



AGENDA

CHARTER TOWNSHIP OF MERIDIAN
LAND PRESERVATION ADVISORY BOARD
REGULAR MEETING
Wednesday, February 9, 2022 6:00 pm
Meridian Service Center
2100 Gaylord C. Smith Ct, Haslett 48840

1. CALL MEETING TO ORDER
 2. PUBLIC COMMENT
 3. APPROVE AGENDA
 - A. February 9, 2022
 4. APPROVE MINUTES
 - A. November 10, 2021
 5. COMMUNICATIONS
NONE.
 6. DISCUSSION ITEMS
 - A. Environmental Commission Wetland Outreach & Restoration Draft Plan
 1. Commissioner Grassesschi presents the plan for overview
 - B. Build Back the Buffer Draft Plan Review
 7. NEW BUSINESS
 - A. 2022 Meeting Resolution
 - B. Election of Officers
 8. OLD BUSINESS
 - A. Drainage Issue at 730 Knightsford Lane
 - B. Land Acquisition
 1. Parcel A
 2. Parcel B
 3. Parcel C
 4. Parcel D
 5. Parcel E
 6. Parcel F (just need an okay to pursue further)
 9. REPORTS
 - A. STAFF REPORT: Stewardship Coordinator, Emma Campbell
 1. 2021 Annual Report; 2022 Land Preservation Program Goals
 2. Financial Review
 - B. ENVIRONMENTAL COMMISSION REPORT: Board Member, Kendra Grassesschi
 - C. PARK COMMISSION REPORT: Board Member, Mark Stephens
 10. PUBLIC COMMENT
 11. OTHER MATTERS AND BOARD MEMBERS' COMMENTS
-

Individuals with disabilities requiring auxiliary aids or services should contact the Meridian Township Land Preservation Advisory Board by contacting: Director LuAnn Maisner, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4600 - Ten Day Notice is Required.

Meeting Location: 2100 Gaylord C. Smith Ct., Haslett, MI 48840

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AGENDA

CHARTER TOWNSHIP OF MERIDIAN
LAND PRESERVATION ADVISORY BOARD
REGULAR MEETING

Wednesday, February 9, 2022 6:00 pm
Meridian Service Center
2100 Gaylord C. Smith Ct, Haslett 48840

12. ANNOUNCEMENTS

- A. Next Land Preservation Advisory Board Meeting: Wednesday, March 9th, 2022 at 6 pm, at the Service Center.

13. ADJOURNMENT

Individuals with disabilities requiring auxiliary aids or services should contact the Meridian Township Land Preservation Advisory Board by contacting: Director LuAnn Maisner, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4600 - Ten Day Notice is Required.

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CHARTER TOWNSHIP OF MERIDIAN
LAND PRESERVATION ADVISORY BOARD REGULAR MEETING MINUTES
Zoom Meeting
Wednesday, November 8th, 2021, 6 PM

PRESENT: Board Members: Jamie Hiller, Steve Thomas, Kris Parnell, Mark Stephens, Kendra Grassesschi, Chanelle Russ.
ABSENT: Board Members: Yu Man Lee.
STAFF: Emma Campbell, Stewardship Coordinator
TOWNSHIP: Township Trustee, Dan Opsommer

1. CALL MEETING TO ORDER

CHAIR HILLER MOVED TO CALL THE MEETING TO ORDER AT 6:08 PM.

2. PUBLIC COMMENT

A. Stephen Schultz, a resident of the Township is present to discuss Agenda Item 6A.

3. APPROVE AGENDA

Board member Grassesschi makes a motion to amend the Agenda to add item 6A, a discussion on the process of decision making by the Land Preservation Advisory Board. Item 6A, Stephen Schultz drainage discussion, will be added as item 6B on the Agenda.

Vice Chair Thomas makes a motion to amend the Agenda to add item 6C, to discuss the process of acquiring land through the Land Preservation Program.

BOARD MEMBER STEPHENS MOVED TO APPROVE THE NOVEMBER 10TH, 2021 AGENDA AS AMENDED. Trustee Opsommer seconded.

VOICE VOTE: Motion carried unanimously.

4. APPROVAL OF MINUTES

BOARD MEMBER GRASSESSCHI MOVED TO APPROVE THE SEPTEMBER 8TH, 2021 MINUTES. Seconded by Trustee Opsommer.

VOICE VOTE: Motion carried unanimously.

5. COMMUNICATIONS

A. No board meeting in December 2021.

6. DISCUSSION ITEMS

A. Process and procedure for decision making by the Land Preservation Advisory Board
1. Township staff vets projects and proposals, discussing items and information needed from presenter (contractor, resident, staff, etc.). Staff then places the item on

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the next meeting's agenda for presentation and discussion

2. Item goes on agenda for discussion amongst board members. Member of public who brought the proposal forward will be invited to speak during their allotted time.
 3. The proposal may either be rejected by the board, or move forward to be put on as an action or discussion item for the next board meeting. Additional field visits, or meetings may be required in order to make an informed decision.
- B. Stephen Schultz – Flooding and drainage issue request at Davis-Foster Preserve
1. Chair Hiller gives Mr. Schultz the floor to discuss background information on the issue pertaining to drainage on their property in conjunction with the Davis-Foster Land Preserve. There have been no drainage issues until recently, water levels were the highest during two different large rain events this past summer. The water table has risen so much that Mr. Schultz basement flooded and has received damage from the event.
 2. Mr. Schultz and his engineer are proposing a swale along the southern property edge on Davis-Foster Preserve to divert heavy rainfall that is draining off the Preserve. The purpose of the swale would only be to catch rain during heavy rain events, or flash floods. No work will be done near the wetland, and only extend along tree line.
 3. Board Members concerns and questions:
 - a. How will fertilizer and pesticide use from neighboring properties affect the runoff onto the preserve?
 - b. How large is the area of disturbance?
 1. Mr. Schultz responds that the swale would be approximately 200 feet long by 30 feet wide as it tapers out – about 6,000 square feet total.
 - c. How does this affect the precedence of floodwater diversion on other land preserves in the Township? The Township legal team will be consulted.
 - d. Would the hydrology of the surrounding wetlands be changed during large storm events? Since large storm events are expected to increase in coming years, will the hydrology remain changed from this diversion?
 - e. Has the Ingham Drain Office been contacted to discuss a long-term solution involving the Davis Drain to the North?
 - f. The main concern from all members is that we reach a solution that will help solve Mr. Schultz's drainage issues, while protecting the land preserve at the same time.
 4. Staff Members will take the proposal to the Engineering Department, as well as the Planning Department and come up with a list of recommendations for Mr. Schultz.
- C. Land acquisition procedure
1. If the board or members are interested in a particular parcel for acquisition, the board can approach the landowner with a letter and a land preservation application for them to review. Once the application is signed, the board is given permission to enter the property and do a walkthrough to complete screening criteria.
 2. Vice Chair Thomas will bring addresses of interest to the next meeting, and a closed session will be allowed to review the parcels.

