



May 2026

Annual Report

*Ponds Working Group (PWG) of
LakeRidge Falls*

Presented on: 05/01/2026

LakeRidgeFalls.Org



LAKERIDGE FALLS PONDS



Intro

INTRO

The Annual Report of the LakeRidge Falls Ponds Working Group (PWG) provides an in-depth look at the stormwater retention ponds in the LakeRidge Falls community. The ponds continue to show signs of bank erosion and in some cases collapse, along with deep cuts, swales, and loss of integrity. These are no significant new problems but a continuation and worsening of issues identified from prior year's reports.

The extent of deterioration varies from pond to pond. Factors such as yard length, slope of the pond bank, and prior remediation attempts all play a role. Buried downspouts have helped slow erosion seen between homes. Rip rap has been used to stabilize areas that required immediate attention. Coir logs and coir mats with vegetation have been installed as part of a bank rebuilding process. More recently, work utilizing coir logs and PondTech planks was completed around the lower part of pond 3 as well as the entirety of Pond 11.

GENERAL BACKGROUND

Florida stormwater retention ponds are engineered to mimic natural hydrologic and treatment processes and as such are permitted based on specific regulatory standards. They are engineered as functional, cost-effective systems for **flood control** and **water quality improvement**. As such, their goals are to:

- Ensure overflow water go into a chain of consecutive ponds, to the Mitigation Area, and from there eventually to the bay.
- Clean about 80% of all pollutants as it goes through the chain before reaching to the bay.

Scientific studies and government reports by entities such as the Florida Department of Environmental Protection, Southwest Florida Water Management District (SWFWMD), and the University of Florida/IFAS show that Florida stormwater ponds often underperform ($\geq 60\%$) as filters compared to their design goals, particularly for nutrients like nitrogen (~30%). Furthermore, these reports identify the primary causes of bank erosion in Florida stormwater retention ponds as a combination of hydrologic and soil factors. As such, Florida ponds are constructed with the explicit understanding that some level of bank erosion is a natural process in Florida's dynamic environment.

Because of this explicit understanding, the developer required a dedicated reserve line item for stormwater management and the regulatory and research entities provide stormwater maintenance guidelines to slow, i.e., not avoid, the process. But as the various PWG came to realize, some of these guidelines were proven to be irrelevant as they been introduced after significant erosion has already occurred, showed a significant "research-to-practice" gap, and/or failed to take into consideration other factors of pond erosions.

"RESEARCH-TO-PRACTICE" GAP

UF/IFAS and the Florida stormwater guidelines strongly recommend the incorporation of native, noninvasive, well-rooted aquatic and littoral plants and Low Maintenance Zone (LMZ) buffer areas, as they play a role in enhancing the ponds' effectiveness in removing contaminants and reducing erosion by binding soil and slowing water.

Intro

During the implementation of the guidelines, the Association identified persistent operational gaps between research recommendations and practical field application. Several key challenges were documented:

- The guidelines do not adequately address areas with pre-existing significant shoreline erosion.
- Large-scale commercial landscape maintenance contractors are generally unequipped to maintain LMZs due to the absence of trained personnel capable of consistently managing 6–10 ft wide grassy buffers at a height of 10 inches without the use of selective herbicides.
- The establishment and long-term maintenance of 6–10 ft wide vegetated landscape beds around sixteen stormwater ponds, without the use of selective herbicides, encountered substantial resistance from residents whose properties directly border the ponds.
- The LMZs were observed to facilitate the proliferation of Torpedograss (*Panicum repens*), a highly invasive and aggressive aquatic weed. This species rapidly outcompetes and displaces installed littoral vegetation. A followed up research showed that Torpedograss negatively impact aquatic ecosystems by reducing oxygen levels within the ponds.

IN SUM

LakeRidge Falls stormwater retention pond erosion is significant to the point that standard vegetation or routine maintenance are no longer sufficient solutions on their own. At this point, enhanced stabilization methods are required to restore/protect the banks.

Moving forward, the PWG strongly recommends a strategic, community-wide approach that includes long-term planning coupled with sufficient funding to keep the ponds functioning as intended. As the ponds age, they erode and lose their ability to hold and disperse sufficient stormwater; if we fail to act and move forward, we will experience more street flooding and may be required to dredge the ponds. This will be costly and the last option for end-of-life retention ponds. Our concerted efforts now in shoring up our pond banks can help delay or avoid that unpleasant future.

What are we trying to prevent?

Overwhelmed Stormwater System in LakeRidge Falls = Floods



August 2024

Such failures occur when rainfall surpasses the engineered capacity of ponds or catch basins, ponds storage capacity is decreased due to shoreline erosion, and/or obstructions such as debris impede the system's function.

Pond #1

Annual Survey
January 27, 2026

Survey was conducted on January 27, 2026 by the LRF Ponds Group.

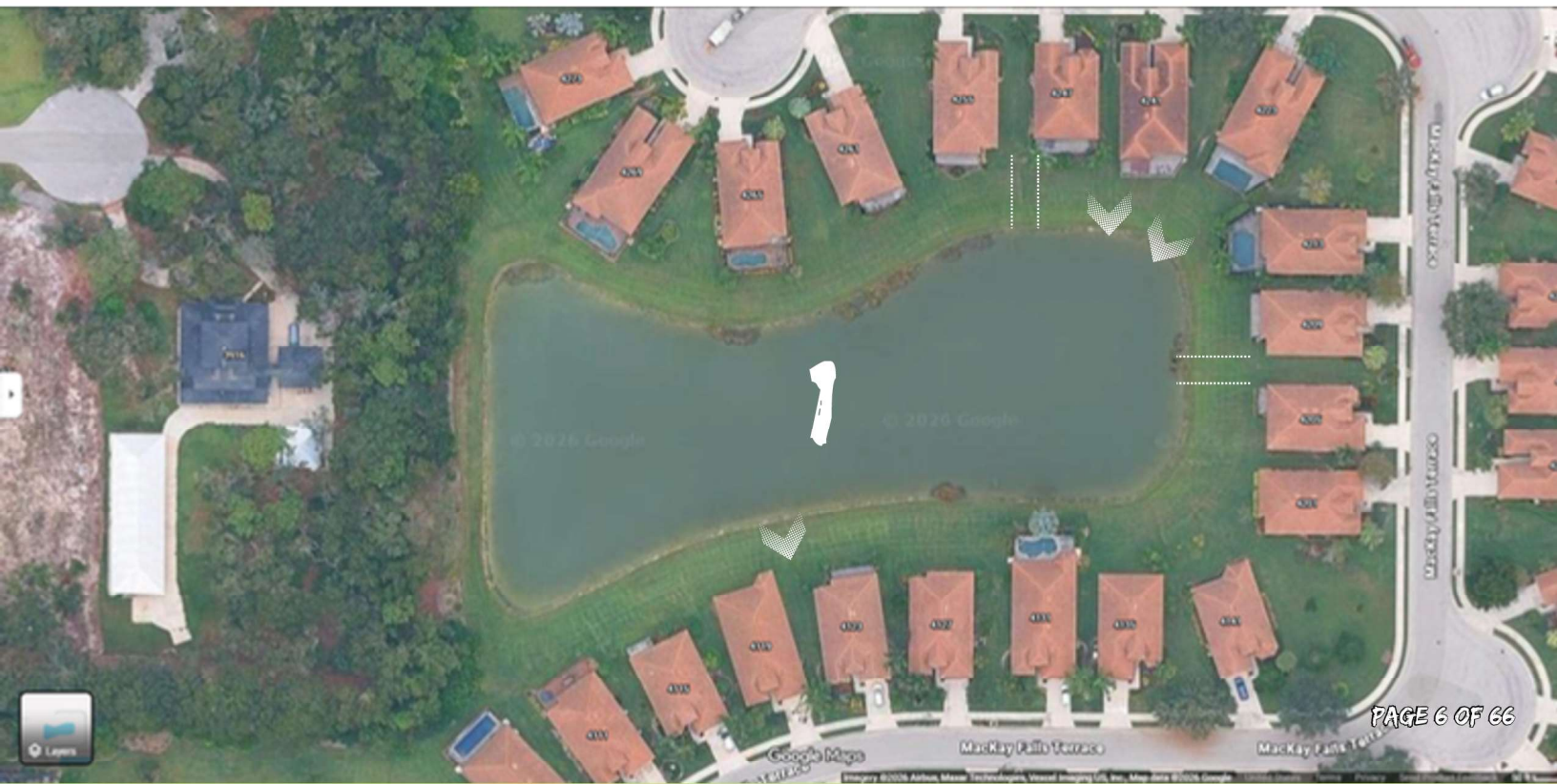
The Roads & Grounds Committee had originally surveyed this pond on May 26, 2023. The water level of the pond today was very low, allowing us greater access to view more of the lower part of the pond. The yards along this pond are longer (deeper) than the community average and there are few pipes buried. There are very few deep cuts evident along the pond edge, except behind 4119 Mackay, but they are there and there is evidence of bank edge collapse. The bank top, out about a foot to 18 inches is soft and spongy and there is evidence of undercut of about the same distance back into the bank itself. Our '23 report showed average undercuts at 8 to 10 inches. It appears that the slow undercut of the bank is the same as is happening in most of the ponds. The water level of this pond in '23 was such that the collapsing bank was not as obvious as we find it today.

This pond had and still contains areas of some type of aquatic plants. It appears that the plants we saw up against the banks in 2023 collapsed with the rim and the remaining plants delineate the near side of where the bank collapsed.

We identified another storm water 24" RCP entering from adjacent to 4255 MacKay Falls Terrace.

Photos were taken and show consistent collapse along most of the pond.

There are no imminent hazards noted or areas where the landscape people would not be able to cut grass or do necessary maintenance.



Pond # 1



Jan 27, 2026 - Behind 4119 Mackay



Behind 4141 Mackay



Behind 4269 Mackay

Pond #2

1st Visit

Annual Survey
March 4, 2024

Survey was conducted On March 4, 2024, by the LRF R&G Committee.

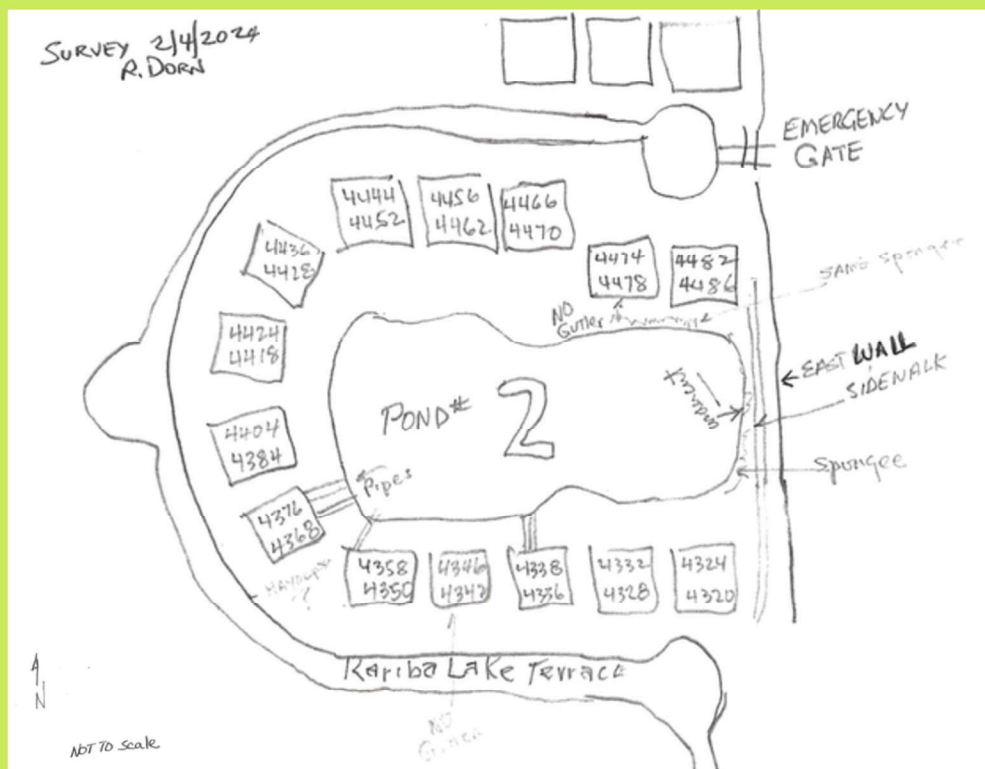
This pond is rectangular in shape, with the two longer sides slightly pinched in the center. This pond is located in the upper northeast quadrant of the community. The pond is surrounded on three sides (north, south and west) by the abutting rear yards of 14 two family unit villas, along Kariba Lakes Terrace; the fourth, or east side, borders the community wall along Lockwood Ridge Road. The units have deeper rear yards than Victoria Falls, that disperse the roof run-off quite well. The majority of the units have roof gutters; some 4 or 5 units have buried pipes. One owner who had a buried pipe told us she recently rebuilt the outside Lanai, and was required by the ARB to bury the gutter pipe when reconnected.

The survey was completed during a period of a relatively full, or near-full water level. Several units had no connected gutters on the rear of their buildings. But, regardless of gutters, no cuts or obvious erosion was evident from any unit surrounding the pond. The grass at the pond rim was observed to be thick, healthy, and hanging over the pond lip (waterfall effect). It was also noted that the first three feet away from the edge was "spongey", i.e., there was no sand beneath it, and the grass gave way to a very wet step. Some of the first Three feet were at a lower level, as if the bank had collapsed slightly into the pond in those areas. Most of the pond had this Spongy feel along the rim, but not the longer rear yards.

No immediate concerns were noted.

TO DO: Nothing but annual update.

Severity Rating: Well below average.



Pond #2

2nd Visit

Annual Survey
January 27, 2026

Survey was conducted on January 27, 2026, by the LRF Ponds Group.

