



HURON-CLINTON METROPARKS CLIMATE ACTION PLAN ANNUAL REPORT and Q4 UPDATE

2024



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BACKGROUND

BACKGROUND:

This Climate Action Plan ('CAP') is the Huron-Clinton Metroparks' formal plan for explicitly focusing on climate impacts the Metroparks have and how we will work toward a climate- positive future. We prioritized five goals for this plan, which include 89 near-term goals (5 years) and 41 long-term goals (10 years). Each action within each goal will include an update on progress thus far.

We recognize the time and financial commitments for this CAP's efforts overall and within each goal. Overall, financial commitments will be examined and detailed early in the plan's timeline and will be a continual check-in point for action prioritization and feasibility studies. We are taking a general approach of climate progress and curiosity with this CAP, centering learning, feasibility analyses, pilot areas, and ensuing actions / redirections as we implement actions and learn about their interactions.

This CAP is a "living document," meaning that adjustments are expected and encouraged as the work progresses and we learn how to refine our efforts in future plan versions. This plan is meant to be flexible and amenable to the uncertainty of climate change in the years to come. We will monitor progress on these actions and toward these goals with continuous tracking, re-evaluation, and updates.

Progress on Metroparks staffs' overall climate-positive awareness, engagement, and behaviors will be assessed as well. Financial metrics and considerations will be tracked annually and considered in action updates. In 2027, a progress report and evaluation will be compiled to inform the direction of the 2028 Climate Action Plan, and to identify any changes or needed shifts in major areas of focus. The CAP will be updated every five years (e.g., 2028, 2033, 2038), aligning with planning standards set by the National Recreation and Park Association's Commission for Accreditation of Park and Recreation Agencies (CAPRA).

EXECUTIVE SUMMARY AND KEY FINDINGS

EXECUTIVE SUMMARY

YEAR ONE: HOW WE STARTED

The board approved the Climate Action Plan at the October 2023 board meeting. The first steering committee was held on October 23, 2023. To execute such a large undertaking, the following structure was created, a steering committee chair and 15 additional members who were a part of the writing and research of the plan are on the steering committee. Each goal as well as the finance component has subcommittee and a chair who are members of the steering committee. Each chair of the subcommittee was tasked to invite/select members from a cross-section of the Metroparks; all perspectives, all districts, all departments, all levels (full time and part time), all backgrounds. A total of 50 employees are active members of this plan.

Each subcommittee meets monthly and steering committee meetings are scheduled bi-monthly. The subcommittees meetings are designed to be working meetings to prioritize and establish a task timeline, for each quarter of the current year and then each subsequent year which will be associated with budget timelines accordingly. They are also tasked with project development and engaging other Metropark employees to activate the project. The actions within this plan are designed to be shared by all Metropark employees.

The steering committee meetings are informational and collaborative meetings intended to share projects across the various goals and to identify overlaps within actions and gaps. Discussion of funding opportunities tracking of the actions have also been part of these meetings.

Staff are working together across the system incorporating employees from all departments, all parks, and all levels within the organization. As a result, ideation is occurring. New ideas are being generated and will be researched and evaluated as the Metroparks address these actions.

229 entries have occurred in our training tracking system.

558 employees completed LMS stormwater baseline training.

19 environmental and climate action blogs have been written.

7 blogs have been written by community partners.

INCREASED COMMUNICATION

- Improving on communication. Through this process enthusiasm is built, but what has been needed is intentionally slowing down to ensure everyone has an opportunity to have a voice and be heard. There have been some learning opportunities for this and has been addressed however there is a careful balance to keep employees empowered and enthusiastic but also acknowledging the spirit of plan development which involved input from everyone.
- We are moving forward in areas that are within our grasp so we are not losing opportunity and time to the larger issues that can take years or decades before action can take place. We have a broad focus and are focused on getting things done now because action is critical.
- Sense of connection. Building the organization as an organization not in its separate parts. The power of the organization lets us move forward. Purposefully and consistently in a fair and equitable way.

PROJECTS AND TASKS

- There were several key projects and tasks that have been accomplished this year. In the Education and Engagement goal, the baseline employee survey revealed training topics employees needed to better understand climate action in their job as well as training topics. Staff offered climate action education to staff as well as the community through blogs and social media posts. Cross departmental collaboration occurred throughout the year. One example of this was teaming up with DEI to bring a Kyle Whyte as a guest speaker on environmental justice.

To establish a baseline for Metropark staff overall climate-positive awareness, engagement and practices, an employee survey was conducted.

During the first year, priority was given to establishing baselines. Audits have been conducted waste receptacles, water bottle filling stations and small equipment.

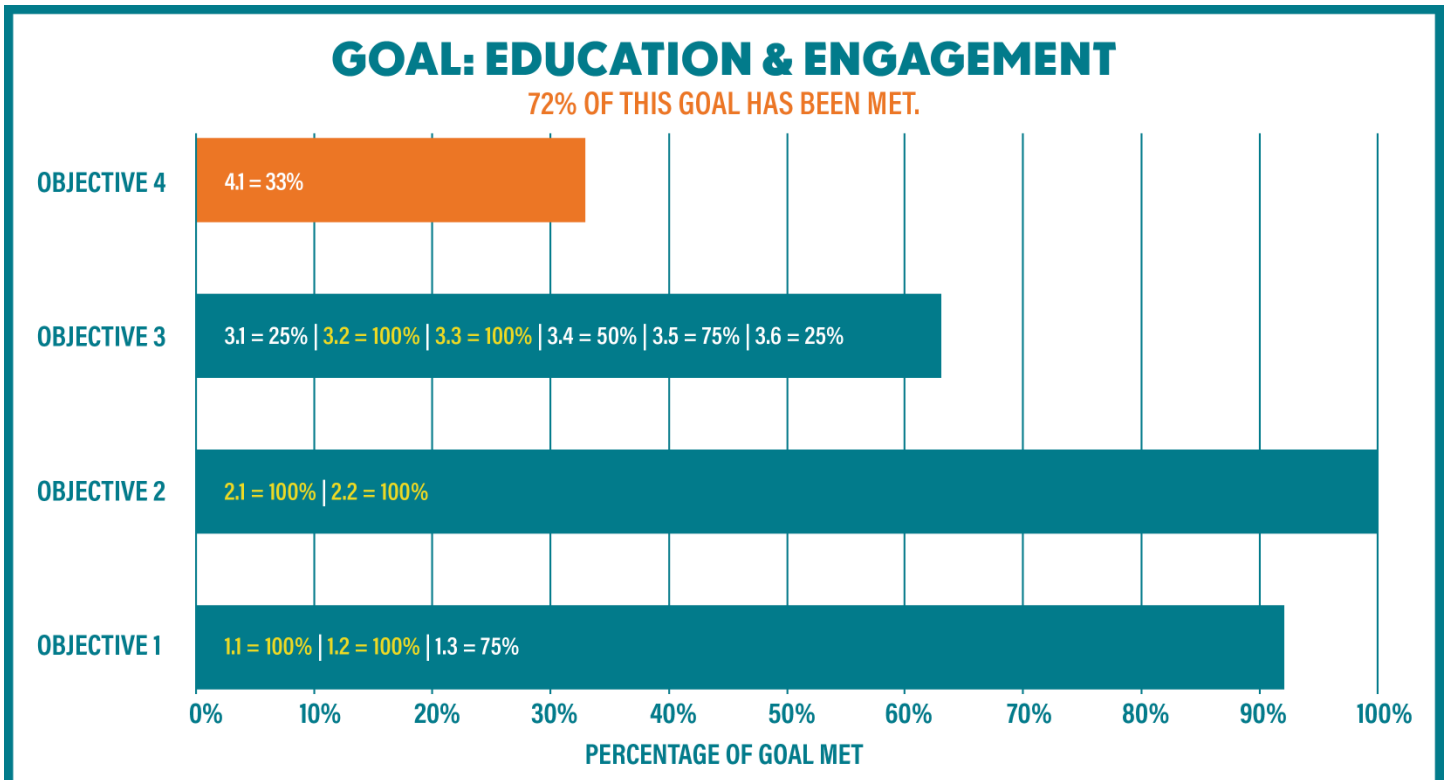
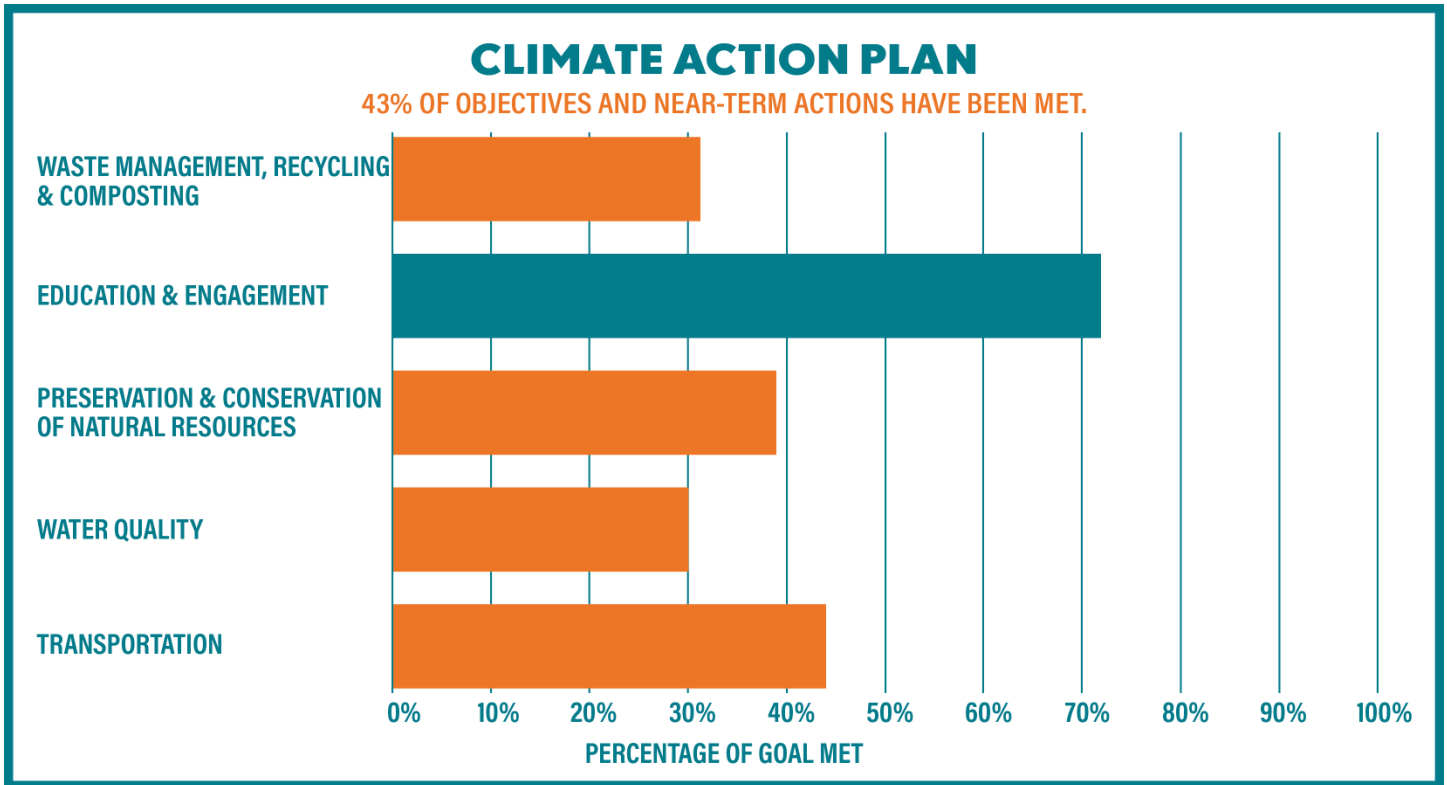
- Establishing baseline data across each goal has been a priority. Staff conducted many audits and gathered data across the system. However, there are several actions within the plan that required more of a robust audit such as the Carbon Emissions project. This project will cover the following, carbon storage baseline, fuel assessment and carbon release, emissions reduction from no-mow areas, fleet and equipment baseline, transition to electric fleet, and facility emissions baseline.

MOVING FORWARD

As we close our first year of the plan, the metrics in which measure success will be evaluated and clearly stated moving forward. Many of the current metrics have measurable components, however there are many that do not. There are some metrics of success that leave employees asking questions and therefore these need to be measured consistently. The Steering Committee will be addressing this at the beginning of the year.