7. OLD BUSINESS

A. Lake Lansing North prescribed burn update

1. The burn is planned for anytime between November 17th and December 17th. If timing

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and weather does not allow for a fall burn, it will take place next spring before April 5th.

- B. Wetland Education Campaign
 - 1. Mailed letter and brochure to 1460 residents that live adjacent to wetlands
 - 2. Tihart-Cornell annual fall wetland cleanup, November 20th
 - 3. Presentation to Capital Area Conservation Stewards Program
- C. Planting a Native Meridian Program Expansion
 - 1. Fall seed collection and planting
 - 2. Work with local nurseries

8. REPORTS

- A. STAFF REPORT: Stewardship Coordinator, Emma Campbell
 - 1. Fall/Winter Stewardship plans: Invasive management will be moving into the removal of invasive shrubs out of priority area using a cut-stump method. Most of the fall stewardship focus has been on native seed collection and planting.
- B. ENVIRONMENTAL COMMISSION REPORT: Board Member, Kendra Grassesschi
 - 1. Board Member Grassesschi briefs the board on the collaboration and work happening between Township Departments as well as the Boards and Commissions to plan for flood mitigation, pollution reduction and improving our wetland habitats. Specifically the Parks Department, Engineering Department, and Planning Department are working with the Environmental Commission, the Board of Trustees and the Land Preservation Advisory Board. She also reminds the board that we have the ability to call joint meetings with other commissions and boards for problem solving and to discuss broad issues.
- C. PARK COMMISSION REPORT: Board Member, Mark Stephens
 - 1. Board member Stephens had to leave the meeting early, so no Park Commission report.

9. COMMENTS FROM THE PUBLIC

- A. Stephen Schultz requests that if the board does a walk-through of the Davis-Foster property to discuss the drainage issue, that he and his engineer may be invited. Staff member Campbell makes a note.

10. OTHER MATTERS AND BOARD MEMBERS' COMMENTS

- A. Board members request to include the following on January's agenda: parcels to review for acquisition (closed session), land preservation financial review. They also request that we schedule a field visit to Davis-Foster to discuss drainage swale.

11. ANNOUNCEMENTS

- A. Next Land Preservation Advisory Board Meeting: Wednesday, January 12, 2021 over at the Service Center.

12. ADJOURNMENT

BOARD MEMBER PARNELL MOVED TO ADJOURN THE MEETING. Board member Grassesschi seconded.

VOICE VOTE: Motion carried unanimously.

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The meeting is adjourned at 8:13 pm.

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Wetland Outreach & Restoration Plan

(draft 1/10/22)

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***Note:** This is an evolving plan. Please share your ideas...visions, hopes, dreams, edits, and suggestions!*

Overview

Meridian Township is developing a program to help protect, restore, and enhance our greenspaces, wetland, yards, and landscapes. A key focus is on restoring and creating natural buffer zones that provide habitat, reduce erosion, absorb and filter stormwater and provide natural beauty and recreational value.

A variety of outreach efforts are planned in partnership with the Parks, Planning, Engineering and Communication Departments, along with the Environmental Commission, Land Preservation Advisory Board, Board of Trustees, and other Township boards and commissions. In addition to restoring natural habitat, our hope is to restore community connection to our local wetlands as we work with local landscaping firms, volunteer groups, schools, developers, the MI Shoreline Stewardship Partnership, MSU Extension, and the Meridian Conservation Corps.

Outreach and activities include:

1. Build Back the Buffer (and related ecological landscaping and green infrastructure improvements)
2. Policy and Procedure Improvements
3. Demonstration Projects & Field Programs
4. Outreach

Build Back the Buffer

This an effort to foster ecological landscaping practices in the Township focusing on the protective buffer zones around wetlands. A variety of approaches including native gardens, natural shorelines, rain gardens, trees, invasive species removal, bubble buffers, reduced mowing, and other strategies will be pursued with a focus on demonstration sites and households on or adjacent to wetlands.

Materials and plans needed for the buffer restoration program:

- Budget for matching funds (and excepts or funds to help eliminate match)
 - How do we determine how much to spend on an area
 - Each buffer will differ in size and amount of restoration work, so prices could vary greatly
 - It will also depend on how much the landowner can contribute
 - What are sources of grants (DNR, EGLE, Infrastructure, Land Pres., etc.)
- Application process for individual/business/school to participate in the buffer restoration and receive funds (may utilize and build upon the Green Infrastructure Grant Program piloted in 2021, the Community Garden Application process, and/or Solarize Meridian Neighborhood Workshops)
- A list of properties the Township would be interested in restoring
 - Township properties (Farmers Market ditch gardens, Central Park Pond, etc.
 - Residential or commercial properties with high visibility
 - Areas of high ecological importance (properties near the Davis-Foster Preserve, etc.)
- A native plant list for applicants to peruse, as well as resources for the website under the wetland buffer tab
- A contact list for questions:
 - Landscape design assistance

- Who to contact for a buffer consultation
- Who to contact for ordinance related questions
- Resources for homeowners who would like to participate on their own
- A step-by-step procedure for how to take calls and go over applications
- Letter (see sample below)

Letter to Residents/Property Owners

(Draft: 12/13/21)

Dear Wetland Neighbor:

You are receiving this letter due to the wetland that occurs adjacent to your property. You may have already received a letter from the Township, about the local wetland ordinance that protects all wetlands $\frac{1}{4}$ of an acre in size or larger. As a next step in our mission to enhance and protect our local wetlands, we would like to take this opportunity to help you restore the wetland buffer on your property. This buffer is the area around a wetland, which reduces adverse impacts to wetland functions and values from nearby development and activity. As you may know, the ordinance requires a vegetative buffer of at least 20 feet around all wetlands in the Township. This is not only to improve the wetland habitat for local flora and fauna, but to benefit the homeowner as well.