The Roads & Grounds committee had originally surveyed this pond on March 4, 2024, and it had not been surveyed before or after, until today's visit. The water depth was near full at the time of our first visit in 2024, but was quite low during our visit today, allowing visual access to the inner wall of the pond. During the 2024 survey we noted that the pond was consistent with a spongy feel three feet around the edge of the pond. Again, today we had a much clearer view of what was going on, from our last visit. It appeared to us that the entire pond had lost the 3 feet of spongy pond bank and the new bank was spongy about a foot to 18 inches wide along the perimeter, which is most likely the result of the every other mow weedwacking of the pond edge. It appeared from the amount of plant material and raised fill along the bank, that the original edge had collapsed into the pond and the erosive effect was starting all over again, further up toward the lot lines. The new spongy area was dry, but when pressure was exerted, the ground below gave way up to a foot or more deep. Voids along the sides into the bank were up to 30 inches and holes were obvious to the eye. The yards are handling the runoff without in the most part causing serious cuts at the pond edge. The rear yards in this section are longer than in many of the homes along Cascade Falls Drive. The vast majority of abutting homes do not have pipes buried and many have no gutters so the roof and yard runoff appears to be gently moving the underlying sand slowly but inevitably toward, and into the pond.

Photos were taken and they consistently show the bank collapse is taking place all along the bank of this pond.

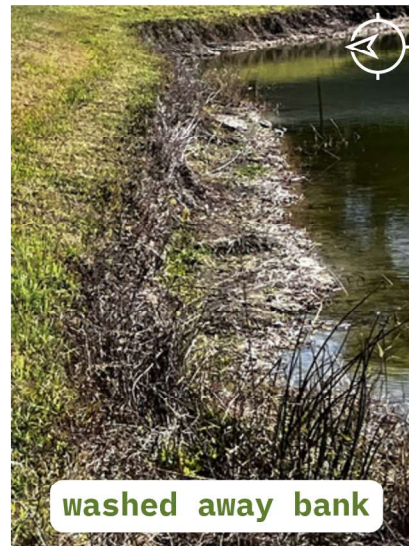
There are no imminent hazards noted or areas where the landscape people would not be able to continue cutting grass or other ongoing maintenance.



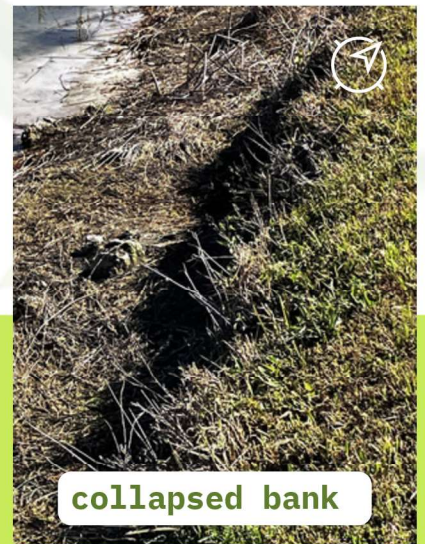
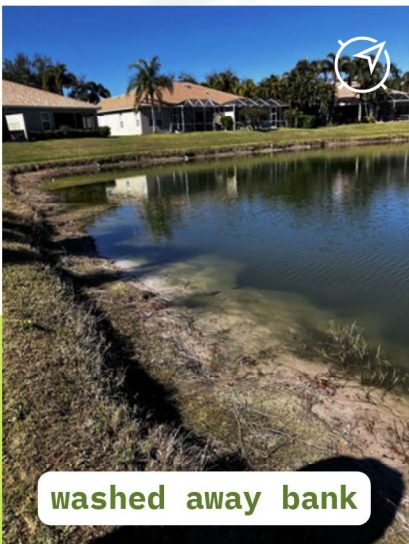
Pond #2



01-27-2026 - North side of the Pond - 4444-4466 Kariba

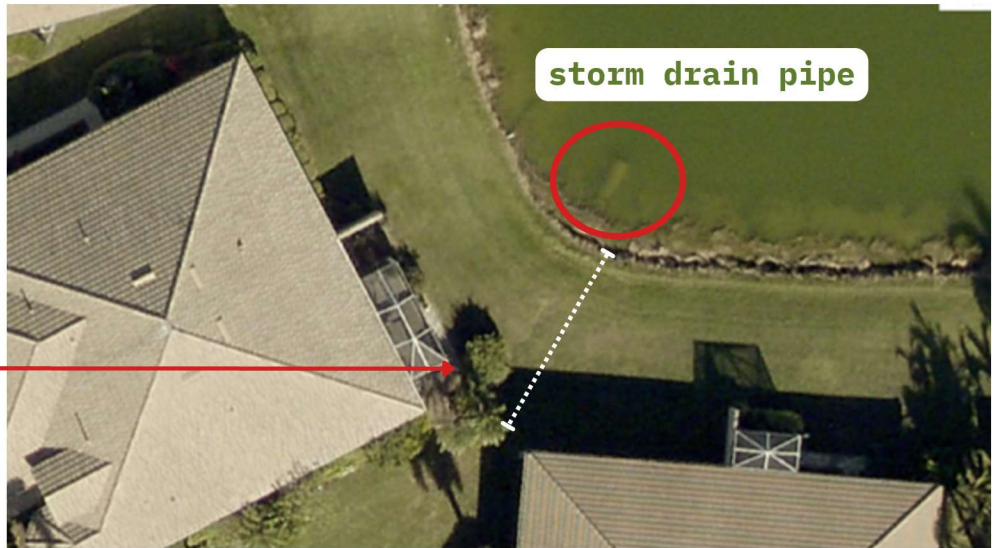


01-27-2026 - North side of the Pond - 4470-4478 Kariba



01-27-2026 - South side of the Pond near 4346 Kariba PAGE 10 OF 66

Pond #2

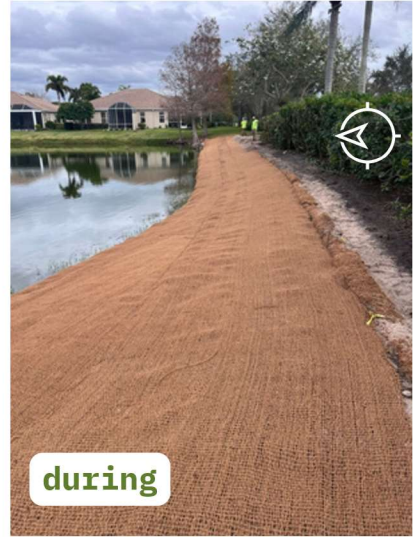
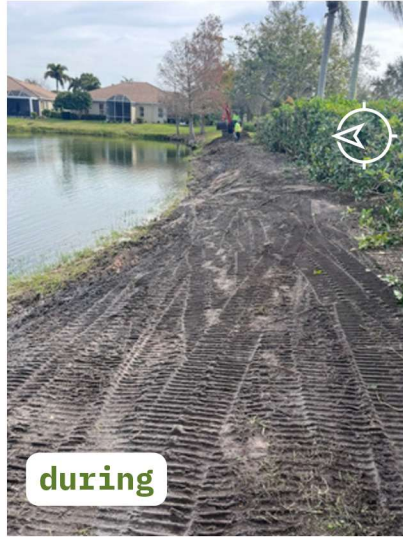


April 1, 2026 - South side - 4468 Kariba

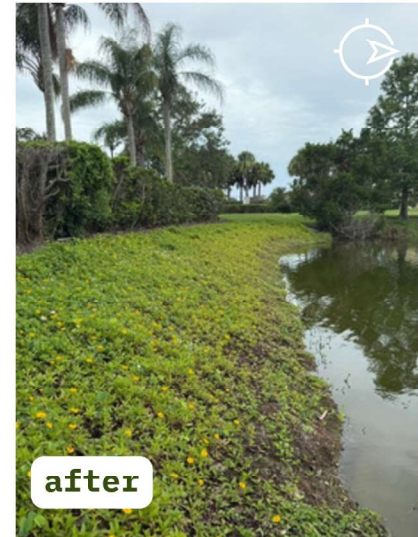
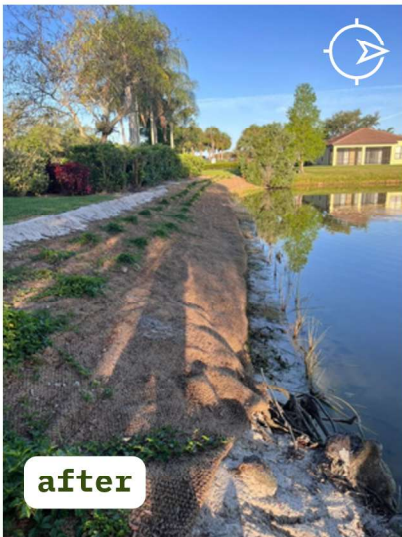


April 1, 2026 - South side - Between 4346 and 4350 Kariba

Pond #3 - South Side



Jan 24, 2024 - South side of Pond 3 - Project Initiation



April 16, 2024

Sept 21, 2024

June 30, 2025



April 1, 2026 - South side of Pond 3

Pond #3

2nd Visit

Annual Survey
May 5 & 7, 2025

South Bank:

On May 5, 2025, three (3) Rebar stakes were driven into the south side of Pond 3, and on May 7, the below measurements were recorded. We used the TOP leading edge of the Coir Log as the edge of the pond, since it replaced the former now collapsed edge.

All measurements are from the Rebar to the top or bottom of the bank.

- Rebar 3-1 (SE corner) Top 40", Bottom 34 ½", Bar to curb 40' 7."
- Rebar 3-2 (center) Top 46", Bottom 39 ½", Bar to curb 51' 9".
- Rebar 3-3 (SW corner) Top 41 ¾", Bottom 36", Unable to measure to curb.

*Note: Between 3-1 and 3-2 a 48' concrete pipe enters the pond from the south.

** Note: The coir log at the pond edge has begun to collapse.

North Bank:

In 2020, a piece of Rebar was installed in this pond's Northern side at 24" from the rim, it was inserted adjacent to some aquatic plants inserted at the rim. (For details, see the original pond survey covering this pond.) Nothing has noticeably changed in this location since 2023, with the exception that the plants have expanded, and now also occupy the area in which the 2020 Rebar was inserted. There is no discernable difference between the erosive loss of the bank where the plants were originally planted and where they were not installed.

- This Rebar we designate as Rebar 3-4.
- Rebar 3-4 (North center) Top 35" to pond edge. There is no hard location to facilitate a second measurement.

Photos were recorded of the site.