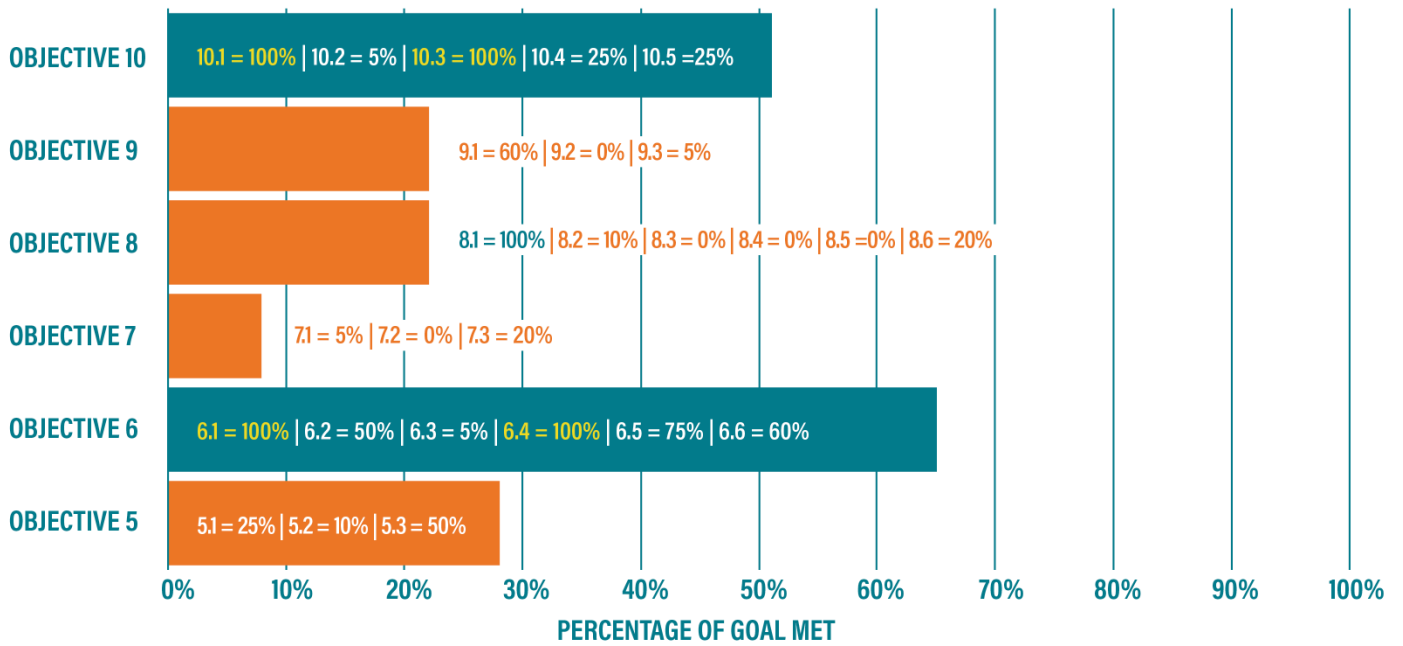
KEY FINDINGS

The key findings are reporting on the 89 near-term actions.



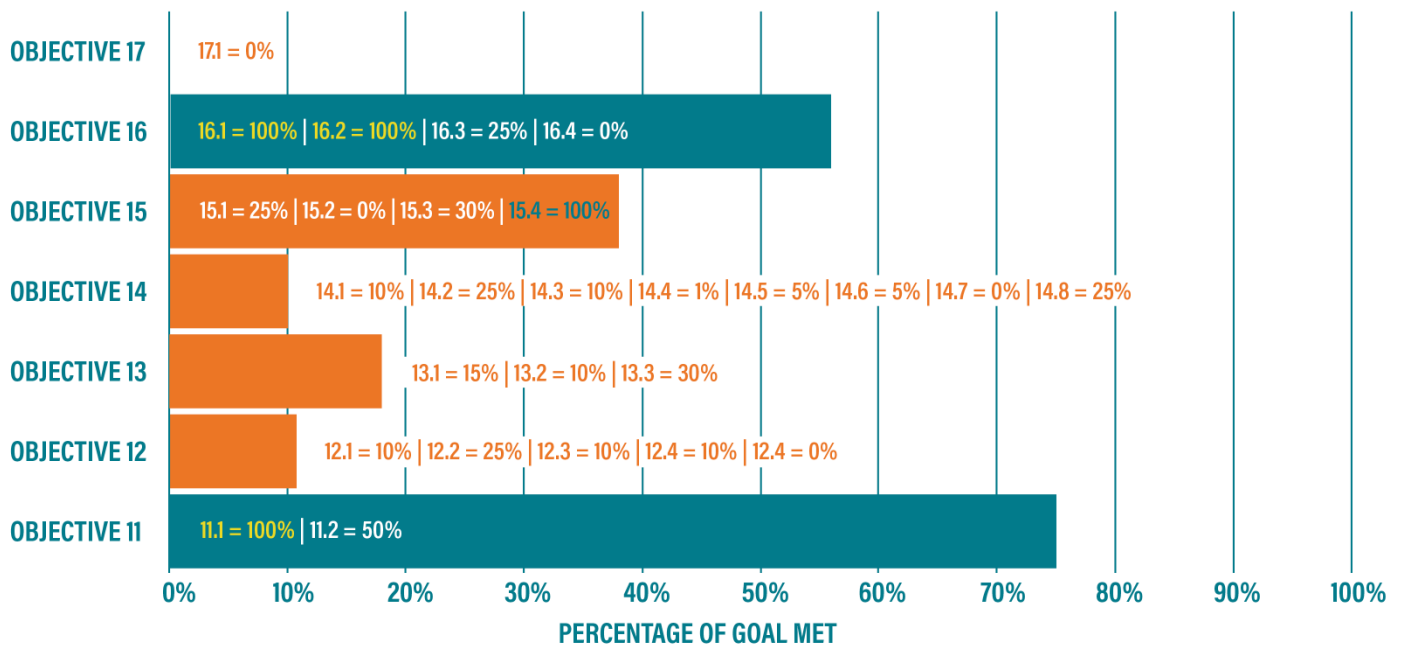
GOAL: PRESERVATION & CONSERVATION OF NATURAL RESOURCES

39% OF THIS GOAL HAS BEEN MET.



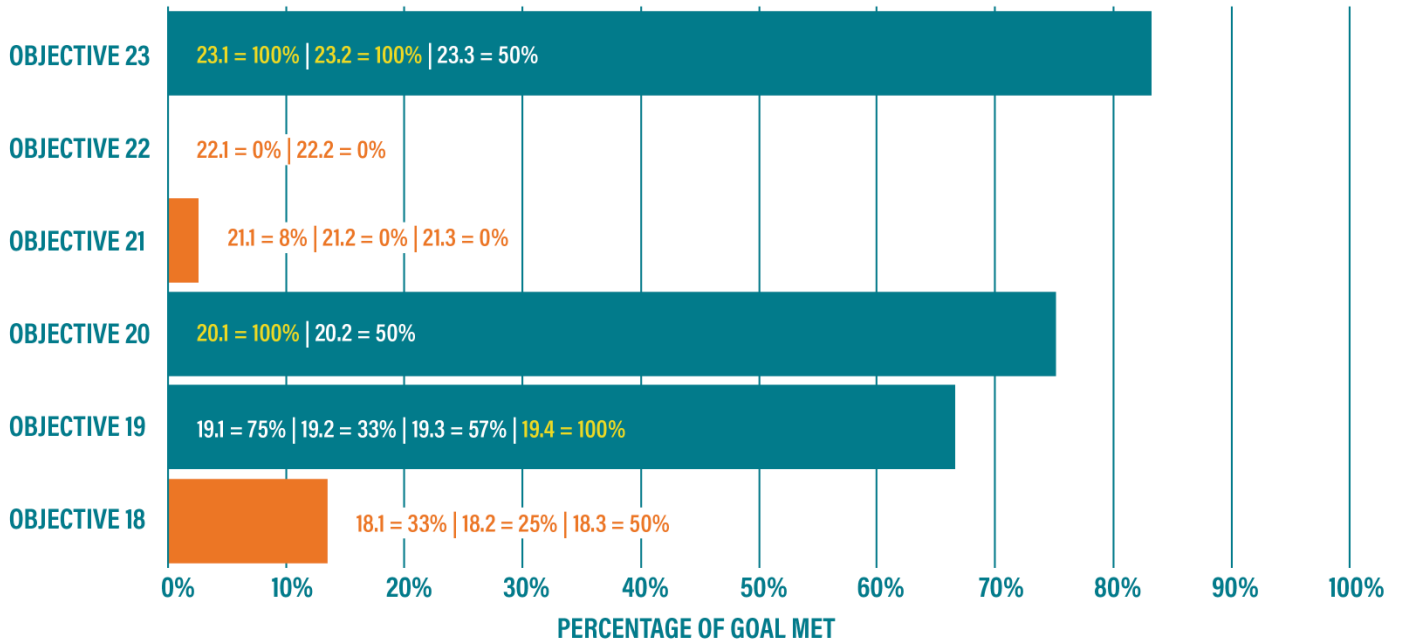
GOAL: WATER QUALITY

30% OF THIS GOAL HAS BEEN MET.



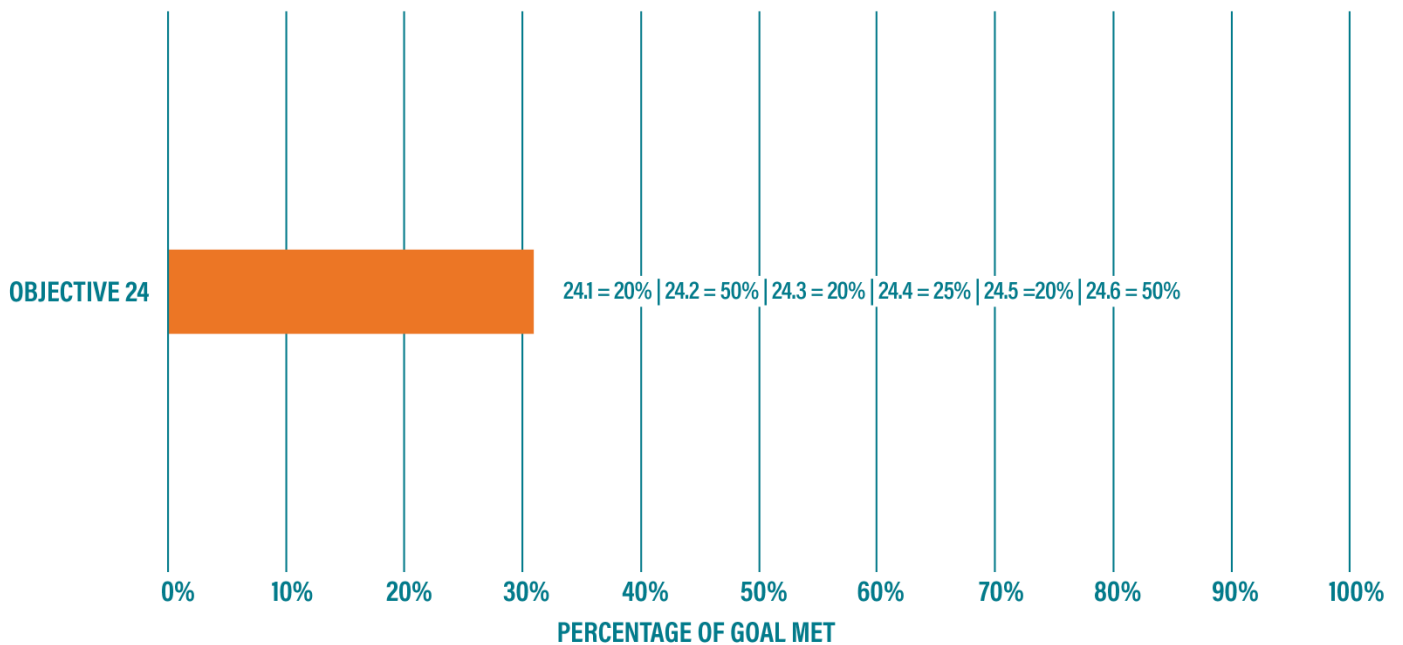
GOAL: TRANSPORTATION

44% OF THIS GOAL HAS BEEN MET.



GOAL: WASTE MANAGEMENT, RECYCLING & COMPOSTING

31% OF THIS GOAL HAS BEEN MET.



