



**AGENDA**  
CHARTER TOWNSHIP OF MERIDIAN  
PARK COMMISSION – REGULAR MEETING  
Tuesday, September 10, 2019 - 6:30 pm

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**REGULAR MEETING – MERIDIAN SERVICE CENTER – 6:30 PM**

1. CALL MEETING TO ORDER
2. PRESENTATIONS:
  - A. Introduction of new Park Naturalist, Allison Goodman
3. APPROVAL OF AGENDA
4. PUBLIC COMMENTS
5. APPROVAL OF MINUTES
  - A. July 9, 2019 Regular Meeting Minutes
6. COMMUNICATIONS
7. DIRECTOR'S REPORT
  - A. Project update
  - B. Staff News
8. ACTION ITEMS
9. DISCUSSION ITEMS
  - A. 2019 Deer Management Program
  - B. Climate Sustainability Program
10. PUBLIC COMMENTS
11. OTHER MATTERS AND COMMISSIONERS' COMMENTS
  - A. Commissioner Comments
  - B. Events Calendar:
    1. Farmers' Market:
      - a. Saturdays, 8 am-2 pm, Central Park Pavilion, through end of October
      - b. Wednesdays, starting July 10, 3-7 pm; through the end of October.
    2. Music in Nature, Saturday, September 14, 5-8 pm; Harris Nature Center (featuring Kati Adams, Matt Foreman and LeRoy Harvey)
    3. Township Recycling Event, Saturday, September 28, 9am-2pm; Chippewa Middle School
    4. Senior Tribute Luncheon, Tuesday, September 24, 1:30-3 pm; The Willows of Okemos
    5. Blue and Grey Event; Saturday, October 5, 11 am-4pm; Historical Village
12. ADJOURNMENT

After Adjournment, the Commissioners will conduct a site visit of Brattin Woods Park, 5851 Okemos Road, Haslett.
13. Next Park Commission Meeting – Tuesday, October 8, 6:30 pm at the Meridian Service Center

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All comments limited to 3 minutes, unless prior approval for additional time for good cause is obtained.

Individuals with disabilities requiring auxiliary aids or services should contact Parks & Recreation Director, LuAnn Maisner: 2100 Gaylord C. Smith Court, Haslett, MI 48864 or 517.853.4600 - Ten Day Notice is Required.

Meeting Location: Meridian Service Center, 2100 Gaylord C. Smith Court, Haslett

# Park Commission Meeting September 10, 2019

## 5. MINUTES

- a. July 9, 2019 Regular Meeting Minutes



CHARTER TOWNSHIP OF MERIDIAN  
PARK COMMISSION REGULAR MEETING MINUTES  
Location: Service Center Building  
Okemos, MI 48864

**DATE:** July 9, 2019  
**PRESENT:** Commissioners Stephens, Van Antwerp, and McDonald  
**EXCUSED:** Commissioners Lick and Schaetzl  
**STAFF:** LuAnn Maisner, Director of Parks and Recreation

**1. CALL MEETING TO ORDER**

Chair McDonald called the regular meeting to order at 6:31pm.

**2. PRESENTATIONS**

**A. Jane Rose, Certificate of Appreciation**

The following resolution was offered by Chair McDonald and supported by Commissioner Stephens

WHEREAS, the Friends of Historic Meridian, a non-profit organization, entered into a partnership with Meridian Township and the Park Commission to collect and maintain numerous 19<sup>th</sup> century buildings in Central Park and to provide programs, workshops, tours, camps and other historic activities; and

WHEREAS, in February, 2002, the Friends of Historic Meridian Board hired Jane Rose as its Executive Director to operate the Historical Village; and

WHEREAS, Jane assisted Friends of Historic Meridian and the Meridian Park Commission in building a replica of the 1870's Okemos Methodist Episcopal Church and through its popularity was awarded the "Best Wedding Venue" in the Greater Lansing area in 2018; and

WHEREAS, Jane developed a historic lecture series, authored articles on Meridian History, and created a pictorial review of Meridian Township; and

WHEREAS, Jane has developed and conducted numerous lectures and tours and worked with approximately 3,000 schools students annually, teaching early American history by engaging in chores such as churning butter, grinding corn, doing laundry on a washboard; and

WHEREAS, Jane has provided 17 years of dedicated service in leading the Friends of Historic Meridian; and

WHEREAS, the Meridian Township Park Commission and Parks and Recreation Department wish to express their deep gratitude and appreciation to Jane Rose for her outstanding efforts in providing meaningful service to the community.

NOW, THEREFORE, BE IT RESOLVED by the Park Commission of the Charter Township of Meridian, Ingham County, Michigan, that Jane Rose is presented with this “Resolution of Appreciation” for her dedication and leadership that contributed to the development of the Meridian Historical Village that enhances the quality of life for residents of Meridian Township.

ADOPTED:

YEAS: Commissioners McDonald, Van Antwerp, Stephens

NAYS: None

The resolution passed.

### **3. APPROVAL OF AGENDA**

Commissioner Stephens moved TO APPROVE THE AGENDA AS WRITTEN. Seconded by Commissioner Van Antwerp

VOICE VOTE: MOTION CARRIED UNANIMOUSLY.

### **4. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS**

None

### **5. APPROVAL OF MINUTES**

A. June 19, 2019 Regular Meeting Minutes

Commissioner Van Antwerp MOVED TO APPROVE THE MINUTES OF JUNE 19, 2019 REGULAR MEETING MINUTES AS SUBMITTED. Seconded by Commissioner Stephens.

VOICE VOTE: MOTION CARRIED UNANIMOUSLY.

### **6. COMMUNICATIONS**

None

### **7. DIRECTOR'S REPORT**

- Marketplace on the Green – Contract for construction has been awarded to Gordon Construction Services.
- Celebrate Meridian Festival took place on June 29 with approximately 25,000 in attendance. Great event.
- A public hearing was held at the Planning Commission meeting on Monday, July 8 for the special use permit and wetland use permit. The permit applications will also be reviewed by the Environmental Commission on Wednesday, July 10 with final action on July 22 by the Planning Commission. The plans and specs are currently under review by the DNR. The project will go out for bid by the end of the month.

**8. ACTION ITEMS**

**A. Budget Amendment/Marketplace on the Green**

Fundraising for Marketplace on the Green has gone extremely well but additional funds are necessary to complete the project. The Park Commission allocated \$200,000 toward this project in the current budget year. The General Fund allocation and donations have brought us to a total of \$1,140,143.

**Donation Partners:**

Meridian Economic Development Corporation	\$ 50,000
Haslett and Okemos Kiwanis Club	\$ 75,000
Haslett/Okemos Rotary Club	\$ 35,000
Capital Region Community Foundation	\$ 75,000
Michigan Economic Development Corporation (MRDC)	\$ 50,000
Delta Dental	\$ 50,000
Patronicity Crowd Funding	\$ 20,143
Meridian Area Business Association	\$ 3,000
Greater Lansing Association of Realtors	\$ 2,000
Michigan Association of Realtors	\$ 2,500
WalMart Foundation	\$ 2,500
LINC	\$ 3,800
Meridian Township	<u>\$775,000</u>

TOTAL REVENUE TO DATE \$1,143,943

**Cost of Project**

Gordon Construction Services	\$1,403,699
Other amenities	<u>\$ 250,000</u>
TOTAL	\$1,703,699
Amount needed to complete project	(\$509,756)

**Commissioner Van Antwerp moved to APPROVE A BUDGET AMENDMENT FOR MARKETPLACE ON THE GREEN PROJECT IN THE AMOUNT OF \$300,000 FROM THE PARK MILLAGE FUND BALANCE. THE ADDITIONAL FUNDING NEEDED WILL BE INCLUDED IN THE 2020 BUDGET REQUEST. The motion was supported by Commissioner Stephens.**

**Roll call vote:**

**Yeas: Commissioners Stephens, Van Antwerp, McDonald**

**Nays: None**

**The motion passed.**

**B. Capital Improvement Program 2020-2025**

Each year the Township reviews and updates major projects as part of the budget process. The Commissioners reviewed the proposed projects for 2020 and recommended that the playground at Towner Road Park be moved to 2021 and to seek grant support to assist in

funding. They agreed by consensus to the 2020 projects but will further review the remaining years at their August meeting.

<u>Year</u>	<u>Project Name</u>	<u>Cost</u>	<u>Funding Source</u>
2020	Marketplace on the Green Playground, stage, Ice, site furnishings	\$300,000	Park Millage
2020	Parking Lot Expansion (Central Park South, N. Meridian Rd Park)	\$102,000	Park Millage
2020	Large Dog Park	\$ 25,000	Park Millage
2020	Towner Road Park Playground (move to 2021)	<u>\$200,000</u>	Park Millage
TOTAL		\$627,000	
<hr/> <b>2021</b>			
2021	Ottawa Hills Playground	\$100,000	Park Millage, Grants
2021	Central Park Pavilion Renovation, Landscaping	\$250,000	Park Millage
2020	Harris Nature Center Parking Lot Expansion	<u>\$70,000</u>	Park Millage
TOTAL		\$420,000	
<hr/> <b>2022</b>			
2022	Hillbrook Park Restroom Building	<u>\$200,000</u>	Park Millage, Federal and State Grants
TOTAL		\$200,000	
<hr/> <b>2023</b>			
2023	Nancy Moore Park Playground, Pavilion	\$300,000	Park Millage
2023	Nancy Moore Park Loop Trail	\$80,000	Park Millage
2023	Marshall Park Playground Replacement	<u>\$100,000</u>	Park Millage
TOTAL		\$480,000	
<hr/> <b>2024</b>			
2024	Central Park Improvements-Splash pad or State	\$500,000	Park Millage, Federal

			Grants
2024	Wonch Park Improvements – Restroom, State Streambank, launch, Wi-Fi	\$500,000	Park Millage, Federal or Grants
2024	Snell-Towar Recreation Center Improvements State	<u>\$185,000</u>	Park Millage, Federal or Grants
	TOTAL	\$1,185,000	

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**2025**

2025	Meridian Riverfront Park Trail Improvements Millage,	\$1,000,000	Park Millage, Pathway Federal/State Grants
2025	Newton Road Park Playground	<u>\$100,000</u>	Park Millage
	TOTAL	\$1,100,000	

**C. 2019 Park Development Budget Request**

Listed below are the recommended projects from Capital Improvement Projects list for 2020 from the Park Millage:

**2020 BUDGET RECOMMENDATION**

**PARK MILLAGE-PARK DEVELOPMENT**

Marketplace on the Green	\$ 250,000
Central Park South Parking Lot Expansion	\$ 20,000
North Meridian Road Park Parking Lot Expansion	\$ 82,000
Large Dog Park	\$ 35,000
Artificial Ice for Skating	<u>\$ 50,000</u>
	\$ 437,000

**COMMISSIONER Van Antwerp MOVE TO APPROVE THE PROPOSED PARK PROJECTS IN THE AMOUNT OF \$437,000 FROM 2020 PARK MILLAGE BUDGET. The motion was supported by Commissioner Stephens. Vote passed unanimously.**

**9. DISCUSSION ITEMS**

None

**10. PUBLIC COMMENTS - NONE**

None

**10. OTHER MATTERS AND COMMISSIONERS' COMMENTS**

A. Commissioner Comments

- a. Chair McDonald commended Director Maisner for her work on Celebrate Meridian and for working an 18- hour day.
- b. Commissioner Stephens commented on his work in promoting legislation to reinstate a \$2 youth fishing license to help promote youth fishing and to support the Great Lakes.

B. Events Calendar:

1. Farmers' Market:

- a. Saturdays, 8 am-2 pm, Central Park Pavilion, through end of October
- b. Wednesdays, starting July 10, 3-7 pm; through the end of October.

C. Meridian Senior Center Fundraiser Rummage Sale, July 11 & 12, 9 am – 5 pm, July 12, 9 am to Noon

D. Howl at the Moon, July 19, 9 pm, Harris Nature Center

E. Music in Nature, July 20, 5-8:30 pm; Harris Nature Center

F. Fireflies and Friends Campfire,, July 27, 7-8:30 pm; Harris Nature Center

G. Turning Back the Pages Day Camp, August 5-9, 9 am – Noon, Meridian Historical Village

H. National Night Out, August 6, 6-9 pm, throughout the Township

I. Senior Center Art Show, August 22, 10 am – Noon, Meridian Senior Center

**11. ADJOURNMENT**

Chair McDonald adjourned the meeting at 8:21pm.

**12. NEXT MEETING:** The next meeting is scheduled for **Tuesday, August 13, 2019**, 6 pm regular meeting in the Service Center Building, 2100 Gaylord C. Smith, Haslett This will be a non-televised meeting.