The wetland on your property is capable of storing a large amount of flood water, which is becoming more unpredictable each year. In order to function properly and reap the benefits of wetlands, native vegetation must be restored along the edge of the water body. Sod, which is often present in residential settings, has shallow roots and requires mowing, which can also be an issue of erosion and destruction for the wetland. Most importantly, a lack of vegetation in this area, can cause major flooding in your yard and surrounding areas. Native plants have root systems that extend anywhere from 1 to 20 feet into the soil. Wetlands may change their water level from year to year, and having a buffer will reduce water creeping into your yard. One acre of wetland can store up to 1.5 million gallons of water according to the Environmental Protection Agency (EPA). Taking care of our local wetlands will help reduce flood damage to this community in the future, and you can be a part of that.

We know this can be a big project, so we would like to help get you started. We can offer a match of funds to acquire native plants, as well as give guidance on what species would be best to plant in your area. The Meridian Conservation Corps staff and volunteers will be on hand to help prepare the area and plant. Once this buffer is established, it will be very low maintenance. You will still be able to mow your yard right up to the buffer line, keeping your yard the way you like, as well as providing better protection for the wetland. Please see some of the attached photos as a demonstration of what your buffer could look like. If you are interested in participating, please contact Emma Campbell at ecampbell@meridian.mi.us, or call 517.853.4614. Thank you in advance for doing your part to keep Meridian Township a healthy, and sustainable community.

Sincerely,

Emma Campbell
Land Stewardship Coordinator
Meridian Township Parks and Recreation
c.c.: Land Preservation Advisory Board
Tim Schmitt, Director of Community Planning and Development

Policy & Procedure Review

Several policy and procedural changes will be helpful including:

- Incorporate recommendations outlined by Cliff Walls (TCRPC) in his Green Infrastructure Audit and Code Review. Focus on low-hanging fruit. Work with new regional coordinator, Code Committee, and local governments (EL, Williamstown Twp., Lansing, Delhi, etc.)
- Maximize the use of energy-saving and ecologically-friendly landscaping practices and procedures in Township Operations.
- Incorporate water, wetland, green infrastructure-related priorities in the Climate Sustainability Plan and Master Plan revisions.
- Develop easy-to-read and understand guidelines for the public, developers, builders, etc. (Wetland Permits, Soil Erosion, eco-landscaping, etc.)
- Other?

Demonstration Projects & Field Programs

Identify existing and potential sites to serve as demonstration sites for buffers, ecological landscapes, rain gardens and other green infrastructure examples such as: Marketplace on the Green, Central Park Pond, Briarwood Pond, Greenmap sites, Towar Garden Rain Gardens, Land Preserves, Natural Shorelines, Silverleaf or other innovative developments, Meridian Mall, Okemos Rd. Property and other sites on the Meridian Green map: <http://bit.ly/meridiangreenmap>

Conduct field programs in partnership with Meridian Conservation Corps (MCC) and others (schools, neighborhoods, residents, businesses, MI Shoreline Stewards, faith-based groups, etc.). Projects could include shoreline restoration, buffer planting, rain garden planting and maintenance, workshops on-line or in the field, tree planting days, neighborhood clean ups, invasive species removal, sustainable home and yard tour, etc.

Lake-Healthy Landscaping

Lake Lansing has been a long-time focus of the community and amenity for the entire Greater Lansing region. There is renewed interest in strategies to help address toxic algae blooms, erosion, flooding, and water quality issues while serving multiple interests and goals. A variety of partners including Meridian Township, Lake Lansing Advisory Committee, MI Natural Shoreline Partnership, Meridian Conservation Corp, contractors, landscaping professionals, residents, and others will seek to identify, highlight, install, and demonstrate natural shorelines and other lake-healthy landscaping and related practices.

Focus sites and groups include:

- public (or private) stretch of shoreline where lawn is mowed to the edge and naturalize it
- County parks – especially as they upgrade the boat launch and “unprotected shore lines” north of the swim area all the way to Pike Street and south of the swim area
- road ends leading to the lake such as Mack and Perry Road
- the Condo association on the north end which has a lot of non seawalled shoreline
- properties along Shaw Street where residents continue to pull cattails to open up access (suggest natural shoreline as a replacement for cattails?)
- properties that do not have seawalls
- other lakes and ponds in the township

Outreach

Messaging Research

Craft messages based on current social research.

https://www.mishorelinepartnership.org/uploads/4/6/8/6/46869113/part_4_the_social_stuff_3-8-19.pdf

Media Campaign

Work with HOMTV to plan regular media outreach through all possible channels including social media. This will include website, news/press releases, Facebook/Instagram/Twitter, Prime Meridian Magazine, Green Gazette, Think Green Thursday, etc. (See “Seasonal Themes” below)

Kick Off and Priority Events could include the World Watershed Day (Feb. 2), MCC Stewardship Days/Seasonal Schedules, Sustainable Home Tour, Demonstration Site workdays or completions, classes/green Theme Presentations, Green Fair at the Marketplace, etc.

Respond to “Breaking Stories” (timely, impact, prominent, close, relevant, useful, novelty, conflict, human interest) – flooding, storm events, droughts, blue-green algae outbreak, etc.