The financial impacts of the Metroparks' climate actions are being considered across the suite of efforts, as well as for individual actions. However, significant financial considerations and detailing are needed both in this initial stage and over the five years of climate action outlined in this plan. We recognize this and will act on four main areas of financial planning to support the work of this plan in an intentional manner. These efforts will be led by the Finance Department.

First, we aim to build the capacity of the Finance department to support the CAP goals. This will include seeking training on financing climate actions and educating Metroparks staff on the connections between climate action innovation and financing.

Second, we will create a financial plan for the CAP, in winter 2023/2024. This will be based on a detailed review of the goals and actions and the estimated costs of implementing them. Doing so may highlight groups of actions within each timeline that can be supported together. These types of considerations will be communicated to the CAP Team, Metroparks governance, and staff as appropriate, for adjustments and prioritizations in implementing the actions. Budgeting efforts will be identified in support of this financial plan, such as reserving allotted amounts for climate goals, evaluating capital and major maintenance impacts resulting from this plan, and evaluating the savings/additional costs regarding climate actions to determine the net costs. Within this financial plan, we recognize the ongoing impacts of climate change and will try to account for these. For example, longer summers and shorter winters will change the needs and operating dates of facilities. We will consider the impact that changing seasons have on operations when budgeting staff and material expenses and operating revenues each year.

Third, we will explore alternate sources of funding for our climate actions. At this initial stage of exploration, examples of those sources might be revenue bonds and/or grants. It also includes evaluating the potential for subsidizing climate actions with funding from revenue-generating projects. We will consider in what ways the Metroparks might pursue alternate sources of income to offset tolling losses with increased public transportation. We will also assess investments and financial institutions for climate-related risks and take steps to mitigate those risks.

Fourth, we will revise the Metroparks' purchasing policy. This will include updates to incorporate our climate goals, partnerships in support of these, and incentives for companies with a climate-smart practice. When purchasing, we will consider and promote climate-friendly options, taking into consideration climate impacts, waste generated, and per unit costs. For example, we will encourage buying in bulk, buying low packaging options, and buying green options.

What has been done:

- Researching training opportunities regarding purchasing guidelines
- Identified training that addresses grant funding towards sustainability.
- Staff is researching how to reduce carbon footprint as it pertains to warehousing and purchasing.

- Setting up a one-year trial period with Amazon Business, which will allow us to prioritize vendors with a sustainability plan.

Here are the results to date:

Q1 2024:

Orders: 850

Climate Pledge Vendors: 30

Percentage: 3.5%

Q2 2024 (to date):

Orders: 781

Climate Pledge Vendors: 38

Percentage: 4.8%

Q3 2024 (to date):

Orders: 580

Climate Pledge Vendors: 29

Percentage: 5%

Q4 (to date)

Orders: 331

Climate Pledge Vendors: 19

Percentage: 5.7%

GOAL 1. EDUCATION & ENGAGEMENT

Increase and embed climate action education across all areas of the Metroparks through sharing of knowledge, engaging with others, collaborating with partners, and forming connections with stakeholders, to make real world difference across the Metroparks and throughout our region.

Objective 1: Beginning in 2024, provide an annual education to all Metroparks staff on issues of climate resilience, climate equity, stewardship, and adaptation.

Near-term Actions

- Action 1.1: Identify topics and trainers for staff training.
 - The subcommittee identified to have joint speaker for DEI/All Staff; Kyle Whyte will speak on Environmental Justice speaker at the September Board of Commissioners meeting.
 - Kyle Whyte spoke on Environmental Justice at 11:00 am on Thursday, September 12. This was an online training for the Board of Commissioners, staff and the public.
 - An initial online meeting has taken place with Sidewalk Detroit to schedule a presentation in 2025 by one of their Artists in Residence for staff and the Board of Commissioners to learn more about the role of outdoor art in environmental justice.

100%

100% of the action has been completed and ongoing.

- Action 1.2: Offer in-house training in collaboration with partners, opportunities to attend webinars or other local conferences, and access to climate education resources for the purpose of expanding knowledge to incorporate into daily work.
 - Survey to identify topics sent to subcommittee chairs. The intention was to have the subcommittee fill out the survey together to identify training needs within the CAP goal.
 - The identified topics include:
 - No mow areas
 - Reducing emission
 - Park connectivity projects
 - Climate Action funding
 - Transitioning to EV
 - Runoff and Storm Drains
 - Waste and Recycling
 - Plant Selection
 - Maintenance resources
 - Climate Change predictions
 - Transit opportunities
 - Metroparks role in the regional
 - Mitigating climate change on a small scale
 - How is the world being impacted

- Best practices for communicating with the public regarding climate change.
 - Other
- These topics were used in the employee survey regarding engagement..
 - Which training topic(s) would help you better understand climate action in your job?
 - What climate topics are most interesting to you?
 - Popular training topics identified in the employee survey will be incorporated into Lunch and Learns.
- Four Lunch and Learn Sessions have been identified and scheduled
 - Tuesday, June 11th from 11:30am-12:30pm: Let It Grow Plan (Chief of Natural Resources)
 - 13 people attended
 - Tuesday, August 13th from 11:30am-12:30pm: Green Infrastructure is key for Stormwater Management (System Planner)
 - 18 people attended
 - Tuesday, October 8th from 11:30-12:30pm: ADA Transition Plan (Planning Department)
 - Friday, November 22 from 11:00am-Noon: “Chasing Time” short film on climate change screening with staff discussion to follow.
 - 18 people attended
- Metroparks were asked to present a webinar for the Society for Outdoor Recreational Professionals.
 - The Director and CAP chair presented **Towards Sustainability: Developing a Comprehensive Climate Action Plan**
 - 92 people attended.
 - Survey feedback to question:
What did you like most about this webinar, if anything?
 - “I was very impressed with how well organized and thought out all the elements are that have gone into developing this plan. Great job distilling the survey feedback into themes and then aligning those with DEI priorities. In the organization I work for, I often feel like incorporating DEI is not well represented in planning efforts, and neither is having a proactive climate plan, so it was inspiring to see an actionable example.”
 - “Detailed examples from experience”
 - “Implementation and process”
 - “Somewhat unexpected insights - but interesting”
- Six Lunch and Learn Sessions are planned/scheduled for 2025
 - February – Shoreline Restoration; MSU Extension
 - April- Keep It Clean Campaign (public-facing campaign details); Chief of Marketing and Communications
 - June- Composting; Interpretive Services Supervisor at Kensington Farm Center
 - August – Waste and Recycling at the Metroparks; Chief of Planning and Development
 - December- Climate Data for Michigan; outside speaker TBD

100%

100% of the action has been completed and ongoing.

- Action 1.3: Hold workshops for staff and speaker series to educate why climate smart practices are implemented.
- The subcommittee members crafted and provided a detailed toolkit to rollout to staff This included:
 - The Education and Engagement tool kit
 - Slides with information for supervisors to share with staff
 - One-slide for seasonal trainings
 - Slide deck for larger departmental meetings
 - Presentation at an Operation Meeting
 - Follow up email to Operation meeting attendees
 - Multiple mentions on morning Leadership calls
 - Multiple mentions to include in staff orientations
 - Positive feedback from supervisors who have used the materials
- The subcommittee identified a way to track training across the park system. This is held on the park's internal SharePoint system where employees will be able to submit their climate action training.
 - 229 entries have occurred.
 - Communication to staff included emails, announcements at operation meetings
 - A flyer with a QRC to access the tracking system was sent to staff to display in areas where employee gather.
- The subcommittee identified a way to receive reports on numbers of staff receiving Stormwater Training through the LMS system and set up a process to utilize those numbers to assess how many staff were completing that CAP-related training.
 - Through November 15, 2024:
 - 558 Metroparks employees completed the LMS Stormwater Baseline training through the LMS system.
 - Of these staff, 110 also logged the training in the online CAP recording document on SharePoint. (These were duplicate of trainings already recorded through the LMS reporting system.)
 - The Climate Action Plan Training Documentation form on Sharepoint also had 229 additional trainings logged in areas besides stormwater management. Topics in which staff received training include:
 - Clean Skies, Clean Waters, Bright Futures
 - Climate Change and Extreme Weather
 - Climate Change MEECs - Train the Trainer
 - Heat stress in workplace
 - How can compost help our climate?
 - How to Keep Your Cool on a Warming Planet: A Toolkit for Climate Justice
 - Managing Stormwater in a Changing Climate
 - Mapping for Justice: Using MiEJScreen to facilitate Place-based, Problem-based, Project-based Learning
 - MEECS Climate Change Curriculum
 - MI Healthy Climate Conference
 - MI Recycling conference
 - Michigan Climate Summit
 - NNOCCI Crash Course - Climate Framing
 - Regional Storm Water Summit
 - Restoring Urban Rivers

- Three-Dimensional Investigations into Sustainability and Climate Change
- Tree migration: how much assistance do they need?
- Understanding Climate Change Impacts on Water Resources
- Webinar "How to Fix Metro Detroit's ailing watersheds"
- Wild About Conservation - Resilient Shorelines

100%

100% of the action has been completed and ongoing.

Metrics of Success

- 100% Complete and ongoing: Four educational workshops (speaker series) will be provided about climate initiatives, conducted by industry leaders, and aimed to increase the knowledge of Metroparks staff, regardless of job classification.
 - Kyle Whyte will speak on environmental justice at the September board meeting.
- 100% Complete and ongoing: Metroparks staff will participate in at least one workshop/webinar/continuing education seminar with a climate initiative focus that pertains to their department. Training will be selected by departmental lead or designated committees.
 - To track participation, a Climate Action Training log button is displayed on the internal Metroparks SharePoint page. 229 entries have occurred.
- 75% Complete and ongoing: By 2025, two Learning Management System (LMS) trainings will be identified and made available for staff.
 - Stormwater Pollution: Baseline Best Management Practices-every 2 years
 - Currently these climate and health and safety-related LMS are assigned:
 - SPCC Training – some maintenance staff
 - Stormwater Training – all staff
 - Heat Stress Training – all staff
 - Other modules are being considered by include:
 - Environmental Awareness
 - Environmental Awareness: Land Pollution (Microlearning)
 - Environmental Awareness: Water Pollution (Microlearning)
 - Environmental Awareness: Air Pollution (Microlearning)
 - Energy Efficiency at Home
 - Energy Efficiency: General Improvements
 - Energy Efficiency: Poor Energy Efficiency Indicators
 - Energy Efficiency: Sealing and Insulating Your Home
 - Sewage/ Wastewater/ Waterline Maintenance
 - Stormwater Pollution Prevention for Industrial Operations
 - Stormwater Pollution: Advanced Best Management Practices (Microlearning)
 - Stormwater Pollution: Water Pollution Regulations (Microlearning)
 - Universal Waste Management
 - A meeting took place August 27, 2024, with the Environmental Health and Safety Compliance Specialist, and a list is being compiled of recommended LMS trainings that are required for both Health and Safety and Climate Action. A matrix of LMS trainings recommended for each

department will be compiled during Winter 2025.

Objective 2: Beginning in 2024, provide collective engagement tools across every department within the Metroparks on issues of climate resilience, climate equity, stewardship, and adaptation on an annual basis.

Near-term Actions

- Action 2.1: Create storytelling pieces around why the Metroparks have adopted a CAP, to be shared on all communication channels. Example engagement tools include public events in underrepresented communities, blogs, surveys, story maps, and social media and traditional communication strategies. These will incorporate stories/engagements from the public and be developed by every department.