Pond #3 - North Side



July 7, 2022 - North side of Pond 3



Jan 3, 2024 - North side of Pond 3

May 7, 2025



May 7, 2025 - North side of Pond 3

Pond #3 - North Side



April 9, 2026 - North side of Pond 3



April 9, 2026

Pond #3 – S. East Side



Oct 6, 2023



April 1, 2026

Pond #3 – S. East Side



before

2023



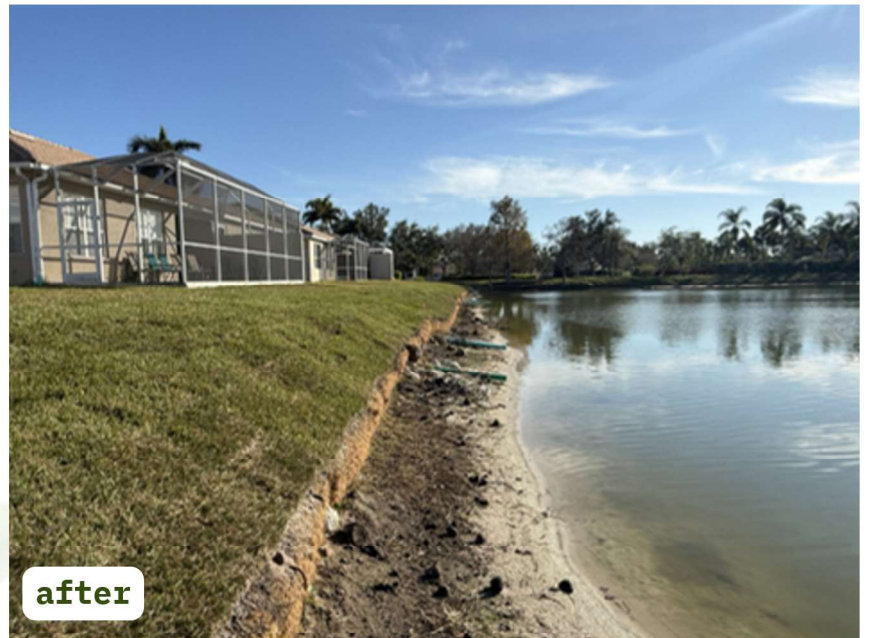
after

2026



before

2023



after

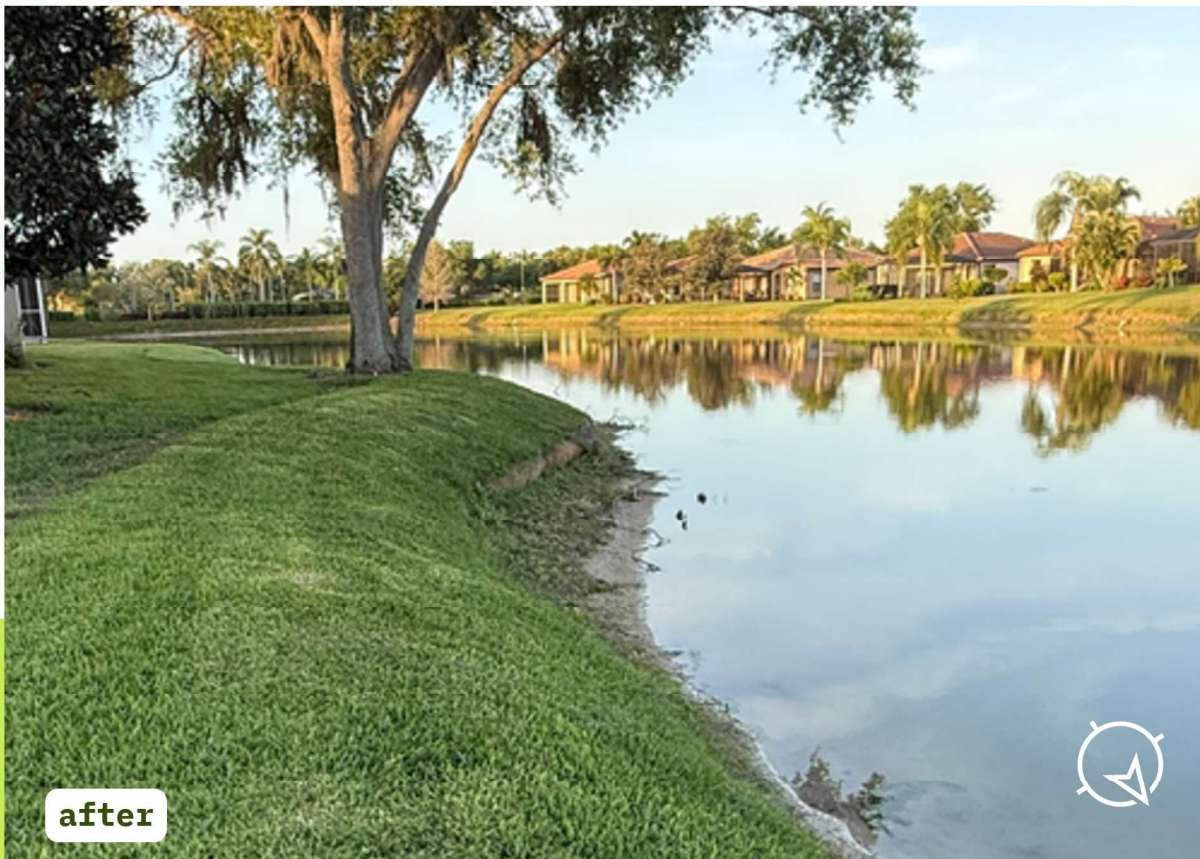
2026

Pond #3 - East Side



before

March, 2023



after

April, 2026

Pond #3 – N. East Side



April 5, 2023 - Aquatic Plants behind 8107 Victoria



Feb 18, 2026 - Imposed picture on top of the 2023 picture

Pond #3 - N. East Side



2023



2025

the measurement on this page are rough approximates, for general impression only



2023



2025

Pond #3 - N. East Side



Feb 18, 2026 - behind 8107 Victoria

Pond #4

Annual Survey
January 27, 2026

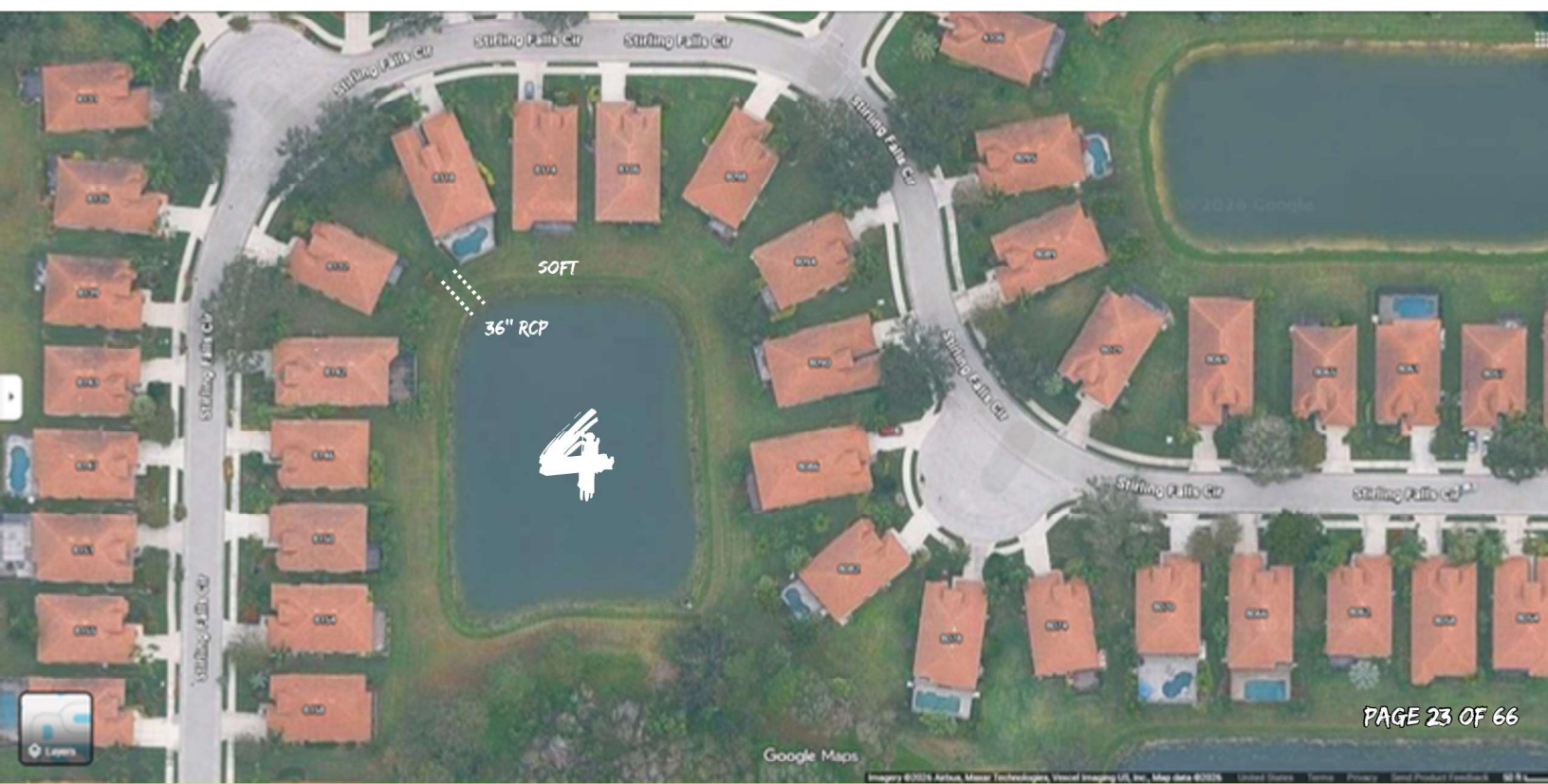
Pond #4 Annual Inspection was conducted on January 28, 2026 by the Ponds working group. The water level was low allowing a good view into the pond. The last time this pond was surveyed or inspected was on May 18, 2023, which became a part of the 2023 initial pond report.

The pond is generally pretty much as described in that earlier report from 28 months ago.

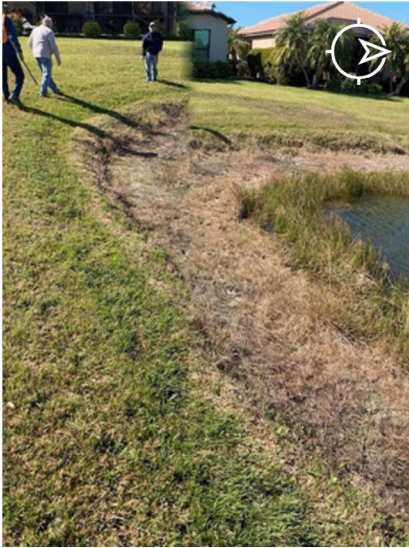
The cuts in the banks are deeper and the banks have receded up to several feet more all around due to obvious bank collapse. The current banks are spongy, up to a foot back from the edge; and it appears the same erosive process we have witnessed along most of the other ponds is at play here. The edges become spongy because the sand along the edge erodes and leaves undercuts until the weight above collapses the bank into the pond, and the process starts all over again. The process here is slower than what we see in other ponds, the different time sequence seems to be dictated by the length of the yard and the slope of the ground facing the edge.

In addition to all the cuts and issues raised in our previous survey; we noted a 36" pipe that enters the pond north west of 8132 Stirling unit, also a very badly eroded area behind 8106-8098 Stirling. This last area of erosion starts almost at the foundation of the 8098 unit.

In summary: This pond is slowly showing the usual signs of erosion and bank collapse similar to the other ponds in the northern part of our community. The overall bank collapse was not noted in our earlier report since the water was higher then, and the signs may have well been there, but we were not as familiar with the degenerative process as we now understand it. No hazards were noted, the area behind 8098 could affect grass cutting but no blue flags were present showing concern by the landscapers.



Pond #4

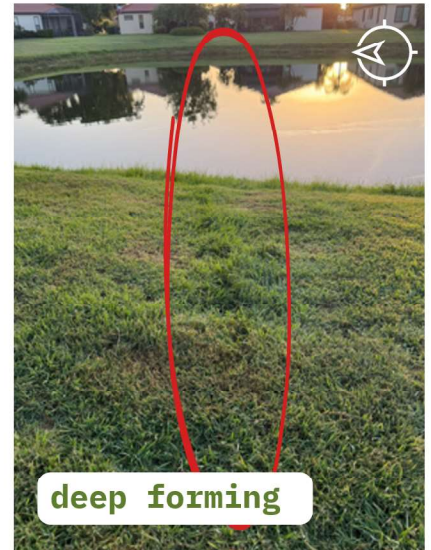


collapsed bank

01-28-2026



grass swale forming



deep forming

April 1, 2026 - East side - 8146 Stirling

when the storm water system can't empty water fast enough it becomes overwhelmed, leading to surfacing water, localized flooding, and potential infrastructure damage



August , 2024 - Hurricane Debby - drain at Pond 4

Pond #5

Annual Survey
January 28, 2026

This inspection was conducted by the LRF Ponds Group on January 28, 2026

At the time of inspection, the water level was low and the near bottom was easily observed. There were no startling finds or discoveries from the last survey which was conducted on May 18, 2023. The pond is going thru the usual erosion process. It appears that the pond has suffered the collapse of the entire edge in the past; and is now probably in another undermining period before that will eventually cycle another collapse. Evidence of the collapse is noted atop the adjacent Littoral shelf.

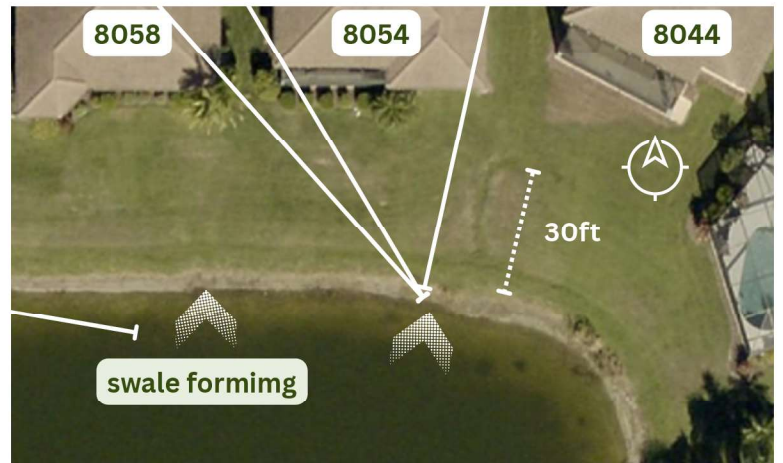
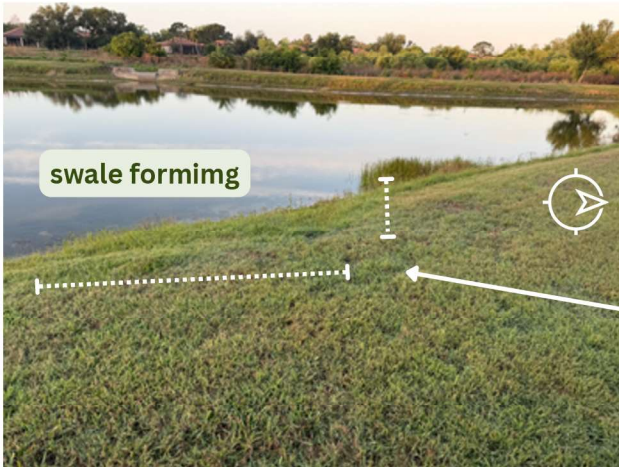
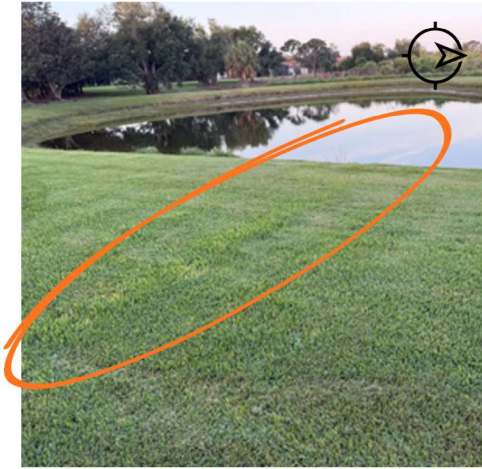
In addition to the cuts and problems noted in our 2023 report, we noted a large cut between units 8044 and 8024 extending up to the rear of the two units. In addition a serious area of bank collapse presents at the 8024 unit. The area would seem to be disrupted enough to hinder crass cutting. However, no landscaper's blue flags were noted.

With the exception of the cut and bank collapse noted at the 8044 and 8024 units; no Hazardous or Maintenance impeding issues were noted.

The Mitigation Buffer area runs adjacent to the western side of the pond. It was noted that the plantings installed in early 2025 seem to have met with mixed results. The clumps of natural grass seem to have died, the Plumb hedge plants seem to be thriving, and it appears the red maple saplings were probably eaten by the small guest residents of the adjacent mitigation area.