Seasonal Themes

Winter

- Kick Off – World Wetlands Day – Feb 2
- Watershed tips: SALT
- **Conservation Corps Work Days**
- FOG (fats oils and grease)

Spring

- Build Back the Buffer/Green Grants
- Spring gardening and landscaping (pollinator, community gardens, native plants)
- Spring Cleaning/Clean Up with Granger
- **Green Fair**

Summer

- **Conservation Corps Work Days**
- Watershed tips: Water Conservation, car washing, scoop the poop
- HHW
- Demonstration projects

Fall

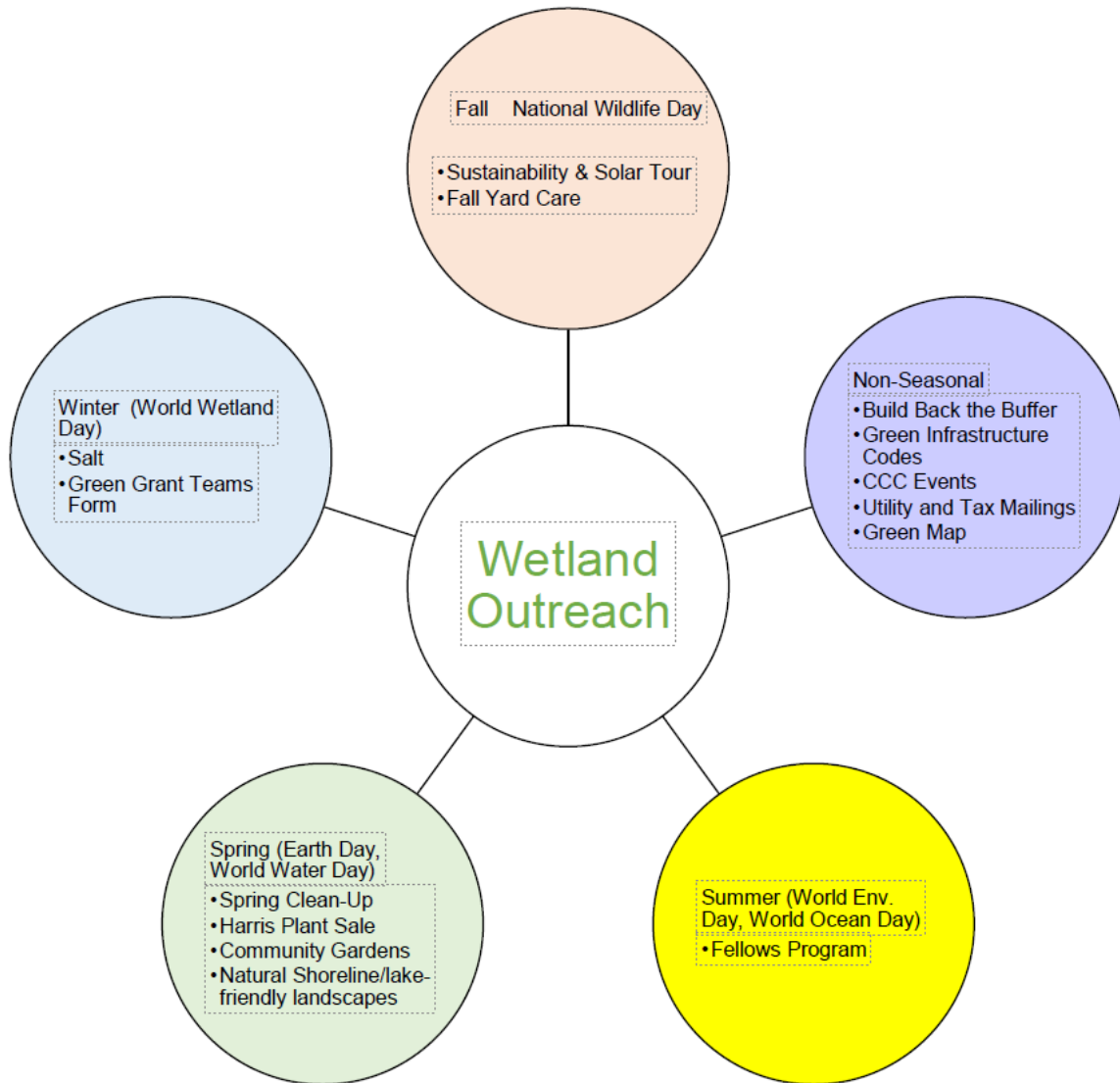
- Solar and Sustainability Tour – Green Map
- ICD Tree Sale – Tree Planting
- Composting, Yard Waste, Fall eco-landscaping 8 Rs
-

Other Ongoing

- Info in property tax/water bills: **Watershed Tips** (TCRPC): Fun Facts about Watersheds/Wetlands, Stream Monitoring, Green Map, Outreach - Neighbor Networks, Motor Oil, FOG, Wipes, HHW/Paint
- Code Flyer/Guide
- Big Drain Projects
- Student Organizations/Projects
- Healthy Ponds and Lakes
- Demonstration Projects

HOLIDAYS

| | |
|------|---|
| Sept | 4 th : National Wildlife Day |
| Oct | Sustainable Home and Yard Tour |
| Nov | 1 st : World Vegan Day 15 th : America Recycles Day |
| Jan | 1 st : New Year's Day- Resolve to go <i>GREEN!</i> |
| Feb | 2 nd : World Wetlands Day |
| Mar | 3 rd : World Wildlife Day 21 st : International Day of Forests 22 nd : World Water Day |
| Apr | Week before Earth Day: National Environmental Education Week 22 nd : Earth Day 26 th : National Healthy Schools Day Last Friday: Arbor Day |
| May | 22 nd : International Day for Biological Diversity 23 rd : World Turtle Day |
| Jun | 1 st Saturday: National Trails Day 5 th : World Environment Day 8 th : World Ocean Day |



Outreach to Developers/Builders/Business

Provide information and resources to residents, builders, businesses, and developers related to Build Back the Buffer, green infrastructure, LEED, local sources of seed and native plants and seeds, and related resources to encourage eco-friendly development.

Develop simplified handouts related to wetland permits, code guidelines, stormwater management, and, of course, “Build Back the Buffer” program.

Highlight successful projects and assist in new demonstration projects.

Work with the Drain Commissioner to promote new guidelines for drainage projects. (example – all native plants/seed, etc.)

Promote other water-saving and pollution reduction opportunities (fats, oils, and grease, soil erosion control, best practices (salt, pavement sealants, etc.), ecological lawn care, pollinator gardens, as opportunities arise.

Progress

- Mailed letter and brochure to 1460 residents
- Green Gazette sent to 2000 households (mostly Meridian)
- Mailed wetland info to Green Neighbors and Meridian Staff
- Neighborhood Clean-Up in collaboration with MCC, Granger, and others
- Green Grants to School Presentations/new application form.
- Website update: <https://www.meridian.mi.us/community/green-meridian>
- Developed [8 Rs for Fall Yard Care](#)
- Solar and Sustainable Tour (featured Green Infrastructure & Green Map)
- Distributed 180 Trees (Farmers Market)/Other?

