immediately opening up the lake but the control does not last very long. It is very risky to rely only on this one product to continue to work as effectively into the future. There is simply no residual or long lasting control when using a contact herbicide like Aquathol K, and we are not practicing resistance management if we do not have other products in the control rotation. When this absence of residual control is combined with the practice of intentionally leaving large areas of unmanaged hydrilla in the lake year round, we cannot avoid the inevitable spread and re-infestation of every area of the lake- we can only try to slow it down and keep it at a level that is manageable annually with our limited tools and resources. This is why for the past few years we have been actively looking at ways to utilize other herbicides such as Clipper, diquat, and Clearcast in ways that allow us to rotate herbicides for better resistance management and long term control. This is also why we are looking at new management strategies to more aggressively target the hydrilla in the areas of the lake that it first and best establishes to avoid it from spreading into large open water blocks. These other herbicides have not proven as effective at managing hydrilla as aquathol K where

used on other public waterbodies. They have not been as effective at managing hydrilla on a large scale in large open water blocks as is the current practice on Istokpoga. I am still optimistic that by combining varied application techniques and timing, with a wider range of available herbicides into a future management strategy that emphasizes integrated maintenance control, should allow native plants greater opportunity to establish and expand, and over time reduce the amount we spend on hydrilla control annually with less herbicide required. I am also optimistic that maintenance control of hydrilla as described could, over time result in the re-establishment of beneficial native plants in the near shore areas.

Finally it was presented that we are considering options to add SONAR herbicide back into the Istokpoga management strategy. Results of recent SONAR herbicide GenTesting points around Lake Istokpoga found that hydrilla in 85% of the test points (40 of 48 sites) responded as classically susceptible, with 8 sample sites displaying resistance- mostly on the east side of the lake. It is theorized that environmental disturbance and other management actions may have eliminated the hydrilla population that was dominated by resistant plants and forced re-establishment of a hydrilla population that is more susceptible to SONAR herbicide. Multiple factors must be weighed to assess the potential for Sonar herbicide to again be a rotational option for hydrilla management in Lake Istokpoga, and we are looking at the various options and strategies with emphasis on how and why we may consider using SONAR again on Istokpoga in the future.