Writing Blog series on Environment and Climate action. This is shared over social media channels. The Metroparks are also tagging other organizations climate related posts. <https://www.metroparks.com/category/environment-climate/>

- Shared story telling posts on social media:
 - **1/3/24 Climate Actions at Home: Resolve to have a greener 2024**
 - **1/17/24 Climate Action at Home: Consider our use of plastic**
 - **1/23/24 Metroparks Announces First Formal Climate Action Plan**
 - **2/21/24 Rain Gardens – Putting Your Yard to Work for You (And Your Community)!**
 - **2/28/24 The Fiery Fix**
 - **3/5/24 Picnic Parties – Strive for sustainable events**
 - Facebook 13 likes, 2 shares, and 10 link clicks to blog post
 - Instagram 36 likes and 3 link clicks to blog post
 -
 - **3/13/24 No-Mow May is not just a catchy phrase... it is a mindset!**
 - March 13 – No Mow May
 - - Facebook 20 likes, 2 shares, 4 link clicks to blog post
 - - Instagram 46 likes, 1 share, 1 link click to blog post
 - **3/27/24 Parks in Partnership Highlight: Michigan Natural Shoreline Partnership**
 - March 27 – Shoreline Habitat
 - - Facebook 19 likes, 3 shares, 2 link clicks to blog post
 - - Instagram 57 likes, 3 link clicks to blog post
 - **4/3/24 The Most Beneficial Gardener Is a Lazy One!**
 - April 3 – Sustainable Gardening
 - - Facebook 46 likes, 6 shares, 2 link clicks to blog post
 - - Instagram 36 likes
 - **4/10/24 Every Day is Earth Day in the Metroparks**
 - April 10 – Earth Day & Keeping Parks Clean



- - Facebook 7 likes, 3 shares, 3 link clicks to blog post
- - Instagram 21 likes

- **4/17/24 Harnessing the Potential of Lawns**
 April 17 – Grow Zones/Native Plants
 - - Facebook 35 likes, 4 shares, 10 link clicks to blog post
 - - Instagram 22 likes, 5 link clicks to blog post

- **5/8/24 Air Quality Awareness Week: How Green Spaces Help Clean Our Air**
 May 8 – Air Quality Awareness Week
 - - Facebook 13 likes, 2 shares, 2 link clicks to blog post
 - - Instagram 26 likes, 1 share

- **5/15/24 Water Wise: Empowering Students Through Stormwater Education**
 May 15 – Empowering Students Through Stormwater Education
 - Facebook 23 likes, 1 share, 5 link clicks to blog post
 - Instagram 47 likes, 2 link clicks to blog post

- **5/22/24 Sustainability in the Kitchen**
 - Facebook 5 likes, 1 link click, 2,253 impressions
 - Instagram 12 likes, 804 impressions

- **6/12/24 Beach Management: Combating E. coli**
 - Facebook 14 likes, 9 link clicks, 2,241 impressions
 - Instagram 62 likes, 11 link clicks, 2,130 impressions

- **6/28/24 Softened Shorelines, Cleaner Water for All**
 - Facebook: 21 reactions, 21 link clicks, 3,832 impressions
 - Instagram: 56 likes, 16 link clicks, 1,894 impressions

- **7/10/24 Air Pollution, Ozone, and the Benefits of Trees and Parks**
 - Facebook 15 likes, 2 shares, 1 link click, 2,838 impressions
 - Instagram 71 likes, 1 share, 1 link click, 832 impressions

- **7/17/24 Air Pollution, Ozone and the Benefits of Trees and Parks (Part 2)**
 - Facebook 16 likes, 4 shares, 2 link clicks, 2800 impressions
 - Instagram 69 likes, 2 link clicks, 1010 impressions

- **7/31/24 Parks in Partnership: Michigan Sea Grant**
 - Facebook 12 likes, 2 shares, 2 link clicks, 1950 impressions
 - Instagram 38 likes, 1 link clicks, 921 impression

- **8/13/24 Stargazing – Perseids Meteor Shower and Climate Change**
 - Facebook 11 likes, 2 shares, 1 link clicks, 1448 impressions
 - Instagram 27 likes, 1 share, 1 link clicks, 663 impressions
- **8/28/24 Parks in Partnership: Michigan State University Extension Conservation Stewards**
- **9/11/24 Recycling and Safely Disposing of Household Items**
- **10/2/24 Designed for Darkness in a World That Never Sleeps**

- **10/9/24 Transforming Your Yard into a Winter Habitat: The Benefits of Mindful Fall Cleanup**
- **11/24/24 Chasing Time – Recording the Changing Landscape + Film Sneak Preview**
- **11/27/24 Parks in Partnership: Six Rivers Land Conservancy**
- Social Media posts and engagements
 - Holiday Lights Recycling (Posted on Instagram and Facebook) Post date: January 16, 2024
 - Linked to Detroit Zoo’s Holiday Light Recycling Program
 - Instagram: 121 likes, 80 shares, 6 link clicks
 - Facebook Analytics: 219 reactions, 16 comments, 100 shares, 45 link clicks
 - Roll out of Climate Action Plan to the public in January.
 - Skip the Straw Day – Post date: February 23, 2024
 - Linked to article about Skip the Straw Day
 - Instagram: 39 likes, 3 comments, 1 share
 - Facebook: 28 reactions, 10 comments, 5 shares, 3 link clicks
 - March 5 – How to Host a More Sustainable Picnic

“Picnic season is just around the corner and with picnic parties comes food, decorations, and a lot of waste. The Metroparks challenge you to host more sustainable picnics this spring and summer. Learn about how to host a more sustainable event...”

 - Facebook 13 likes, 2 shares, and 10 link clicks to blog post
 - Instagram 36 likes and 3 link clicks to blog post
 - April 4 – Keep America Beautiful Month

“Every act of care, big or small, paints a brighter tomorrow. Celebrate Keep America Beautiful Month by nurturing our shared home, one green step at a time.”
 - TikTok 35 likes, 333 plays
 - Instagram 50 likes, 3 shares, 997 plays
 - April 14 – Earth Day Cleanups
 - Facebook 24 likes, 17 shares, 10 link clicks to sign ups
 - April 16 – One thing you should do this earth day

“Earth Day cleanups are coming up and now is your chance to get involved! Help keep our parks clean and join us as we pick up litter and plastic that can be harmful to our wildlife. Also use this time to reflect on your impact on the planet and work towards more sustainable practices and efforts that support a healthy environment for all of us.”
 - TikTok 19 likes, 269 plays
 - Instagram 27 likes, 1 share, 1304 plays
 - April 22 – Happy Earth Day!

“Let’s celebrate Earth Day every day! 🌍 Do your part in preserving our planet’s beauty. Get educated and make small daily changes to work towards making a positive impact on our environment.”
 - Facebook 20 likes, 9 shares

- Instagram 60 likes, 3 shares
- April 26 – Arbor Day – touches on our grant with Consumers energy and the tree planting
 - ”Happy Arbor Day! Guess what? Over the fall and winter, we planted over 2000 trees across 43 acres at Indian Springs Metropark. This was possible thanks to funding from the Consumers Energy Foundation through their Planet Awards grant program for the Healing the Huron River Headwaters project. We've got 13 different species of trees in the mix. This creates a diverse, resilient landscape that is better prepared to withstand invasive pests and potential tree diseases like oak wilt! Let's keep planting, growing, and nurturing our green spaces together!”*
 - - Facebook o 43 likes, 1 share
 - - Instagram o 57 likes, 1 share
- September 11 – Recycling and Safely Disposing of Household Items
 - Caption: “The onset of fall means new rhythms and routines for many of us! September can even feel like a second new year, a chance to start new habits or get back into old ones. And it also coincides with the start of a season where we may be spending more time indoors again, and that may trigger a desire to clean up....”*
 - Facebook
 - Link: <https://www.facebook.com/share/p/1BAirr9kqj/>
 - o 8 Likes, 1 Shares, 1 Link Click
 - Instagram
 - o Link: https://www.instagram.com/p/C_x7aMKNW0j/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==
 - o 7 Likes, 0 Shares, 0 Link Clicks
- September 17 – E-Recycling Event at Lake St. Clair Metropark (Detroit Zoo Repost)
 - Caption: “Mark your calendars for Sunday, Sept. 22! Our E-Recycling Event at Lake St. Clair Metropark is almost here, and spots are still open for registration. Bring your unwanted electronics to be sustainably recycled and help protect habitats in the Great Lakes. Register now....”*
 - Facebook
 - Link: <https://www.facebook.com/share/p/1As8B8wytZ/>
 - o 7 Likes, 6 Shares
- September 18 – Miles of Milkweed for Monarchs
 - Caption: “We often see advertisements for milkweed and other pollinator-friendly plants, but what do they mean for monarch butterflies? How is planting these plants crucial for their survival and that of other pollinators....”*
 - Facebook
 - o Link: <https://www.facebook.com/share/p/1NsasE3Unf/>
 - o 10 Likes, 3 Shares, 2 Link Clicks
 - Instagram
 - o Link: https://www.instagram.com/p/DAD-HsWsveu/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==
 - o 69 Likes, 1 Share, 0 Link Clicks

- October 9 – Transforming Your Yard into a Winter Habitat: The Benefits of Mindful Fall Cleanup

Caption: “Did you know that leaving seed heads, branches, and leaf litter in your yard helps birds, insects, and small animals survive the winter? Things like sunflower seed heads provide food for birds, while hollow stems and fallen logs create shelter for insects and wildlife. By adopting these eco-friendly cleanup tips....”

 - Facebook
 - Link: <https://www.facebook.com/share/p/17s69HunN1/>
 - 18 Likes, 5 Shares, 2 Link Clicks
 - Instagram
 - Link: https://www.instagram.com/p/DA6Cz2YN8nL/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==
 - 23 Likes, 0 Shares, 0 Link Clicks

- October 30 – Parks in Partnership: United States Fish and Wildlife Service

Caption: “Did you know mussels help keep our water clean? Metroparks, in partnership with the United States Fish and Wildlife Service, recently reintroduced over 7,600 native mussels to the Clinton River! Learn more about this vital restoration project...”

 - Facebook
 - Link: <https://www.facebook.com/share/p/1AUAEsTSJe/>
 - 6 Likes, 1 Shares, 0 Link Clicks
 - Instagram
 - 30 Likes, 0 Share, 0 Link Click

- November 13 – Parks in Partnership: Great Lakes Commission

Caption: “Phragmites may look like just another wetland plant, but it poses a serious challenge to native Michigan ecosystems. This week, we're diving into how Metroparks and the Great Lakes Commission work together using the Phragmites Adaptive Management Framework to manage...”

 - Facebook
 - Link: <https://www.facebook.com/share/p/19eFpYkYpK/>
 - 51 Likes, 4 Shares, 5 Link Clicks
 - Instagram
 - Link: https://www.instagram.com/p/DBwRbLvtNq4/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==
 - 31 Likes, 1 Share, 1 Link Click

- November 15 – National Recycling Day

Caption: “Today is National Recycling Day! Let’s make every visit to the Metroparks a chance to keep our planet and parks beautiful. Look for our recycling bins on your next visit and be part of the solution. The Metroparks’ Climate Action Plan has five years of action items that we are focused on – including recycling....”

 - Facebook
 - Link: <https://www.facebook.com/share/p/1JLLnmxqiu/>
 - 20 Likes, 2 Shares
 - Instagram

- Link: https://www.instagram.com/p/DCZxsWDvLe3/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==
- 19 Likes, 1 Share

100%

100% of the action has been completed and ongoing.

- Action 2.2: Collaborate with other departments, partners, and the community to create an annual story collection process about topics including but not limited to: Clean Air Action Days, prescribed burns, burning tree debris, environmental justice, mental health and wellness, composting/food waste, recycling, Leave No Trace campaigns, and reducing energy and fuel consumption.
 - 12-month calendar of a blog post schedule is complete with the following identified: date, topic, person writing, organization partnership.
 - Writing Blog series on Environment and Climate action. This is shared over social media channels. The Metroparks are also tagging other organizations climate related posts.

100%

100% of the action has been completed and ongoing.

Metrics of Success

- 100% Complete and Ongoing: Collaboratively create a monthly engagement, combined annually as a story collection (12 stories).
 - 19 climate and environment blogs have been written and posted, with a goal of 21 by December 31
 - 7 community partner blogs have been written and posted, with a goal of 9 blogs by December 31.
- 100% Complete and Ongoing: Provide four educational workshops or speaker series events about climate initiatives, conducted by industry leaders, aimed to increase the knowledge of Metroparks staff and visitors.
 - Lunch and Learn
 - Tuesday, June 11th from 11:30am-12:30pm: Let It Grow Plan (Chief of Natural Resources)
 - Tuesday, August 13th from 11:30am-12:30pm: Green Infrastructure is key for Stormwater Management (System Planner)
 - Friday, November 22 from 11:00am-Noon: “Chasing Time” short film on climate change screening with staff discussion to follow.
 - Additional Training Opportunities available in each department as documented in the CAP Training Documentation Log

Objective 3: Integrate concepts of climate change into existing and new programs at the Metroparks and throughout our region.

Near-term Actions

- Action 3.1: Increase Green School participants across the five-county region by 10% by 2028.
 - First step is to determine how many green schools the Metroparks work with currently.
 - Met with Michigan Green Schools Coordinator Samantha Lichtenwald on September 6, 2024 to learn baseline information about the MI Green Schools program.
 - We learned that in 2024 each county had this many schools participate:
 - Macomb – 81 schools certified
 - Oakland – 92 schools certified
 - Wayne – 57 schools certified
 - Livingston – 11 schools certified
 - Washtenaw – 18 schools certified
 - Schools are certified on an annual basis, so the numbers in each county change annually, which may create challenges for our metric of increasing green schools by 10% by 2028.
 - Metroparks CAP goal is to increase number of green schools 10% by 2028; this would be 26 more schools certified. This is a moving target based on the number of schools that apply each year, because the designation is only for one year.
 - The recommendation is that the committee discuss the metric needs to be clarified or rewritten.
 - Conversations began with local STEM Teachers and Green school’s coordinators.