Pond #5



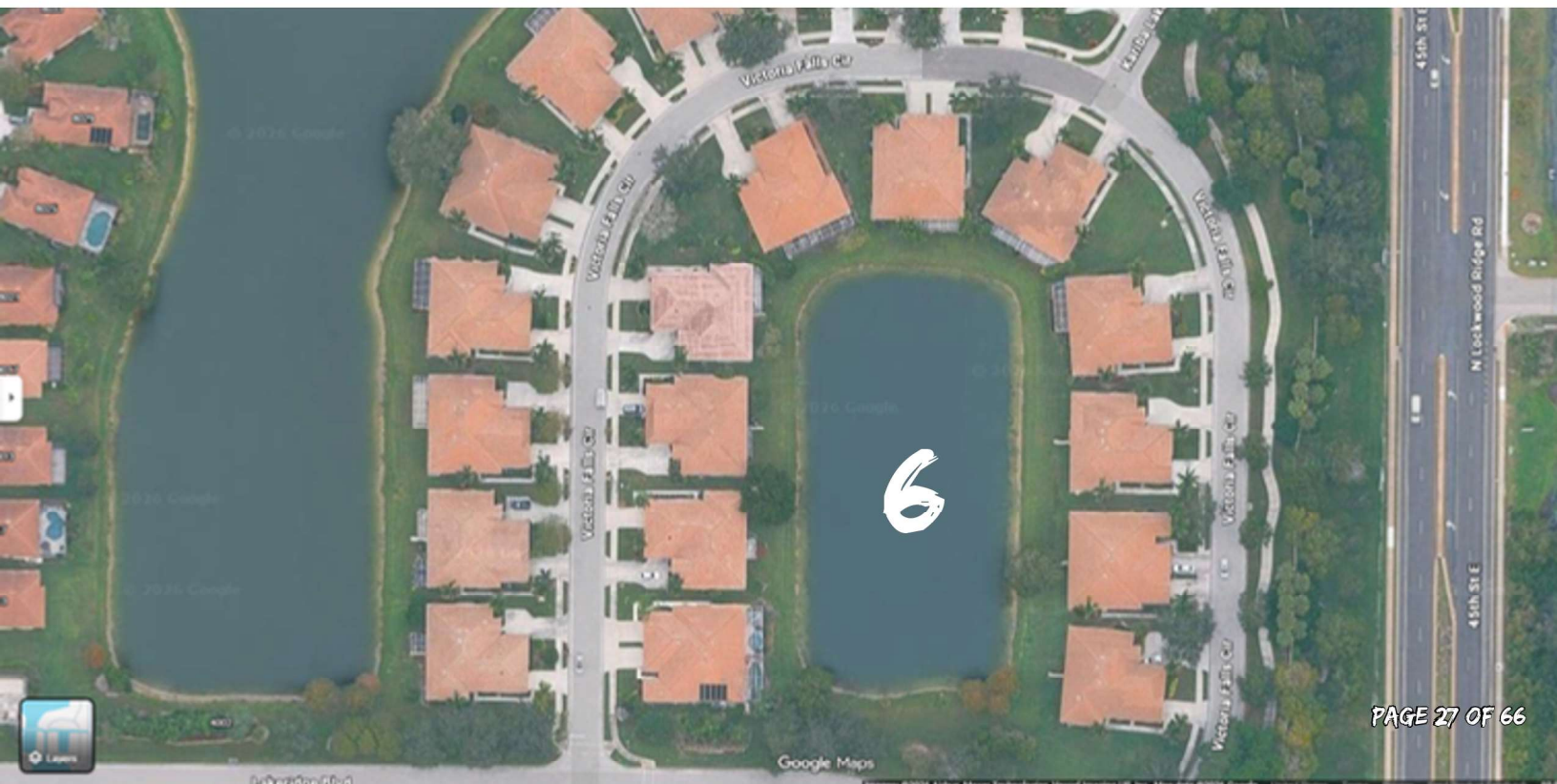
Pond #6

Annual Survey
March 13, 2026

Survey was conducted by the Ponds Working Group on March 13, 2026. The last summary report on this pond was conducted on May 24, 2023. The water level in the pond today was very low, enabling us a very clear view low into the pond. On our last visit to this pond the water level was much higher, limiting our view of the banks, as well as for limiting us in obtaining accurate measurements.

The cypress trees that we reported on in our earlier report, both on the south east as well the south west corners of the pond, are still tenuously in position, but rapidly losing their attachment to the southern bank. The roots are much more exposed, and there has been more wash out under these trees. In addition, the south bank evidences much more erosion from the last survey, the cause being water runoff coming from the area between the pond edge and its proximity to the LRF Boulevard.

A major live oak tree half way up the eastern shore is now standing in the center of a noticeable bulge along the bank. The spongy feel of the surrounding ground around this tree evidences loss of sand that has washed from below into the pond. The roots are helping to slow the erosion directly under the area beneath this tree. Notable was the fact that since we were here last, the approximately 2-3 feet along the east side of this pond has completely collapsed into the pond. The new pond edge is showing evidence of the spongy feel that's a leading indicator to another eventual collapse. The pond edge collapse appears to be not that recent, as the subsequent movement of the sand from the collapsed edge has mostly settled into the rest of the pond. At least one wet season has helped that dispersal of the lost sand.

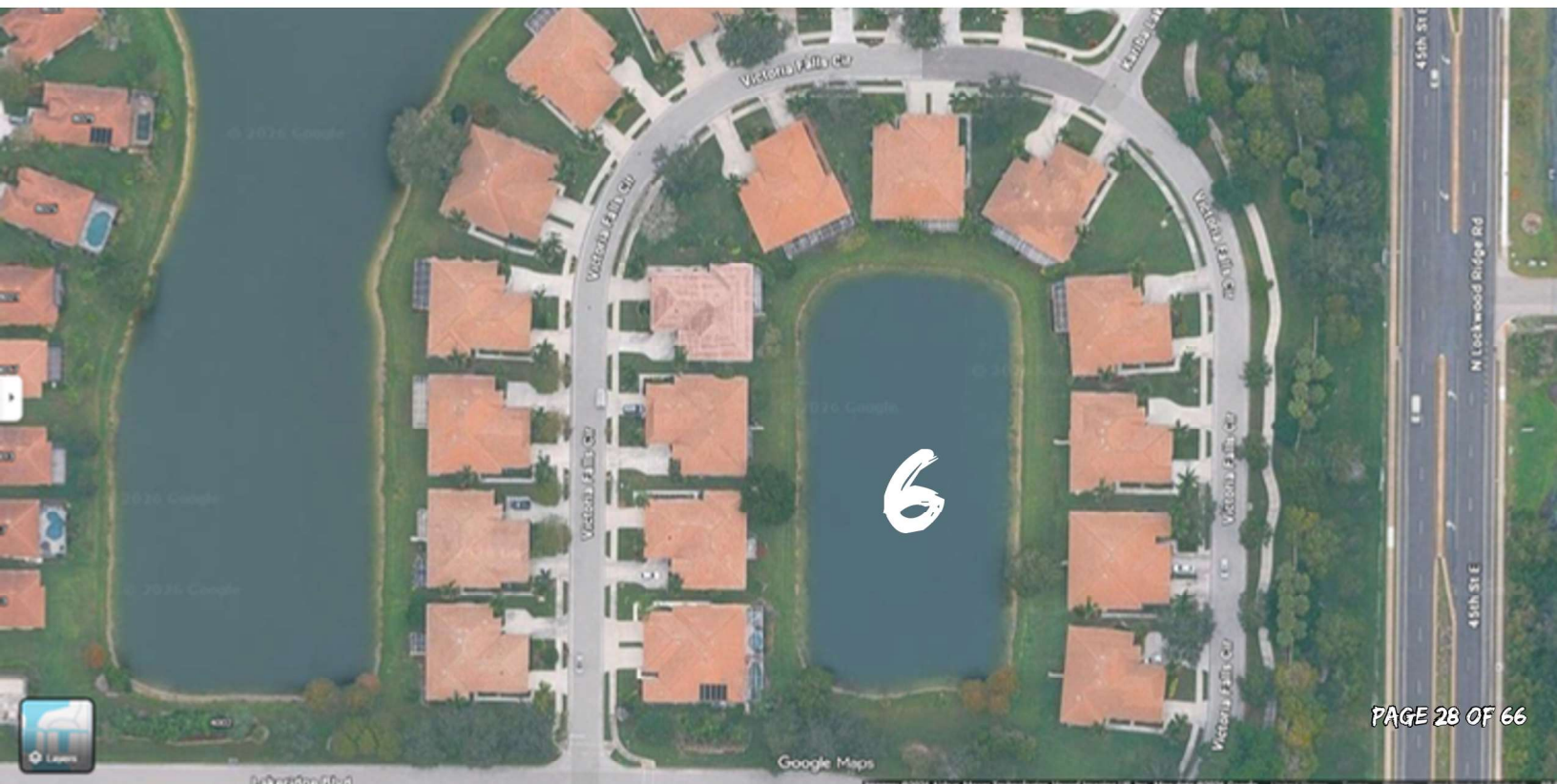


Pond #6 - cont'd

The unit at 8230 Victoria evidences a recent repair, with a drain installed adjacent to the southeast corner of the building. The sod over the installation has been pulled apart possibly by the landscaper's grass mowing. The drain seems to be a repair similar to those used by PondTech, one of the community's more reliable contractors. This entire pond would seem ideal for a total drain project as we have initiated in other ponds in the community.

There are two Reinforced Concrete Pipes (RCP's) entering this pond: a 24 inch one between units 8018 and 8016 Victoria. This is an inflow from the adjacent street's drain sewer. There is also a 36inch RCP entering from the south which spans a sewer intake and is apparently the pond's drain leading into Pond 8. There is another storm drain between this pond and pond 3 located a little south west of Victoria unit # 8010. We were unable to find a pipe end for that location entering this pond. A review of the original "AS BUILT" plans for the community shows no drain at that location, so it appears the pond fills by rain water as well as road runoff from a pipe entering from the east roadway. The pond drains into pond #8, south of the Lakeridge Falls Boulevard.

Both the north and west banks of this pond are spongy and soft (currently dry season). There were minor as well as some medium collapses along both banks. They are both spongy, and there is evidence that the cycle of collapse is in the process of leading to similar future problems.



Pond #8

1st Visit

Annual Survey
March 27, 2024

Pond #8 inspection on March 27, 2024. Annual review by B. Pezzimenti and D. Dorn, Co-Chairs of the R&G Committee, accompanied by BOD member Diane Pezzimenti. This is the first annual inspection since the original survey visit of March 27, 2023. Existing downspouts (with the exception of unit 4283 Cascades) had voids and bank damage restored, all pipes have been buried, and Rip Rap was installed where necessary, in February of 2022.

The impression today is that the previous efforts show restored stability to the bank where applied. The damage that continues from the unburied pipe (infra) seems to be accelerating. The rebar pipe in the NE corner is now reading 37" from the pond edge. In 2023, it measured +7 inches since installation in 2020.

It is still not clear if Bio fabric is behind the installed Rip Rap, but if sand is still moving past the Rip Rap, it is not obvious, given the water level during our visit. Several areas behind the Rip Rap need to be re-backfilled and re-sodded. The exception is one swale between 2 buildings that was not Rip Rapped wide enough and some water run off is bypassing the treated area along its east side*. All and all, having been arguably the worst eroded pond, the previous work has slowed the problem considerably.

TO DO:

1. As available, clean fill should be used to resurface behind the existing Rip Rap. *Some areas could use additional Rip Rap.
2. Have the owner of 4283 Cascades bury his down pipe, and repair the damage his runoff is continuing to cause.

** Site visited on 3/22/25. All areas have been rebuilt and the area looks to be doing well. The short pipes from the adjacent dwellings are scouring the pond bottom? The owner of 4283 Cascade still has not buried his pipe and erosion attributable to this residence is notable and should be corrected.



Pond #8

2nd Visit

Annual Survey
May 8, 2025

See 3/22/2025 report for Interim reporting.

During April and May, The Ponds Group took over responsibility of the LRF Ponds issue, in accordance with a BOD charter that laid out expectations for the group to address. One of those expectations was the need to develop a method of measuring the status of the ongoing erosion in each of the ponds. In late 2023, a project was initiated in this pond on the southern shore. This report is, in fact, the report of the installation of the "Rebar Technique" for future measuring in this pond.

On May 5th 2025, with the help of Victor, our irrigation specialist, we installed Green Rebar in this pond (at Approx 36") from the edge of the pond to determine where the pond edge was from the rebar, and how far the rebar was from something that would probably not move, like a curb or sidewalk or a foundation. On May 7th, we measured the Rebar, along the south side of the pond.

Reb 8-1 SW corner (pond edge to rebar top 41 3/4") rebar to adjacent wall 35' 8".
Pond bottom 34 1/2" to rebar.

Reb 8-2 Center (pond edge to rebar Top 42") rebar to adjacent wall 35' 3".
Pond bottom 34 1/2" to rebar.

Reb 8-3 SE corner (pond edge to rebar Top 38 3/4") rebar to adj. wall 36" 6."
Pond bottom 32"

Reb-4 There was a rebar placed along the east side of this pond in 2020 near the NE corner at 24" from the pond edge. On March 20, 2024, an inspection of this rebar was measured at 37" from the edge. (Today the rebar was measured top 30" from the Bank?) Bottom 23 1/2" from the Bank?



Pond #9/#13

Annual Survey
April 19, 2025

On April 18, 2025, the Entire Group visited the subject ponds about 2 PM, accompanied by Victor, our Community Irrigation specialist, to insert 4-foot sections of rebar as place markers in the two ponds. The rebar was driven into the bottom of each location at 36 inches from the bank, and 24 inch height from the exposed bottom. Each pond received Three (3) of these rebar sections along the area to be addressed by Pond Tech. It is anticipated that this will give us some idea if the bank continues to recede from the point of where the rebar was driven into the bottom. To ensure a constant, we also decided to mark the distance, from the inserted rebar, to a second point and that is a concrete object that will not move, such as a curb or a roadway.

It is currently anticipated that Pond-Tech Solutions will be on site shortly to complete an installation to reduce erosion on these two pond's south sides, per contract. As we proceed with marking other ponds, we will use the method and distances described above, and refer to this as the Rebar Technique.

*** we shall construct a list and inventory number of each piece of REBAR and that piece's individual measurements described above, and dated.

** To obtain exact measurements we used a 4-foot T-Square with a 22-inch blunt head. The measurement from bank to rebar was obtained by holding the 22-inch T against the bank, assuring an average along the irregular bank, back to the rebar. The second measurement was from the center of the rebar to the leading edge of a non-moveable surface such as a road, a sidewalk, light pole or a building.



Pond #9/#13 - cont'd

On April 20, 2025 we returned to these two ponds and re-measured the distances from the bank edge to the REBAR markers with a large T-Square (for a more accurate measure). The two ponds are being monitored on their south sides by 3 pieces of rebar spaced along that side. Measurements are from the bar to the TOP of the bank, as well as from the bar to the bottom of the bank where it hits the bottom of the pond.

All measurements are from the rebar to the top or bottom of the bank.

Pond 9 (south side) measured on 4/20/25

Rebar 9-1 (SW corner) Top $36\frac{1}{2}$ " Bottom $27\frac{3}{4}$ " Bar to Sidewalk 18' 10".

Rebar 9-2 (center) Top $30\frac{1}{2}$ " Bottom 20'14" Bar to Sidewalk 11'6".

