Prof. Sean Patton Stocking Savvy - Environmental Consulting 941-500-2218 <u>Stocking Savvy Environmental Newsletter</u> <u>www.stockingsavvy.com</u> <u>stockingsavvy@gmail.com</u> "Native Plants, Native Fish, Native Florida."

Overall your site is in very good condition, you have extensive native planting growing throughout the entire area with nearly all ponds having 85% or more continuous coverage with some being the best shoreline planting in the area! Below are my recommendations for potential improvements with the note that you all are doing the right thing and have been on the right track overall.

- 1. Shoreline Gaps There are small gaps in shorelines shown in green on the map that I suggest replanting or supplementing. However since your other lakes are in such good condition we can save the community money by harvesting dense growth in other ponds and transplanting them nearby. This also helps control the most aggressive growth that may start filling in shallower ponds such as in the North East Pond East of 87th street. We estimate we can transplant plants from dense areas to bare areas of shorelines for approximately \$900 which not only opens up and clears dense ponds but plants bare shore with sample collection areas outlined in blue.
- 2. **Invasive Species** in red on the far western pond the far shoreline has extensive torpedo grass intrusion and needs to be treated likely on foot by an herbicide technician. Physical removal does not work on grasses and I would simply highlight this area to your lake management company. If needed we can also replant the pond and any affected areas after their treatment.
- 3. Eroding Shoreline highlighted in yellow in the most southern area of the most southern pond on 17th Ave there is some more extensive erosion occuring likely due to mowing where the heavy equipment pushes the land into the lake and causes erosion. What I suggest here is the same thing already done on the backside of the northwest pond where we plant large shrubs and trees on the corners. Another area in the north also in yellow could benefit from the same thing. Why mow areas no one sees, walks in, and erodes your shoreline? Shade trees or large shrubs here would not only reduce maintenance costs but add more backdrop to the ponds, help cool the community with canopy trees, and improve property values. These costs depend on the number of trees and size installed with guotes varying. Personally I suggest using southern live oaks, magnolias, cypress trees especially in the southern eroded areas. If using smaller 7 gallon cypresses and some mulch for looks 5 trees in the smaller southern area would be as little as \$600 to install and remove the potential to undermine nearby roads, fences, and gates as erosion worsens. Larger trees would be more effective in looks and erosion control.
- 4. Looking Forward In the fall after any potential plantings are done and the heat lightens I suggest stocking Florida Flagfish as a low cost algae eating fish. These native fish look like small american flags, are only native to Florida, and live in between planted shoreline plants. Since there is a legacy of algae blooms this would act as a future preventative. Stocking amount depends on lake size and should be between \$120 a lake for the smallest, and \$400 for the

largest ponds with 100 fish and 500 fish respectively. Otherwise we always recommend banning fertilizer use throughout the community that is not compost based or slow release, and to plant only Florida native or edible plants.

If I missed anything Kenneth please let me know but this should be comprehensive of the issues and recommendations and thank you for Stocking Savvy!

Map Quick Key

- Red invasive species issues
- Blue high levels of good growth and potential harvesting of plants
- Green Needs some level of replanting if desired
- Yellow Replace lawn with trees or shrubs to reduce erosion and maintenance levels

Regards,

