

## WHAT HAS BEEN ACCOMPLISHED?



Standard maintenance has included the application of chemicals to mitigate algae and lately invasive creeping primrose. Other standard maintenance efforts have included, but not been limited to, repairs to the circulating pump, replacement of two of the concrete street drains, resealing the weirs and fixing a leak in the spillway on pond 7.

- Starting in the later **2000s** increased sediment build-up became a concern especially in ponds #1, #2, and #3. The shallow ponds were becoming the perfect environment for increased algae growth.
- **Pond #3** Sediment had accumulated creating what was often referenced as “the mud flats.” Weeds and cattails took over the area, creating a very unsightly mess and causing concerns over mosquito breeding areas.
  - Pond 3 is 0.32 acres. The northern half of this pond is much shallower than the southern portion. The pond receives water from several sources including a weir from pond 2, a stream flowing into the pond from Winslow Woods north of the pond, a street outlet pipe, and several residential stormwater outlets.
  - Bids were obtained to dredge the area close to the bridge and install a rain garden.
    - Two bids were submitted: one for \$35,000 and another for \$88,000.
    - However, a vote to approve the project failed at the WFCOA annual general meeting.
  - Until 2019, the project languished for lack of attention, when an excavating contractor was hired to dredge the area for two days at a cost of \$5,000.
    - Some topsoil was saved and was used to fill in a small inlet that captured waterflow preventing it from flowing through the pond.
    - However, this attempt removed only about 3 feet of muck in a limited area. During the ensuing winter some of the sediment washed back to the area.
  - In the fall of 2020, another somewhat inconsequential attempt was made to excavate the area. Progress was again limited to the amount of work that could be completed for \$5,000.
  - The majority of pond #3 still needs to be dredged.
  - Pond #3 has eroded the bank behind one of the Moss Creek HOA units. There is no room to walk between the unit and the pond. It is even next to impossible for the landscapers to access the area to remove tall weeds. During heavy rains the water flows under the porch, threatening the supports. **This is a serious situation that requires urgent attention.**

- In **2015** the sediment in **ponds #1 and #2** was vacuumed and trucked away. The old liners were removed, and new liners were installed.
  - Pond #1: The pond is approximately 0.11 acre. Three aerators were installed in the pond to create adequate mixing for improved dissolved oxygen levels.
  - Pond #2: This pond is approximately 0.10 acre.
  - In the fall of 2016, a product called Flexamat was installed around the banks of both ponds to prevent erosion and create an attractive plant barrier around the perimeter. Flexamat is designed for exactly this use.  
Unfortunately, efforts to seed the Flexamat with grass were not successful. The Davey Resource Group identified the root cause is that fill soil was under the Flexamat and above the liner rather than topsoil. Also, an insufficient amount of depth of soil was placed below the Flexamat on top of the liner. Since then, attempts have been made to seed with wildflowers and to plant “plugs” of flowers. The results remain rather dismal. Some weeds have taken hold, but overall, it is not what was anticipated.
  - The cost for the two-pond project totaled \$97,000 including the installation of the Flexamat. This was more than the WFCB Board had planned because the selected company could not provide an accurate estimate. They did not know how much sediment they would be removing, and how long it would take. No bathymetric study was completed to provide an estimate for the project.
  - The combined size of the two ponds is 0.21 acres. The combined area of P1 and P2 is less than the area of pond #3 (Pond 3 is 0.32 acres.)
- June **2017**, after problems with the liner floating in pond #2, all the weirs were examined and resealed to prevent loss of water in the pond system. Resealing the weir corrected the floating liner problem in pond #2.

[Davey Resource Group Report](#) In **2018** the WFCB Board contracted with **Davey Resource Group** to create a plan that will “address short-term needs of the system as well as establish a long-term management strategy”.

[Hydrologic/Hydraulic Study](#) In **2019** WFCB contracted with Bledsoe Riggert Cooper and James to conduct a **Preliminary Hydrologic/Hydraulic Analysis**. Mr. Andy Knust submitted the report in April.

[The Conceptual Design Report submitted by Mr. Andrew Knust, P.E](#) In **2020**, the WFCB commissioned Bledsoe Riggert Cooper and James to create a report that would improve pond aesthetics and maintainability, reduce the prevalence of algal blooms and other water quality issues, and control shoreline erosion. The recommendation in this report were specifically aimed at the mainline Ponds 3 - 7 and provided a comparison between two options. **Mr. Andrew Knust, P.E. presented the final Conceptual Design** to the WFCB Board in the Spring of 2021.