Rebar 9-3 (SE corner) Top $35\frac{3}{4}$ " Bottom $26\frac{1}{2}$ " Bar to Sidewalk 17'1".

Pond 13 (south side) measured on 4/20/25

Rebar 13-1 (SW corner) Top $35\frac{1}{2}$ " Bottom $28\frac{1}{4}$ " Bar to Curb 57' 7".

Rebar 13-2 (center) Top $33\frac{3}{4}$ " Bottom 29" Bar to Curb 55'8"

Rebar 13-3 (SE corner) Top $35\frac{3}{8}$ " Bottom $32\frac{5}{8}$ " Bar to Curb 55'8"

In addition, we noticed several facts we were not aware of prior.

In pond 9 there is a Pipe about 15 feet south-east of the REBAR # 9-1. It is large possibly 36" in diameter and appears to be disconnected? Looks like it may run under our wall into the shopping center.

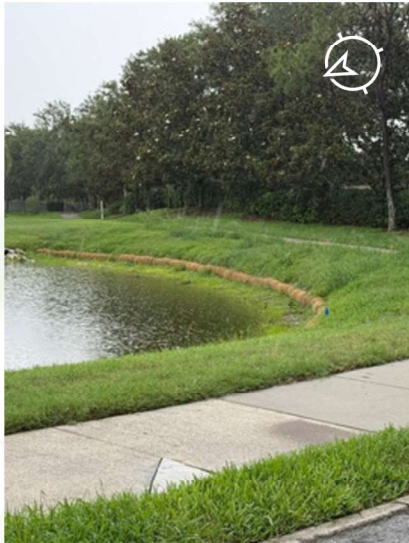
In pond 13 there is a roadway storm drain mid Bowen Falls Road that has a pipe leading into the north side of the roadway toward the mitigation area. Is this the drain for the pond as well, if so, where does the other end go?



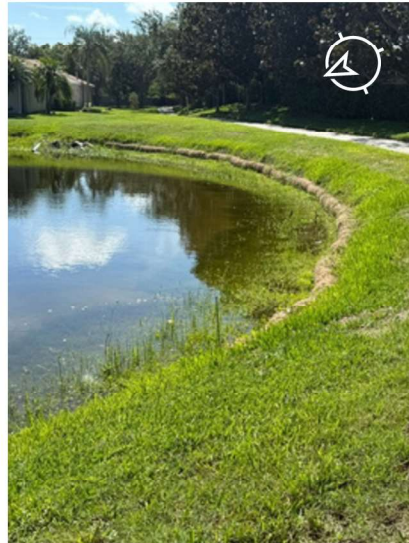
Pond #9



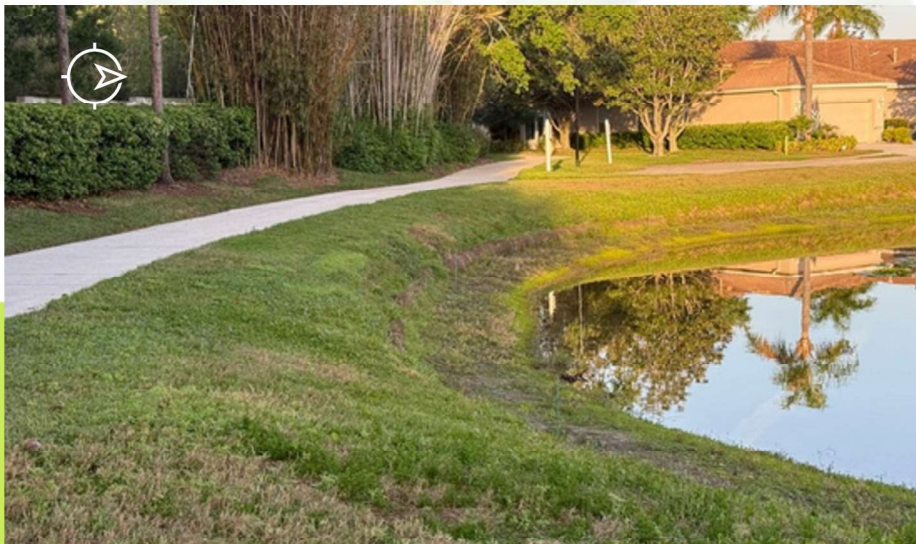
April 22, 2025



June 3, 2025



June 17, 2025



April 1, 2026

Pond #10

1st Visit

Annual Survey
March 28, 2024

Pond # 10 inspection on March 28, 2024. This is the first annual inspection since the original survey visit of May 24, 2023.

The pond shows signs of the erosion, progressing in a steady and possibly more aggressive pace. Since our last visit, the SW corner of the bank appears to have had a recent tree lost to the erosion; only a sawed-off stump remains, along with the above ground knot of roots. Along the south side where the residences abut the pond, the swales between the units 4211 and 4215, as well as between 4237 and 4233, are getting progressively worse and need pipes buried, as well as possibly catch basins installed. It is also noted that both these swales follow a 36-inch pipe from storm drains in the street into the pond.

We identified the problem pipes in detail in the original survey as well as the v-cuts that need work; nothing to correct any deficiencies previously identified have shown any corrective activity to date of this visit.



Pond #10

2nd Visit

Annual Survey
May 17, 2025

Pond # 10 was inspected by members of the Pond Group on May, 17 2025. Very little has changed since last March's report. The North side of the pond, bordered by the clubhouse and sidewalk, needs the pipes from the 2 downspout pipes, off the SE corner of the Clubhouse to be buried under the sidewalk and into the pond.

** It was observed that a seriously raised sidewalk slab which needs to be replaced is in proximity to the path of the needed drain. When the sidewalk section is replaced, the opportunity to bury the drain should not be missed. **

The Eastern side of the pond retains a strong rim with no discernable current erosion issues. The Southern side is flanked by the rear of 16 villas. Several owners have buried their pipes but several are continuing to cut the pond edge. See the 2023 report for who still needs to bury pipes. As reported earlier, between 4211 and 4215 Cascades could use a catch basin where the swale between them passes beyond the buildings. The SW corner of the pond evidences the stump of a tree lost thru erosion? It is not obvious that any abutting owner has taken any more corrective action since our last visit.

On May 8, 2025 we placed 2 pieces of Rebar along the west bank, for purposes of continuing follow up. The bottom of the pond was not accessible for measurement. (it is always full).

10-1 (NW stake) Pond edge to Rebar 17 ½", Rebar to sidewalk 25' 4".

10-2 (SW stake) Pond edge to Rebar 25 ¼", Rebar to sidewalk 28' 5".



Pond #10



May 17, 2025



April 8, 2026

Pond #11

1st Visit

Annual Survey
May 5-7, 2025

This report will focus on the south side of this pond. In 2020 a strip of Rebar was driven into the bottom of this south pond side 24" from the bank. The 2023 survey measured that rebar at 38" from the bank; however, there were now two pieces of rebar present, not one. In late 2023, a small test of plastic drain bars was authorized by the BOD to be installed in the southern bank. These are exactly the same as the planks recently inserted in ponds 9 and 13 by PondTech. On inspection, an end of a drain plank was observed protruding, near the center of the south bank between Rebar #11-2 and 11-3. In addition, the erosion along the sidewalk continues to get worse, and it appears that water from above is starting to undermine the sidewalk itself.

On May 5th, we placed 2 pieces of rebar along the south side of the pond on either side of the 2 pieces mentioned above.

On May 7th, we took measurements of the location of the 4 rebar strips, relative to the pond edge.

Pond 11 South Side

Rebar 11-1(SW corner) Top 38½", Bottom 424", Bar to sidewalk 13' 7".

Rebar 11-3 (SW center-old) Top 42 3/8", Bottom 18 ½", Bar to sidewalk 13' 11".

Rebar 11-3 (SE center-old) Top 23½", Bottom 5 1/2", Bar to sidewalk 12'.

Rebar 11-4(SE corner) Top 47", Bottom 35 3/4", Bar to sidewalk 12' 6".

** Note: Plants along the back wall may help reduce runoff that is undermining the sidewalk.



Pond #11

2nd Visit

Annual Survey
August 11, 2025

This report will encompass the balance of pond 11 from part 1. Part 1 of this report dated May 5-7 reported on the staking with rebar of the South Pond side.

On August 11, 2025 members of the Ponds working group visited this pond to survey the entire pond. First, we found the pond during our wet season, and full of water. We could not see the inside pond profile. During this time of year, the littoral shelf of the pond hosts innumerable incidental grasses and weeds that will eventually drown as they are not aquatic plants, but incidentals that had found moisture during the preceding dry season, and will be gone by early fall. With that said, we reviewed the pond's south side and could only locate 3 of the 4 rebar we had earlier implanted for measuring purposes. Rebar 11-3 was most likely under water or hidden in the aforementioned grass and weeds. Otherwise, the South side exhibits as we left it earlier in May.

The other 3 sides of the pond: North, East, and West, are basically as described in our full report of March 2023, except that, without exception, the erosion and size of the pond cuts, at the pond edge, were much worse than noted 2 years ago. Several more pipes had been buried, but no effort to remediate the cut damage is evident and some are so extensive as to impact grass cutting and hazardous walking conditions.

We need to notify the owners of the listed property, identified in 2023, to bury their pipes now and afterwards remediate the pond edge damage. We recently filled a serious cut in pond #12 that was identified by the BOD as a hazard. There are cuts in this pond that are approaching the seriousness of that area we just remediated. There are also several between buildings swales that could use catch basins to divert water toward the pond. These issues were outlined in the original 2023 survey.

TO DO: Residents need to bury pipes, so we can remediate and eliminate walking hazards and grass cutting problems.



Pond #11

3rd Visit

Annual Survey
October 11, 2025

Members of the Ponds Group visited this pond today, with a work proposal from the vendor PONDTECH SOLUTIONS in hand. Using the proposal as a starting point we discussed a strategic plan to remediate and repair the entire pond.

The photos and graphics clearly delineate the problems and damage present along the pond edge. The South and East side of the pond up to the proximity of the SW corner of 8236 Reynolds Falls Court, seems to us a perfect fit for a beam drain system as earlier employed in ponds 9 and 13. The two northern pond corners where the A&C swales intercept the pond, could benefit from the same system after the surrounding down spouts are all buried. The West side of the pond units need to bury the pipes from the remaining 20 or so units that remain unburied. As to those units without gutters, they need to resolve a method to retard erosion from the uncontrolled runoff from their roofs. Then that west side should be remediated with rock/sand/sod at the pond edge and the swales. This is our first pond since #8 where we are working in private backyards and we may find our experience with pond 8 helpful here.

We think once we have a plan above or another agreed to by the Board, that we need a meeting/ workshop with all the owners of the lots surrounding this pond as well as the Board representatives to discuss costs and responsibility of the owners and the community. That meeting should be ready to discuss the issue of the erosion caused by roofs not provided with gutters etc.

In inspecting the pond today, it becomes more and more obvious that the pipes need to be properly buried to take away the volume of water runoff from the roofs. It is also obvious to us that without gutters and buried downspout, there is no way to control the runoff from the un-guttered units.