25% of the action has been completed.

- Action 3.2: Increase teacher training opportunities by 10% by 2028, by offering accredited continuing professional development to improve teachers’ personal understanding and ability to incorporate current data and science of our changing climate and its impacts into classroom instruction.
 - Several interpreters attended Michigan Environmental Educational Curriculum Support: Climate Change training on June 14, 2024, to be certified to lead workshops. (6 attendees)
 - Michigan Environmental Education Curriculum Support: Climate Change Workshop for Teachers took place on July 15, 2024. (8 attendees)
 - Incorporate climate component in teacher learning boxes/workshops (needs work)
 - Staff are discussing including climate component in early childhood teacher education programs offered with partners.



100% of the action has been completed and ongoing.

- Action 3.3: Collaboratively develop new programs by 2025, that allow students to research climate change effects (e.g., green-up/green-down, water quality, invasive species).
 - Evaluation of current programs has begun. Some processes are in place however more work will be done throughout the year.
 - BWET Grant activities will focus on water quality.
 - Environmental Outreach Interpreter has scheduled several rain garden and water quality programs in 2025.



100% of the action has been completed and ongoing.

- Action 3.4: Beginning in 2024, address climate action in exhibits and programs.
 - A process for future programs will include tagging in Rec Trac for stormwater and climate action public programming and facility programs.
 - Rain Garden Program expanded in 2024 with an emphasis on providing stormwater management in a changing climate in equity emphasis areas of Wayne County. Plans are in place to continue to grow the program in 2025.
 - “Chasing Time” short film on climate change screening offered online to public November 2024



50% of the action has been completed.

- Action 3.5: Beginning in 2024, create an images-based community science project.
 - Photo Stations (chronolog) locations have been identified in three Metroparks, Stony Creek, Lk. St. Clair and Dexter Huron.
 - Chronologs will also be placed in Southern District locations.
 - Chronologs have been purchased and are in the process of installation in most locations identified.



75% of the action has been completed.

- Action 3.6: Beginning in 2024, staff will consider climate action best practices when planning and implementing programming.
 - Audit of stormwater and climate action tag usage when programs are booked in RecTrac.
 - Conduct 50% of programs annually as part of the center repertoire of public offerings.

Metrics of Success

- 25% Complete: Number of Green School participants increased by 10%.
 - Discussion with MI Green Schools Coordinator and Green Schools Teachers
 - Environmental Interpreter hired.
 - Information gathering and planning stage.
- 100% Complete and Ongoing: Number of teacher education programming offered by 10%, and feedback received from participants.

- MEECS Climate Change Curriculum Workshop offered July 2024 (100% more climate change workshops than offered in 2023)
 - Participants were asked to complete post-program evaluation.
- 50% Complete: Internal audit conducted of interpretive programs and displays for climate relevant messaging.
- 25% Complete: Conducted 50% programs annually as part of the center repertoire of public offerings.
 - Rectrac Tags implemented to begin regular recording of CAP and Stormwater programs.
 - Evaluation of current programs for messaging is ongoing.
- 75% Complete: Climate change messaging incorporated in new interpretive exhibits as the feature of the exhibit or as a supplement to the core message.
 - Photo stations in progress of being installed and activated, for visitors to take images within the parks over time.
 - “Chasing Time” short film on climate change screening offered online to public
 - Rain Garden programming

Objective 4: By 2028, host an Interpretive Regional Climate Action Conference, encouraging Interpreters and educators from across the region to attend and present on climate-related programming that they conduct. This would introduce staff to potentially new, innovative ways of presenting climate programming.

Near-term Actions

- Action 4.1: Work with partnering organizations to host a Climate Action Conference for formal and informal educators by 2028.
 - The Winter Workshop was held at the Environmental Discovery Center on January 19, 2024, with a theme of: “Interpretive Preparedness: A Focus on Resilience in Interpretation”. Billed as, “From the light-hearted to serious content, and professional development, the sessions during this workshop will have a little of everything including a foremost topic in our field: incorporating climate action”. Ninety-two participants enjoyed advice and story-sharing from peers on staying relevant during changing climates.
 - The following sessions were offered:
 - Fostering Community, Building Resiliency
 - Practical Advice for Keeping Preschool-aged Children Engaged During Programs
 - Career Cushioning, Upscaling, and Interviews
 - Elevating Interpretive Hikes
 - Effects of Climate Change on Raptors
 - When Captive Animals Pass or Move On
 - Interpreting with Citizen Science
 - Astronomy: Stories and Stars
 - Stream Tables
 - Ojibwe History and Culture
 - Threats to Our Natural Resources
 - Patterns in Flight: Hawk ID 101
 - Evictions of the Eponym
 - Building Successful School Partnerships
 - Discussion began with the Michigan Alliance for Environmental and Outdoor Education to investigate the possibility of partnering to host an Interpretive Climate Action Conference at the Metroparks for interpreters and teachers in 2025 or 2026.



33% of the action has been completed.

Metrics of Success

- 0% Complete: Executed partner agreements that include the date(s), time, specific location of the conference, and the roles and contribution of each partner.

- 50% Complete: Host climate action conference by 2028.
- 50% Complete: Conference evaluation conducted.

Long-term Actions

- Action 4.2: Expand/ramp up Climate Action Conference based on feedback from previous conference to increase effectiveness and ensure learning-outcomes are up to date.

0%

0% of the action has been completed.

GOAL 2. PRESERVATION AND CONSERVATION OF NATURAL RESOURCES

Protect and enhance natural resources to ensure longevity of important ecosystems in a changing climate, to preserve these resources for the benefit of future generations.

Near-term Actions

- Action 5.1: Identify important habitats and determine which ecosystem types are most threatened by climate change. Habitats will be identified and ranked by 2028.
 - Staff created an inventory of the natural communities' assets in GIS.
 - A survey is currently being conducted to determine updates to the natural communities and changes that may have occurred. The survey is open for staff input until September 13, 2024.
 - Survey was completed, review of results ongoing.
 - Define and identify natural areas that are remnant or restored natural communities based on current AGOL map. Update the Natural Community layer to reflect these differences. Rank Natural Communities based on Global Rank and State Rank and include climate threats based on community abstracts.

25%

25% of the action has been completed.

- Action 5.2: Create a formal review process for the Natural Resources Department to assess the impact of trails and development on natural areas with multi-departmental review, to be implemented on new developments, repair work, etc., by 2028.
 - Develop a standard operating procedure that includes if this, then that type of checklist for use by other departments during project planning, expanding, construction.
 - The formal review will include identifying issues such as soil compaction, impact to trees, fragmenting habitats, disturbance bringing in invasive species.
 - Tree Standards and Site Restoration Plan will capture this effort. This plan is in an early draft form.

10%

10% of the action has been completed.

- Action 5.3: Identify specific tree species that are vulnerable to a changing climate and select suitable replacements (for all new plantings) that will preserve ecosystem integrity under changing conditions. These trees should be used in all landscaping, project design, and restoration efforts by 2028.
 - Research continues to identify trees vulnerable to climate change and best practices.
 - Tree and Site Restoration Plan is being written by the Natural Resources Dept.
 - This guide will include:
 - Tree restoration standards, guiding principles, best practices for planting/location, and a list of native trees.
 - A quick reference guide will be created to include as an appendix in bid documents.
 - Reference material will be included for staff (e.g. engineering, planning, purchasing, maintenance supervisors)

- Appendices to specific department needs e.g. "I need to replace a tree" "I'm bidding a project, what is required" "A patron is wishing to donate a tree"
- Annual, no mow areas, bioswales, include seed mixes, donation trees as an addendum.



50% of the action has been completed.

Metrics for Success

- 25% Completed/Ongoing: A ranked list of important habitats, vulnerable to climate threat by 2028.
- 10% Completed/Ongoing: Formal review process for trail development established by 2028.
- 50% Completed/Ongoing: All landscaping, project design, and restoration efforts are utilizing suitable tree species by 2028.

Long-term Actions

- Action 5.4: Create an “eyes-in-the-field” type app or program, to document presence of endangered species, by crowdsourcing data collection and helping educate staff and the public. This would include a portal for invasive species identification and reporting, similar to the Midwest Invasive Species Information Network. Target pilot app or program for internal use and testing by 2028, and release for public use by 2033.
 - Conversations included discussion on using a pre-existing app like iNaturalist, which uses citizen science to count and monitor species in specific areas. Visitors and staff can submit photos of plants, animals, fungi, etc to iNaturalist projects created by staff. Projects can be made for each park, or even sections of a park if more specific data is desired.
 - Discussed using Survey123 for collecting flora and fauna observations at multiple parks.
 - Purchased multiple Chronolog stations to be deployed in 2025 across multiple Metroparks.



33% of the action has been completed.

- Action 5.5: Develop habitat or species management plan for critical threatened and endangered species identified within the Metroparks, with a section devoted to climate change pressures and strategies to mitigate them by 2028. We will begin to address species of special concern by 2033. Each plan will be reviewed and approved by the Board of Commissioners. Actions will be identified and integrated into relevant park master plans and budgeted on a prioritized annual basis.
 - The committee has accessed current work done by the Natural Resources department. A species lists for different management areas throughout all Metroparks. Natural Resource staff annually survey for presence/absence of threatened and endangered (plant) species. In 2023, a management plan was created for the Eastern Prairie Fringed Orchid at Lake Erie Metropark, which includes information on the pressures of climate change.
 - Eastern Massasauga Rattlesnake surveys started. Natural Resources staff assisted Michigan Natural Features Inventory (MNFI) in surveying likely habitat for two weeks in April. MNFI continued surveys throughout the summer.

5%

5% of the action has been completed.

Objective 6: integrate our land management best practices to align with the changing climate and adapt habitat management strategies and plans for on-the-ground work consistent with best management practices.

Near-term Actions

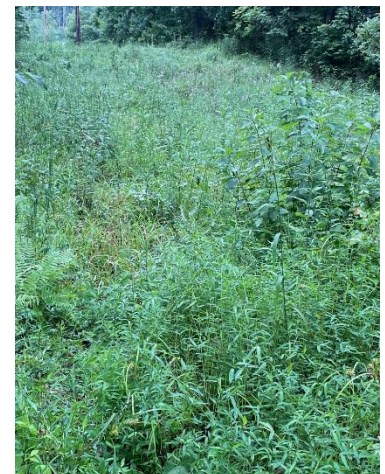
- Action 6.1: Identify staff training needs associated with this objective.
 - Preservation and Conservation of Natural Resources subcommittee completed a survey for potential educational needs. CAP Education and Engagement survey completed, and results will provide better insight.
 - Results: 1. Climate change, how it affects fieldwork e.g suitable native species selection for landscaped areas. 2. Workdays to educate community partners and volunteers for best management practices. 3. Training with new equipment and why we are reducing emissions, thinking greener in general. 4. Educate best management practices for field rotation, no till farming, cover crop planting etc. 5. Composting practices. 6. Innovative carbon storage solutions. 7. Fuel assessment and carbon release, related to prescribed fires and burning tree debris; internal and park visitors.
 - Evaluation will occur to monitor need of new training opportunities.

100%

100% of the action has been completed and ongoing.