# Park Commission Meeting

## September 10, 2019

### 6. COMMUNICATIONS

#### A. Items to/from the Public

None

#### B. Commission Information

##### 1. Helen K Tanner Obituary

##### 2. Harris Nature Center Foundation Minutes

a. March 11, 2019

b. April 8, 2019

c. May 13, 2019

d. June 10, 2019

e. August 12, 2019

##### 3. Press Releases:

a. Howl at the Moons – Guided Evening Walk for People and Dogs

b. Strings and Wood Playing Outdoors Venue – Music in Nature Series Final Performance at Harris Nature Center

c. Preschoolers Discover Nature – Preschool Science Exploration Class Investigates Nocturnal Nature

d. Harris Nature Center Encourages Stewardship – Volunteer Opportunities Connect People with Parks

e. Harvest Moon Stories around the Campfire – Lansing Storytellers Providing Entertainment at Campfire Program

f. Toddlers and Preschoolers can Discover Nature at the Harris Nature Center – Nature Tots Registration Begins

g. Chipmunk Story Time at Harris Nature Center – Chicory Chipmunk presents “Possum’s Harvest Moon”

#### C. Staff Inquiries/Response

PRINT BILL PAY CONTACT US ENGLISH



PLAN A FUNERAL OR CREMATION

FIND OBITUARIES AND SERVICES

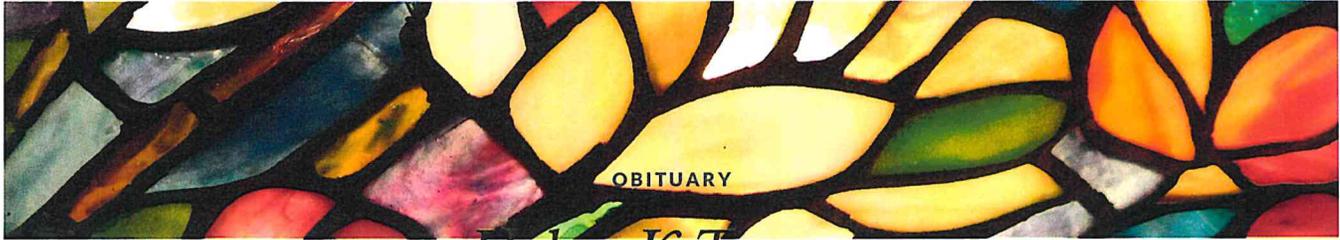
FIND FUNERAL HOMES OR CEMETERIES

SUPPORT FRIENDS AND FAMILY

HOME > OBITUARIES > MI > EAST LANSING, HELEN K TANNER OBITUARY

### Gorsline Runciman Funeral Homes

1730 East Grand River Ave, East Lansing, MI



# Helen K Tanner

JANUARY 25, 1924 - AUGUST 28, 2019



**H**elen K. Tanner passed away at home August 28, 2019, at the age of 95. She was born January 25, 1924, in Philadelphia, the daughter of Carl and Frances (Keller) Freytag. Surviving are her husband, Howard A. Tanner, PhD; children, Howard "Mark" (Sally Marquette) Tanner, Carl David (Jan Jorguson) Tanner, Hugh Adrian (Roberta Dye) Tanner; grandchildren, Eric, Kevin, and Ben Tanner; great-grandchildren, Jude, Maxwell, Rocky, Eleanor, Jaden, Tyler, Karsten, and Asa.

Helen was a founding member of the Meridian Garden Club. She was active with the Harris Nature Center and was a member of the American Association of University Women. According to her wishes, cremation has taken place. A ceremony to scatter her ashes will be scheduled for the near future.



SEND FLOWERS ADD A MEMORY SHARE OBITUARY RECEIVE NOTIFICATIONS

# Services

*Memorial at a later date*

RECEIVE NOTIFICATIONS

SHARE OBITUARY

SHOW YOUR SUPPORT

# Memories

## Helen K Tanner

ALL MEMORIES FROM THE FAMILY

HAVE A MEMORY OR CONDOLENCE TO ADD?

ADD A MEMORY

RECEIVE UPDATES WHEN NEW MEMORIES ARE POSTED

RECEIVE UPDATES



SEND FLOWERS

FROM THE FAMILY



IN THE CARE OF

*Gorsline Runciman Funeral Homes  
East Lansing, MI  
517-337-9745*

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Harris Nature Center Foundation

**MINUTES**

March 11, 2019 6:30 PM

**Board Members Present:** Jim Buscetta, June Hicks, Roxanne Truhn, Julie Moore, Barb Kissling, Rachel McDaniel and HNC Coordinator Kit Rich

**Guest:** Christen Chappelle - Okemos High School Sophomore interested in environmental law and engineering

**Absent:** Patty Robbins

**Meeting called to order by President, Jim Buscetta:** Last month's minutes reviewed by Board. June Hicks moved to approve the February minutes. Barb Kissling seconded the motion. Approved unanimously (Robbins absent).

**Financial Report (Barb Kissling)**

- Barb reviewed our 2018 endowment numbers as well as our December and February profit and loss numbers and balance sheets. Barb is interested in doing an audit this year after tax season is over.
- We need to update the Tree of Thanks for our 2018 donors soon.
- Rachel McDaniel moved to approve the Financial Report. Roxanne Truhn seconded the motion. Approved unanimously (Robbins absent).

**Harris Nature Center Report (Kit Rich)**

- Meridian Township has provided HNC with a new copy machine, which is a big upgrade from the previous copier
- There have been some staff changes at HNC
  - Allison Goodman accepted a position at Eaton County and will be leaving HNC this spring
  - Christena Wilcox has started training to work weekends and AM/early PM school groups
  - Jenna Haley will begin training in May and work day camp
- The office/kitchen has received a small remodel so that Kati has her own workspace
- The grading in front of the nature center will need to be fixed this spring
- HNC is getting an American Crow once the enclosure is finished (built by Scott Adams) and the permit is approved
- Pavilion meetings have taken place and there have been some changes in what will be built
  - The pavilion will not be 2-stories like we originally wanted, but a compromise has been made (approved by CRCF grantors): the pavilion will be 30x40 with the planned patio area and wall seating and a separate, accessible observation deck structure (20x30) will be built
  - Construction on these structures should be finished by the end of 2019
  - The bathroom building is also being planned and should be finished this year
- Mole Mound
  - Jim has done more culvert research
  - Kit was able to get the information from the MSU students who did research about this project
  - HNC will need to find someone to do the construction

## **Ongoing Business**

- Tower Tour - this project has wrapped up and Jim received a letter from the auction winner's mother. They are very excited to be using our package. Perhaps we will do something similar in the future.
- Brick Patio
  - Jim will ask Jamie Goble to work on a brochure for our order form
  - We will mail brochures out to the HNCf mailing list
  - Julie will make a page for the website
- Music in Nature
  - The Township has created a flier for this event to help us promote it
- Culver's Fundraiser
  - June will work on setting this up for the week after camp and we'll need HNCf members to be there to help out and talk with customers about the fundraiser

## **Adjournment**

- Barb Kissling moved to adjourn the meeting. June Hicks seconded the motion. Approved unanimously (Robbins absent).

## **Important Dates**

Next Meetings: 4/8, 5/13, 6/10

Summer Day Camp begins 6/18

Music in Nature: 7/20, 8/10, 9/14 (5-8pm for all dates)

Harris Nature Center Foundation

**MINUTES**

April 8, 2019 6:30 PM

**Note:** Since the last meeting, the Board voted via email to accept Christen Chappelle to the Harris Nature Center Foundation Board of Directors.

**Board Members Present:** Jim Buscetta, June Hicks, Patty Robbins, Julie Moore, Barb Kissling, Rachel McDaniel, Christen Chappelle and HNC Coordinator Kit Rich

**Guest:** Bartolomeo "Bart" Gorgoglione, an assistant professor at MSU in the College of Veterinary Medicine and the College of Agriculture and Natural Resources

**Absent:** Roxanne Truhn

**Meeting called to order by President, Jim Buscetta:**

- Added to the agenda was "Mole Mound" in Ongoing Business
- Last month's minutes reviewed by Board. June Hicks moved to approve the March minutes. Barb Kissling seconded the motion. Approved unanimously (Truhn absent).

**Financial Report (Barb Kissling)**

- The Profit and Loss sheet for March shows \$250.00 of donations, and with the final amount of Silent Auction coming in, we raised \$1,330.00 from that fundraiser this year. The Tower Auction raised almost \$2,300.
- The total net assets in the endowment fund are \$19,164.95.
- Patty Robbins moved to approve the financial report. June Hicks seconded the motion. Approved unanimously.

**Harris Nature Center Report (Kit Rich)**

- Kit has created an updated contact list to reflect the addition of Christen onto the Board
- Boulder garden interpretive signs have been installed - this project is almost complete
  - A geologist volunteer has been working on the website that goes with the interpretive signs, which we hope will increase community engagement and curiosity about geology
- School groups are picking up this month with Annie's Big Nature Lesson programs and other school groups
- Stewardship mornings will begin this month, lasting into October
  - Hoping to lay more gravel on the NEA path this month, and possibly replant the front garden if the grading project is completed by stewardship morning

**President's Report (Jim Buscetta)**

- Jim shared a newspaper article with the Board about a pavilion structure and grant that Onaway, MI was awarded - a project similar to the one Meridian Township will be doing

**Ongoing Business**

- Brick Sale
  - Jim had a mockup of a brochure/order form made by Jamie Goble. The mockup was a great starting point for our discussion of our brick sale order forms and other material we want to distribute related to this fundraiser.
  - Kit and Patty will get together to create another draft of an order form and get the Board's comments. Once it is finalized, it will be printed and we can start our sales.
  - The Board was in agreement to use paper forms as well as online forms to take orders for the bricks. We will limit logo and handprint engraving to the large size brick (12x12)

- Mole Mound
  - David Vanderklok will be building the Mole Mound feature in the NEA on April 15 and 16
  - The cost will be around \$500
  - The Mole Mound will feature a slide as part of the dirt hill. This feature is the final addition to the NEA and once complete, Kit will be able to finish the sign for this area of the nature center

### **Adjournment**

- Rachel McDaniel moved to adjourn the meeting. Julie Moore seconded the motion. Vote unanimously passed (Truhn absent)

### **Important Dates**

Next Meetings: 5/13, 6/10, 7/8

Nature Friends BBQ: 6/12 6-8pm

Summer Day Camp begins 6/18

Music in Nature: 7/20, 8/10, 9/14 (5-8pm for all dates)

Harris Nature Center Foundation

**MINUTES**

May 13, 2019 6:30 PM

**Note:** Since the last meeting, the Board voted via email to accept Bartolomeo “Bart” Gorgoglione to the Harris Nature Center Foundation Board of Directors.

**Board Members Present:** Jim Buscetta, June Hicks, Patty Robbins, Julie Moore, Bart Gorgoglione, Rachel McDaniel, Roxanne Truhn

**Guest:** Alexa Warwick - Doctoral student at MSU in the Department of Fisheries and Wildlife

**Absent:** Christen Chappelle, Barb Kissling and HNC Coordinator Kit Rich

**Meeting called to order by President, Jim Buscetta:** Last month’s minutes reviewed by Board. June Hicks moved to approve the April minutes. Julie Moore seconded the motion. Approved unanimously (Chappelle, Kissling absent).

**Financial Report (Jim Buscetta)**

- There was little discussion on the financial report due to Barb Kissling’s absence, however the Board was able to look over the Balance, Profit and Loss, and CRCF Endowment sheets for April. We received \$10,150.00 in donations for the month of April and spent \$423.90 on PayPal fees and envelopes.
- Roxanne Truhn moved to approve the Financial Report. Patty Robbins seconded the motion. Approved unanimously (Chappelle, Kissling absent)

**President’s Report (Jim Buscetta)**

- Jim let the Board know that longtime donor Helen Tanner is in hospice care and the Board discussed sending a card to the her and Howard

**Harris Nature Center Report (Rachel McDaniel)**

- The Brick Fundraiser order form has been completed by Patty, Kit and Julie but can be amended if needed.
- David Vanderklok finished the Mole Hill and donated all the materials and his time. The project is complete except for allowing grass to grow on the dirt. Hopefully it will be ready for use in June.
- Rachel and 7 volunteers spread safety bark and mulch in the NEA features on the April Stewardship Morning.
- The Township will be re-graveling the NEA pathways this month.
- The barn is under deconstruction and will be completely removed by the end of May.
- Kit will be sending out a newsletter in May featuring the brick fundraiser and promoting Music in Nature. The Board discussed adding the Culver’s fundraiser to the newsletter.
- The Nature Friends BBQ date has been changed to June 13 (instead of June 12) and will include volunteers from all of Meridian Township Parks.

**Ongoing Business**

- Brick Sale
  - Kit, Patty and Julie created a flier for the Brick Fundraiser that includes the order form. The Board made some changes to the wording and added some information. Patty will discuss these changes with Kit when Kit is back from vacation.

- There was a lot of discussion on how to make the online order form work. It is not as simple as it seems with the time frame we are working with. Julie and the Board decided that if the online order is a PDF that people print and mail to us, that might be easiest. With that method, people will still be able to pay online via PayPal.
  - This way is not foolproof, though, as payments will need to be very clearly associated with the order forms.
- The Board plans to promote this fundraiser and sell bricks at the Farmer's Market, Nature Friends BBQ, at the Nature Center (perhaps on Be a Tourist in Your Own Town) and at some of the senior center events in the Township
- Perhaps we can leave some fliers at the libraries, too
- Culver's
  - June will have a date for this fundraiser soon. The Board will need to be present and helping serve the food to interact with folks who have contributed.

### **Adjournment**

- Rachel McDaniel moved to adjourn the meeting. June Hicks seconded the motion. Vote passed unanimously (Chappelle, Kissling absent)

### **Important Dates**

Next Meetings: June 10, July 8, August 12

Nature Friends BBQ: 6/13 6-8pm

Summer Day Camp begins 6/18

Music in Nature: 7/20, 8/10, 9/14 (5-8pm for all dates)

Harris Nature Center Foundation

**MINUTES**

June 10, 2019 6:30 PM

**Note:** Since the last meeting, the Board voted via email to accept Alexa Warwick to the Harris Nature Center Foundation Board of Directors.