Resources

www.mywatersheds.org

Washington State Department of Ecology:

https://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Wetland_Buffers_Use_and_Effectiveness.pdf

Green Infrastructure Code and Ordinance Manual (draft)

https://drive.google.com/file/d/1vL44e-gvgHOvARLJ63p5lV_vJ0_lCtLS/view?usp=sharing

Environmental Protection Agency: www.epa.gov/wetlands/wetlands-factsheet-series
www.mywatersheds.org

<https://cfpub.epa.gov/npstbx/index.html>

https://www.mishorelinepartnership.org/uploads/4/6/8/6/46869113/part_4_the_social_stuff_3-8-19.pdf

<https://www.semcog.org/protect-our-waterways#770115-what-you-can-do-about-lawn-care>

<https://www.semcog.org/protect-our-waterways#770116-what-you-can-do-with-landscaping>

Organizations

- Meridian Wetland Outreach Team (Kendra, LeRoy, Courtney, Emma, Paige, Brandy)
- Meridian Departments/staff, Commissions, and Subcommittees
- Neighborhood Associations
- Meridian's Lake Lansing Consultant/Contractor
- Lake Lansing Advisory Committee
- Ingham Conservation District
- Mid-Michigan CISMA (for potential invasive species management as part of the buffer restoration)
- Green Neighbors Network
- Wildtype Native Plant Nursery
- Designs By Nature Native Plant Nursery
- Michigan Natural Shoreline Stewards
- State of Michigan: EGLE, DEQ, others?
- MSU Extension (Paige Felice)
- U of M Sustainability Fellows
- Wild Ones Red Cedar Chapter (demonstration and expertise from local residents who are already maintaining buffers and native vegetation in their yards)
- Volunteer wetland delineators: to ensure that we place restoration buffer in the correct spot There are a few Township contacts who may volunteer to do this

Wetland Buffer Restoration Program
Meridian Township Wetland Education Campaign
“Build Back the Buffer”

Information cited from:

- Washington State Department of Ecology
 - https://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Wetland_Buffers_Use_and_Effectiveness.pdf
- Environmental Protection Agency
 - <https://www.epa.gov/wetlands/wetlands-factsheet-series>

What is a wetland buffer: Areas that surround a wetland and reduce adverse impacts to wetland functions and values from adjacent development.

Why are buffers essential for wetlands protection?

- Buffers reduce wetland impacts by moderating the effects of stormwater runoff including:
 - stabilizing soil to prevent erosion
 - Filtering suspended solids, nutrients, and harmful or toxic substances
 - Moderating water level fluctuations and reducing flash flood events
- Buffers provide essential habitat for wetland-associated species for use in:
 - feeding
 - Roosting
 - breeding and rearing of young
 - cover for safety
 - mobility
 - thermal protection
- Buffers also reduce impacts of human disturbance on wetland habitats including:
 - Blocking noise and glare
 - Reducing sedimentation and nutrient input into the local watershed
 - Reducing direct human disturbance from:
 - dumped debris from yard waste
 - removing vegetation
 - Mowing
 - Pesticide and fertilizer applications
 - Provides visual separation

Potential partners for the program:

- Ingham Conservation District

- Mid-Michigan CISMA (for potential invasive species management as part of the buffer restoration)
- Wildtype Native Plant Nursery
- Designs By Nature Native Plant Nursery
- Wild Ones Red Cedar Chapter (demonstration and expertise from local residents who are already maintaining buffers and native vegetation in their yards)
- Land Preservation Program - potential funding for properties that border preserve wetlands (example: the property on Okemos Road next to Central Meridian Uplands)

Examples of what buffer restoration can look like:

Photos from Light and Dark Landscape

Location: Plymouth, MN

Partners: Tree Hugger Tree Care, Light and Dark Landscape, and the Minnehaha Creek Watershed District

<https://lightdarklandscape.com/portfolio/wetland-buffer-restoration/>

(below) Light and Dark Landscaping company lays out plugs and plants them for the buffer. Depending on how large the buffer is, various species as well as sizes of transplants can be used.



(below) A view of the buffer restoration a few weeks after planting. Larger transplants will fill in faster and decrease the amount of maintenance required in the first few years of planting.



(below) A buffer restoration after it has been more established and filled in



(below) a sign denoting where the buffer starts - may be a great option for Township wetland buffers, as well as a sign for neighbors participating in the Township program



Wetland Walks

February - May
5:00 pm - 6:30 pm

As part of the Meridian Wetland Education & Restoration Program, tours will be offered the first Wednesday of every month, featuring wetlands in Meridian Township.

February 2

Nancy Moore Park

March 2

Tihart Preserve

April 6

Lake Lansing North Preserve

May 4

Davis-Foster Preserve

For more information, visit
www.meridian.mi.us/Wetlands or
email campbell@meridian.mi.us





**CHARTER TOWNSHIP OF MERIDIAN
RESOLUTION TO DESIGNATE
2022 LAND PRESERVATION ADVISORY BOARD
MEETING RESOLUTION**

At a regular meeting of the Land Preservation Advisory Board of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Service Center, in said Township on the 12th day of January 2022 at 6:00 pm, Local Time.

PRESENT: Jamie Hiller; Yu Man Lee; Steve Thomas, Mark Stephens, Dan Opsommer, Chanelle Russ, Kris Parnell, Kendra Grassesschi

ABSENT: None

The following resolution supported by Chair Jamie Hiller:

WHEREAS, the Land Preservation Advisory Board desires to announce the time, date, and place of all meetings of the Land Preservation Advisory Board; and

WHEREAS, the Land Preservation Advisory Board deems the 2022 regular meeting schedule sufficient to uphold the Township Board's Policies and Procedures, and advancement toward the Board's Global Ends; and

NOW, THEREFORE, BE IT RESOLVED BY THE LAND PRESERVATION ADVISORY BOARD OF THE CHARTER TOWNSHIP OF MERIDIAN, INGHAM COUNTY, MICHIGAN, THAT THE LAND PRESERVATION ADVISORY BOARD ADOPTS ITS REGULAR 2022 MEETING SCHEDULE AS FOLLOWS:

Date

| | | |
|--------------------|----------------------|-------------|
| January 12 | Regular Meeting | 6 pm |
| January 25* | Joint Meeting | 6 pm |
| March 9 | Regular Meeting | 6 pm |
| May 11 | Regular Meeting | 6 pm |
| June 8 | Regular Meeting | 6 pm |
| July 13 | Regular Meeting | 6 pm |
| August 10 | Regular Meeting | 6 pm |
| September 14 | Regular Meeting | 6 pm |
| November 9 | Regular Meeting | 6 pm |

*Joint Meeting of the Township Boards and Commissions

1. The Land Preservation Advisory Board has set a schedule to meet on the second Wednesday of the month; except for the joint meeting with the other Township boards and commissions on Tuesday, January 26. No meeting will be held for the month of February, April, October, and December, unless one is called by the chairperson.