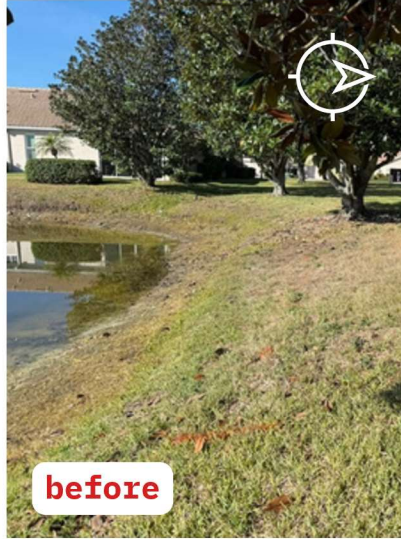


Pond #11 - North Side



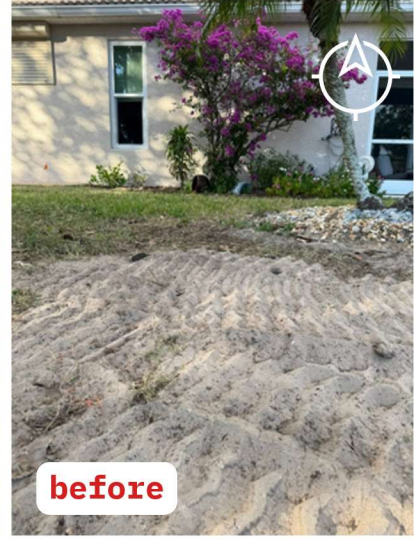
before

Sept 10, 2025



before

Jan 6, 2026

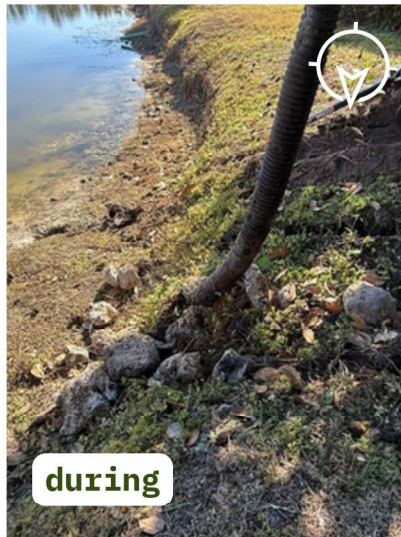


before



during

Jan 6, 2026



during

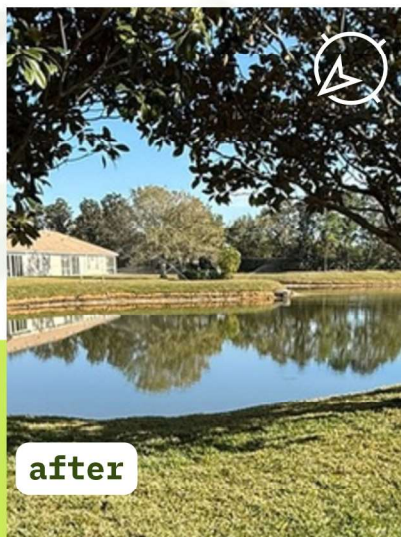


during

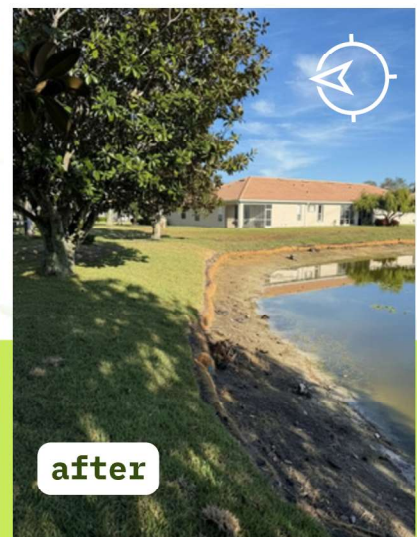


after

Jan 29, 2026

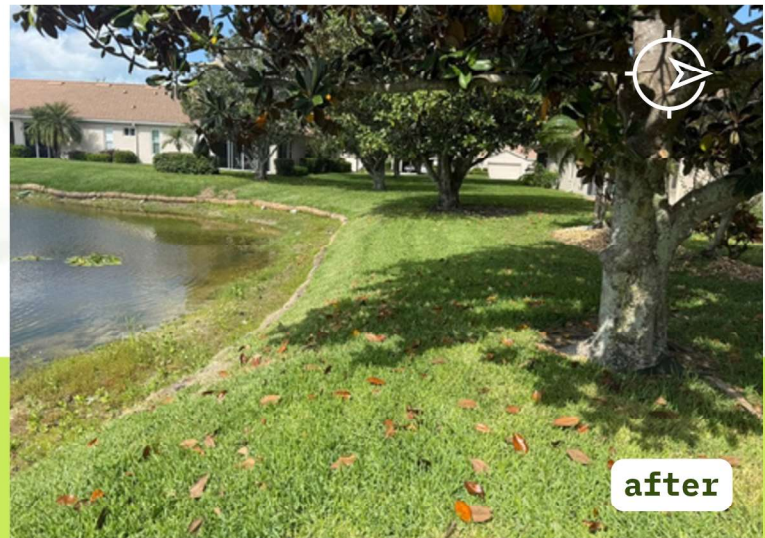
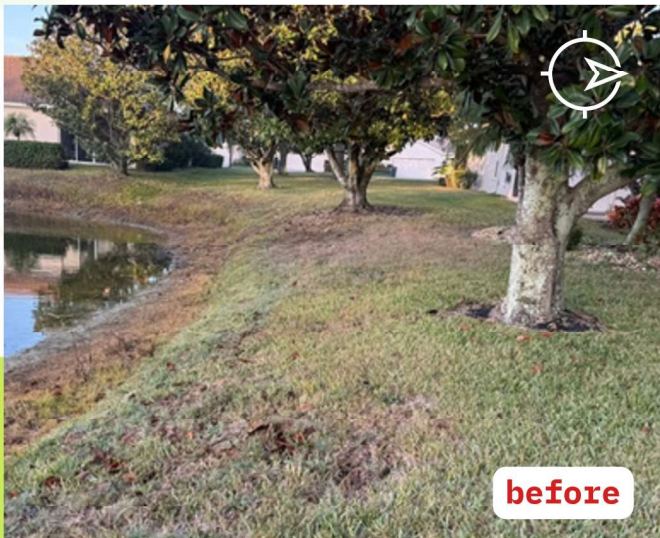


after

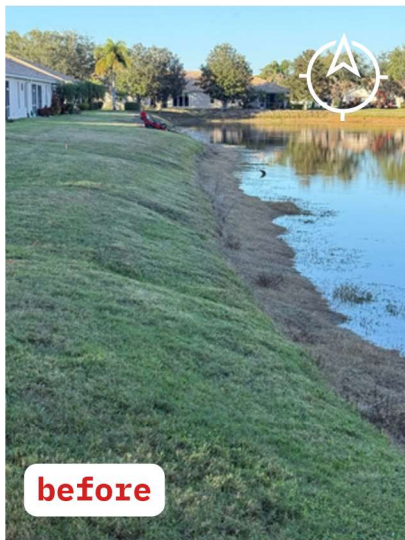


after

Pond #11 - North Side



Pond #11 - West Side



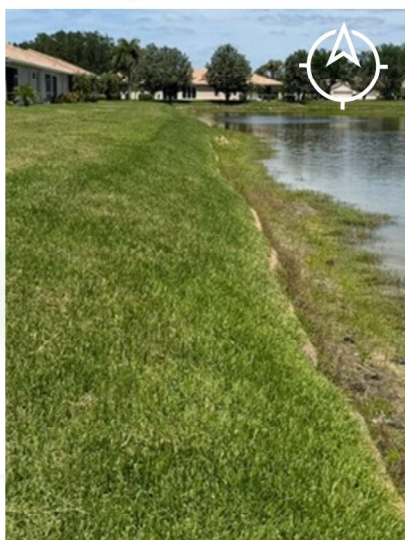
Jan 6, 2026



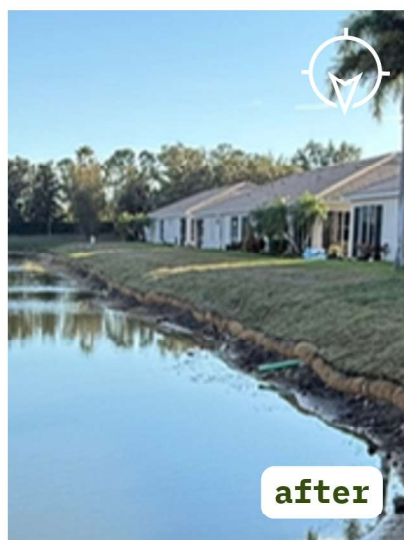
before



before



April 13, 2026



after

Jan 29, 2026

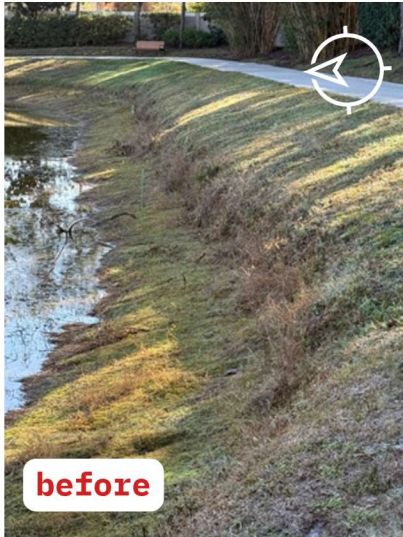


after

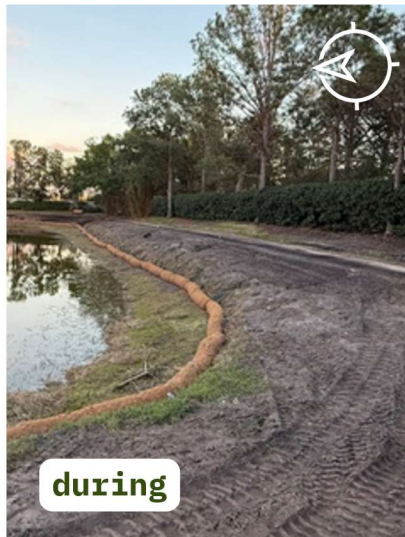


March 6, 2026

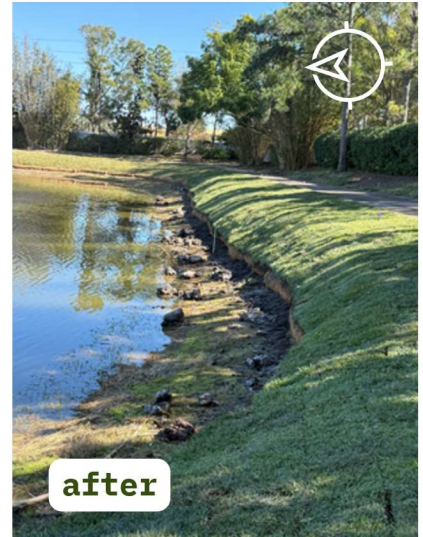
Pond #11 - South Side



Jan 6, 2026



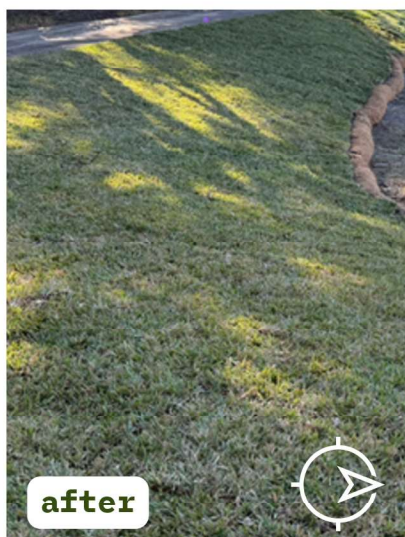
Jan 10, 2026



Jan 16, 2026



Jan 6, 2026



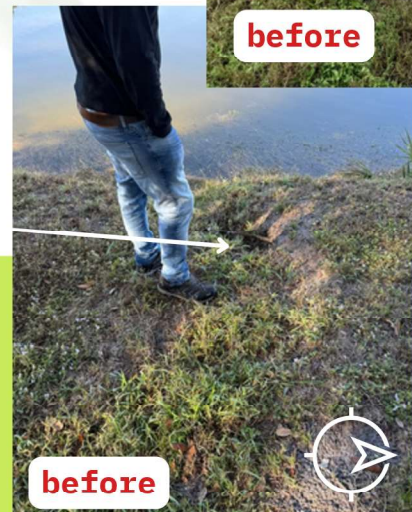
Jan 16, 2026



before



Jan 6, 2026

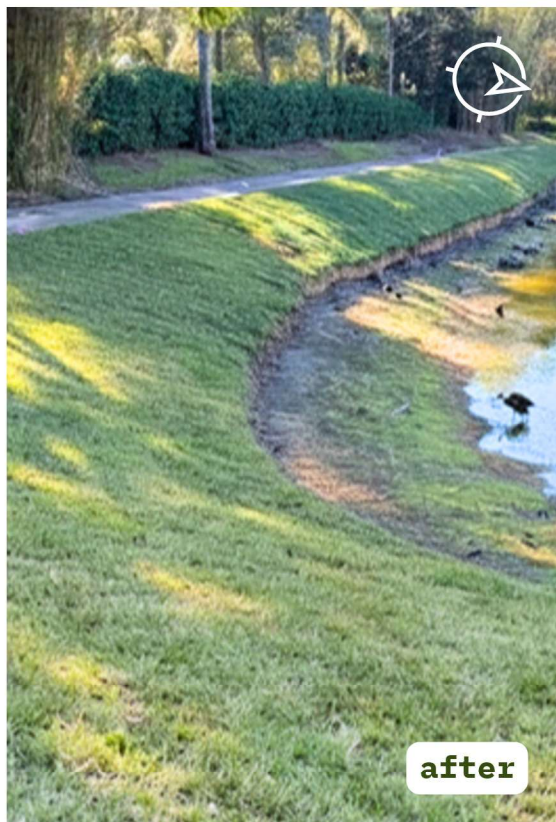


before

Pond #11 - South Side



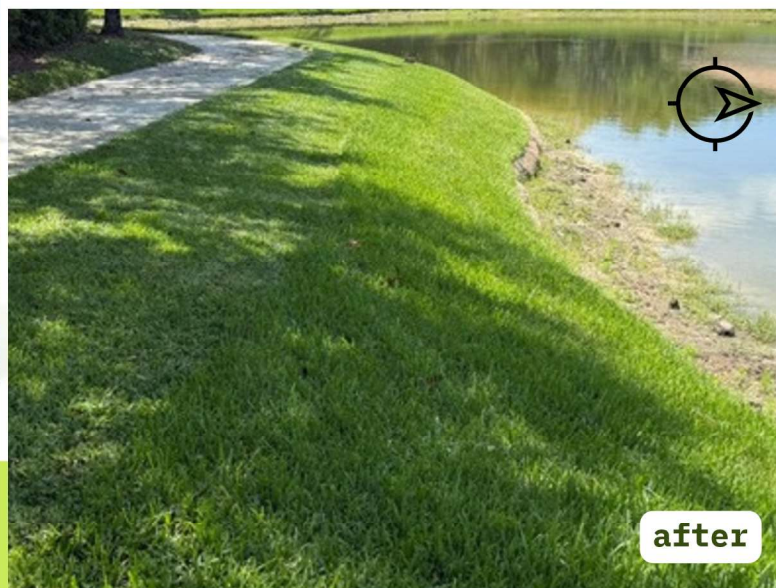
March, 2023



Jan 16, 2026



March, 2023



April 13, 2026

Pond #12

Annual Survey
July 12, 2025

This survey was conducted by the Ponds Working Group on July 26 2025. This pond was last inspected 28 months ago. This review was conducted during our wet season so the banks and bottoms were only partially visible. A repair to the west bank had been completed the previous day. The repair consisted of filling and sodding over a wide cut at the pond edge that was deemed by the Board to be a serious hazard. The repair was at the pond edge between the residences at 4155 and 4151 Cascades. It was not obvious what was used to fill the depression but the work was professionally completed by the contractor PondTech Solutions. This area was identified in the 2023 report, but it had progressed to the point that it hindered grass cutting, and posed a hazard.

The overall impression of the reviewers was that the pond was sustaining ongoing erosion as outlined in our previous report. The pond edge area, like all previously noted areas were in worse shape than outlined in our previous report. Not much had been done in the intervening time to bury pipes, fill holes or do anything else. The short yards were working with the rain to dissolve the yards even from the non-guttered roof run off. Several new cuts were noted, including one between 4163 and 4165 Cascades that was not present in 2023. Without exception all those noted areas earlier were worse now. There are at least 2 more cuts in the banks that are almost as bad as the one filled yesterday.

In our opinion, the east and west banks, could in 4 or 5 areas benefit from the type of repair made at 4155. However, the south side of the pond needs to be completely rebuilt. The banks need a drainage system, backfilled and sodded. From 4105 on the SW corner to 4143 the 14 back yards are 8-10 inches lower than the other sides of the pond and continuing to wash away. It would seem the PondTech Solutions would be an excellent fix for the south side.

Evaluation: Pond needs work sooner rather than later, particularly the south end and major voids.



