

# September 26, 2024

## Lakes Committee Update

Primary update since last meeting:

Aeration to do (underway now through October)

- Ran new hose Lake 5
- Ran new hose to Lake 13 & Add a BioBoost aerator
- Lakes 14 & 15 Check manifolds to balance airflow
- Lake 12 – New Compressor (irrigation pond) and fix leak
- Lake 20 – fix leak at lake edge
- Lake 6 remove old pump box
- Lake 8 various manifold adjustments

Fountain Notes

- Motor replaced on front fountain (\$4k). Quarterly maintenance commenced with CrossCreek Environmental to address mussels and barnacles. Silicone added to parts. One LED light requires replacement.

Last meeting Notes below round out committee actions.

The Lakes Committee met on August 7<sup>th</sup> to review the latest water testing data.

Salinity levels were measured post Ian and this testing has continued monthly. While we have directional improvement in our salinity levels we have not yet had enough rain to flush out salts this rainy season to take action on fish stocking or littoral plantings. Summer water temps are also not ideal for juvenile fish stocking.

Tests also indicated that clarity is good, nitrogen levels are low (good) and dissolved oxygen is at healthy levels and well distributed.

Marina Cove had a fish kill and testing is being added to this pond with the assumption that without a fountain or aeration it does not have well distributed oxygen or perhaps the fresh water inflows from June just killed off the saltwater fish species. Testing will help guide our actions and is to be included in the September tests.

Committee recommends withholding insectivorous fish stocking until after the rainy season.

Eutrosorb is a product that absorbs nutrients such as phosphorus which we are soon to commence in an application to Lake 11 and Lake 3 (lake # map attached). The last test was nullified by Ian's storm surge. These two ponds are a manageable size, high in phosphorus, and

flow to our larger ponds so they are ideal ponds to test to see if the results flow down to other lakes. This is budgeted and is expected to be applied after rains calm down in October with follow up tests a month after. The expectation is for phosphorus levels to stay near zero for an extended time following the application. If effective, we may be able to then apply maintenance level treatments as part of our annual budget. Goal is less nutrients = less algae and midge.

As a result of the lingering high salt levels, our Midge are few and far between. We are prepared for more targeted midge treatments to our ponds. Essentially a triple dose would be applied over 14 days each quarter instead of standard dose once a month. In addition, the larvicide would be applied via a drop hose which distributes the product to the bottom of our pond instead of the surface. This treatment regime has proved more effective in other locations and we will adopt this to see if keeps any hatchings better managed. Committee members will continue to report on any increase in midge.

(water test results uploaded to website)