2. Each of the above meetings shall be held at the specified time in the lunch room of the Meridian Service Center, 2100 Gaylord C. Smith Ct., Haslett, Michigan, (517) 853-4000; with the exception of the joint meeting of the boards and commission which is held in the Town Hall Room, Meridian Municipal Building, 5151 Marsh Road, Okemos; unless changed and noticed in accordance with MCL 15.265
3. Special meetings of the Land Preservation Advisory Board may be called pursuant to the statute thereto appertaining.
4. Regular meetings may be canceled, recessed or postponed by members of the Land Preservation Advisory Board pursuant to the statute thereto appertaining.
5. A summary of this resolution stating date, place, and time shall be posted in the Meridian Municipal Building within ten (10) days after the first regularly scheduled meeting of the year in accordance with the MCL 15.265

ADOPTED:

YEAS:

NAYS:

The resolution passed

STATE OF MICHIGAN)
) ss:
 COUNTY OF INGHAM)

I, the undersigned, the duly qualified Chairperson of the Land Preservation Advisory Board of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Land Preservation Advisory Board held on the day of January 12th, 2022.

 Jamie Hiller, Chairperson
 Land Preservation Advisory Board



To: Land Preservation Advisory Board Members
From: Emma Campbell, Land Stewardship Coordinator
Date: February 9, 2022
Re: Election of Officers for 2022

The current Chair/Vice Chair opens floor for nominations of Chair:

- a. A commissioner nominates a member of the Commission.
- b. Another Commissioner seconds the nomination.
- c. The nominee either accepts or declines nomination.
- d. The Chair asks if there are any other nominations, and if there are, then steps a, b and c are repeated.
- e. Once all nominations are offered, the Chair closes the floor to nominations (or a Commissioner can move to close the floor to nominations) and the Chair takes a roll call vote.

The current Chair/Vice Chair opens the floor for nominations of Vice Chair:

- a. A commissioner nominates a member of the Commission.
- b. Another Commissioner seconds the nomination.
- c. The nominee either accepts or declines nomination.
- d. The Chair asks if there are any other nominations, and if there are, then steps a, b and c are repeated.
- e. Once all nominations are offered, the Chair closes the floor to nominations (or a Commissioner can move to close the floor to nominations) and the Chair takes a roll call vote.



To: Land Preservation Advisory Board Members
From: Emma Campbell, Land Stewardship Coordinator
Date: February 9, 2022
Re: Election of Officers for 2022

Chair opens the floor for nominations for **Chair**.

BOARD MEMBER _____ MOVED, TO NOMINATE _____ AS CHAIR.
BOARD MEMBER _____ SECONDED.

Board member _____ accepted the nomination.

Hearing no other nominations, Chair closed the floor to nominations for Chair.

Roll Call Vote:

AYES:

NAYS:

Chair opens the floor for nominations for **Vice Chair**.

BOARD MEMBER _____ MOVED, TO NOMINATE _____ AS VICE CHAIR.
BOARD MEMBER _____ SECONDED.

Board member _____ accepted the nomination.

Hearing no other nominations, Chair closed the floor to nominations for Vice Chair.

Roll Call Vote:

AYES:

NAYS:



Meridian Township
5151 Marsh Road
Okemos, MI 48864

P 517.853.4000
F 517.853.4096

Township Board:

Ronald J. Styka
Township Supervisor

Deborah Guthrie
Township Clerk

Phil Deschaine
Township Treasurer

Patricia Herring Jackson
Township Trustee

Dan Opsommer
Township Trustee

Kathy Ann Sundland
Township Trustee

Courtney Wisinski
Township Trustee

Frank L. Walsh
Township Manager

January 7, 2022

Stephen & Jane Schultz
730 Knightsford Lane
Okemos, MI 48864

Dear Mr. & Mrs. Schultz,

We have corresponded with you about the issue you are facing with drainage on your property in conjunction with the Davis-Foster Preserve to the North. While we would like to do everything in our power to help you with your situation, we do need to consider the protection of the Davis-Foster Preserve as we proceed forward. Currently we have a list of options that we believe would be the best to pursue to clear up the issues you are facing. We take the damage to your property very seriously and want to make sure whatever remedy is decided on, will be the best in the long-term for both your property and the Preserve.

Our Land Preservation Board will be conducting a field visit to the site on January 29th from 4:00 to 5:00 pm. During this visit, board members will evaluate the site and potential causes for concern. Both you and your engineer are welcome to attend the meeting to answer any questions.

Before moving forward we do require a few more pieces of information about the proposed project:

- The elevation of the walkout basement. We do have a topographic map of the area, but it does not specify the elevation of the basement receiving flooding.
- What is the impact of the diversion? Please calculate the percentage of runoff that the proposed diversion will create.

Questions and comments from Township Staff:

- This project is only a diversion of flood water, not a retention or detention of the water.
- The township will address the water from the Land Preserve only.
- If the proposed diversion is approved, how will other neighboring properties be affected?
- Is this the best long-term fix to ensure that the flood waters will be diverted successfully without flooding elsewhere during heavy rain events?