**Board Members Present:** Jim Buscetta, June Hicks, Patty Robbins, Julie Moore, Rachel McDaniel, Roxanne Truhn, Christen Chappelle, Barb Kissling and HNC Coordinator Kit Rich

**Absent:** Bart Gorgoglione, Alexa Warwick

**Meeting called to order by President, Jim Buscetta:** Last month's minutes reviewed by Board. June Hicks moved to approve the May minutes. Patty Robbins seconded the motion. Approved unanimously (Gorgoglione, Warwick absent).

**Financial Report (Barb Kissling)**

- Our only income this month was from Amazon Smile and there were no expenses in May.
- Our endowment fund has net assets of \$21,880.37 as of 4/30/19, and we started the account with nearly \$15,000. We have had \$2,255 in donations to the account in 2019.
- Rachel McDaniel moved to approve the Financial Report. Roxanne Truhn seconded the motion. Approved unanimously (Gorgoglione, Warwick absent).

**Harris Nature Center Report (Kit Rich)**

- School bus scholarship report for the 2018-19 school year shows that they were at a record low. Discussion on why that might be and how we can help get more schools out to HNC. If there is anything the Board can do to help financially, the consensus was that we'd like to assist.
  - It seems as though the HNC outreach programs are higher
- The honeybees are back at HNC
- HNC's resident American Crow has arrived, is in his enclosure and is slowly adjusting to his new home
- Day Camp registration is going well, higher than usual at this point in the summer
  - Kit and Kati did an ad in Macaroni Kids earlier in the spring, so perhaps that has gotten some early registrations
- There are 13 volunteer Junior Counselors signed up to assist with Day Camp
- Kit announced she is retiring at the end of the summer, her last day with HNC will be August 23rd

**Ongoing Business**

- Pavillion
  - Nothing new to report. The Board discussed concern about the timeline in regards to our CRCF grant and anonymous donor.
- Brick Patio
  - Fliers have been completed and printed, a few orders are in already.
  - We will do a mailing to our list and stuff envelopes at the next meeting.
  - Directors can chat with folks about this and hand out fliers at the Nature Friends BBQ and at the Farmer's Market. We will organize who is available on which Saturdays and then let the Farmer's Market know we'd like a table.
- Music in Nature

- Will want Directors present at each date to welcome visitors and promote out fundraising efforts
- Can promote this event and others at Day Camp
- Culver's
  - June should be hearing back about this next week, and we can promote at summer camp, through social media and newspaper

### **Adjournment**

- Julie Moore moved to adjourn the meeting. Roxanne Truhn seconded the motion. Approved unanimously (Gorgoglione, Warwick, Robbins, Hicks absent)

### **Important Dates**

Next Meetings: July 8, August 12, September 9

Summer Day Camp begins 6/18

Music in Nature: 7/20, 8/10, 9/14 (5-8pm for all dates)

Harris Nature Center Foundation

**MINUTES**

August 12, 2019 6:30 PM

**Note:** Since the last meeting, the Board voted via email to accept Evelyne Cudel to the Harris Nature Center Foundation Board of Directors.

**Board Members Present:** Jim Buscetta, Bartolomeo Gorgoglione, Julie Moore, Rachel McDaniel, Roxanne Truhn, Christen Chappelle, June Hicks, Patty Robbins, Evelyne Cudel, and HNC Coordinator Kit Rich

**Absent:** Barb Kissling, Alexa Warwick

**Meeting called to order by President, Jim Buscetta:**

- Last month's minutes reviewed by Board. Bartolomeo Gorgoglione moved to approve the July minutes. Patty Robbins seconded the motion. Approved unanimously (Kissling, Warwick absent).

**Financial Report (Jim Buscetta)**

- Our Profit and Loss sheet in July shows that we have received the grant money from the Capital Region Community Foundation Impact Grant of \$25,000 for the pavilion and observation deck.
- There were no expenses to report in July.
- Patty wondered if we should transfer some of our money from the checking account into our own endowment fund. Julie mentioned that if we did that, we should set up some guidelines if we want to do that regularly, or if we should do a case-by-case basis. There was some discussion and the Board will think about this more.
- Rachel McDaniel moved to approve the Financial Report. Roxanne Truhn seconded the motion. Approved unanimously (Kissling, Warwick absent).

**Harris Nature Center Report (Kit Rich)**

- The camp season brought in 440 campers this year - which is the 2nd highest in HNC history
- Allison Goodman was hired on as the full-time Park Naturalist, she will start after Labor Day
- The new Spider Web arrived for the NEA and Kit has put in a work order to have it installed
- There is no news from the Township on the pavilion
- Kit and Kati have been working on 2020 program planning
  - HNC will no longer be holding the Winter Wonderland festival since the elimination of the ski rental and the numbers from recent years
  - They will be working on some different winter programming
  - HNCF will need to decide if we want to do a silent auction in some other format

**Ongoing Business**

- Culver's Fundraiser
  - The fundraiser is August 20th. June had folks sign up to volunteer at the event.
- Music in Nature
  - The August Music in Nature went really well. The weather cooperated perfectly and we had about 100 visitors attend the event.
  - Jim received some comments from visitors that the event was too long and that we should provide food at them. Discussion on serving food - it could be something we try the next time we do this concert series.
- Brick Sales

- So far we have received around \$2000 in brick sales, but we've only sold 25 bricks. We need to keep at this fundraiser because we need to sell a lot more bricks for the patio.
- Patty and June did not have much success at the Farmer's Market selling bricks, but promoted the Music in Nature event to a lot of folks

### **New Business**

- Mailing list
  - Jim wondered how we can expand our mailing list and how can we target specific populations of folks for things like directed donations from 401K and IRA for people who have to start making withdrawals. In regards to publicity and promoting events, we should have a better protocol to reach more people
  - Board discussion on who should have access to the mailing list and if we should purchase addresses from the USPS of HNC neighbors
  - HNCF does not have an email list to contact donors, we only use mailing addresses, so perhaps we need to formulate an email list for special events like with our mailings
- Publicity
  - Discussion on HNCF doing a newsletter, but the consensus was that we don't need one, as the Nature Center newsletter promotes the Foundation. But we could use the email list to send out information once in a while.
  - Discussion on if we should hire someone to work on creating a database for all of our email and mailing addresses so we can categorize folks and target specific groups of people for certain things. We will want to think about this for the next meeting.

### **Adjournment**

- Roxanne Truhn moved to adjourn the meeting. June Hicks seconded the motion. Approved unanimously (Kissling, Warwick absent.)

### **Important Dates**

- Next Meetings: September 9, October 14, November 11, December 9
- Music in Nature
  - Sat. 9/14 5-8pm



**FOR IMMEDIATE RELEASE**  
**August 26, 2019**

**CONTACT:** Kati Adams, Harris Nature Center Coordinator  
517.349.3866 | [kadams@meridian.mi.us](mailto:kadams@meridian.mi.us)

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**Howl at the Moon**  
*Guided Evening Walk for People and Dogs*

**Meridian Township, MI-** Enjoy the full moon while taking a guided walk through the moonlit woods of the Harris Nature Center, 3998 Van Atta Road in Meridian Township on Friday, September 13th at 8 pm. Dogs are welcome and the group meets in the parking lot. The fee is \$3/person, due at the time of the walk. For more information, contact [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

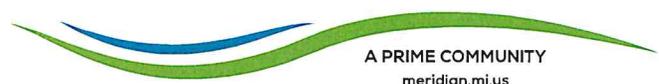
“Dogs love to smell all the fresh scents in the woods,” said Nature Center Coordinator Kati Adams. “However, it is not necessary to have a dog to attend the walk”

Participants are reminded that dogs must be on non-retractable leashes and flashlights are permitted.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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**FOR IMMEDIATE RELEASE**  
**August 26, 2019**

**CONTACT:** Kati Adams, Harris Nature Center Coordinator  
517.349.3866 | [kadams@meridian.mi.us](mailto:kadams@meridian.mi.us)



### **Strings and Wood Playing Outdoor Venue**

*Music in Nature Series Final Performance at Harris Nature Center*

**MERIDIAN TOWNSHIP, MI** — The Harris Nature Center, 3998 Van Atta Road in Meridian Township, has launched a new series of events this summer called Music in Nature, which features live music outside and freedom for the audience to move around the park while listening.

The third and final event is Strings and Wood on Saturday September 14th at 5 - 8 pm. They will play on a woodland stage while visitors choose to sit and listen concert-style, walk the trails, picnic or listen from another sitting area in the park. The program is sponsored by the Harris Nature Center Foundation and is free to the public. For more information, contact the Harris Nature Center at [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

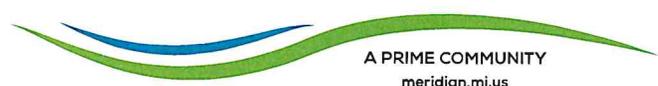
“There’s been a lot of enthusiasm for this live music series,” said Harris Nature Center Foundation President, Jim Buscetta. “People have really enjoyed spending time in nature while listening to great music.”

Strings and Wood is a trio comprised of Kati Adams, Matt Foreman and LeRoy Harvey. Matt is known locally as lead vocals and guitar for the Mama Tryd Band, and LeRoy is a member of the popular group Whoa Nelly. While Kati may be best known as the Senior Park Naturalist for Harris Nature Center, visitors will discover she has a hidden talent when they hear her beautiful voice.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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**FOR IMMEDIATE RELEASE**  
**August 19, 2019**

**CONTACT:** Kit Rich, Harris Nature Center Coordinator  
517.349.3866 | [rich@meridian.mi.us](mailto:rich@meridian.mi.us)



### **Preschoolers Discover Nature**

#### *Preschool Science Exploration Class Investigates Nocturnal Nature*

**Meridian Township, MI-** Curious preschool children will enjoy hands-on science exploration activities at the Harris Nature Center, 3998 Van Atta Road, in Meridian Township on Thursday, September 5th at 1-2 pm. This month's Preschool Science Exploration theme is Nocturnal Nature. The program is designed for 4-5 year old children. The fee is \$3/child and is due at the time of the program. For more information, contact [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

"Nighttime brings its own nature sights and sounds," said Nature Center Coordinator Kati Adams, "and while it won't be dark in the middle of the afternoon, the children will still have fun making nocturnal nature discoveries."

Each Preschool Science class has a different science topic and will always include a walk in addition to the science activities.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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**FOR IMMEDIATE RELEASE**  
**September 3, 2019**

**CONTACT:** Kati Adams, Nature Center Coordinator  
517.349.3866 | [kadams@meridian.mi.us](mailto:kadams@meridian.mi.us)

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**Harris Nature Center Encourages Stewardship**  
*Volunteer Opportunities Connect People with Parks*

**Meridian Township, MI-** It's always Earth Day at the Harris Nature Center, 3998 Van Atta Road in Okemos and they are looking for volunteers to help in the park on Saturday September 21st at 9-11 am. Volunteers will work in the flower beds, restore habitats and maintain trails. For more information, contact [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

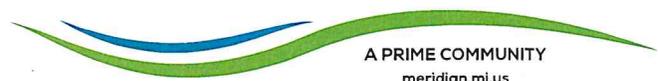
"In order to maintain the natural beauty of our park, we have to remove invasive plants, maintain habitat areas and garden around the nature building," said Nature Center Coordinator Kati Adams. "We are encouraging people to become stewards of Meridian Riverfront Park, home of the Harris Nature Center, by volunteering at least one morning this year."

There is one more Stewardship Morning on October 12th.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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**FOR IMMEDIATE RELEASE**  
**September 3, 2019**

**CONTACT:** Kati Adams, Harris Nature Center Coordinator  
517.349.3866 | [kadams@meridian.mi.us](mailto:kadams@meridian.mi.us)

**Harris Nature Center**  
A Meridian Township Park Millage Facility



### **Harvest Moon Stories around the Campfire**

*Lansing Storytellers Providing Entertainment at Campfire Program*

**Meridian Township, MI-** Enjoy a campfire and listen to stories by the Lansing Storytellers before taking a walk through the evening woods with a naturalist at the Harris Nature Center, 3998 Van Atta Road in Meridian Township, on Saturday September 21st at 7 pm. There is a \$3/person or \$7/family fee due at the time of the program. For more information, contact [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

“The harvest moon is low in the sky and appears huge,” explained Nature Center Coordinator Kati Adams. “Before there was electricity, the extra light it gives off allowed farmers to stay in their fields harvesting crops well into the night.”

This year, the Lansing Storytellers will be telling stories in the time honored way, around the campfire.

Participants will also be able to roast marshmallows and take a guided walk through the woods.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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**FOR IMMEDIATE RELEASE**  
**September 3, 2019**

**CONTACT:** Kati Adams, Harris Nature Center Coordinator  
517.349.3866 | [kadams@meridian.mi.us](mailto:kadams@meridian.mi.us)



**Toddlers and Preschoolers can Discover Nature at the Harris Nature Center**  
*Nature Tots Registration Begins*

**Meridian Township, MI-** Introduce your toddler or preschooler to nature at the Harris Nature Center, 3998 Van Atta Road, in Meridian Township. Eight-week sessions of Nature Tots begin Monday September 23rd for children 4 years and younger accompanied by an adult. For more information, contact [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

Nature Tots classes meet at 9:00 - 10:00 am or 12:30 - 1:30 pm, giving parents the option to choose which time works best for their schedule. The fall session is for eight weeks on Mondays, September 23rd through November 11th.