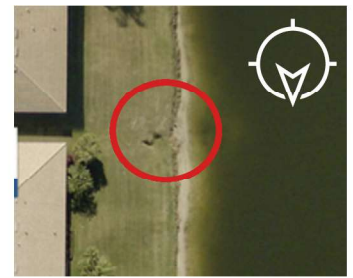
Pond #12 - East Side



July 1, 2025 -
Between 4151-55 Cascade



July 17, 2025



Satellite Image Jan 2025



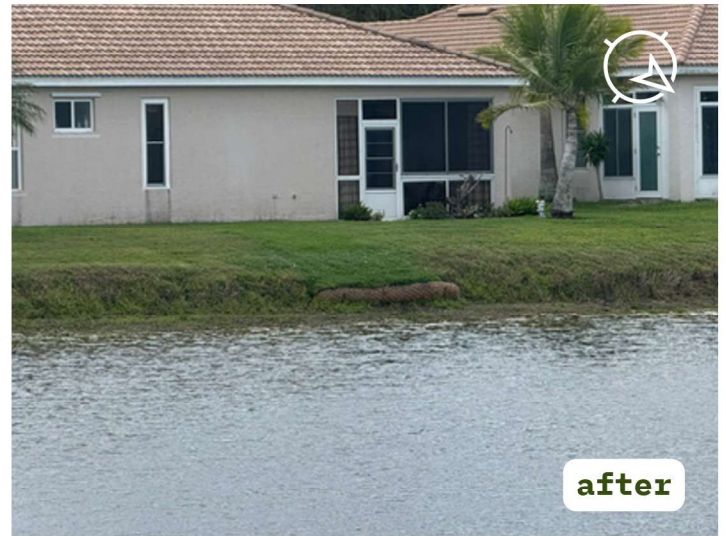
April 8, 2026



Pond #12 - South Side



Oct 15, 2025 - Behind 4117 Cascade



Oct 15, 2025



Feb 20, 2026

Pond #13

Annual Survey
March 28, 2024

Pond #13 inspection on March 28, 2024. This is the first Annual Inspection of this pond, since the original survey visit of April 3, 2023. During today's visit the water level in the pond was considerably higher than a year ago during the original survey. There were, however, several marked differences noted during this visit.

Starting in the Southeast the noted rebar could not be located. The cut adjacent to the former rebar caused by the flow from the Blvd. above, is dramatically more pronounced. It also appears the runoff is collecting debris and depositing that debris into the pond near where the stake was located. The debris is intertwined with new plants/weeds that are starting to get established in the vicinity. The cut needs to be filled, and a deterrent to cause devised. With the higher water level, it is difficult to determine if part of this bank has merely collapsed and taken the rebar with it. This is another example why rebar is not necessarily a good choice for long term measurement purposes.

Moving up the South side of the pond shows continuing erosion along the bank. In the past we have lost trees along this side, and the erosion is getting uncomfortably close to the above road bed. The West side of the pond is behind the three original model homes with the pipes buried by the developer. One of the 6" corrugated pipes that is leading gutter runoff from a shared pipe was apparently anchored at the end to the bottom of the pond. This pipe has broken loose, and its end is now floating loose on the ponds surface.

The Northern side along Bowen Falls Place evidences no change since last year.

Please also refer to report under POND #9



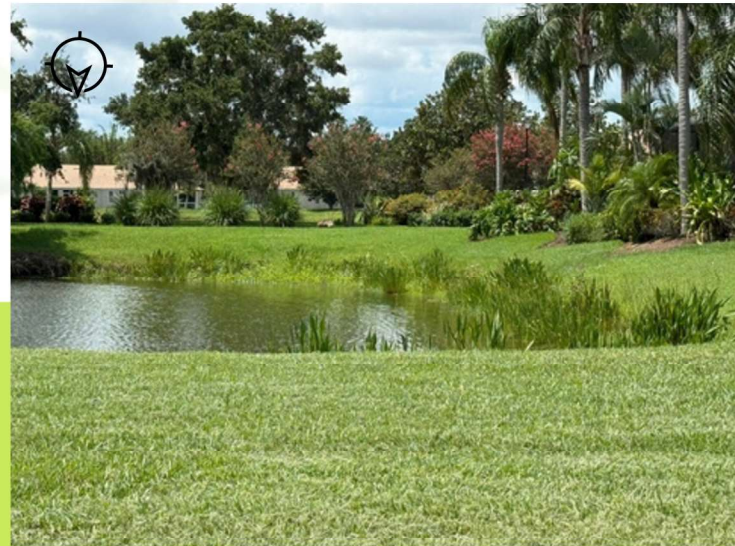
Pond #13



Feb 4, 2025



April, 22, 2025



June 3, 2025

Pond #14

1st Visit

Annual Survey
May 5, 2025

This report will discuss the south side of this pond, specifically action taken to measure ongoing erosion at the south end of the pond. At the time of the 2023 review, there was Rebar present and it was being monitored; however, in the interim, the bank collapsed and it took some of the rebar with it. On May 5th, we reintroduced Rebar to the south side, and on May 7th we measured its placement as follows.

Rebar 14-1 (SE Corner Old) Top 34", Bottom 24 ½", Bar to lamp Post 28' 3".

Rebar 14-2 (Center New) Top 42 ½", Bottom 28 ½". Bar to transformer base 34'10"

Rebar 14-3 (SW corner) Top 40 ¾", Bottom 28", Bar not close enough to an object.

This bank and where it wraps around the Eastern side faces an extremely sharp drop in the pond center. Where this bank collapsed the material has been completely washed away. It is hard to imagine any technique but a heavy bulkhead, that will hold back this area from eventually sliding away into this pond.



Pond #14

2nd Visit

Annual Survey
August 20, 2025

Part one (1) addressed the south side of the pond, see Part 1 May 5, 2025.

On August 20, 2025, members of the Pond Working Group continued and completed this pond's annual survey. We noted no changes on the south side, since our last visit. We proceeded up the east side of the pond, which has 24 single family units bordering the water way. The rear of all 24 face the water. It was noted that with the exception of the first few lots (#8235-8229), all the rear yards are lengthy, allowing the grass between the buildings and the pond edge to absorb much more runoff than the shorter lots. It is also interesting to note, as many roofs do not have gutters, as do on this pond.

Since our last visit pond edge cuts have developed from 5 swales between homes, some have gutters, others do not. One of the cuts may also be partially caused by a leaking irrigation line. Otherwise, the serious problems are at the southern side of the pond. (see May 5, 2025 report). The referenced edge cuts from swales are behind units; (8223 and 8219), (8183 and 8179), (8179 and 8175), (8175 and 8171), (8167 and 8163) Stirling Falls Circle. The cut at 8175 is deep with a length of exposed 3- or 4-inch white PVC pipe. The opening was dry when we visited, but the irrigation system was not on at that time. Further up the pond, both 8135 and 8139 have buried pipes, but earlier, the pipes or the swale between the home caused a good size cut or hole at the joint pond edge that needs to be remediated. It should be noted that all these identified cuts are at the pond edge between 1 and 2 feet deep, and were not noted on the 2023 survey.

The North and Western side (Along the west property wall), do not, at this time, evidence any cuts or serious erosion. Photos were attempted showing the newly found swale cuts at the pond edge.

