

Mango Park HOA
Activity Report
July 25, 2019 1:00 pm
19th DR NW at the Pond
APPROVED

Attendees: Dan Golus, SWFMD; Bryan Zoller, Zoller Engineering;
Lorraine Grace, Mango HOA; Bud Grace, Mango Homeowner

Meeting Summary

The group met to examine the issues causing the violations and to determine solutions. The group examined the west end of the pond along 19th Street Lot # 33 and went along the path around the back to the north weir. The 91st Street County roadwork project and ditch to the pond were also examined.

Results

- Issue # 1: Non-Functioning Stormwater Management System (channels ground water to a discharge point and into the swamp)

Visual Findings

1. Very little water is leaving the underground pipe running along the perimeter of the pond-it is not working correctly. It should channel more ground water into the swamp.
2. More water is flowing into the pond than there should be. 2 storm drains on 91st Street, as well as others in the neighborhood, empty directly into the pond-the County's current project is draining water from the cement casements around the street pipes into the pond. The soil around the casements is badly eroded on 91st St.

Possible Causes

1. The drainage pipe along the pond bank is clogged resulting in very little water leaving the pipe. The Roto-Rooter clean-out work (2018) might not have adequately cleared the pipe. The main culprit could be a clump of palms at the edge of the bank (lot # xxx) or the pipe's mesh covering could be clogged with silt.
2. Water flowing into the pond from ground water seepage and rain water run-off through storm drains could be factors in excess water entering the pond (ground water seepage may be a major

contributor to the problem). The amount of water the County project currently is draining from 91st Street is roughly equal to the observed overflow of the north weir. Water from the Wisteria pond could account for part of the excess water in the Mango pond. The soil erosion around the street pipes could be caused by ground water seepage.

Potential Solutions

1. One or two clean-outs should be installed in the underground pond pipe to allow access for a Roto-Rooter or high-pressure water cleaning. This would remove debris from inside the pipe and clean the filtration holes to restore proper functioning of the pipes.
2. Extend the under street storm drain pipes (91st St) to the drainage ditch at the end of the street. This would cut down on the rain flow from storm drains into the pond. Less water would decrease the pond level.
3. Work with Wisteria to address water management issues that affect both developments.

Exploratory Work Required

1. "Pot holes" in several places on the bank should to be dug to determine the condition of the pipe and factors affecting proper drainage prior to installing the clean outs.
 2. Work with the County to modify the current 91st street project.
 3. Initiate discussions with Wisteria on water management issues.
- Issue # 2: Lack of Maintenance on Pond Bank & Outfall Control Structure

Visual Findings

1. North weir (outfall control structure) that is cement is in good shape but has erosion around it; a large amount of water was spilling over the weir.
2. Path to the north weir is passable now but will become over grown.
3. Bank on homeowner properties (19th Street houses backing to the pond) has eroded. The bank overhangs the pond by about 2 feet and has receded about 4 feet from the original waterline.

Possible Causes

1. Natural vegetation growth.
2. The bank erosion could be due to ground water seepage washing the soil from under the bank out into the pond.

Potential Solutions

1. Repair the underground pipe for proper drainage.
2. Repair the pond bank to avoid further erosion.
3. Maintain the path to the north weir on a regular basis to avoid overgrowth that restricts access.

Conclusion

Mango Park has 2 violations for improper pond operation and maintenance. The deadline to comply is August 19, 2019. A July 25th site visit was conducted to develop a compliance plan. Progress toward compliance must be demonstrated prior to the deadline and as justification to request an extension to complete necessary work.

There are 2 options to consider in addressing the violations and becoming compliant. One is to repair and maintain the current storm water management system. The other is to convert the pond from dry to wet detention. There are different approaches to make the conversion. According to SWFMD one that involves notching the weir might work and might be cost effective.

Next Steps

1. Work with the County to investigate modifying the current 91st Street stormwater drainage project to divert the ground water to an adjacent ditch that bypasses the Mango pond and directly feeds the Manatee River.
2. Work with Wisteria Park on water management issues.
3. Decide whether to convert the pond or not, depending on which is more cost efficient over the long term.
4. Send a letter to SWFMD before August 19 requesting an extension.

Additional Background and Details

Available upon request from the Mango Park Board of Directors.