Proposed suggestions from Township Staff:

1. Installation of a Bioswale on the Davis-Foster Preserve. If the proposed swale is approved by the Land Preservation Advisory Board, there will be stipulations in place of what will be required. Requirements for the approved Bioswale are as follows:



- a. Removal of invasive species within the area of flooding (as to reduce spread of invasive species through construction and runoff)
 - b. The Bioswale will need to have a series of steps in place for runoff to be diverted through
 - c. Specialized soil will need to be implemented during construction to enhance water absorbing capabilities
 - d. Additional flowers, shrubs, and grasses will need to be planted to add ecological value to the area, as well as increase the absorption of water
 - i. All plant species must be pre-approved by the Township
 - e. All plans for the Bioswale need to be approved by Township staff first
2. Contact Ingham County Drain Office:
 - a. In order to ensure that this is the best path forward, please contact the Ingham County Drain Office to get their perspective on the issue. Please contact them at 517.676.8395.
 3. Neighborhood Collaboration:
 - a. The most successful long-term solution may be to alter the drains in the entire Knightsford neighborhood. A route to the Davis Drain could provide a better solution to increasing flash flood events.
 - b. If more than one neighbor is having flooding issues, enough support may garner action from the Ingham County Drain Office to make a permanent fix for the drainage in that area.
 4. Planting deep-rooted, native species around the retention pond located at 730 Knightsford Lane:
 - a. The retention pond that is receiving an overflow of water has no vegetative buffer around it, which can significantly decrease its ability to hold water.
 - b. Planting deep rooted native species around the retention pond, and leaving a 10 foot buffer of no-mowing, could dramatically increase the retention capabilities. Currently only shallow rooted sod makes up the buffer.

If you have any questions or concerns about any of the suggestions above, please do not hesitate to reach out via email at ecampbell@meridian.mi.us, or call 517.853.4614. Please know we want to move forward with the best solution. We will be in contact after the Land Preservation Advisory Board meets to discuss the issue on January 29th, as well as the next board meeting on February 9th, at 6:00pm. Thank you.

Sincerely,

Emma Campbell
Land Stewardship Coordinator
Meridian Township



Land Stewardship Coordinator
2021 Annual Report &
2022 Stewardship & Land Preservation Program Goals

1. Volunteer & Meridian Conservation Corps Accomplishments

- a. **185 M.C.C. members total; 50 sign-ups in 2021; 1,047.5 volunteer hours worked**
- b. **Planting a Native Meridian (PANM) launched in May of 2021: While removing invasive species is a top stewardship priority, planting native species in their place is just as important. The goal of PANM is to expand this effort past Township land, and into residents' yards.**
 - i. 220 native trees planted in Township Preserves
 1. Towar Preserve, Tihart Preserve, & Davis-Foster
 2. 15 native species total
 - ii. 150 native flower plugs planted throughout Township Preserves, as well as the Marketplace on the Green. These will act as seedbank gardens for future propagation of seeds back into Township parks and preserves.
 - iii. Thousands of seeds collected from Township Preserves, processed, counted and planted, or stored for planting next year
 1. Over 60 native species collected as seed
- c. **Invasive Species Strike Team (ISST) Accomplishments: The ISST works hard throughout the season to bring stewardship to as many parks and preserves as possible, removing invasive species to open up habitat for native plants, wildlife, and insects.**
 - i. Over a 1,000 pounds of invasive dame's rocket and garlic mustard removed in the spring from Nancy Moore Park, Harris Nature Center, Ted Black Woods, Hillbrook Park, Legg Park, Hartrick Park, and Sower Woods Preserve
 - ii. 30 Stewardship Workdays held at 20 different parks and preserves
 1. Davis-Foster Preserve, Tihart Preserve, Central Park, Nancy Moore Park, Hillbrook Park, Foster-Crouse Preserve, Ted Black Woods, Tihart-Cornell Wetland Preserve, Harris Nature Center, Towar Woods Preserve, Sower Woods Preserve, Hartrick Park, Legg Park, Red Cedar Glen Preserve, Ponderosa Preserve, Eastgate Park, Southwest Uplands Preserve, Central Meridian Uplands, Lake Lansing North Preserve, Large Dog Park
 - iii. 19 species of invasive plants managed and mapped with GIS
- d. **Clean Up Crew Accomplishments: This year marked the start of annual neighborhood cleanups that will continue to grow and include more Township**

areas. This is the start of a partnership between residents, local businesses and the Township to create a cleaner, safer and more sustainable community.

- i. 3,160 pounds of litter removed from pathways, parks, & preserves in the Township
- ii. 2,035 pounds alone was removed from Tihart-Cornell Wetland Cleanup for Earth Day.
 1. 23 tires, a truckload of car parts, chairs, a couch and two mattresses were removed
- iii. On October 19th, Township staff, and M.C.C. volunteers worked with Granger Waste Management for a neighborhood cleanup on Central Park Drive in hopes to continue this effort on an annual basis

2. Love a Park Day (June 16th)

- a. 34 volunteers worked across 6 Township parks to clean up park sign gardens, and plant flowers. Ferguson Park, Hartrick Park, Hillbrook Park, Nancy Moore Park, Orlando Park, & Wonch Park.

3. Community Connection with Michigan State University

- a. Worked with Dr. David Rothstein, Dr. David MacFarlane and Ingham County Parks staff to offer students of the Forestry Field Studies course to gain real experience developing management plans for land managers.
- b. Collaborate annually with Dr. John Paskus' Community Sustainability course to engage students in the field management of invasive species, and public outreach; 10-15 students participate each year.

4. Wetland Education & Restoration Program

- a. The goal of this program is to expand the community's knowledge of ecosystem services wetlands provide, Township ordinances & state regulations for wetland protection, as well as local restoration efforts & conservation.
- b. Wetland Education letter & brochure went out to 1,460 residents in the fall of 2021
- c. Program will launch February 2nd, 2021 on World Wetlands Day. Wetland Walks will be offered the first Wednesday of every month, to tour Township wetlands

5. Community Education & Outreach (Presentations, Trainings, & Workshops)

- a. Virtual Invasive Species Training Webinar, January; 38 participants
- b. Meridian Garden Club, Virtual Invasive Species Training, February
- c. Invasive Species Field Training Workshop, March; 27 participants
- d. MSU Science Festival Presenter for Invasive Species Outreach Applications & Resources, April; 20 participants
- e. Lansing League of Women Voters Presenter on Environmental Benefits of Planting Native, May; 36 participants
- f. Conservation Stewards Program Presenter on Wetland Conservation & Restoration, October; 25 participants

Staff Members

Emma Campbell, Land Stewardship Coordinator
Rebecca Fisher, Stewardship Intern

(Below) Volunteers spend Earth Day removing over 350 pounds of garlic mustard and dames rocket from an area of spring ephemerals at Harris Nature Center. Our very own Park Commissioner, Mary Ferris, pitched in!