"In these programs the naturalist will facilitate activities while the child and adult companion participate as a team," said Nature Center Coordinator Kati Adams. "Participants will enjoy nature activities, games, walks, crafts, stories and songs."

Enrollment is limited, so parents should request a registration form by calling the Harris Nature Center at 517.349.3866 or register online at [www.meridian.mi.us/HNC](http://www.meridian.mi.us/HNC). There is a \$50 fee for these 8-week sessions.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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**FOR IMMEDIATE RELEASE**  
**September 3, 2019**

**CONTACT:** Kati Adams, Harris Nature Center Coordinator  
517.349.3866 | [kadams@meridian.mi.us](mailto:kadams@meridian.mi.us)



**Chipmunk Story Time at the Harris Nature Center**  
*Chicory Chipmunk presents "Possum's Harvest Moon"*

**Meridian Township, MI-** Story time comes alive as children interact with puppets Chicory Chipmunk and his animal friends at the Harris Nature Center, 3998 Van Atta Road, in Meridian Township on Thursday, September 19th at 10 am for this month's Chipmunk Story Time, *"Possum's Harvest Moon"*. The story times are open to preschool and elementary children. The fee is \$3/ child/ session and is due at the time of the program. For more information, contact [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) or 517.349.3866.

"Everyone notices the big Harvest Moon in the fall," said Nature Center Coordinator Kati Adams, "and the animals in these stories do too."

The stories will be followed by a walk in nature to do our own counting.

For more information about this and other programs offered at the Harris Nature Center, contact 517.349.3866 or [hnc@meridian.mi.us](mailto:hnc@meridian.mi.us) and find out more online at [www.meridian.mi.us](http://www.meridian.mi.us) and [www.facebook.com/HarrisNatureCenter](http://www.facebook.com/HarrisNatureCenter) and [www.twitter.com/HarrisNatureCnt](http://www.twitter.com/HarrisNatureCnt).

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PARK COMMISSION  
September 10, 2019

9. DISCUSSION ITEMS:
- A. 2019 Deer Management Program
  - B. Climate Sustainability Program



9.B.

**To:** Park Commission  
**From:** LuAnn Maisner CPRP, Director  
Department of Parks and Recreation  
**Date:** September 6, 2019  
**Re:** Climate Sustainability Plan

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Please review the attached Meridian Sustainability Plan for discussion on identifying current practices that support this effort and things we can work toward in the future

/att



**To: Park Commission**  
**From: Jane Greenway and Kelsey Dillon**  
**Parks and Recreation Department**  
**Date: September 5, 2019**  
**Re: 2019 - Deer Management Recommendation**

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The purpose of this memo is to update the Park Commission on the status of the deer management program.

Proposed 2019 properties for the Deer Management Program (see attached map for locations):

1. Central Park
2. Towner Road Park
3. Wonch Park
4. Ferguson Park
5. Eastgate Park
6. Legg Park
7. Hartrick Park
8. Ted Black Woods
9. North Meridian Rd. Park
10. Red Cedar Natural Area
11. Forest Hills Natural Area
12. Tacoma Hills Natural Area
13. Orlando Outlot B
14. Davis Foster Preserve
15. Hubbel Preserve
16. Lake Lansing North Preserve
17. Newman Equities Preserve
18. Towar Woods Preserve
19. Lake Lansing South Preserve
20. Central Meridian Uplands
21. Sower Woods Preserve
22. Tihart/Cornell Wetland
23. Southwest Meridian Uplands
24. Sumbal Preserve
25. Red Cedar Glen Preserve
26. Towner Wetland Preserve
27. Meridian Central Wetland
28. Red Cedar River East Preserve
29. Forest Grove Preserve
30. North Ridge Preserve
31. Mandenberg Woods
32. Tihart Preserve
33. Ponderosa Preserve
34. Nemoke Preserve
35. Glendale Cemetery
36. Riverside Cemetery
37. Ingham County Farm
38. Transfer Station

**Background**

Meridian Township’s ninth year of deer management will officially commence on October 1, 2019 and will run until January 1, 2020. This popular program places volunteer archery hunters on select Township and County owned properties to manage the deer population. Meridian Township has an over-population of deer that has resulted in an increase of damage to landscaping, reports of vehicle/deer accidents, concern for public health, and a disruption to the ecological balance of our natural areas. In response, the Meridian Township Board directed staff to develop and implement a deer management plan that outlines measures for a highly managed program to harvest white-tailed deer in a number of selected township-owned properties. The program began in 2011 and has been conducted each year since that time. The harvest is held during the regular archery season, October 1st through January 1st. The managed harvest is NOT open to the general public. All hunters must be approved by the Township and are tested for proficiency at the MSU Demmer Archery Center. Only approved, qualified, competent and experienced hunters will be considered to access Township property for the managed harvest. Neighboring property owners are notified of the harvest each year. All parks and land preserves remain open to the public during archery season. The hunters have proven to be valuable partners and act as the eyes and ears on Township-owned properties. The program continues to receive accolades statewide and serves as a model for suburban wildlife management.

**Deer Management Program Statistics**

*(Collision based on data provided on the MSP “Traffic Crash Reporting System – Crash Statistics Report Selection Criteria”)*

	<b>Total Hunters</b>	<b>Properties Hunted</b>	<b>Deer Harvested</b>	<b>Reported Deer/Car Collisions</b>
<b>2011</b>	25	7	43	152
<b>2012</b>	50	18	90	153
<b>2013</b>	60	20	127	180
<b>2014</b>	73	21	150	137
<b>2015</b>	30	19	63	144
<b>2016</b>	73	31	73	164
<b>2017</b>	66	30	80	129
<b>2018</b>	74	38	57	129
<b>2019</b>	---	38 proposed	---	---

**Chronic Wasting Disease (CWD)**

CWD is a deadly neurological disease found in the state's free-ranging deer population. Since the discovery of CWD deer in Meridian Township in May 2015, over 2,000 deer from Meridian Township have been tested for CWD in order to gauge the extent of the disease across the landscape. To date, ten deer in Ingham and Clinton counties have tested positive for the disease with five of them found in Meridian Township. To date, more than 61,000 deer in Michigan have been tested for chronic wasting disease, and CWD has been confirmed in 120 free-ranging deer in eight Michigan counties: Clinton, Ingham, Ionia, Jackson, Kent, Gratiot, Eaton and Montcalm.

In summary, the discovery of CWD somewhat complicated the Meridian Deer Management program because the hunters are no longer allowed to utilize bait to attract the deer. This has resulted in a significant drop in deer harvested (seen from 2014 to 2015). In addition, local processors who processed the Township's deer are no longer participating in the Michigan Sportsmen Against Hunger program due to concerns over CWD. The World Health Organization has advised against consuming venison that is contaminated with CWD, although no link to harmful effects in humans has yet been proven. Many processors will not take deer within the core CWD zone to be sure they are not contaminating their equipment which would have to be thrown out if a CWD positive deer was processed. The DNR is unsure of when the CWD restrictions can be lifted but they advised it will be at least a few more years. Until that time, the closest processor that works with Michigan Sportsmen against Hunger is in Howell. However, many of our hunters donate their venison through other private programs or directly provide venison to families in need. A few local processors will still process deer in the core zone and then the hunters take it upon themselves to donate the meat to charity.

### **Michigan State University Research Project**

Johnathan Trudeau, a PhD student with the MSU Department of Fisheries and Wildlife, is conducting a long-term research project on white-tailed deer movement that started in January 2018. This research is part of a large-scale collaboration between Michigan State University (MSU), the Michigan Department of Natural Resources (MDNR), and the United States Department of Agriculture (USDA) aimed at characterizing deer movement across a landscape with varying human development. With the emergence of chronic wasting disease (CWD) in mid-Michigan, it is crucial to understand deer movement patterns to best inform effective disease management practices. The study area spans Ionia, Clinton, Ingham, and Shiawassee counties. Jonathan's team successfully captured and fit global positioning system (GPS) collars on 20 adult white-tailed deer in 2018 and 39 adult white-tailed deer in 2019. The GPS collars allow Jonathan to monitor the survival and movement of each deer for up to two years.

The following properties are being utilized for the study: Central Park, North Meridian Road Park, Ted Black Woods, Nancy Moore Park, Towar Woods, Central Meridian Uplands, Davis Foster Preserve, Red Cedar River East Preserve, Tihart/Cornell Wetland Preserve, Legg Park, Forest Grove Preserve, North Ridge Preserve, the Transfer station, and Tihart Preserve.

### **Future Plans**

The intention is to continue the volunteer archery deer management program in 2019 with the hope that our volunteer's efforts will continue to reduce the herd and provide valuable data on Chronic Wasting Disease to the Michigan DNR.

### **Conclusion**

The Parks and Recreation office regularly fields calls from residents complaining about deer damage to personal property. Our environmental consultants and staff continue to report severe ecological damage to the natural areas due to over-browsing.

The onset of CWD has also raised concerns about the health of the deer herd in Meridian Township. While not its original intention, the deer management program now plays a vital role in providing the Michigan DNR and MSU with valuable data on the disease. Although, this now means one of the goals of the program to donate all harvested venison is not a possibility at this time. We will keep encouraging hunters to privately donate the venison they harvest and as soon as the CWD restrictions are lifted, we hope to resume all donations to Sportsman Against Hunger.

#### Attachment:

1. Meridian Township 2019 Deer Management Areas Map



## DEER MANAGEMENT REGISTRATION INSTRUCTIONS

1. Complete and submit the Application Packet which includes: Volunteer Registration, Waiver, and Release of Liability. Review the 2019 Harvest Regulations.
2. Return Application Packet **AND** a copy of your driver's license to our office:  
Meridian Township Service Center (in Nancy Moore Park)  
2100 Gaylord C. Smith Court  
Haslett, MI 48840  
OR place in drop box  
OR email to Kelsey Dillon at [dillon@meridian.mi.us](mailto:dillon@meridian.mi.us)
3. Meridian Township will run a background check and process your application.
4. If approved, you will be contacted to enroll for the archery workshop and proficiency test at the MSU Demmer Center on September 19<sup>th</sup> from 5:30-7pm.
5. Returning hunters will not be required to take the proficiency test, but are required to attend the archery workshop at the Demmer Center (Sept. 19 at 5:30pm).
6. After you have passed the proficiency test, you will be assigned to a property and will receive an information packet with your deer tags, map, sign for your dashboard, and hunter ID.
7. You will be required to mark your stand's location on the property before you hunt.
8. Returning hunters have first priority and generally receive their first choice of hunting property.



## **Meridian Township Deer Management Program - 2019 Volunteer Registration, Waiver, Release of Liability**

Meridian Township is seeking volunteers to participate in special controlled deer harvests on specific township-owned properties. These deer harvests have been developed to reduce the Whitetail deer population.

1. The Deer Management Program is ARCHERY ONLY.
2. Approved hunters are allowed to be on their assigned property seven days a week from ½ hour before dawn to ½ hour after dusk, per State of MI and DNR rules, during the regular bow and firearm seasons (October 1, 2019 through January 1, 2020).
3. Bow hunting is allowed during the firearm season, as long as the hunter is carrying a combination license or a firearm license, per DNR rules.

### **APPLICANT BACKGROUND INVESTIGATION WAIVER**

To Whom It May Concern:

I authorize Meridian Township to investigate my personal history, character, and police records, as they may be relevant to determine my suitability as a volunteer working with the deer management program. I understand that such an investigation may also include a driving record check, and criminal history check.

I hereby release and hold harmless Meridian Township, its agents or others from any liability or damage which may result from furnishing the information requested.

Applicant's Signature \_\_\_\_\_ Date \_\_\_\_\_

Applicant's Printed Name \_\_\_\_\_ Date of Birth \_\_\_\_\_

Driver's license Number \_\_\_\_\_

### **RELEASE OF LIABILITY BY A VOLUNTEER FOR PARTICIPATION IN DEER MANAGEMENT PROGRAM**

In consideration of receiving permission from Meridian Township, I, the undersigned, state and agree as follows:

The undersigned states and agrees as follows:

1. I have read and will abide by the Meridian Township rules and regulations dealing with the deer management activities, as well as all applicable MDNR hunting rules and regulations.

2. I will use only hunting equipment that I know how to operate and use safely. I will not undertake any deer management activity until I have been informed of and understand my role in the deer management activities, including the actions I am to take in those activities.

3. I am in good health and I am aware of no physical problem or condition which will limit or interfere with my ability to participate in the deer management activities under either predicted or emergency conditions. I also understand that medical attention may not be readily available.

4. I understand that the activities in which I will be participating may be inherently dangerous and/or involve strenuous activity. I agree to take all reasonable precautions to avoid injury to myself and to others and damage to property in connection with deer management activities. I agree that I am participating at my own risk, and acknowledge that Meridian Township makes no warranty or representation, express or implied, regarding the condition or safety of the property where I will be participating in the deer management activities ("the Property") or any equipment to be used in the deer management activities.