- Action 6.2: Create and enact an Early Detection and Rapid Response (EDRR) survey protocol, to detect and respond to emerging invasive species threats, specific to each Metropark by 2028.
 - Current EDRR surveys underway:
 - Lake St Clair – Water Primrose
 - Wolcott Mill – Spotted Lanternfly/tree of heaven
 - Stony Creek – Spotted Lanternfly/TOH, Swallow-wort, Porcelainberry
 - Indian Springs – Spotted Lanternfly/TOH, Swallow-wort
 - Kensington - Spotted Lanternfly/TOH, Swallow-wort
 - Huron Meadows – TOH
 - Hudson Mills – Siltgrass survey (found, August 2024)
 - Dexter-Huron – Stilgrass survey (not yet found)
 - Delhi – Japanese Stiltgrass (known population)
 - Lower Huron
 - Willow
 - Oakwoods

pictures of Stiltgrass



- Lake Erie – Frogbit, Flowering Rush
- Staff are working on a Stiltgrass literature review and protocols to develop a Stiltgrass survey best management plan; this will hopefully translate to other locations and species.
- Update: Natural Resources staff found a new population of Japanese stiltgrass in August 2024 in the northern section of Hudson Mills Metropark. After initial observation, staff completed extensive surveys, two rounds of treatment, and notified park neighbors of the new invasive plant in the region. Future plans include one more round of treatment and coordinating with power line companies to slow the spread. Stiltgrass was first found in Michigan in 2017 in Washtenaw County. Previous known populations exist at Delhi Metropark, and continuing treatment has resulted in smaller populations.
- Update: MSU completing research at Lower Huron and Huron Meadows to surveying tree of heaven stands and the threat of invasive new Spotted Lanternfly (SLF) in SE Michigan. SLF surveys will be continuing in 2024 by contractor (Superior Invasives), paid for by MISGP grant.
- Update:
 - Number of acres surveyed by Superior Invasives for SLF at Kensington, Stony Creek, Indian Springs, Wolcott Mills – 791 acres
 - Hours spent treating Tree-of-Heaven (preferred host for SLF) – 52 hours
 - Acres surveyed and/or treated for Tree-of-Heaven – 43 acres
 - Number of acres treated for stiltgrass between Hudson Mills, Delhi - None found in Delhi 2024; 1 acre ROW in Hudson Mills
 - Acres surveyed for beech leaf disease – 27 acres
 - Acres of porcelain berry treated – 2 acres
 - Hours spent treating porcelain berry – 23 hours
- Discussion to develop the EDRR survey protocol to be specific to each species rather than to each Metropark since we don't know what will show up where.



50% of the action has been completed.

- Action 6.3: Develop and implement a framework for assessing and reviewing fieldwork, monitoring ecosystems, and identifying the need to adjust practices based on climate changes by 2028.
 - Staff are evaluating a variety of practices such as southern hardiness zones for tree plantings, reducing emissions, evaluating if the prioritization of management units will change and equipment needed (Blowers, chainsaws, mowers).
 - Staff developed a draft RFP to seek proposal for a report to analyze usage data from combustion equipment and vehicles, building utility consumption, and the impacts of park visitation. It should assess carbon storage in park ecosystems and provide recommendations for reducing greenhouse gas emissions.
 - RFP submittal process is closed and currently being internally evaluated.
 - In coordination with the Transportation committee, committee Members and the District Maintenance Supervisors and warehouse staff met to discuss developing baseline data associated with transitioning from fuel powered small equipment to battery operated and other alternatives.
 - Equipment is already entered into the faster system,

- Asked to update information in faster to collect baseline information on fuel small equipment power hand tools. With a goal of mid-June to update.
 - Already transitioning backpack blowers and string trimmer.
- Developed potential list for alternatives.
- Update: RFP was awarded to CIS during the October board meeting.
- Through proposed audit methods detailed in the proposal, CIS will be responsible for the assessment and establishment of the following:

A	Carbon Storage Baseline
B	Fuel Assessment and Carbon Release
C	Emissions Reduction from No-Mow Areas
D	Fleet and Equipment Emissions Baseline
E	Transition to Electric Fleet
F	Facility Emissions Baseline

- Deliverables at the conclusion of this report will include an executive summary, results, and recommendations for further study, as well as guiding principles and high-level coherent actions for strategy development.

5%

5% of the action has been completed.

- Action 6.4: Seek training opportunities for Metroparks staff to learn about climate change and how it affects their fieldwork. Training will include suitable native species selection for landscaped areas.
 - The Environmental Discovery Center hosted a Winter Interpreters Workshop this January with a theme of climate change and resilience in interpretation. The EDC is hosting the workshop again in 2025. Sessions could be presented by experts in the field of Natural Resources and staff could attend to learn about this topic.
 - Natural Resources attended conferences and trainings related to oak wilt, stewardship, and others related to climate change.

100%

100% of the action has been completed and ongoing.

- Action 6.5: Use community partnerships and volunteer workdays to educate the public on changing best management practices and share lessons learned.



- Continue collaboration between Natural Resources and Interpretative Services for volunteer workdays.
- Work completed from March - May:
We began the spring by cutting invasive shrubs such as autumn olive, honeysuckle, and buckthorn along the Cedar Knoll Prairie at Oakwoods Metropark. This helped prevent woody encroachment into the prairie and preserved sensitive prairie species. Throughout April and May, volunteers helped remove garlic mustard from high quality woodlands at the Kensington Nature Center trails and the Wolcott Mill Historic Center woodland near the Clinton River. By removing garlic mustard, volunteers protected native wildflowers and natural woodland ecosystems. Additionally, the Nature Conservancy hosted a volunteer event at Oakwoods Metropark in May to plant 1,000 blazing star plugs in the

Volunteer Group from Toyota removed invasive autumn olive at Kensington Metropark. This work was follow-up to a recent prescribed burn.

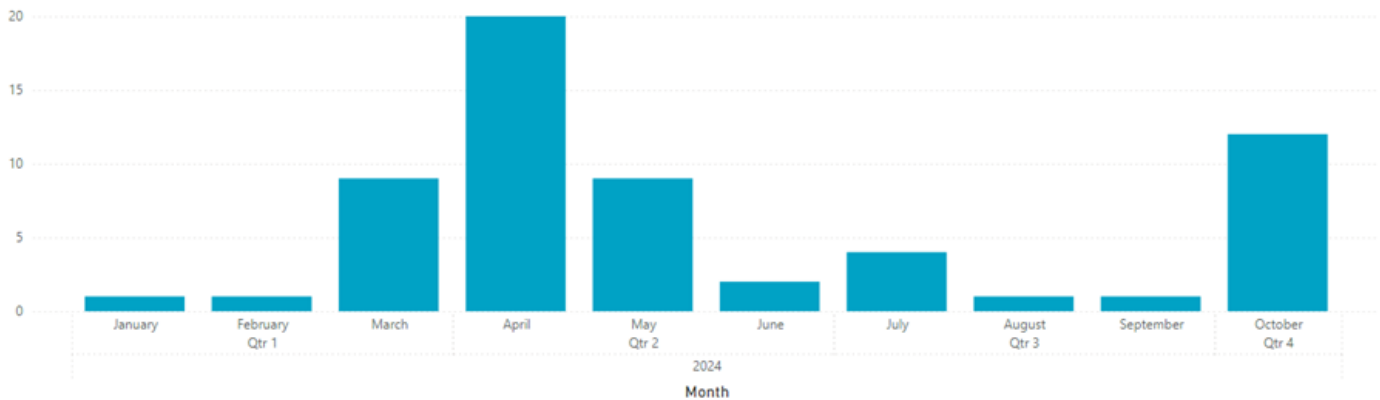
butterfly viewing area and surrounding grasslands.

*The TNC blazing star volunteer stats were not included in the table since it was planned and led by TNC. They had three volunteers, and the event was three hours.

*There were no volunteer events in January or February.

- Work completed from July-December 2024:
Natural Resource volunteer workdays include themes such as "Celebrate Your Lakes day". We can include an education piece, and collaborate with interpretive when available/applicable, on best management practices and climate action. For example – Natural plantings near bodies of water at Lake St Clair help reduce stormwater runoff and improve water quality.

Registrations By Month, Quarter, Year



Public Volunteer Workday stats for 2024 as of 11/15/24

- Hosted educational walk with staff and partners from City of Detroit Parks to introduce Prescribe Fire methods in order to expand use of prescribed fire as land management tool in southeast Michigan.



75% of the action has been completed.



Steve Koss

Katie Carlisle, the Huron-Clinton Metroparks' chief of natural resources and regulatory compliance.

"The thing about plants and animals is they don't understand political borders," says Katie Carlisle, the Metroparks' chief of natural resources and regulatory compliance. "... There's only so much that we can do within our Metroparks' borders, so being able to work outside of that on a regional scale is really important to trying to adapt with climate change."

From

<<https://www.secondwavemedia.com/metromode/feature/s/climateequity09182024.aspx>>

- Action 6.6: Develop a policy of mowing reduction on Clean Air Action Days, to include as an update to the established mowing plan. This policy should identify and suggest the mowing of select critical areas, as needed, on Clean Air Action Days, forgo regular mowing during these days, and communicate to the public why mowing may be reduced in certain areas.
 - In the 2025 update of the Mowing Plan to include procedure relevant to Clean Air Action Days and designate "critical areas" with assistance from operations. <https://www.michigan.gov/egle/newsroom/mi-environment/2024/03/01/ozone-season-starts-march-1>
 - Staff are having conversations about what could be included in a Standard Operating procedure for Clean Air Action Days. Staff were asked to think about what they can do to address this, and a survey will be sent after Labor Day to gather more input.
 - Update: Survey in development, open until early January from all Supervisors in Metroparks



60% of the action has been completed.

Metrics of Success

- 50% Completed/Ongoing: EDRR survey protocol specific to each Metropark created.
- 5% Completed/Ongoing: Framework for assessing fieldwork and adjusting practices based on climate threats developed.
- 100% Completed/Ongoing: Identified staff will attend three climate-related training sessions by 2028.
- 75% Completed/Ongoing: Host volunteer days specific to educating the public on the reasons for changing best management practices for ecosystem management in a changing climate.
- 60% Completed/Ongoing: Policy regarding mowing on Clean Air Action Days created and implemented.
- Ongoing: Development of a communication strategy with the Marketing Department to communicate park actions (or non-actions) to the public.

Long-term Actions

- Action 6.7: Evaluate potential changes in equipment, reduction of 2-cycle engines, and guidance on more restrictive emission standards (e.g., California’s).
 - Working with Transportation Subcommittee to create a “catalog” of battery-operated small tools (i.e. string trimmers, chainsaws etc.). Information from their inventoried items.



30% of the action has been completed.

- Action 6.8: Identify ways to address these changes in purchasing policy and vendor offers.



0% of the action has been completed.

- Action 6.9: Seek grant funding to assist in this conversion.



0% of the action has been completed.

Objective 7: Enhance, expand, and restore natural areas and strengthen the ability of ecosystems to combat pressures of climate change.

Near-term Actions

- Action 7.1: Improve Forest health and increase tree canopy cover to create healthy habitat, improve air filtration, and increase carbon storage in the Metroparks.
 - Staff will take thoughtful approach when assessing forest health, for example, thin maples from oak/hickory forest to encourage oak regeneration.
 - Staff are beginning to identify forests that will benefit from maple thinning and are creating procedure to monitor.



5% of the action has been completed.

- Action 7.2: Review known sensitive habitats and identify the habitats with the most potential for improvement. Update ranking system and prioritize three management units per district for targeted restoration by 2028.



0% of the action has been completed.

- Action 7.3: Enhance selected no-mow zones with pollinator-friendly grassland and savanna species.
 - Already completed – Sprayed turf grass over 4.25 acres at Lake St Clair Metropark and seeded with pollinator-friendly species in 2022 and 2023. Once established, we will continue in adjacent no-mow areas.

- Natural Area Crew annually collects and processes seeds, in addition to seeds being purchased. For 2024, there are plans to enhance the Wolcott Metropark North Branch Trails (old Golf Course), which is currently designated an annual mow area.
- Lake Erie GLRI project is creating bioswales throughout the park, where previously it was regularly mowed or annually mowed.
- Natural Resources is working with Kensington staff to incorporate seed ball distribution into family campout, which will hopefully improve no-mow areas.
- Additional enhancements completed in 2024, Lake St Clair (Point), Wolcott Mill (NB Trails), Hudson Mills (Entrance fields, monarda prairie), Kensington (adj Farm Center), Willow (expanding Big Bend restoration), Lake Erie (tree planting and bioswale improvements).



20% of the action has been completed.

Metrics of Success

- 0% Completed/Ongoing: Expanded softened shoreline along inland lakes by 5% by 2028, up to 90% total natural shoreline makeup.
- 0% Completed/Ongoing: Met a 10% increase in natural shoreline cover through restoration of great lakes shoreline by 2028, and 20% by 2033.
- 20% Completed/Ongoing: Converted 100 acres of no-mow area to pollinator-friendly grassland and savanna habitats by 2028, and 200 acres by 2033.
- 0% Completed: Updated habitat ranking system, with three management units per district prioritized for targeted restoration by 2028.

Long-term Actions

- Action 7.4: Restoration efforts ongoing to target 2033.



0% of the action has been completed.

Objective 8: protect existing and acquire additional undeveloped lands as a resource to buffer ecosystems and infrastructure from the pressures of surrounding land use and effects of climate change. Consider divestment of undesired parcels and reinvestment in acquisition of critical parcels.

