DRAFT

SPECIAL ASSESSMENT PROJECT ADVISORY COMMITTEE REGULAR MEETING

OCTOBER 19, 2021 4:00 PM - WATERVLIET TOWNSHIP HALL/ZOOM

Agenda/Minutes

Roll call, Introduce

Public comment time will be at the end of the meeting, please limit to 3 minutes, time is non-transferable. Response from the committee may be today or at a later date. Guests may record the meeting. Guests will be on mute during the meeting.

Masks are optional for those who are fully vaccinated

Rick Hoffman is a new member of the board, replacing Mary Spessard.

Approve minutes of last meeting – August Minutes (September meeting was cancelled) Minutes approved

Reports

- Financial: Year to date expenditures
- Communications

Old Business

- Fish stocking Project Update from Bryan Duffield
 - 1,850 walleye were stocked in Paw Paw Lake in early October.
 - The average size was approximately 5.8 inches.
 - Some fish with left pelvic fin clips that originally were headed to another lake wound up in Paw Paw Lake.
 - Out of the 1,850 fish, 479 had fin clips.
 - Paw Paw Lake's contribution of walleye will be stocked in the next couple of weeks. There are 1,850 additional fish to be stocked, with an average length of about 7 inches.
 - If walleye are caught on the lake, MDNR is asking anglers to:
 - report their walleye catches to Sarah Carlson (269)685-6853; carlsons4@michigan.gov
 - DNR is looking for fish length, weight (not required, but helpful), date caught, any fin clips, and whether the fish was kept or released. DNR also typically makes note of the general condition of the fish does it look healthy? Is it skinny? Are there any wounds or lesions?
- PLM Update on starry stonewort infestation/treatment
 - Upon last inspection, starry stonewort appears to have cleared up. This was confirmed by riparian observation.
- PLM and Emily Update on black goop found on shoreline
 - The goop was determined to be primarily the benthic cyanobacteria Osciltoria.
 - It forms on the lake bottom
 - Is either broken loose by turbulence (boats) or gasses formed in the sediment can cause it to float.



- Is not usually measured in high concentrations in surface as it is a mat forming benthic species
- Rarely seen on lakes
- Common problem for staff that work on ponds or smaller waterbodies
- Its presence on the lake this year may be due to clearer waters
 - Sunlight can reach deeper depths within the lake, down nutrient rich sediment
 - In previous years the sunlight could not reach very deep into the lake due to cloudier water.
 - Algae needs sunlight and nutrients to grow, and it is a benthic species of algae that grows on the bottom of the lake.
- Emily (Spicer) Review and conclusions from July Water Quality Summary
 - Total phosphorus, dissolved oxygen, Secchi Depth (water clarity), and temperature data from July 2021 were compared to July data from previous years.
 - Total phosphorus was significantly lower than previous years, and is the lowest it's been since 2018 in the surface samples.
 - Surface samples were within the median/average Michigan Inland Lakes Summer Near Surface total phosphorus levels (<u>USGS Report</u>). Bottom samples tended to be higher than Michigan Inland Lakes average and median.
 - Results are within the normal and healthy range for Paw Paw Lake.
 - Dissolved Oxygen: surface levels down to approximately 15 20 feet have enough dissolved oxygen to support a warmwater fishery (5 mg/L State of Michigan standard)
 - Surface levels were around 8 9 mg/L of dissolved oxygen
 - This is a normal level for Paw Paw Lake and Michigan inland lakes.
 - Dissolved oxygen is near zero at the bottom of the lake which is typical for Paw Paw Lake and many Michigan inland lakes in the summertime that are stratified.
 - Bottom dissolved oxygen levels were between 0 1 mg/L.
 - Secchi Depth (Water Clarity)
 - Water clarity in Paw Paw Lake was down by about 2 feet of visibility in July 2021 compared to July 2020.
 - Paw Paw Lake tends to have less water clarity/visibility than other Michigan inland lakes on average. This is not necessarily a bad thing – sometimes too much water clarity can lead to more aquatic plant growth.
 - During the October sample event (early October) water clarity weas the highest it's ever been on the lake – upwards of 15 feet of visibility.
 - Temperature: July 2021 surface temperatures were about 6 6.5°F cooler than July 2020. Bottom of the lake temperatures remain consistent with previous years, which is usually around 45 – 50°F.
- Larry/Emily Review possibility of using condo canal as sediment pond Yes, this is a possibility. There are many options for what can be done on the drain in order to increase water quality within the lake and drain, and encourage sediment and nutrient deposition somewhere other than the canal by the condos – it depends on what the board wants to do, and which projects have funding and support. Options include:
 - Helping finance sediment removal from the canal, as it is currently functioning as an effective sediment and nutrient sump.



- Build a detention basin near the mouth of the drain an example project plan, bid documents, cost estimate, etc. was given to the board a couple years ago. The example project was constructed on a drain in another county.
- Reconnect the drain to the floodplain A project that is ready to be bid right now, as long as an agreement is signed by the adjacent property owner.
- Multiple options of drain improvement (reconnection to wetlands, construction of basins in key locations) were outlined in the 2020 improvement plan.

Discussion about M-140 basin:

- When was the last time it was cleaned out, how much did it cost?
- *Cost approximately* **\$15,000 \$20,000**
- Has been shown to be very effective in removal of sediment and nutrients.
- Collects significant sediment.
- Was a Paw Paw Lake Foundation project
- PPLA meeting on August 9, 2021 with Ever Blue and Restorative Lake Sciences
 - Presentation was made by Ever Blue and Restorative Lake Sciences regarding their services
 - Ever Blue does not feel that their services are needed yet on the lake, would like to see the results of what Restorative Lake Sciences finds through their process of historical data review.
 - Restorative Lake Sciences has been contracted by the Paw Paw Lake Association to review historical Paw Paw Lake data.
 - Do not anticipate starting this work until January 1, 2022. The report is anticipated to be done in February 2022.

New Business

- Spicer Drain project timeline *The project is at a stand still until the agreement is signed. It is ready to bid. If the project doesn't work out at this time, it can be returned to at a later date when agreement is signed.*
- Emily (Spicer) results of drain sample testing and conclusions *Final reporting for 2021 is underway for both drain and lake monitoring. Anticipated completion by December 1, 2021.*
- Collaboration between PPLA, PPLF, and SAPAC

Proposed Recommendations

Public Comments – Please limit to three minutes per person

- Flowmeter get it in as early as possible...should go in as early as March or end of February. Once the weather breaks.
- Correlate lake testing and drain testing with the amount of rain we get through the year. Editor's note, this has been done on previous reports refer to 2020 end of year reports.

Next Meeting Date – April 19, 2022 4:00 pm Watervliet Township Hall/Zoom

Adjournment