5. I waive and release, and covenant not to sue, Meridian Township, its elected and appointed officials, employees, agents, and volunteers, from any and all claims, liabilities, losses, damages, costs and expenses resulting from any injury to me or damage to my or their property arising out of my or their presence at the Property, travel to or from the Property, or our participation in the deer management activities. I further agree to be responsible for any injuries caused by my negligence, and will hold Meridian Township harmless for such.

6. I understand that I have no right to participate as a volunteer in this program. Meridian Township has the sole discretion in selecting volunteers, and may make its decision based on whatever factors it deems appropriate. I also understand that if I am selected as a volunteer, Meridian Township may revoke that selection at any time for any reason without liability.

7. I am at least 18 years of age, and I understand the contents of this Release.

\_\_\_\_\_  
Print name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**HUNTER COMMITMENT TO DEER MANAGEMENT**

The Meridian Township Deer Management Program has a limited number of spaces. As a result, we require a strong hunting commitment from the hunters and ask that you commit to hunting a minimum of one day per week. We regularly check records and if you are not regularly hunting your assigned property, your "spot" may be replaced by another hunter who is able to commit more time to our program.

I commit to hunting my assigned property on a weekly basis.

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

**Include your preferred hunting locations below (see map of Meridian Township Deer Management Areas):**

Have you previously participated in Meridian Township's Deer Management program?

\_\_\_\_\_

\*There is absolutely NO guarantee that you will receive your top choice

First choice: \_\_\_\_\_

Second choice: \_\_\_\_\_

Third choice: \_\_\_\_\_

**Private Property Hunting:**

Are you interested in having your name on a list of hunters that may be provided to private homeowners in Meridian Township who would like their property to be hunted?

\_\_\_\_ YES

\_\_\_\_ NO

**Notes:**

1. Meridian Township's hunting rules do not apply to hunting arrangements with private land owners, but the State of MI rules do apply.
2. Private landowners understand that Meridian Charter Township has NO responsibility or control of the hunters involved in this program.



## MERIDIAN TOWNSHIP DEER MANAGEMENT HARVEST REGULATIONS - 2019

### General Information & Designated Deer Harvest Locations

1. Permitted hunting will be in accordance with the laws of the Michigan Department of Natural Resources (MDNR), the State of Michigan, and the regulations of Meridian Charter Township.
2. Hunting may take place on the following Township or County properties by permission ONLY. (All other Township or County-owned properties are NOT open for public hunting.)
  1. Central Park
  2. Towner Road Park
  3. Wonch Park
  4. Ferguson Park
  5. Eastgate Park
  6. Legg Park
  7. Hartrick Park
  8. Ted Black Woods
  9. North Meridian Rd. Park
  10. Red Cedar Natural Area
  11. Forest Hills Natural Area
  12. Tacoma Hills Park
  13. Orlando Outlot B
  14. Davis/Foster Preserve
  15. Hubbel Preserve
  16. Lake Lansing North Preserve
  17. Newman Equities Preserve
  18. Towar Woods Preserve
  19. Lake Lansing South Preserve
  20. Central Meridian Uplands
  21. Sower Woods Preserve
  22. Tihart/Cornell Wetland
  23. Southwest Meridian Uplands
  24. Sumbal Preserve
  25. Red Cedar Glen Preserve
  26. Towner Wetland Preserve
  27. Meridian Central Wetland
  28. Red Cedar River East Preserve
  29. Forest Grove Preserve
  30. North Ridge Preserve
  31. Mandenberg Woods
  32. Tihart Preserve
  33. Ponderosa Preserve
  34. Nemoke Preserve
  35. Glendale Cemetery
  36. Riverside Cemetery
  37. Ingham County Farm
  38. Transfer Station

### Participation Rules

1. Participants must be Meridian Township residents and at least 18 years old.
2. Hunters will be required to sign a release of liability form and consent to a background check. Meridian Township will require a copy of driver's license.
3. **Existing hunters:**  
Participants who passed a proficiency test at a previous archery workshop are **not** required to perform a test in 2019. Returning participants are required to attend the meeting at the Demmer Center before the testing (**5:30pm on September 19<sup>th</sup>**).  
**New Hunters:**  
You are required to take a proficiency test at the MSU Demmer Center. Orientation and testing is scheduled for **September 19<sup>th</sup> from 5:30-7pm**. If you are unable to attend on that date, please let Jane Greenway know and she will make arrangements for a future testing date.

### **Managed Hunt Rules**

1. Days and Hours: Hunting shall be permitted only during those days and hours set forth in the Michigan Department of Natural Resource's 2019 Hunting and Trapping Digest.
2. Designated managed harvest dates:  
Seven days a week during the regular 2019 bow and firearm season (October 1, 2019 – January 1, 2020).
3. Hikers, hunters, bicyclists may share the township and county properties during the regular hunting season. Property entrances are posted and adjacent neighbors are notified. Please hunt responsibly.
4. Meridian Township and Ingham County property is NOT open to the general public for hunting. Meridian Township has the sole discretion in selecting volunteers, and may make its decision based on whatever factors it deems appropriate.
5. Meridian Township's deer management program is ARCHERY ONLY. Bow hunting is allowed during the firearm season(s) with the appropriate license.
6. The 2019 deer harvest will operate according to these regulations:
  - a. Hunters may keep all deer harvested.
  - b. Hunters are responsible for finding a processor.
  - c. All deer must be checked at a DNR check station.
  - d. Failure to properly comply may result in loss of hunting privileges.
  - e. It is the responsibility of the hunter to understand all State rules.
  - f. It is the responsibility of the hunter to understand the parameters of the Disease Control Permit.

### **Managed Hunt Procedure**

1. Hunters will be assigned to specific properties.
2. Hunters are required to report participation throughout the season upon entering and exiting the property, each hunter will have two options for recording participation (entrance and exit times/dates), either through the use of the Facebook group 'Meridian Deer Management', or by email to [greenway@meridian.mi.us](mailto:greenway@meridian.mi.us) or [dillon@meridian.mi.us](mailto:dillon@meridian.mi.us).
3. Hunters must remain within 50 feet of the blind or stand while hunting.
4. It is expected that hunters will only take shots within their level of proficiency in accordance with hunter's ethics, which dictate that a shot is only taken when capable of effectuating a quick and humane harvest. Hunters using a compound bow should limit their shots to a maximum of 30 yards and those using a crossbow should limit their shots to a maximum of 40 yards.
5. Hunters are required to limit their shooting distance to that which will ensure the deer is put down quickly. Never take a shot if you are unsure of what lies beyond the target.

6. Safety harness use in tree stands is mandatory.
7. Tree stands and blinds must comply with MDNR rules for public land that state “a portable deer stand left overnight must have the hunter’s name and address on the stand and be readable from the ground.” If you would like to use another hunter’s stand or blind, you must contact them directly for permission to do so.
8. Use of bolts, screws, and screw-in type steps are not allowed. Stands and associated equipment may not pierce trees.
9. Township personnel will remove any and all stands and blinds that are in violation of the MDNR rules for public property.
10. No trail flagging material should be placed on trees, branches or other objects. Do not remove any existing flagging.
11. Absolutely no marking or defacing of any tree, plant, shrub, etc. However, small tree branches may be carefully trimmed to accommodate tree stands.
12. Fires and overnight camping are not permitted at any time.
13. Participants must carry proof of being a member of the deer management team at all times (small pink card).
14. Participants must display a Managed Deer Harvest Notice in their vehicle while hunting on township property.
15. All hunters must wear blaze orange hunting gear during firearm season per DNR regulations.
16. **NO** bait piles – per MDNR rules relative to chronic wasting disease.
17. Use of the all-terrain wheelchair or other special arrangements may be made for hunters. Contact Jane Greenway at 517.853.4610 or [greenway@meridian.mi.us](mailto:greenway@meridian.mi.us) for arrangements.
18. Hunters must report the date and location of deer taken directly to Jane Greenway at 517.853.4610 or [greenway@meridian.mi.us](mailto:greenway@meridian.mi.us), or via the Facebook Page. **Do not report number of deer taken to the Police Department.** Hunters must also comply with all reporting requirements of the Disease Control Permit. To join the Facebook page, simply type in “Meridian Deer Management” and request to join the group or type in <https://www.facebook.com/groups/677493192339578/>.

### **Tracking Deer and Field Dressing**

1. Trespassing on private property for the purpose of tracking deer is strictly prohibited. Written permission is required to hunt or retrieve deer on private property.

2. Deer shot and **not** recovered, should be reported as soon as practical to the Meridian Township Police at **517.853.4800** (cadet desk) and to Jane Greenway (517.853.4610) or Kelsey Dillon (517.853.4614).
3. **Hunters tracking deer after dark must contact the Meridian Township Police to alert them of their activity, 517.853.4800 (cadet desk).**
4. Deer harvested may be kept by the hunter.
5. Deer must be dressed in the field, well away from roads or trails. **DNR check stations have dumpsters available for bagged deer parts and carcasses. The head must be brought to a check station. There is a drop box for after hours.**

#### **Deer Permits**

1. The Meridian Township Managed Deer Harvest will take place under a 2019 Disease Control Permit. Deer Management Assistance Permits are invalid after the last day of the deer season.
2. Antlered Deer may be harvested and kept by utilizing a disease control permit tag. If the hunter utilizes a disease control permit tag they are NOT permitted to keep the deer's head or antlers. If the hunter utilizes a personal tag they ARE permitted to keep the head and antlers (after CWD testing – the DNR will return it to the hunter).
3. Every unused deer permit must be returned to the Township when the hunter will no longer be deer hunting on the property authorized by this program.
4. It is illegal to sell 2019 Disease Control Permits to anyone, or transfer them to any other person, except by issuance to hunters. It is illegal for the township to charge a per permit fee or a per deer fee which, in effect, is selling the permit or selling a deer; both of which are illegal in Michigan.

#### **Illegal Hunting Activity**

1. Your help is important in keeping Meridian Township parks and land preserves clean and well-maintained. Report hunting-related incidents and accidents to 911 or the **Meridian Township Police non-emergency line at 517.332.6526.**
2. Report poaching and other illegal hunting activity to the **MDNR RAP Hotline at 1.800.292.7800.**

#### **Questions may be directed to:**

Jane Greenway or Kelsey Dillon  
 Meridian Township  
 2100 Gaylord C. Smith Ct.  
 Haslett, MI 48840  
 (517) 853-4610 or (517) 853-4614; greenway@meridian.mi.us or dillon@meridian.mi.us



## Deer Management FAQ's

- 1. How can I participate in the Meridian Township Deer Management Program?**

To submit your name for the waiting list please call or visit the Meridian Township Service Center at 2100 Gaylord C. Smith Court Haslett, MI 48840 to fill out an application, view hunting maps, rules, and regulations.
- 2. What are the requirements to hunt in the Deer Management Program?**

Placement in the program is **limited to Meridian Township residents**. All hunters must submit to a background check, and pass a proficiency test and equipment check. There are also minimum participation requirements throughout the hunting season.
- 3. When and where does the hunt take place?**

The deer management program coincides with the archery season, running from October 1, 2019 through January 1, 2020. Hunting occurs seven days a week from ½ hour before dawn to ½ hour after dusk. All participating properties are posted at obvious points of entry.
- 4. What safety precautions has the township taken to prevent hunting related incidents?**

Hunting is limited to **archery only**. Designated properties have a predetermined number of hunters based on the property size, huntable area, and public use. All hunters are required to have a background check, pass a proficiency test, and pass an equipment check. Hunter participation is reported as far as property entrance and exit times, their stand locations, and deer in process of being tracked.
- 5. Can I hunt on private property in Meridian Township?**

Yes, be sure to obtain written landowner permission and follow all State rules and regulations. **Meridian Township parks and land preserves are not open to public hunting.**
- 6. What do the hunters do with the venison?**

Hunters are allowed to keep the meat themselves, but are encouraged to donate the deer through Michigan Sportsman Against Hunger (MSAH), so that the meat can be donated to local food banks.
- 7. How many reported deer car collisions occur in Meridian Township?**

2018: 129	2013: 180
2017: 129	2012: 152
2016: 164	2011: 152
2015: 145	2010: 138
2014: 137	
- 8. Who can I call to report a dead deer along the roadway?**

