

Pond Committee report to the CC HOA Board Meeting, October 12, 2016

1) Committee:

a) October 13, 2015: The Secretary's Report stated

- i) "...we will be engaging with Pinellas County in its Watershed Management: Watershed Planning, Adopt-A-Pond program. Thanks for the tip Bruce Berger."
- ii) Also noted in the report "...the engineer reported some things that could be done to the pond to make it function better. We implemented most of the items. One that we considered and did not do, because of the cost and a further discussion with the engineer, was a piping system or relocation of suction head beneath the fountain that would enhance the pond circulation. Given the health of the pond and the engineer's assertion that it was fine as is for now we did not act on either alternative. This may be revisited in the future if the pond shows signs of problems."
- iii) "It was not until early 2015, when the county changed its procedures and eventually its application, were we able to file on behalf of all the community. The board then voted to pay our engineer, Bob Hugenschmidt, to do the filing. His cost was \$814.24. We are on the county application list going forward for the biennial filing and Bob H and we will put in into our calendars."
- iv) "One last correction; our pond effectiveness is at 100%, but since the county uses one hundred year flood statistics to calculate rates and credits and our pond (as with many other ponds in Florida) are based on twenty-five year statistics and values, we cannot get more than a 25% credit. Going forward we will have to maintain 100% efficiency in order to qualify for the 25% credit."

b) November 11, 2015, The HOA Board Minutes stated: "...The Board voted to approve to appoint an ad hoc "Adopt a Pond" committee and Lynn Romano will chair this committee." (There was no documentation as to who is allowed on the committee, or who is on the committee.)

c) Pond Committee membership:

i) Dec 2, 2015:

- (1) Initial Committee: Bruce, Doug, Monica, Bud, Lynn
- (2) Action Committee: Connie
- (3) HOA Board: Bob & Janet

ii) January 27, 2016: Bruce, Doug, Monica, Bud, Connie, Janet, Lynn, Bob

iii) June 20, 2016: Bruce, Doug, Bud, Connie, Janet, Lynn

2) Mission Statement:

a) On December 2, 2015 the pond committee determined the mission statement to be:

*To preserve and enhance our two pond system, protect its visual appeal
and maximize the benefits to the community.*

b) To clarify, the goal is to mitigate, remediate, restore eroded bond banks and to mitigate the causes of the erosion. Mitigation includes factors that would lessen rise/fall or the speed or rise of water. For example, if something is clogged and water doesn't move from one pond to another at typical rate.

c) A local community chose a different path to deal with their pond bank erosion.

i) The Preserve, in ELW, hired a neutral, professional (WRA) to analyze their ponds, the environment, permits and regulations and make a recommendation to the community and then hired them to act as “general contractor” to implement the project.

ii) We have our own engineer, but the committee (non-experts in pond bank erosion/mitigation) is charged with doing the research and making recommendations to the Board.

d) Pond committee status and update (eblast, attached)

e) Scope of project:

i) The initial priority was the large pond until the contractors and vendors and experts saw the small pond. There is no consensus (within the committee and between vendors and contractors) as to which pond should be the priority.

ii) Large Pond...at this time, the committee is looking at the distance from the bottle brush tree to the entrance into the northeast cove (approximately 430 linear feet)

iii) Small Pond...entire circumference of the pond (approximately 735 linear feet)

3) Pond bank restoration vs pond bank mitigation:

a) The options to permanently eliminate pond bank erosion is extremely limited to non-existent because the pond in a “living environment.” Conditions change, and the environment outside the waters edge, and possibly a distance away may influence continued soil erosion around the ponds (i.e.: slope, lack of roots, etc). Again there is no consensus to this.

4) To date, the committee has obtained information from:

a) CC Engineer:

i) Hugenschmidt's evaluation

b) Supplier:

- i) R.H. Moore
- c) Contractors:
 - i) American Shoreline Restoration
 - ii) Finn Outdoor
 - iii) Cross Creek Environmental
 - iv) GEI/BioMass
 - v) Landcrafters
- d) Other Services:
 - i) Master Gardener (Doris Heitzmann, Community Outreach Coordinator Florida Friendly Landscaping™ Program Pinellas County Extension)
 - ii) Adopt a Pond, Pinellas County Program (Julie Vogel)
 - iii) Aquatic Systems
- 5) Factors/causes of the pond bank erosion:
 - a) There seems to be *general* agreement that the pond bank erosion is due to many factors but especially that the soil is not able to withstand the extreme and drastic high water surges. When the pond fills up, and doesn't drain quickly, the soil becomes saturated, when the water recedes the soil falls apart and "pancakes," which causes the pond banks to erode.
 - b) Other causes, although not all agree, of the pond bank erosion are as follows:
 - i) Water/rain run-off from areas above and around the ponds
 - ii) Fountain wave action (relatively concentrated versus more contemporary diffuse pattern)
 - iii) Lack of sufficient root structures to stabilize the soil.
 - iv) Slope of the bank and surrounding ground.
 - v) Lack of maintenance of pond filters and drains
 - vi) Short mowing to lawn/ponds edge
 - vii) Mulch and small debris floating into pond from surrounding land in heavy rains clogs the drain covers
- 6) Possible mitigation/restoration options the committee is pursuing:
 - i) GeoTubes (synthetic fiber tubes filled with pond sediment - grass topping)
 - ii) Flexamat (plastic w/concrete blocks that can take the contour of the bond bank to certain degrees...)
 - iii) Gibion (rock bundles)
 - iv) Rip rap (rock/stone used to armor shorelines - specified source/type)
 - v) Coir Logs (coconut fiber) with vegetation

and want to have an idea of budget/funds available to implement the project in 2017 & thereafter.

- ii) Some people think this is a “one time fix” whereas others think it it’s a multi-phase and multi-option mitigation effort. Some think it’s a “one time fix” vs “ongoing maintenance of the ponds filters.” To maintain proper water flow and over-flow of excess water from the small pond to the large pond, and the large pond to the creek is primary to reduce pond bank erosion in both ponds.

12) Timelines: These are very general estimates...once bids are received the committee will have a more definitive timeline.

- a) A summary of the committee’s recommendations and cost estimates to the Board approximately February – March 2017.
- b) Generally preferred installation season: not in the rainy season
- c) General range of wait/backlog for contractors: varies from few months to a year
- d) General range for construction time: varies from less than a week to more than 2 weeks

Presented to the Board on October 12, 2016.