Near-term Actions

- Action 8.1: Review the current land acquisition/divestment policy (conducted by the Natural Resources Department leadership), and update if needed.
 - Land Acquisition and Divestment Plan was approved at the August 2024 Board meeting.
 - The Land Acquisition and Divestment Plan was drafted in May 2020. The plan was recently updated during the final team meeting regarding the stormwater parcel assessment project in Wayne County. The property acquisition team (Director, Deputy Director, Executive Assistant, Chief of Planning & Development, and Chief of Natural Resources) reviewed the updated acquisition language to include stormwater management as a consideration when reviewing parcels for acquisition.

100%

100% of the action has been completed.

- Action 8.2: Identify adjacent land managers and coordinate conservation of buffer ecosystems across boundaries, to be included in all ecosystem management plans by 2028.
 - Staff has begun making a list of potential adjacent land managers for management plans.
 - Met with partners from Ann Arbor area on surveying, monitoring, and treating Stiltgrass on landscape scale. Talked about surveying on neighboring property (Scio Twp) and creating best management plans for surveying.
 - With funding from EPA-GLRI, HCMA staff worked across boundaries to remove invasive species and engage with volunteers at Lake Erie Metropark and Wyandot of Anderdon Nation's Six Points property.

10%

10% of the action has been completed.

- Action 8.3: Acquire an additional 1000 acres, preferring in contiguous parcels, by 2028, for the specific purpose of maintaining as undeveloped land.
 - Storymap drafted by planning department prioritizes parcels for acquisition in Wayne County based on stormwater storage, filtering, etc.

0%

0% of the action has been completed.

- Action 8.4: Identify areas totaling 200 acres within currently developed lands that can be converted back to undeveloped areas by 2028.

0%

0% of the action has been completed.

- Action 8.5: Identify properties within Metroparks' ownership that are underutilized and good candidates for divestment, according to established acquisition and divestment strategy plan.

0%

0% of the action has been completed.

- Action 8.6: Prioritize climate resiliency of parcel acquisition.
 - Storymap drafted by planning department prioritizes parcels for acquisition in Wayne County based on stormwater storage, filtering, etc.

20%

20% of the action has been completed.

Metrics of Success

- 100% Completed: Review current land acquisition/divestment policy, with policy recommendation for Board of Commissioners consideration (if needed).
- 10% Completed/Ongoing: List developed of adjacent land managers and conservation of buffer ecosystems.
- 0% Completed: 1000 acres of land acquired for preservation by 2028.
- 0% Completed: 200 acres of land converted from developed to undeveloped by 2028.
- 0% Completed/Ongoing: Acres of mowed turf decreased.

Long-term Actions

- Action 8.7: Decrease regularly mowed areas within the Metroparks by 5% by 2033.
 - <https://www.metroparks.com/wp-content/uploads/2023/07/Metroparks-Mow-Plan-2023.pdf>

0%

0% of the action has been completed.

- Action 8.8: Implement a cover crop planting policy, field rotation, and no till farming; seek equipment needed and training for staff; and identify best management practices for staff and conditions for leased land.
 - Staff will determine how broad cover crop planting strategy will apply and create a definition for the Metroparks. For example, current farming practices within the Metroparks or if it is expanded to other areas of the parks or to leased lands. Examples could include stipulation in leasing contracts for cover crop usage, fertilizer/chemical limits, or no-till practices in order to lease lands. Additionally, other areas of the park such as beaches could benefit from cover crops in the winter to help keep sand from blowing away.
 - Committee conversations include collaboration between departments to ask Ag Equipment dealers to provide demo units of specialized planters needed for cover crop and no-till planting.
 - Industry professionals or MSU Extension could provide training for staff to develop a plan using the most recent science-based practices. In addition, it's possible to partner with other ag

organizations to host demonstrations/field days to showcase environmentally friendly agricultural practices.

- Staff attended training on Cover Crop/Soil Health Improvement, which covered best practices that inspired future ideas and shared many resources to help towards implementation.



15% of the action has been completed.

- Action 8.9: Identify potential locations for solar, wind, and other green energy generation installations.
 - Solar panel study completed at Willow Metropark Golf Course.



5% of the action has been completed.

- Action 8.10: Implement conversion of developed land back to undeveloped.



5% of the action has been completed.

Objective 9: Build strategies into all “existing and future” plans to incorporate climate adaptation resilience.

Near-term Actions

- Action 9.1: Develop a policy with standards for selecting vegetation or trees for planting, selecting native species that are hardy or resilient to climate pressures by 2024.
 - Natural Resources staff are creating a Tree and Site Restoration guide that will include suitable replacements for new plantings, including species vulnerable to a changing climate. Additionally, native plants in gardens, rain gardens that will require less water and maintenance and will provide for pollinators.



60% of the action has been completed.

- Action 9.2: Advocate for local climate monitoring efforts, to incorporate future climate models and projections into climate resilience planning beginning in 2023. Examples of climate monitoring data sources to be used include FEMA’s Hazard Mitigation Plan, the EPA, USGS, and the State Senate.
 - Staff is identifying potential data sources. One source is the State of Michigan historical climate change data: <https://www.michigan.gov/mdhhs/safety-injury-prev/environmental-health/topics/mitracking/climate-change>



0% of the action has been completed.

- Action 9.3: Create regional partnerships to define mutual goals for integrating climate resilience plans and identifying funding sources by 2025.



5% of the action has been completed.

Metrics of Success

- 60% Completed/Ongoing: Development of policy with standards for selecting vegetation or trees for planting and presented to the Board of Commissioners for consideration.
- 0% Completed: If adopted by the Board of Commissioners, policy implemented on all internal and contracted projects by 2028.
- 0% Completed: All lands leased by the Metroparks will hold lessee to internal standards according to the CAP by 2028.
- 5% Completed/Ongoing: Development of a database of regional partners and mutual goals for integrating climate resiliency plans and funding strategies.

Long-term Actions

- Action 9.4: Incorporate climate resilience and impact analysis into infrastructure development and maintenance planning.



0% of the action has been completed.

- Action 9.5: Review all current natural resources plans and incorporate specific strategies to combat climate change.



10% of the action has been completed.

Objective 10: Increase capacity for carbon storage in natural areas and pursue projects for the intentional storage of carbon.

Near-term Actions

- Action 10.1: Identify a consultant and/or partner to assess the level of carbon currently stored in the Metroparks.
 - Conversations have taken place with purchasing to explore direct bids for this work. Several committees and departments will be working together to develop scope of work.
 - The following actions have been identified to be included into scope of work.
 - Action 10.1: Identify a consultant and/or partner to assess the level of carbon currently stored in the Metroparks.
 - Action 10.3: Identify the education necessary to support innovative carbon storage solutions.
 - Action 10.5: Incorporate fuel assessment and carbon release into planning related to prescribed fire and burning of tree debris. Provide education and rationale internally and broadly to Metropark visitors on these practices.
 - Action 18.1: Establish the current carbon emissions baseline and provide recommendations on ways to reduce it.
 - Action 18.3: Calculate emissions reductions made by creating new no-mow areas.
 - Action 19.2: Conduct an analysis to understand barriers to moving to electric, unexpected costs or savings, and expected carbon emission reductions.
- Alternative consultants are being considered for this work, such as 2/20/24 - a Master's Project to complete of these actions, UM SEAS about the possibility of collaborating as they completed a similar project in the past with City of Ann Arbor Natural Area Preservation department about carbon storage model.
- Update: As a result of the analysis, it is determined to develop an RFP. A Draft RFP is complete and will be reviewed by an internal team. This RFP will address 5 different actions: 18.1, 18.3, 19.2, 10.1 and 10.5. It will also capture within the RFP, but was not originally captured in the CAP, which is the Facility Emissions Baseline.
- RFP submittal process is closed and was internally evaluated.
- Update: RFP was awarded to CIS during the October board meeting.
 - Through proposed audit methods detailed in the proposal, CIS will be responsible for the assessment and establishment of the following:

A	Carbon Storage Baseline
B	Fuel Assessment and Carbon Release
C	Emissions Reduction from No-Mow Areas
D	Fleet and Equipment Emissions Baseline
E	Transition to Electric Fleet
F	Facility Emissions Baseline

- Deliverables at the conclusion of this report will include an executive summary, results, and recommendations for further study, as well as guiding principles and high-level coherent actions for strategy development.

100%

100% of the action has been completed.

- Action 10.2: Develop policy governing composting practices in internal operations by 2028.
 - This overlaps with Waste Sub-committee. There is a proposed pilot project for composting at Kensington in 2025.



5% of the action has been completed.

- Action 10.3: Identify the education necessary to support innovative carbon storage solutions.
 - Committee participated in the Education and Engagement committee survey to identify high priority education topics. The intention is to have the subcommittee fill out the survey together to identify training needs within their CAP goal.
 - Survey to identify topics sent to subcommittee chairs. The intention is to have the subcommittee fill out the survey together to identify training needs within the CAP goal.
 - The identified topics include:
 - No mow areas
 - Reducing emission
 - Park connectivity projects
 - Climate Action funding
 - Transitioning to EV
 - Runoff and Storm Drains
 - Waste and Recycling
 - Plant Selection
 - Maintenance resources
 - Climate Change predictions
 - Transit opportunities
 - Metroparks role in the regional
 - Mitigating climate change on a small scale
 - How is the world being impacted
 - Best practices for communicating with the public regarding climate change
 - Other



100% of the action has been completed and ongoing.

- Action 10.4: Partner to plant 10,000 native trees across the Metroparks' five-county area by 2028 (2,000 bare root saplings per year).
 - In 2023, through the Consumer Energy grant: Healing the Headwater 2000 trees were planted at Indian Springs Metropark.
 - 500 hazelnut shrubs planted at Willow, Hudson Mills, Kensington, Wolcott Metroparks



25% of the action has been completed.

- Action 10.5: Incorporate fuel assessment and carbon release into planning related to prescribed fire and burning of tree debris. Provide education and rationale internally and broadly to Metropark visitors on these practices.

- Staff are exploring the possibilities of alternatives to burning logs/brush. They are reaching out to partner organizations about their research into carbon release from prescribed burning as well as incorporate fuel load into burn prescriptions (low/medium/high) and compare to amount of carbon stored in healthy ecosystem to carbon release in prescribed fire.
- Update: As a result of the analysis, it is determined to develop an RFP. A Draft RFP is complete and will be reviewed by an internal team. This RFP will address 5 different actions: 18.1, 18.3, 19.2, 10.1 and 10.5. It will also capture within the RFP, but was not originally captured in the CAP, which is the Facility Emissions Baseline.
- RFP submittal process is closed and was internally evaluated.
- Update: RFP was awarded to CIS during the October board meeting.
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A	Carbon Storage Baseline
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E	Transition to Electric Fleet
F	Facility Emissions Baseline

- Deliverables at the conclusion of this report will include an executive summary, results, and recommendations for further study, as well as guiding principles and high-level coherent actions for strategy development.



25% of the action has been completed.

Metrics of Success

- 0% Completed/Ongoing: Create and finalize a report on current carbon levels stored in the Metroparks.
- 100% Completed/Ongoing: Completed employee training(s) on carbon storage issues and strategies within the Metroparks.
- Ongoing: Composting policy created by 2028.
- 25% Completed/Ongoing: 10,000 trees planted.
 - 2500 trees have been planted to date.
- 25% Completed/Ongoing: Prescribed fire and burning plans updated by 2028.

Long-term Actions

- Action 10.6: Engage in carbon offsetting, provide sink for vehicles or other emissions.



0% of the action has been completed.

- Action 10.7: Protect, expand, and improve tree canopy coverage.

0%

0% of the action has been completed.

- Action 10.8: Evaluate forestry management practices to selectively develop and harvest stands of timber for carbon storage initiative funding.

0%

0% of the action has been completed.

- Action 10.9: Address procurement policies, local sources, food operations, and materials, to reduce transportation carbon costs and footprints.
 - Staff is exploring the possibility of having Metropark farms have the ability to produce consumable goods. Strategic plans could be developed to help offset items purchased with items grown/produced in house. Examples could include vegetables, annual and perennial flowers, pumpkins, Maple Syrup, and Ice Cream.

5%

5% of the action has been completed.

- Action 10.10: Evaluate opportunity to purchase, or provide, Regional Carbon Banking or Credits.

0%

0% of the action has been completed.

GOAL 3. WATER QUALITY

Enhance built and natural stormwater infrastructure in preparation for increasingly intense storms and promote the protection of water quality.