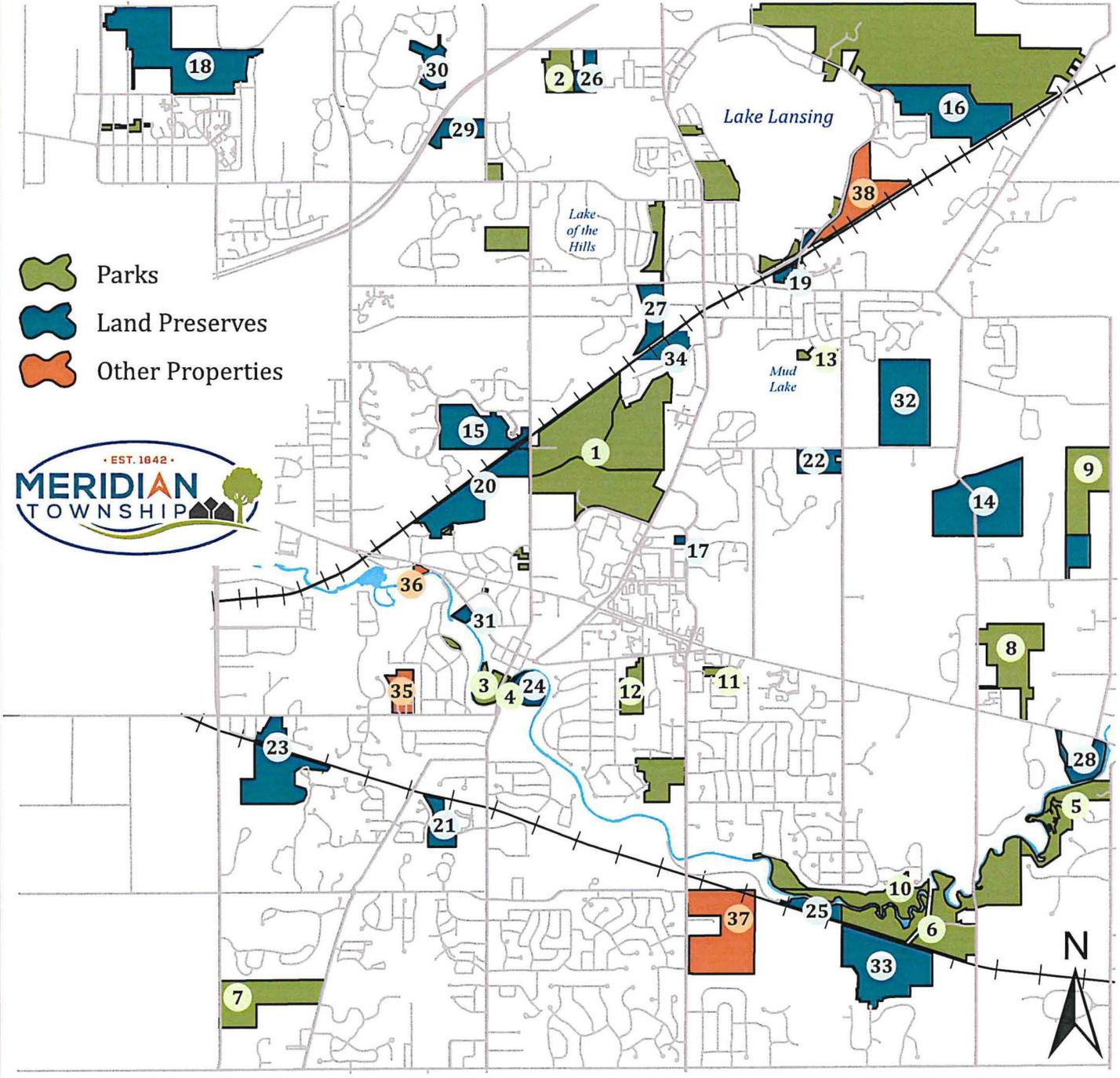
Meridian Township at 517.853.4600.
- 9. How can I remove a dead deer from my yard?**

Call Meridian Township at 517.853.4600.
- 10. I believe someone is poaching on my property or illegally feeding deer, who do I call?**

Michigan Department of Natural Resources RAP line (Report All Poaching) 800.292.7800

# Meridian Township Deer Management Areas 2019

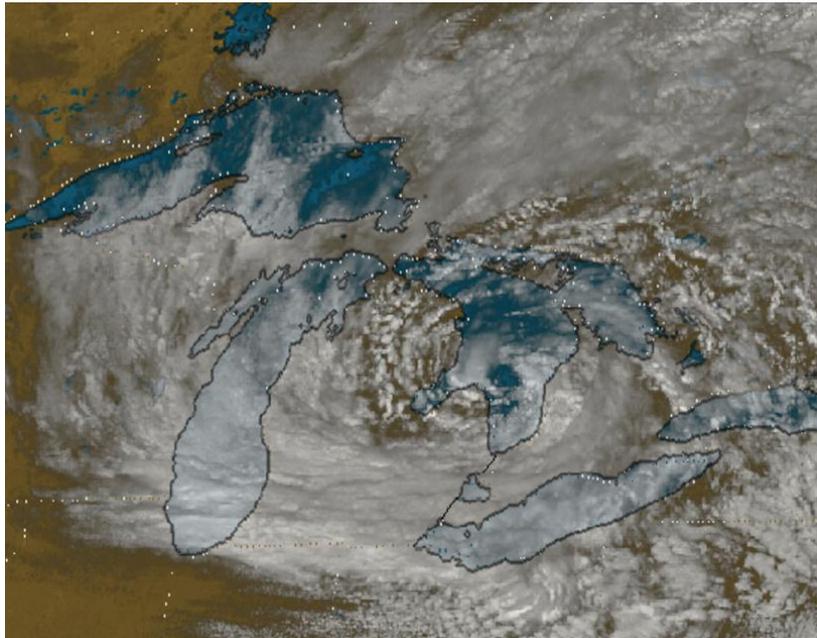
- 1 Central Park
- 2 Towner Road Park
- 3 Wonch Park
- 4 Ferguson Park
- 5 Eastgate Park
- 6 Legg Park
- 7 Hartrick Park
- 8 Ted Black Woods
- 9 North Meridian Rd. Park
- 10 Red Cedar Natural Area
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- 37 Ingham County Farm
- 38 Transfer Station





# Climate Sustainability Plan

Meeting Our Climate Action and Green Community Goals



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## **Executive Summary**

In 2007, Meridian Township joined over 1000 communities in signing the U.S. Mayors Climate Protection Agreement. This plan describes many of the activities that have been done during the past 10 years to implement that agreement. The Meridian Township Board adopted a resolution of support for the Paris Climate Accord on June 20, 2017. Consistent with the Accord, many national, state, and local governments have established goals to reduce greenhouse gas emissions by 80% or more by 2050 compared to 2005 levels with an objective of a maximum global average temperature rise of 1.5°C to 2°C.<sup>1</sup> This is also the long-term goal of this plan.

Climate change is largely attributed to greenhouse gases, such as CO<sub>2</sub>, released from burning fossil fuels. Climate change is predicted to have many impacts on our weather, our health, and our economy. These include flooding, poor air quality, negative impact on trees, and increased infectious diseases. One of the most significant impacts in Meridian Township will be more major rain events that lead to flooding.

Meridian Township has a long history of environmental stewardship. The Climate Sustainability Plan provides a framework for continuing and expanding this legacy. Implementation of this plan will enable Meridian Township to:

- Contribute to the worldwide efforts to curb greenhouse gas emissions.
- Make our community a more sustainable, resilient, affordable, and vibrant place to live.
- Make our township government operations more energy and resource efficient and better prepared to deal with the impacts of climate change.

This plan requires many actions related to energy efficiency, renewable energy, recycling and waste reduction, transportation, and water management. This plan includes objectives to:

- Achieve significant energy and water cost savings in township facilities and vehicle fleet.
- Obtain 50% of electricity used for township operations from renewable energy sources by 2025 and 100% by 2035.
- Reduce the amount of materials sent to landfills by 10% in 5 years.

The Township Manager will work with township staff, Meridian Township Energy Team, Environmental Commission, Transportation Commission, and other township boards and commissions to define responsibilities for implementing the plan. Monitoring will be important to determine plan impacts and what is working. Objectives and strategies in this plan should be revisited at least every 5 years.

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<sup>1</sup> [https://en.wikipedia.org/wiki/Paris\\_Agreement](https://en.wikipedia.org/wiki/Paris_Agreement)

## Introduction

The Meridian Township Board adopted a resolution of support for the Paris Climate Accord on June 20, 2017. Consistent with the Accord, many national, state, and local governments have established goals to reduce greenhouse gas emissions by 80% or more by 2050 compared to 2005 levels with an objective of a maximum global average temperature rise of 1.5°C to 2°C.<sup>2</sup> This is also the long-term goal of this plan. Implementation of this plan will enable Meridian Township to:

- Contribute to the worldwide efforts to curb greenhouse gas emissions.
- Make our community a more sustainable, resilient, affordable, and vibrant place to live.
- Make our township government operations more energy and resource efficient and better prepared to deal with the impacts of climate change.

Achievement of this goal will require many actions related to energy efficiency, renewable energy, recycling and waste reduction, transportation, and water management. This plan includes objectives to:

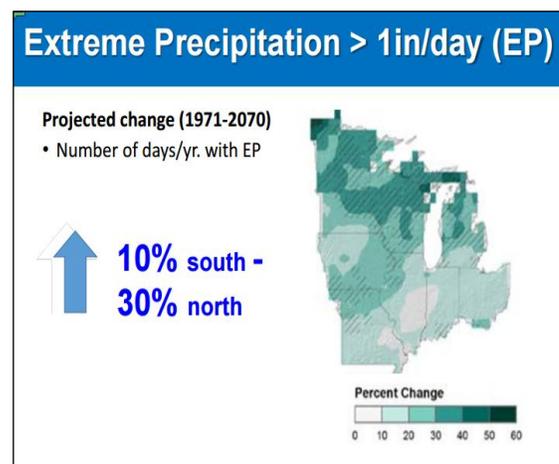
- Achieve significant energy and water cost savings in township facilities and vehicle fleet.
- Obtain 50% of electricity used for township operations from renewable energy sources by 2025 and 100% by 2035.
- Reduce the amount of materials sent to landfills by 10% in 5 years.

In light of the urgency to mitigate climate change and the imperative to use tax dollars wisely, a plan to use resources as economically and efficiently as possible is essential.

## Climate Action

In 2007, Meridian joined over 1000 communities in signing the U.S. Mayors Climate Protection Agreement. More recently, East Lansing, Grand Rapids, Ann Arbor, Traverse City, and others have developed Climate Action, Energy, and Resiliency Plans. Many of these are integrated in Comprehensive Plans. The Michigan Municipal League, Michigan Townships Association, State of Michigan, and others have launched a Green Communities Network to assist local governments in addressing environmental challenges including climate change.

Climate change is largely attributed to greenhouse gases, such as CO<sub>2</sub>, released from burning fossil fuels such as coal, oil, and natural gas. Climate change is predicted to have many impacts on our weather, our health, and our economy. These include flooding (see Figure 1), poor air quality, negative impact on trees, increased infectious diseases, and increased wildfire risk. One of the most significant impacts in Meridian Township will be more major rain events that lead to flooding.



**Figure 1: Great Lakes Integrated Sciences & Assessments (GLISA)**

<sup>2</sup> [https://en.wikipedia.org/wiki/Paris\\_Agreement](https://en.wikipedia.org/wiki/Paris_Agreement)

## Predicted Changes in Michigan

Key Health Outcome	Biophysical Parameter Changes	Predicted Change
Respiratory Diseases	Air Pollutants increase with high temps; Pollen, Mold levels increase with longer growing season & more moisture	↑
Heat Morbidity, Mortality	More frequent, longer Heat Events; Warmer minimum temperatures	↑
Injury, CO Poisoning	More frequent Ice Storms, Extreme Rain leading to more Power Outages & Cleanup; changes in other storm types unclear	↑ ?
Waterborne Diseases, Toxins	Algal blooms, other Flood-related contaminations more frequent	↑
Vector borne Diseases	Impact on Mosquito & Tick lifecycle unclear	?

**Figure 2: MI Climate & Health Adaptation Program**

While exact impacts cannot be predicted, long term trends are evident (see Figure 2) and call for an organized response – especially when climate adaptation and mitigation actions make communities more vibrant, affordable, sustainable, and resilient places to live.

This Plan includes strategies that can help reduce climate change impacts while saving money, saving energy, saving resources, and improving landscapes. These “actions of no regret” offer win-win opportunities that should be carried out regardless of opinions about the nature and threat of climate change.

**“The climate is changing and we need to be more dynamic in our planning, especially in terms of extremes”**

– Jeff Andresen, MSU Professor of meteorology/climatology and State Climatologist

### Purpose, Scope, and Process

Meridian Township has a long history of environmental stewardship. The adoption of a Climate Sustainability Plan provides a framework for continuing and expanding this legacy. This Plan helps nurture this culture of environmental stewardship that influences all Township policies and actions.

The Plan focuses on five areas: Energy Efficiency, Renewable Energy, Recycling and Waste Reduction, Transportation, and Water Management. It offers a list of positive steps we can take now and lays out long-range objectives. It is intended to stimulate conversation, generate ideas, and evolve as new information and ideas emerge, and as more people become involved. Education and communication will be an important part of all areas of the Plan. The Township will use the web page, HOM-TV, public forums, and other means to make residents aware of current and proposed policies, programs and incentives.

As incorporated by reference in the Township’s Master Plan, the Climate Sustainability Plan is integrated with all Township government activities. Resource usage is a part of everything the Township and its staff does, so everyone is a partner in efforts to achieve a sustainable future. The Township Manager will work with township staff, Meridian Township Energy Team, Environmental Commission, Transportation Commission, and other township boards and commissions to define responsibilities for implementing the plan. The Plan should be revisited at least at 5 year intervals and updated as needed.

## Sustainability Plan, Programs, Policies, and Progress to Date

### a. Energy Efficiency

Meridian residents spend over \$100,000,000 each year on energy.<sup>3</sup> The majority of this, consisting of non-renewable coal, oil, and natural gas, is imported from outside of Michigan. Most energy efficiency investments are dollars spent in our community and they have a multiplier effect. A 2011 report on the “Economic Impacts of PA 295 Energy Optimization Investments in Michigan” indicated that for each dollar spent on energy efficiency there is a net increase of over seven dollars in the cumulative Gross State Product (GSP).