LATE FEB 26 MAJOR BANK COLLAPSE

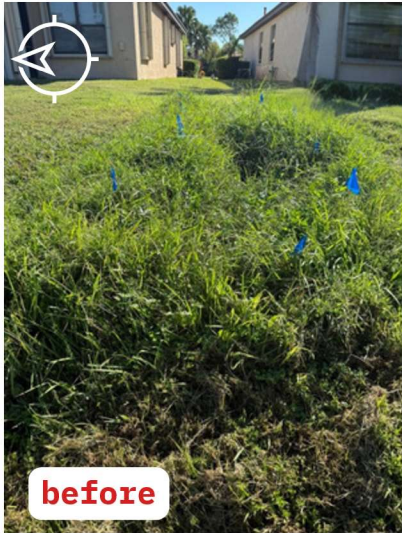


Pond #14 - West Side

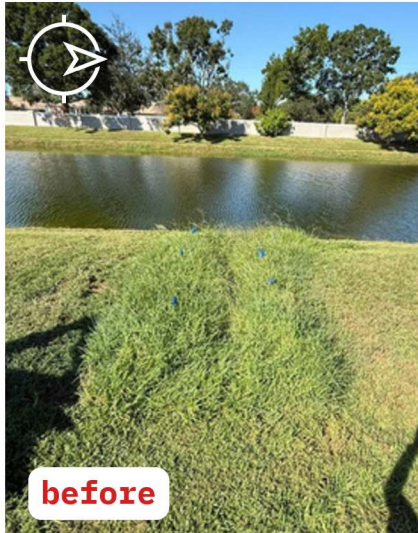


Oct 15, 2025

Pond #14 - East Side



Oct 15, 2025 - Behind 8179 Stirling



before

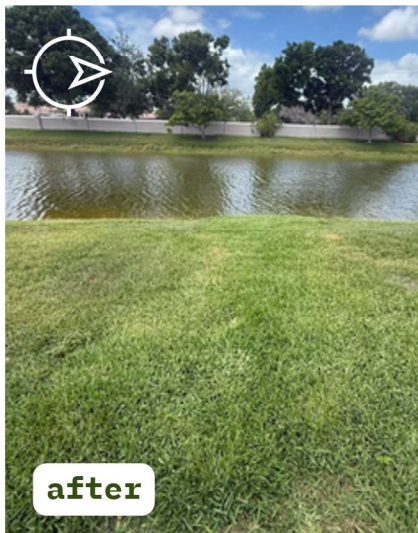


before

Jan 20, 2026



after



after

April 8, 2026 - Behind 8179 Stirling



after



before

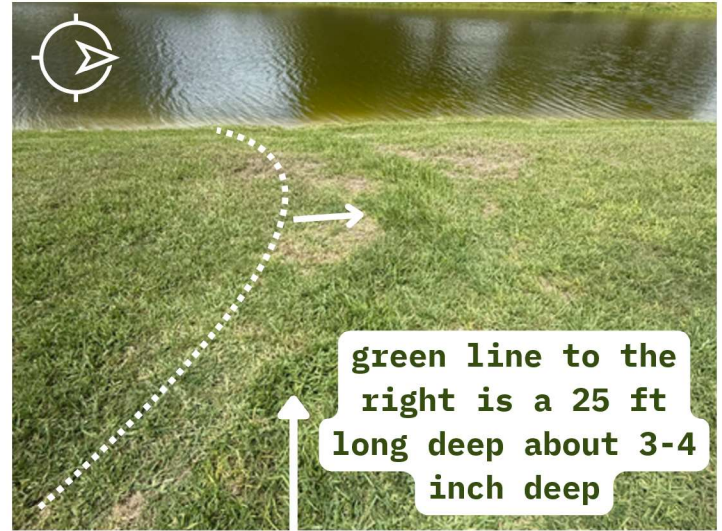
Oct 15, 2025 - Behind 8175 Stirling



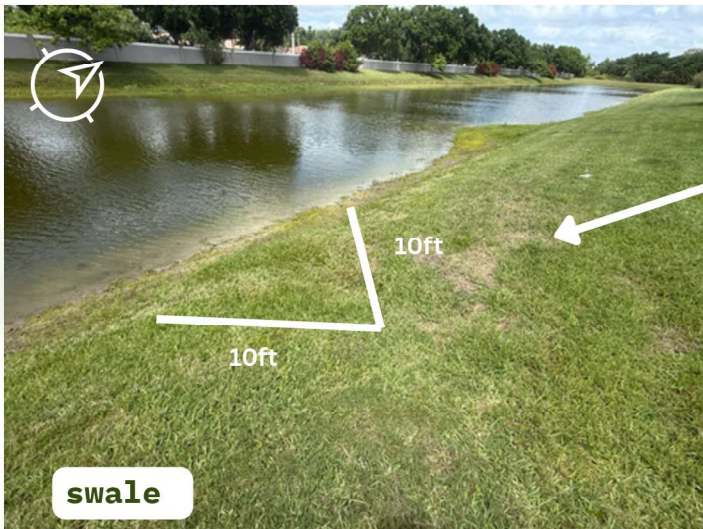
after

April 8, 2026

Pond #14 - East Side



April 8, 2026 - Between 8171 and 8167 Stirling



April 8, 2026 - Between 8167 and 8163 Stirling



Aug 8, 2024 -
Between 8163 and 8159 Stirling

April 8, 2026

Pond #14 - South East



Sept 18, 2023 - Behind 8227 Stirling

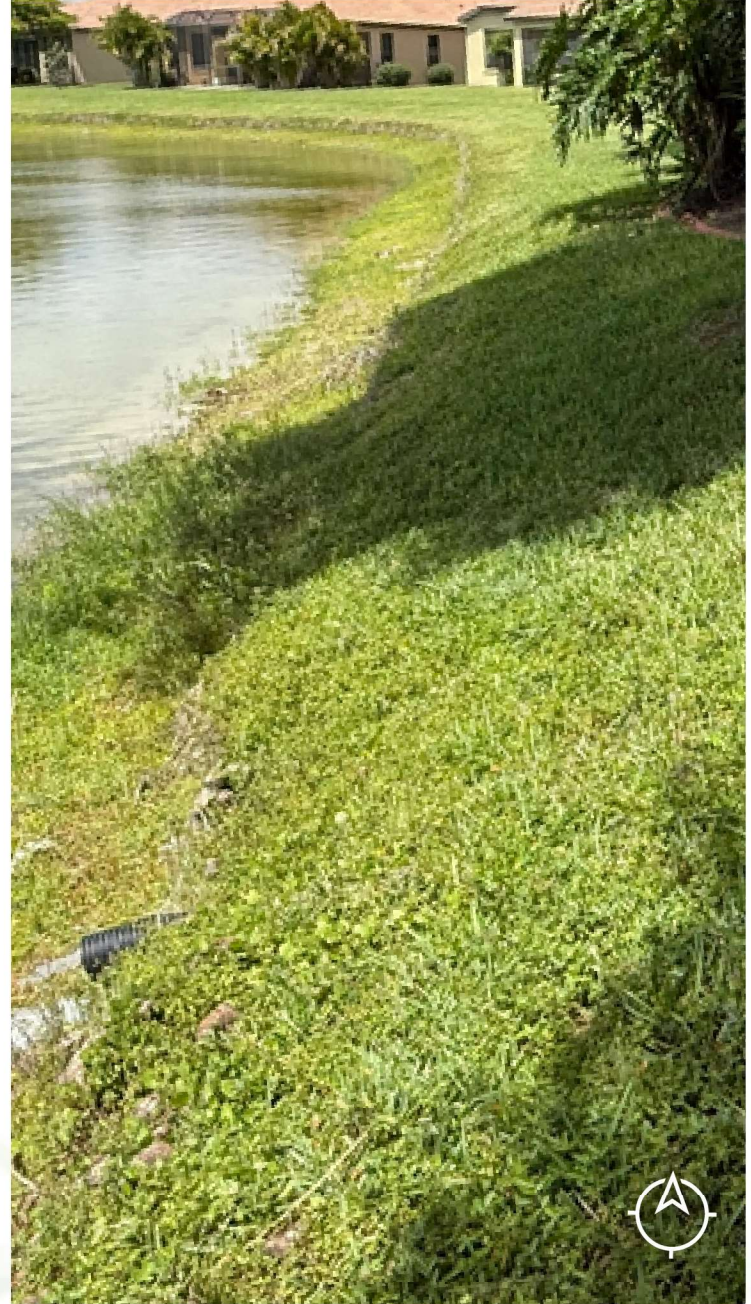


Sept 18, 2023
Mower in the pond



Aug 5, 2025

Pond #14 - South East



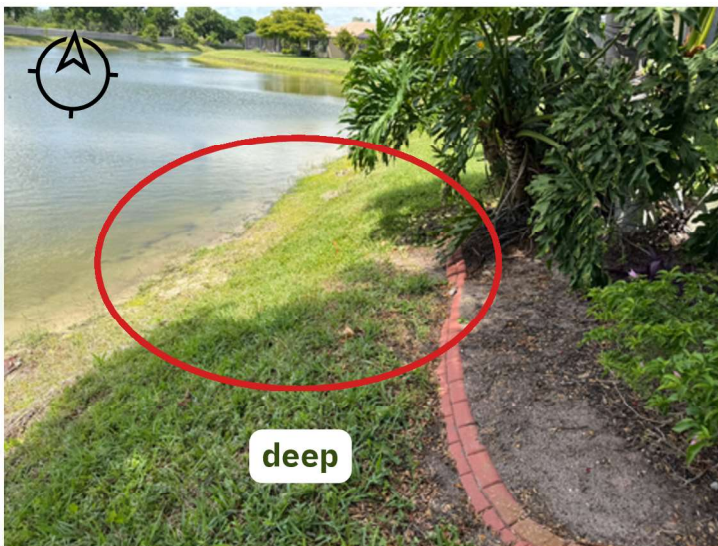
2017 Vs 2026 - Behind 8227 Stirling - Significant erosion

Pond #14 - South East

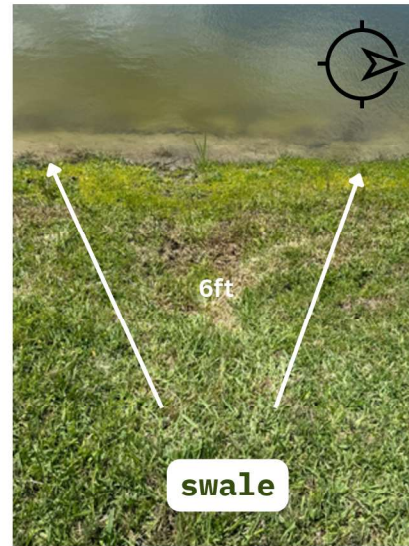


curbing are breaking due to erosion

April 9, 2026 - Behind 8227 Stirling



deep



swale

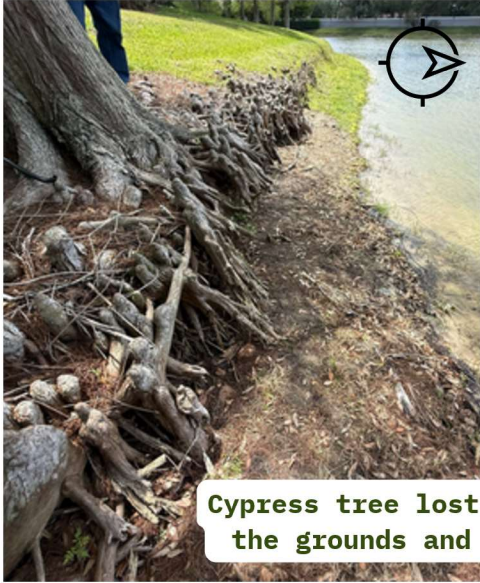
April 9, 2026 - Behind 8227 Stirling 8219-8223 Stirling



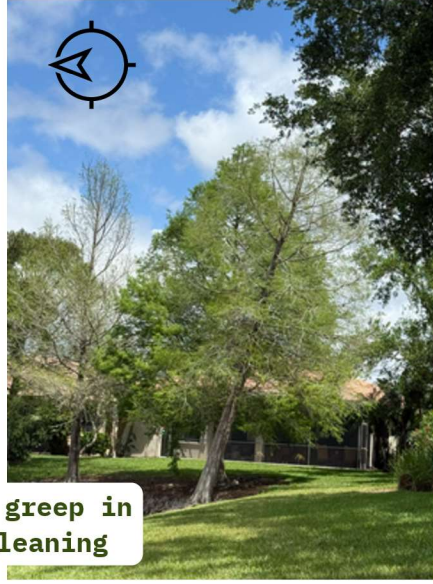
significanton erosion

April 9, 2026 - Behind 8227 Stirling

Pond #14 - South Side



Cypress tree lost grip in the grounds and leaning



Rebar installed 24" in 2020 and now is 38" from bank

April 9, 2026 - Behind 8231 Stirling



significant erosion



April 9, 2026 - SW Corner



exposed roots



Palm roots holding bank

April 9, 2026

Pond #15

1st Visit

Annual Survey
March 20, 2024

Pond 15 inspection on March 20, 2024 Annual review by B. Pezzimenti and D. Dorn, accompanied by BOD member Diane Pezzimenti. This pond had been surveyed on April 2, 2023, 4 months after Rip Rap had been applied to the north side of the pond. This work was done to secure the adjacent wall off the side and rear of the adjacent monument (waterfall) pile, as well as to eliminate erosion caused by runoff down the rear of the berm, separating the pond from the Boulevard. We still need several areas along the South side of this pond repaired, as well as a stabilization plan for that south end. Ground cover seems a good /possible solution.



Pond #15

2nd Visit

Annual Survey
May 13, 2025

On May 13, 2025, members of the Ponds working group visited this pond, and reports as follows:

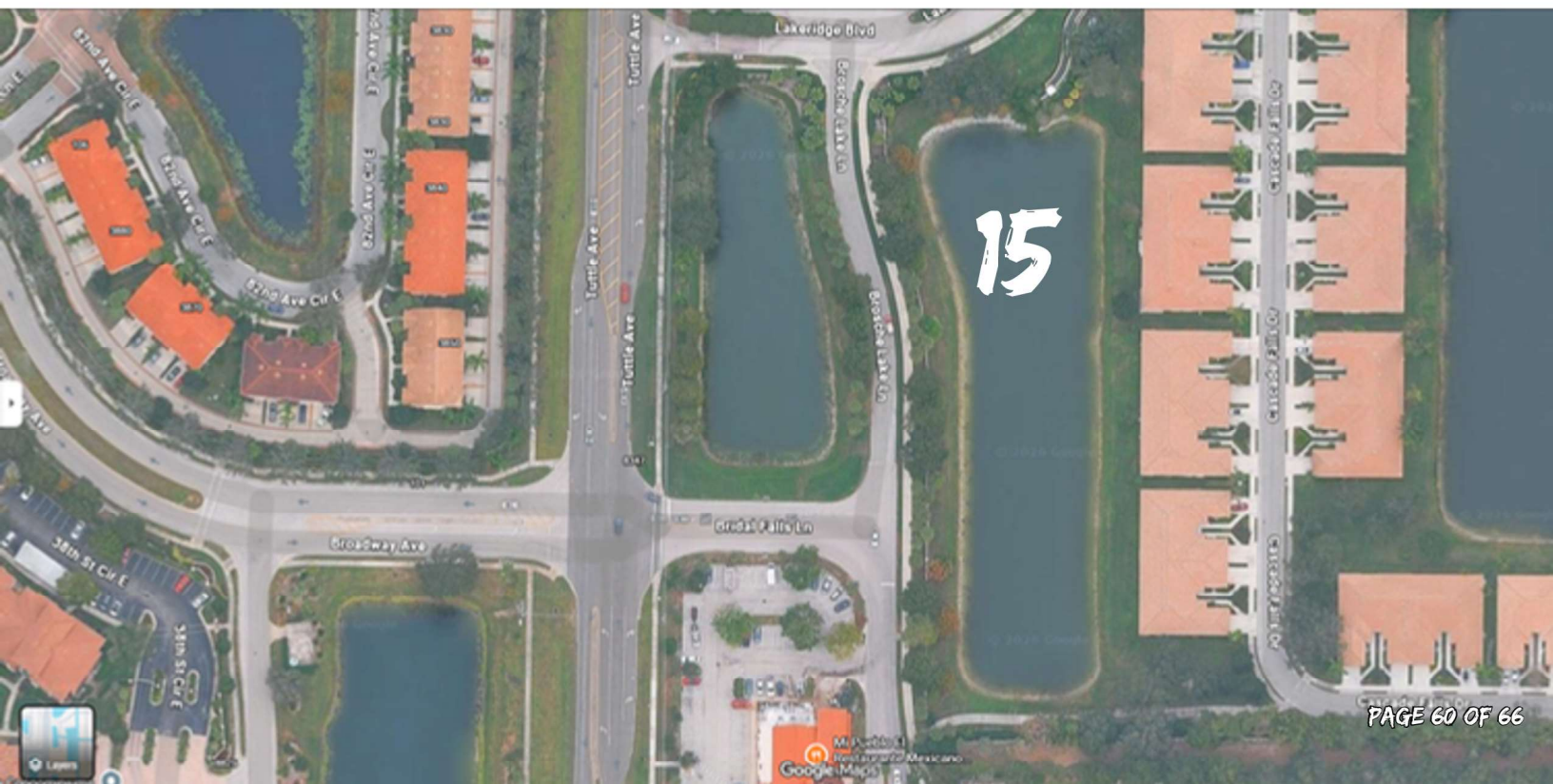
The Rip Rap installed along the Northern Bank has surprisingly held up well. Some of the rocks have settled back, but they seem to be doing their job. A healthy rim edge is in place above the rocks and there appears to be little material working down and thru the Rap area.

Each time we visit this pond (when the water level is so low as it was on this date), we find the pipes entering and exiting here more perplexing. It is not clear if this pond's overflow exits east to pond 12, or west to pond 16.

During this review, it was noted that: (1) a large pipe enters the pond from the west side across from # 4032 Cascades. This pipe possibly connects to the East side of pond 16 running directly under the west wall. (2) There is also a large catch basin outside the back gate that seems to be catching road runoff; it appears to be aimed into another large pipe entering the west side of the pond, just north of the same gate. (3) There is also a large swale along the rear of the shopping center's back parking lot, incorporating a large catch basin that is close to the SW corner of our wall. This is most likely feeding the large pipe visible entering the pond from a point along the southside of the pond.

Earlier suggestions of filling in the cuts and gullies at the corners on the south side and putting in ground cover could be all this pond needs. The 16 units on the eastern bank now have two units with buried pipes. There is NO obvious run of from the buildings causing erosion at this time.

Severity Rating Low



Pond #15



May 13, 2025
North side of the
Pond, behind
Waterfall



April 1, 2026 - Southwest side of the pond

Pond #16



swale at the west side of the pond



brosche lane

March 17, 2023



Mitigation Area

This is our initial survey of the mitigation area.

On June 7th 2025, members of the Ponds Group inspected the mitigation area. The nexus of this report is the common area surrounded by Stirling Falls Circle, Bowen Falls PI and the LRF Boulevard, which is maintained by the community under the supervision of the SW Florida wetlands commission. (See attached map.) The mitigation area itself is surrounded by a strip of common property that is maintained by the community, under rules as well called the "Buffer" zone. In Circa 2017, the Roads and Grounds committee recommended that the Buffer zone be tidied up and replanted, so as not to look like an unkept wild area, and provide a suitable aesthetic for the community. The BOD agreed and authorized the committee to solicit a proposal at that time. The work was done in stages. In the fall of 2020, ACI cleaned out the buffer area with several large pieces of equipment that turned the strips overgrown foliage into mulch. The plan was to then replant the strip with a layered look of suitable plants, and/or ground cover. It took several years to both plan, as well as accumulate funds, but in early 2025, we had ACI plant \$12,000 worth of plant materials in the buffer. The plants were approved by the committee, as well as by Southwest Florida Water Management District (SWFWMD). The plantings included a first line of special grasses a second double line of Plumb shrubs and a back layer of maple trees: hence, the layered look.

Our weather during the first 5 months of 2025 had been bone dry; actually, drought conditions were the official weather reporting. On or about the last week in May, the weather changed and we made up in about a week the rain shortfall for the preceding 5 months.

Surprisingly, the new vegetation planted in January was in some respects in better shape than we expected. The area remains open and free of weeds and unwanted grass. The specialty grasses in the front of the plantings look as vital and fresh as they did when planted. The plumb bush plantings, although a little rougher, in our estimate, are about 90 % fine and coming back. The shade seems to have helped keep many plants from cooking and turning brown, but, as just stated, most will be fine with more rain expected. The Maple trees have not fared very well. More than half are either gone, or broken off, several inches above ground. This could also be evidence of animals eating the little foliage during the drought.

We surveyed the area and drew the attached rough map. We plan to revisit this area in the next (6) six months, and make an evaluation as to the initial loss of new plantings, and make a recommendation at that time. We will also include the mitigation area in our every 6-month survey and report as we will do with the ponds.

We noted that several large overgrown trees were recently culled from the buffer. The drains shown on the attached map were clear of any problematic live or dead foliage, and open and working.

***No action to be taken at this time.

Mitigation Area



Mitigation Area



Thank You



Ponds Working Group (PWG)

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