(Below) Steve Thomas, the Land Preservation Advisory Board Vice Chair, as well as a valuable volunteer, removes spotted knapweed from Tihart Preserve..





(Above) One of our youngest volunteers removes garlic mustard from Hartrick Park in May. We picked a total of 600 pounds that day!

(Below) Steve Thomas teaches volunteers the importance of native plants and their ecosystems, while collecting seeds at Lake Lansing North Preserve.





(Above) Volunteers work hard to pull trash from Tihart-Cornell Wetland; 23 tires were removed total!
(Below) Volunteers enjoy a beautiful day at Davis-Foster Preserve to plant the first native seed bank garden in the Township.



2022 Stewardship & Land Preservation Program Goals

1. Conservation & Stewardship Campaigns to focus on:
 - a. Planting a Native Meridian: continue to engage volunteers & community members in the program through planting, seed collection, seed processing, and possible propagation. An installation of over 2,000 native plant plugs across Township Preserves will happen between May and September of this year.
 - b. Support & supplement the Wetland Outreach & Restoration Plan developed and launched by the Environmental Commission. Continue to hold educational field sessions, cleanups, species inventory, seed collection and planting of native species in Preserve Wetlands.
 - i. All Township preserves contain at least one delineated wetland (except for Tihart Preserve, which may be a candidate for a historic wetland restoration).
2. Expand and enhance the Land Preservation Prescribed Burn Management Program
 - a. Include other properties that would benefit from prescribed burns; Tihart Preserve, Lake Lansing North Park (burn scheduled for spring of 2022), Red Cedar Glen Preserve, Towner Wetland Preserve
3. Research & pursue potential land acquisitions for the Land Preservation Program. Parcels of high ecological quality, or those that can extend preserve acreage to increase valuable ecological corridors for local flora and fauna.
4. Use GIS mapping of invasive Phragmites in 2021 to increase the area of contractual treatment and management in the Township.
 - a. Work closely with Ingham County Road Department & Drain Office, private businesses, & the Stewardship Network to reach more areas in the Township.

LAND PRESERVATION FUNDS
Preliminary Financial Statements
12/31/2021 (Unaudited)-December not taken into account

| | 217 <u>Land Acq Fund</u> | 218 <u>Land Pres Rsrv Fund</u> | <u>Combined</u> |
|---|-----------------------------|-----------------------------------|----------------------------|
| BALANCE SHEET | | | |
| ASSETS | | | |
| Investments | | | |
| Cash | 2,106,389.59 | 406,692.33 | 2,513,081.92 |
| Savings | 0.00 | 0.00 | 0.00 |
| Certificates of Deposit | 0.00 | 0.00 | 0.00 |
| Agency Funds | 145,805.15 | 2,721,000.00 | 2,866,805.15 |
| Allowance For Investments | 2,624.93 | 99,489.45 | 102,114.38 |
| Accrued Interest Receivable | - | 527.08 | 527.08 |
| Money Market | 1,706,907.43 | 209,499.06 | 1,916,406.49 |
| Other | | | |
| Taxes Receivable | 0.00 | 0.00 | 0.00 |
| Due from Trust & Agency | 0.00 | 0.00 | 0.00 |
| Prepaid Expenses | 0.00 | 0.00 | 0.00 |
| Cash, Investments & Other | <u>3,961,727.10</u> | <u>3,437,207.92</u> | <u>7,398,935.02</u> |
| TOTAL ASSETS | <u><u>3,961,727.10</u></u> | <u><u>3,437,207.92</u></u> | <u><u>7,398,935.02</u></u> |
| LIABILITIES | | | |
| Accounts Payable | 15.21 | 0.00 | 15.21 |
| Credit Card Payable | - | 0.00 | - |
| Accrued Liabilities | 24.33 | 0.00 | 24.33 |
| Due to General Fund | 0.00 | 0.00 | 0.00 |
| Deferred Revenue | 0.00 | 0.00 | 0.00 |
| TOTAL LIAB | <u>39.54</u> | <u>0.00</u> | <u>39.54</u> |
| FUND BALANCE | | | |
| Restricted - Land Preservation activities | 3,962,878.76 | 746,941.12 | 4,709,819.88 |
| Restricted - Acquisitions | 0.00 | 0.00 | 0.00 |
| Nonspendable - Endowment | 0.00 | 2,707,300.00 | 2,707,300.00 |
| Nonspendable - Prepaids | 0.00 | 0.00 | 0.00 |
| TOTAL FUND BALANCE | <u>3,962,878.76</u> | <u>3,454,241.12</u> | <u>7,417,119.88</u> |
| TOTAL LIABILITIES AND FUND BALANCE | <u><u>3,962,918.30</u></u> | <u><u>3,454,241.12</u></u> | <u><u>7,417,159.42</u></u> |
| INCOME STATEMENT | | | |
| Millage | 213,567.26 | 0.00 | 213,567.26 |
| Investment Income | 7,850.25 | 73,986.19 | 81,836.44 |
| Sale of Assets | 0.00 | 0.00 | 0.00 |
| Grant and Donation Revenue | 0.00 | 0.00 | 0.00 |
| | <u>221,417.51</u> | <u>73,986.19</u> | <u>295,403.70</u> |
| EXPENDITURES | | | |
| Land Acquisition | 0.00 | 0.00 | 0.00 |
| Unrealized Loss on Investments | 0.00 | 0.00 | 0.00 |
| Transfer Out | 0.00 | 0.00 | 0.00 |
| Wages & Benefits | 96,750.38 | 0.00 | 96,750.38 |
| Professional Services | 2,648.32 | 0.00 | 2,648.32 |
| Maintenance and Supplies | 11,426.94 | 464.14 | 11,891.08 |
| | <u>110,825.64</u> | <u>464.14</u> | <u>111,289.78</u> |
| 2021 YTD Net Income | <u><u>110,591.87</u></u> | <u><u>73,522.05</u></u> | <u><u>184,113.92</u></u> |
| BEGINNING FUND BALANCE | 3,852,286.89 | 3,380,719.07 | 7,233,005.96 |
| ENDING FUND BALANCE | 3,962,878.76 | 3,454,241.12 | 7,417,119.88 |