Past and Current Progress:

Energy efficiency remains one of the quickest and most economical paths to sustainability and resilience. Meridian government has made great strides in reducing energy consumption in its operations, saving over \$100,000 during the past 5 years. These energy improvements have more than paid for themselves and a portion of this savings has been allocated to a Revolving Energy Fund to support new investments in efficiency.

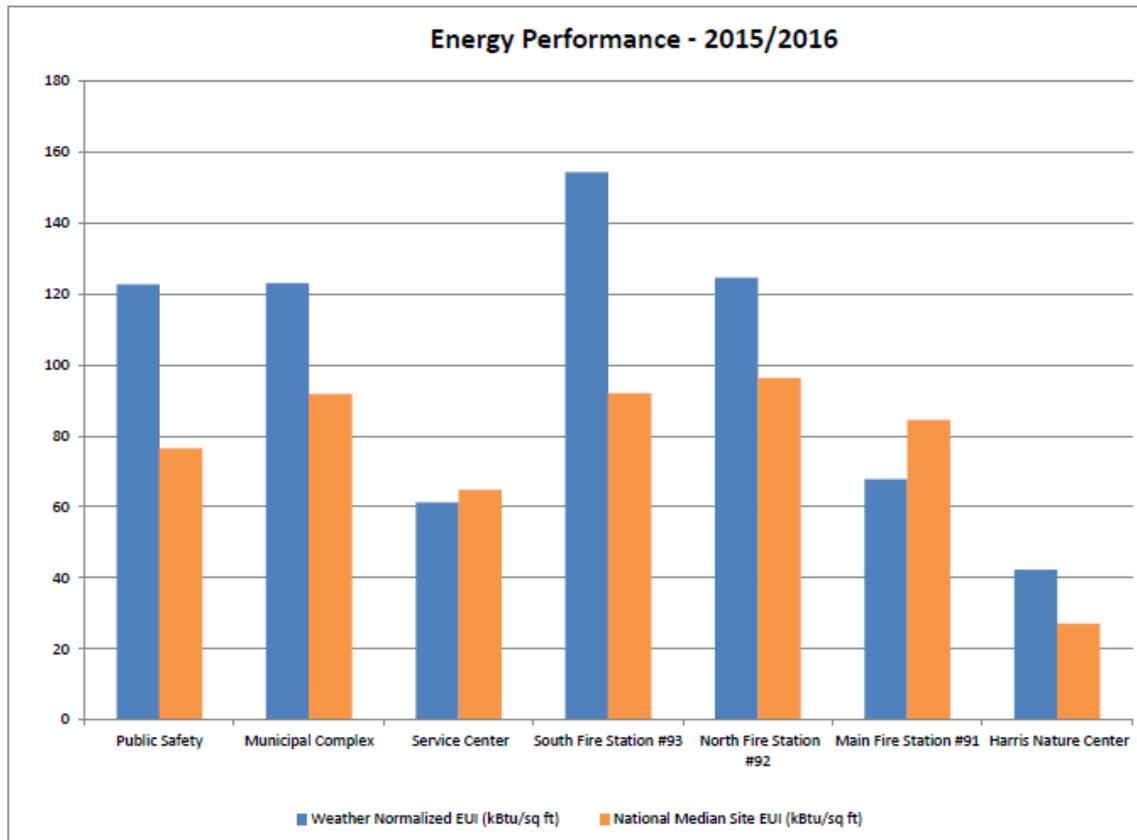
A “Phase II” Energy Study was completed in 2015<sup>4</sup> (<http://bit.ly/phase-II>). In addition to seeking bids on the items recommended in this report, an engineering study is underway to explore major HVAC (heating, ventilating, & air conditioning) system replacements and/or retrofits for the Municipal Building. A recent benchmarking study by Consumers Energy shows we still have energy savings potential in our Township buildings<sup>5</sup> (See Figure 3 and <http://bit.ly/energy-performance-17>).

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<sup>3</sup> <http://energy.gov/articles/how-much-do-you-spend> downloaded 9-12-16

<sup>4</sup> Meridian Township Phase II Energy Efficiency Project - Part 1 Final Report submitted by Bob Tinker, RA, LEED AP, May 18, 2015

<sup>5</sup> Consumers Energy Building Performance with Energy Star®: Energy Efficiency Walk Through and Behavioral Assessment Report submitted by Consumers Energy, May 2017



**Figure 3** How Meridian’s Top-Consuming Buildings Compare to National Median

Objective a.1: Achieve significant energy cost savings and carbon emission reductions in Township facilities.

Strategies:

1. Implement recommendations from the Consumers Energy Building Performance with Energy Star Study including development and adoption of a Meridian Energy Policy.
2. Implement Phase II Energy Recommendations and HVAC Engineering Study and include major HVAC upgrades in Capital Improvement Plans.
3. Obtain Energy Star designation for township buildings where possible.
4. Use LEED Gold criteria or the equivalent for all projects undertaken by the Township. LEED criteria include measures related to energy efficiency, renewable energy, recycling and waste management, transportation, and water management.
5. Monitor energy savings and return 80% of savings to Revolving Energy Fund.
6. Budget funds for energy efficiency assessments a minimum of once every five years.
7. Address sustainability implications in proposals for capital improvements. Township Manager will consider criteria related to energy efficiency, renewable energy, waste management, transportation, and water management when developing a capital improvement plan.

Objective a.2: Explore other opportunities and partnerships to achieve energy savings.

Strategies:

1. Identify and pursue State and Federal grant funding, pilot programs, and utility programs.
2. Further build partnerships such as Michigan Green Community Network, Clean Cities, Sustainability Forums, and expand collaboration with other local governments in our region.
3. Establish incentives to builders to exceed the energy efficiency provisions of the state building code.
4. Increase tree canopy throughout the township and especially in business areas to reduce cooling loads. Consider the potential for future solar energy installations when deciding placement of trees. Propose ordinance changes and provide incentives for existing businesses to upgrade their parking lots and landscaping to increase tree cover and shade to be energy efficient and environmentally friendly.
5. Create incentives for the use of white roofs or green roofs to reduce cooling loads.
6. Identify opportunities and remove barriers to support the construction of “tiny houses.”
7. Review parking requirements and provide incentives to reduce and remove asphalt.

Objective a.3: Provide educational opportunities for Township staff and residents about energy consumption, energy savings opportunities, and utility incentives.

Strategies:

1. Improve delivery of information and data on energy consumption to building managers, Township staff, accounting/budgeting staff, and financial managers.
2. Provide Information to Township residents so they are aware of Township efforts and utility and other programs that can assist them.

## **b. Renewable Energy**

Renewable energy systems are becoming more cost effective as technology advances lead to increased efficiencies and system cost decreases, while the cost of traditional power sources increase. Meridian Township will develop and identify opportunities to install solar, wind, geothermal, and other renewable energy systems at Township facilities and to facilitate installations elsewhere. The focus will be on solar energy in the near term because many opportunities exist.

Past and Current Progress:

Meridian Township adopted a wind energy ordinance in May 2011 (Ord. No. 2011-05) to provide standards and regulations pertaining to the location, construction, design, maintenance, and abandonment of wind energy systems and anemometer towers.

The Township worked with Peninsula Solar, Michigan Energy Options, U.S. Dept. of Energy, and Consumers Energy to create a solar demonstration and educational project at Harris Nature Center. The demonstration includes a solar-powered webcam system and a grid-connected photovoltaic (PV) system. The main panels are mounted on a racking system on the roof (right

photo) and a micro-inverter rests behind each panel. The two 250 watt roof-mounted solar panels were made in Michigan by Global Watt. These provide an average of 1.76 kWh on a sunny day. A separate 135 watt PV panel (left photo) powers two webcams pointed at the bird-feeding area and hawk cage. Energy production can be viewed at

[https://enlighten.enphaseenergy.com/pv/public\\_systems/Uwam100679/overview](https://enlighten.enphaseenergy.com/pv/public_systems/Uwam100679/overview)



The Meridian Township Energy Team has been identifying opportunities to encourage more solar energy use in the Township. The Lansing Board of Water & Light (LBW&L) is developing a 300 kW Community Solar project in Burcham Park on the border of Meridian Township. Since the Township does have LBWL street lighting accounts, the Township Board authorized leasing ten 300 watt solar panels at the Burcham Park PV array. The Township will get utility bill credits for 25 years based on the electric production from the leased solar panels.

Objective b.1: Develop Township policies and procedures that encourage the use of renewable energy.

#### Strategies

1. Revise Township ordinances and procedures to ensure that they encourage energy conservation and the use of renewable energy.
2. Develop renewable energy and other practices that reduce greenhouse gas emissions that can be included in the list of amenities allowed in mixed use and commercial planned unit developments (PUDs).

Objective b.2: Increase the use of renewable energy at Township facilities.

#### Strategies

1. Obtain 50% of Township electricity from renewable energy by 2025 and 100% by 2035. The Township receives almost all of its electricity from Consumers Energy and indirectly will get 15% of its electricity from renewables due to the state Renewable Portfolio Standard (RPS) requiring the 15%.
2. Pursue the installation of solar electric systems at Township facilities by Dec. 31 2018. Identify and evaluate options to fund solar energy installations on Township facilities.
3. Participate in Community Solar or other green purchasing programs where possible.
4. Identify and seek grant funding for demonstrations of new renewable energy technologies.
5. Identify opportunities for non-grid connected applications like solar street lighting and solar lighting for signs.
6. Explore solar and other efficient back-up power options for Township facilities.

Objective b.3: Provide educational opportunities regarding renewable energy options and encourage the installation of renewable energy at private and public facilities throughout the Township.

### Strategies

1. Obtain 25% of total community electric use from renewable energy resources by 2025. This includes the 15% due to Michigan’s Renewable Portfolio Standard (RPS) requirements.
2. Provide educational opportunities on current and proposed policies, programs and incentives that could help Township residents, businesses, and institutions utilize renewable energy.
3. Share information about funding and vendors with residents and business owners.
4. Provide incentives to developers to employ renewable energy in site plan and construction of new development. Identify and adopt incentives to encourage greater use of renewable energy, e.g. incentives for net zero homes or PV systems, elimination of permit fees for PV systems.
5. Collaborate with schools and other institutions on joint purchasing of renewable energy systems.
6. Inventory, highlight, and promote Meridian homes and businesses that feature net-zero, renewable, LEED, and related features.

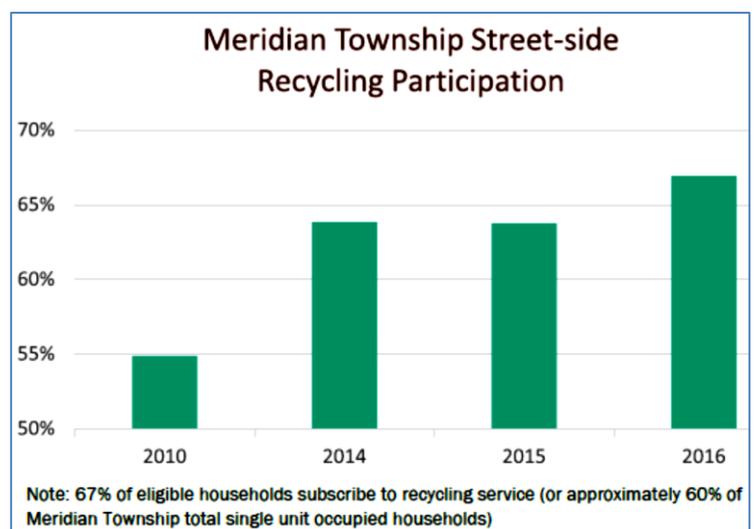
### **c. Recycling and Waste Reduction**

Recycling is an important environmental action taken by most Meridian Township residents and businesses. Recycling saves resources, prevents pollution, supports public health, and creates jobs. Harmful chemicals and greenhouse gasses are released from rubbish in landfill sites. It takes less energy to create new items from recycled materials than it does to create new products from raw materials.

Past and Current Progress:

For over a decade Meridian Township has partnered with citizen groups and waste haulers and recycling providers to provide recycling options to residents. During this time, Meridian has offered drop-off for yard waste, paper, metal, glass, and #1-#2 plastic at its Recycling Center and Transfer Station at 5976 E. Lake Drive in Haslett. This has been expanded to include electronics, Styrofoam/expanded polystyrene, green glass, and batteries. In addition, useable household furniture and knick-knacks are often reclaimed and refinished for resale.

In 2005, Granger, who serves the majority of single-family residential customers in the Township, began providing curbside recycling at no charge to their customers in 1-5 unit single-family dwellings. Also, in 2006, the



**Figure 4 Granger 2016 Recycling Report**

Meridian Township Citizen's Recycling Advisory Committee formed and offered the first bi-annual community-wide recycling day. In 2007, Meridian hired a Recycling Coordinator to assist with recycling efforts in the township. Figure 4 illustrates increases in curbside recycling rates during the past six years.

In 2015, larger residential recycling carts were offered, which helped increase recycling rates in the residential sector in 2016. In addition, more materials were collected at our drop off center.

Objective c.1: Increase recycling in owner-occupied dwelling units. Reduce the amount of materials sent to landfills by 10% in 5 years.

#### Strategies

1. Work with Granger and others to expand the use of 96 gallon carts and remove disincentives for recycling.
2. Evaluate having a single hauler in the township.
3. Launch a collaborative marketing and outreach program in the Township to promote existing recycling services and options.
4. Conduct regional education and promotion opportunities in collaboration with the Regional Recycling Coordinating Committee (R2C2), Capital Area Local First (CALF) and other neighborhoods, organizations, and partners.

Objective c.2: Expand recycling in multi-family housing, township departments, and in other commercial settings. Reduce the amount of materials sent to landfills by 10% in 5 years.

#### Strategies

1. Promote and expand current recycling efforts in multi-family housing.
2. Revise ordinances and policies as necessary to encourage recycling.
3. Provide technical assistance to managers and occupants of multi-family housing/apartments.
4. Implement a recycling campaign for all township departments.

Objective c.3: Offer community- and region-wide recycling events and other partnerships

#### Strategies

1. Partner with local business, schools, neighborhoods, governments, churches, and others to promote and offer recycling events.
2. Promote Ingham County household hazardous waste collections.
3. Explore collaborative processing and/or transfer of recyclables locally and/or in the region.
4. Identify and implement food, cooking oil/grease, composting, and related organic material recycling options.
5. Provide educational opportunities concerning the 5 R's: Refuse, Reduce, Reuse, Repurpose, & Recycle.
6. Consider a ban on plastic bags for single use purposes. Promote re-usable bags, bottles, etc.

## **d. Transportation**

Transportation produced 26% of greenhouse gases in 2014<sup>6</sup>. Public and non-motorized alternatives can reduce the impacts from these greenhouse gases. The most accessible alternative to petroleum is often overlooked -- walking and biking. Transportation fuel use reduction measures decrease emissions, save the Township and residents money, enhance environmental quality, and promote public health. The Township will focus on its own fleet, walking and biking, and land use decisions. Land use decisions that lead to infill development and a greater use of public and non-motorized transportation can significantly impact petroleum use.

Past and Current Progress:

A Complete Streets Ordinance was adopted by the Meridian Township Board on Sept. 18, 2012. The ordinance is intended to provide safe, convenient, and comfortable routes for multiple modes of transportation including but not limited to walking, bicycling, personal vehicles and public transportation.

The Township has 20 miles of trails and 80 miles of pedestrian/bicycle paths. The development and maintenance of the trails and pathways are funded through the Park Millage and Pedestrian/Bicycle Pathway Millage. They are maintained by Township Parks and Grounds Maintenance Staff. The purpose of the pedestrian/bicycle pathway system is to provide a network of interconnected pathways throughout Meridian Township that connect destination points including schools; libraries; parks; public buildings; commercial areas; and connecting routes outside the Township.

Smart Commute competitions, coordinated by the Mid-Michigan Environmental Action Council, encourage trips involving alternatives to single-occupancy motor vehicles. Meridian Township staff has participated in the competitions for a number of years and in 2015 placed first among 23 teams participating. The 34-member Primed Meridian team won with 1,083 smart commutes, up from the previous year when the team had 927 trips. The Township has also offered bikes and bike helmets to employees and volunteers for the past three years.

The Meridian Energy Team partnered with the Greater Lansing Area Clean Cities Coalition and ChargePoint to purchase and install an electric vehicle charging station at Studio C in 2012. The Township has also explored clean diesel technology and experimented with biodiesel in its vehicles.

The Meridian Transportation Commission began meeting in January 2017. The purpose of the commission is to review transportation services, both public and private, within the township as to their efficiency, sufficiency, and costs and make recommendations, if necessary, for improvements.



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<sup>6</sup> Fast Facts on Transportation Greenhouse Gas Emissions, U.S. Environmental Protection Agency, December 1, 2016

Objective d.1: Encourage employee and citizen participation in Smart Commute competitions and encourage Township employees and citizens to be smart commuters year round.

Strategies

1. Continue to expand the bike and pedestrian pathways network throughout the Township.
2. Incentivize employee participation in Clean Commute competitions and encourage employees to be smart commuters year round.
3. Partner with Capital Area Transportation Authority and others to promote “Clean Commute” options and identify efficient paratransit and Redi-Ride efficiency improvements.

Objective d.2: Decrease the use of petroleum in the Township vehicle fleet.

Strategies

1. Choose the cleanest and most fuel-efficient vehicle that meets the department’s needs.
2. Use electric or hybrid vehicles whenever possible.
3. Use efficient trip-planning to reduce the use of fuel.
4. Conduct an efficiency inventory and audit of the Township vehicle fleet.
5. Adopt a fuel efficiency target for the Township vehicle fleet, including an implementation plan for reaching this target. The plan should incorporate vehicle efficiency and life cycle cost analysis as well as highlight opportunities for purchasing or converting vehicles to be more efficient.
6. Review and update the idling policy for the government fleet and/or a community-wide policy.
7. Identify and seek funding for alternative fuel vehicles and electric charging infrastructure.

Objective d.3: Use land-use planning to reduce vehicle miles traveled and petroleum use.

Strategies

1. Accelerate implementation of the Township’s Complete Streets policy to ensure that entire roadways are designed and operated with all users in mind - including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.
2. Use the Urban Services Boundary to reduce vehicle miles traveled and encourage infill and redevelopment.
3. Encourage cluster developments, mixed use and other compact residential choices closer to shopping, public transit and other services.
4. Offer fast tracking and technical assistance for sustainable developments.

Objective d.4: Provide educational opportunities on transportation alternatives that can reduce petroleum use.

Strategies

1. Provide educational opportunities concerning public transit, car sharing, smart commuting, and transportation-efficient communities.
2. Provide educational opportunities on biking, walking, and driving safely, especially around bikers and walkers.

3. Continue membership in and partnerships with Greater Lansing Area Clean Cities (<http://michigancleancities.org>) and providers of efficient vehicles, equipment, and fuels.
4. Provide web sites and apps that identify charging stations for electric vehicles. Identify funding and opportunities for electric car charging stations.
5. Promote the employee and volunteer bike-sharing program.

### **e. Water Management**

Water and how it is managed impacts almost all aspects of society, in particular health, food production, water supply and sanitation, and the functioning of ecosystems. Higher temperatures and changes in extreme weather conditions due to climate change are projected to affect rainfall, river flows groundwater, and water quality. Water management is an important Township responsibility and pollution prevention and wetland preservation are priorities. One of the most significant Climate Change impacts in Meridian Township will be more major rain events that lead to flooding.



Drinking water and wastewater systems account for approximately 2 percent of energy use in the United States, adding over 45 million tons of greenhouse gases annually. As much as 40 percent of operating costs for drinking water systems can be for energy.<sup>7</sup>

Past and Current Progress:

Meridian Township Public Works and Engineering maintains, repairs and operates the water distribution system; which includes 158 miles of water mains, 12,000+ water services, 15,000+ water meters, over 15,000 remote readers, over 1,900 fire hydrants, and two 500,000 gallon elevated storage tanks. The Township's web site has information on storm water management and pollution prevention including the following topics: Pollution Isn't Pretty, How to Properly Wash Pavement and Your Car, Pesticides and Fertilizers, Green Infrastructure and Low Impact Development, and Managing Riparian Lands.

The Township is a member of the East Lansing Meridian Water & Sewer Authority and purchases treated water from the Authority for areas of the Township north of Bennett Road and Kinawa Dr. The Township purchases treated water from the Lansing Board of Water & Light for areas south of Bennett Road and Kinawa Dr.

The Township enacted a wetlands protection ordinance that is more protective of wetlands than

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<sup>7</sup> Sustainable Water Infrastructure: Energy Efficiency for Water Utilities, U.S. Environmental Protection Agency, April 24, 2017

State regulations. The Township ordinance stipulating “no net loss” of wetlands means that wetlands drained or filled must be replaced by a wetland of equal or greater size. This includes wetlands as small as .25 acres. The Township maintains a wetland inventory and incorporates wetlands considerations into the site plan review process, including setbacks from natural features such as wetlands.

Objective e.1: Decrease water usage at Township facilities.

#### Strategies

1. Use building audits to determine which water fixtures to upgrade.
2. Amend purchasing policy to require that when purchasing or replacing new toilets only low flow fixtures will be purchased.
3. Install waterless urinals where appropriate.
4. Implement, as funds allow, a system to capture and use rainwater and gray water for turf and landscape irrigation at municipal facilities.

Objective e.2: Reduce storm water runoff.

#### Strategies

1. Partner with the Ingham County Drain Commissioner on reduction in storm water runoff.
2. Review and change policies as needed to accommodate expected changes in storm surges and extreme weather events.
3. Increase the number of street trees.
4. Use porous pavement, rain gardens, bioswales, riparian buffers, and retention ponds as appropriate. Use township parks and other properties to demonstrate these strategies.
5. Provide credits on water bills for rain barrels, porous pavement, and rain gardens.
6. Encourage projects that reuse storm water for irrigation purposes.
7. Discourage development within wetlands, floodplains, floodplain fringe areas, and water retention areas. Strengthen the Township wetlands ordinance in order to increase wetland acreage in the Township.

Objective e.3: Provide educational opportunities concerning water conservation and management.

#### Strategies

1. Use signs, brochures, and other outreach materials to describe why we conserve water and what the Township is doing to conserve water, alternatives to fertilizer use and how it affects stream ecosystems, drought resistant grasses, native plants, rain barrels, water efficient appliances such as low-flow toilets, and how one’s water usage compares to a typical home’s water usage.
2. Use media, web page, HOM-TV, public forums, and other means to encourage water conservation.

Objective e.4: Explore opportunities for water efficiency improvements within Meridian’s water supply and sewage treatment systems.

Strategies

1. Work with East Lansing Sewage Treatment Plant and Lansing Board of Water and Light to identify ways to reduce water use and sewage.
2. As a member of the East Lansing Meridian Water & Sewer Authority, identify ways to reduce water use.
3. Review water safety and supply plans and strategies.

**f. Monitoring and Evaluation**

Objective f. 1: Monitor greenhouse gas reductions and energy and cost savings and determine benefits to the community.

Strategies

1. Conduct a greenhouse gas inventory of the Township government operations.
2. An annual progress report will be prepared by township management on activities related to the Climate Sustainability Plan.
3. Evaluate cost-effective energy monitoring systems, software, assistance, and equipment including WeGoWise and Consumers Municipal Energy Efficiency Pilot and invest in monitoring equipment as needed
4. Prioritize top energy-using sites, buildings, and equipment for more frequent monitoring.
5. Explore opportunities with Consumers’ E-Billing Program, smart metering, street lighting, and other pilot programs.
6. Calculate annual water, energy, and cost savings and reductions in greenhouse gases. Reporting metrics would make annual comparisons and include:
  - 1) Annual greenhouse gas reductions for municipal operations and the community (tons)
  - 2) Annual municipal and community energy consumption (MBTU)
  - 3) Annual energy and cost savings from energy improvements to municipal buildings (MBTU, \$)
  - 4) Annual renewable energy generated from township facilities or purchases (kWh)
  - 5) Annual renewable energy generation in the community (kWh)
  - 6) Materials recycled communitywide (tons)
  - 7) Number of participants recycling (#residents, #businesses)
  - 8) Annual municipal water consumption (gallons)
  - 9) Annual community water consumption (gallons)
  - 10) Number of electric, electric hybrid, or alternative fuel vehicles in the township fleet
  - 11) Annual fuel savings in the township fleet (gallons of petroleum-based fuel)
  - 12) Percent sustainable commutes by mode type (%walked, %biked, % public transportation)
7. Objectives and strategies in this plan should be revisited every 5 years and a summary of accomplishments prepared.

## Conclusion

This Climate Sustainability Plan for Meridian Township documents activities implemented by the Township since the Township's signing of the U.S. Mayors Climate Protection Agreement in 2007. Much progress has been made and the Township's departments and residents can be proud of the efforts to date. The Meridian Township Board adopted a resolution of support for the Paris Climate Accord on June 20, 2017. Implementation of this plan will support the Paris Climate Accord and enable Meridian Township to:

- Contribute to the worldwide efforts to curb greenhouse gas emissions.
- Make our community a more sustainable, resilient, affordable, and vibrant place to live.
- Make our township government operations more energy and resource efficient and better prepared to deal with the impacts of climate change.

## Acknowledgements

Many organizations and citizens assisted in the development of this plan by providing presentations on climate change topics, comments on plan drafts, and suggestions for objectives and strategies.

- City of East Lansing
- Great Lakes Integrated Sciences & Assessments
- Consumers Energy
- Ingham County Drain Commission
- Meridian Economic Development Corp.
- Meridian Energy Team
- Meridian Environmental Commission
- Meridian Planning Commission
- Meridian Transportation Commission
- Michigan Climate & Health Adaptation Program, MDHHS
- Michigan Green Communities Network
- Michigan State Climatologist's Office

Cover Photo Credit: Todd Miner, Penn State University, 1996

Figure 1: Great Lakes Integrated Sciences & Assessments (GLISA)-Climate Change and Health Impacts presentation by Lorri Cameron, MPH, PhD to Environmental Commission on Feb. 1, 2017

Figure 2: Michigan Climate and Health Adaptation Program- Climate Change and Health Impacts presentation by Lorri Cameron, MPH, PhD to Environmental Commission on Feb. 1, 2017

Figure 3: Consumers Energy Building Performance Study (2017) <http://bit.ly/energy-performance-17>

Figure 4: [Granger 2016 Recycling Report](#)