Objective 11: Beginning in 2024, provide annual education opportunities to staff on issues of stormwater management and water conservation.

Near-term Actions

- Action 11.1: Develop methods of communication with and for Metroparks staff related to stormwater management and water conservation.
 - Water Quality committee participated in CAP Education and Engagement Survey collaboratively at Meeting #3. Survey results will provide staff training methods of communication.
 - The Metroparks environment and climate section of blog authored by Interpretive Department staff which highlights the following water quality initiatives as part of the blog cycle.
 - LMS Training Stormwater Management
 - Lunch and Learn series.

100%

100% of the action has been completed and ongoing.

- Action 11.2: Offer staff in-house training, opportunities to attend webinars or other local conferences, and access to water quality resources for the purpose of expanding knowledge to incorporate into daily work.
 - Compile list of 2024 related in-house training, webinars, local conferences, access to Water Quality resources for knowledge into daily work.

50%

50% of the action has been completed.

Metrics of Success

- 100% Complete/Ongoing: Four educational experiences provided by Natural Resources Department and Planning and Development for staff across the Metroparks, in coordination with education goals/objectives about climate initiatives, conducted by industry leaders, and aimed to increase the knowledge of Metroparks staff, regardless of job classification.
 - Lunch and Learn
 - Tuesday, June 11th from 11:30am-12:30pm: Let It Grow Plan (Chief of Natural Resources)
 - Tuesday, August 13th from 11:30am-12:30pm: Green Infrastructure is Key for Stormwater Management (System Planner)
 - Friday, November 22 from 11:00am-Noon: “Chasing Time” short film on climate change screening with staff discussion to follow.
- 50% Complete, anticipated completion timeframe, 2025: Metroparks staff have

participated in at least one workshop/webinar/continuing education seminar with a climate initiative focus that pertains to their department. Training will be selected by departmental lead or designated committees.

- The subcommittee identified a way to track training across the park system. This is held on the park's internal SharePoint system where employees will be able to submit their climate action training.
- 229 entries have occurred.
 - Examples include:
 - MSU Extension Wild About Conservation Webinar: Managing Stormwater in a Changing Climate
 - Great Lakes Educators of Aquatic and Marine Science: Restoring Urban Rivers
 - Washtenaw County Master Rain Gardener Certificate
- Communication to staff included emails, announcements at operation meetings.
- A flyer with a QRC to access the tracking system was sent to staff to display in areas where employee gather.
- Staff can demonstrate learning by incorporating it into their work responsibilities (i.e., transfer of knowledge).
- By 2025, two Learning Management System trainings will be identified and scheduled for staff participation.
 - Stormwater Pollution: Baseline Best Management Practices-every 3 years
 - Other modules being considered include:
 - Environmental Awareness
 - Environmental Awareness: Land Pollution (Microlearning)
 - Environmental Awareness: Water Pollution (Microlearning)
 - Environmental Awareness: Air Pollution (Microlearning)
 - Energy Efficiency at Home
 - Energy Efficiency: General Improvements
 - Energy Efficiency: Poor Energy Efficiency Indicators
 - Energy Efficiency: Sealing and Insulating Your Home
 - Sewage/ Wastewater/ Waterline Maintenance
 - Stormwater Pollution Prevention for Industrial Operations
 - Stormwater Pollution: Advanced Best Management Practices (Microlearning)
 - Stormwater Pollution: Water Pollution Regulations (Microlearning)
 - Universal Waste Management
 - These are being evaluated to determine which ones will best suit the needs of various departments.

Long-term Actions

- Action 11.3: Demonstration projects for long-term living labs.

0%

0% of the action has been completed.

Objective 12: Adopt innovative strategies to capture and manage stormwater in preparation for more severe storms and educate the public about these efforts.

Near-term Actions

- Action 12.1: Identify internal education needs related to stormwater management, including financial considerations.
 - Water Quality Subcommittee completed a survey (results in meeting #2 summary) for potential educational needs. CAP Education survey completed, and results will provide better insight. Committee will discuss projects and equipment in upcoming meetings to be proactive on 2025 budget items.
 - Staff are participating the LMS training: Stormwater Pollution, Baseline Management Practices.
 - Lunch and Learn on Green Infrastructure was completed.
 - On site tour given of completed stormwater grant projects at Willow and Lake Erie. Goal is to have multi-departmental coordination on stewardship activities and standardization of routine maintenance.
 - Update: Natural Resources Dept. and Planning and Development Department along with Maintenance park staff have begun to develop long term maintenance/stewardship training for staff following green infrastructure projects implemented.



10%

10% of the action has been completed.

- Action 12.2: Work with partners and/or consultants to identify options and determine the viability of each.
 - Working with Don Carpenter and Brendan Cousino, Stormwater consultant's regional stormwater plan. Planning department and Leadership are working on next steps.
 - HCMA will be receiving a report from stormwater consultants Drummond & Carpenter, which will highlight opportunities to improve stormwater management and partnerships.
 - Working with consultants Six Rivers Conservancy and HRC
 - We obtained a grant from the Erb Foundation: Urban Runoff program for Stormwater Management in Wayne County
 - Developing an action plan which will identify findings of parcels to develop internal policy for acquisition for stormwater parcels.



25%

25% of the action has been completed.

- Action 12.3: Based on the findings, develop a pilot project utilizing innovative strategies (e.g., green roof, permeable pavement, bioswales, increase culverts).

- Add green infrastructure training for Water Quality Subcommittee members in order to prioritize a list of potential pilot projects (rain garden/bioswale, shoreline stabilization, riparian buffers).
 - As part of the green infrastructure project at Lake Erie Metropark, our consultant will develop instructions for maintenance of bioswales and rain gardens. Staff will be trained.
 - Chair of the Water Quality committee participated in consultant led hands-on training.
 - Out of this process a best practices procedure will be created.

10%

10% of the action has been completed.

- Action 12.4: Create a list of 5-10 projects where innovative strategies might be employed, including financial analysis.
 - Pilot projects will be identified in the 2025 Capital Improvement, Major Maintenance and Minor projects list.
 - Prioritized this action to year 2.
 - Potential projects are being identified and recommendations will be made for 2025.

1%

1% of the action has been completed.

- Action 12.5: Present pilot project to the Board of Commissioners.
 - Prioritized this action to year 3-5.

0%

0% of the action has been completed.

Metrics of Success

- 10% Complete, anticipated completion timeframe, 2026: Provision of stormwater management education to all Metropark staff.
- 25% Complete, anticipated completion timeframe, 2025: Connected with partners and/or consultants to assist in the identification of suitable options.
- 10% Complete, anticipated completion timeframe, 2026: Development of a list of innovative stormwater management strategies.
- 10% Complete, anticipated completion timeframe, 2026: Strategy list presented to and approved by the Board of Commissioners.
- 10% Complete, anticipated completion timeframe, 2026: Development of stormwater management pilot project and assessment of efficacy.

Long-term Actions

- Action 12.6: Plan an additional five projects with potential to innovate and provide information to the public.

0%

0% of the action has been completed.

- Action 12.7: Result of pilot projects communicated to public and partner agencies.

0%

0% of the action has been completed.

Objective 13: Become a prominent stormwater management partner in the region.

Near-term Actions

- Action 13.1: Identify important stormwater corridors, documenting and providing staff with locations, jurisdictions, and responsibilities by 2028. This documentation includes description of the opportunities, challenges, and possible solutions.
 - Don Carpenter and Brendan Cousino, Stormwater consultants are working on regional stormwater planning.
 - Working with consultants Six Rivers Conservancy and HRC
 - The Metroparks obtained a grant from the Erb Foundation: Urban Runoff program for Stormwater Management in Wayne County
 - Developing an action plan which will identify findings of parcels to develop internal policy for acquisition for stormwater parcels.
 - SEMCOG Green Infrastructure Subcommittee.
 - City of Detroit Green Infrastructure Project Submittal.
 - Exploring possible deeper community partnerships.

15%

15% of the action has been completed.

- Action 13.2: Actively research and identify innovative global and regional strategies for stormwater treatment methods and adapt to the Metroparks system. These strategies should be incorporated into all stormwater partnerships.
 - Don Carpenter and Brendan Cousino, Stormwater consultants are working on regional stormwater planning. SEMCOG partnerships for outside funding.
 - In addition, the Metroparks recently completed an ERB Foundation Grant Urban Runoff Program Action Plan for Stormwater Management in Wayne County. Grant Plan 2026-2030 will include the acquisition strategy following preliminary Restoration Plans completed in 2025 in order to determine cost estimates.
 - The HCMA will need to look beyond its own available funds and set realistic expectations for funding that can be secured for property acquisition and lead into developing a priority for acquisitions.
 - National, State, and local grant programs have been targeted for potential grants, most related to climate resiliency efforts.
 - The availability of HCMA capital funds that have been set aside for acquisition, will also provide a source of funds to leverage against grant options.
 - Drummond/Carpenter Project. Provide meeting summaries with other regional partners for us to better understand the next steps in this process.

10%

10% of the action has been completed.

- Action 13.3: Share at least 20 articles or blog posts with the public related to stormwater climate action by 2028.

- Seven stormwater blogs have been posted.
 - **2/21/24 Rain Gardens – Putting Your Yard to Work for You (And Your Community)!**
 - **3/13/24 No-Mow May is not just a catchy phrase... it is a mindset!**
 - **3/27/24 Parks in Partnership Highlight: Michigan Natural Shoreline Partnership**
 - **5/15/24 Water Wise: Empowering Students Through Stormwater Education**
 - **6/12/24 Beach Management: Combating E. coli**
 - **6/28/24 Softened Shorelines, Cleaner Water for All**
 - **7/31/24 Parks in Partnership: Michigan Sea Grant**
 - **11/27/24 Parks in Partnership: Six Rivers Land Conservancy**



30% of the action has been completed.

Metrics of Success

- 10% Complete, anticipated completion timeframe, 2025: An internal document created that identifies stormwater corridors and related responsibilities.
- 10% Complete, anticipated completion timeframe, 2025: Regional standard policy created for engineering standards.
- 10% Complete, anticipated completion timeframe, 2025: Stormwater management partnerships created, joined, or facilitated.

Long-term Actions

- Action 13.4: Identify existing local and regional stormwater partnerships and how the Metroparks can collaborate. Identify stormwater management gaps in the region and partnerships that need to be created to address these gaps in stormwater leadership.



0% of the action has been completed.

- Action 13.5: Create an internal policy establishing a regional Metroparks standard for stormwater management, adhering to or exceeding individual county engineering standards.



0% of the action has been completed.

- Action 13.6: Develop plans or recommendations for maintenance of stormwater corridors by 2033, implementing them (e.g., resolving conflicts and reroutes) after 2033.

0%

0% of the action has been completed.

Objective 14: Adopt a practice of strategic water usage that minimizes stress on and protects regional water resources.

Near-term Actions

- Action 14.1: Determine the current level of water use in the Metroparks, including golf courses, water features, buildings, etc.
 - Currently Water Quality Subcommittee determining by meeting #4 (February 28, 2024) on a tentative schedule to complete a water inventory system wide. Staff will determine the level of effort to complete checklists for all water usage and provide a gap study of those facilities/water features/water resources that need water metering installed to determine water usage baseline in 2024.
 - Staff determined to implement a pilot project at Kensington to estimate the metering of water usage throughout the park. i.e., Water wells and including the irrigation system.
 - As part of this pilot, staff discovered the need to update the inventory of the active water well location within GIS prior to providing consultants with this data.
 - Understanding meter and system based on pipe inventory and a scope for plumbing contractor is the recommendation from this subcommittee. Staff will work on the scope of this recommendation. Staff has met with potential contractors and received two quotes for meter equipment.
 - Update: This pilot project at Kensington will continue into 2025.

10%

10% of the action has been completed.

- Action 14.2: Identify innovative strategies and the financial viability to reduce water usage.
 - SEMCOG Green Infrastructure Sub Committee
 - Groundwater smart metering pilot project at Kensington
 - Multiple departments collectively participate in continuing education that include water usage strategies.
 - DNRTF/LWCF grants scoring system incorporates reduction of water usage in the scoring for sustainable design (total of 20 points). Planning and Development department researching the reduction of water usage for future grant submittals.
 - Best Practices implemented through NPDES Non-Point Stormwater Permit administered by the Natural Resources Department that are related to water reduction.

25%

25% of the action has been completed.

- Action 14.3: Create an inventory of water usage (the draw of water on natural or municipal water resources) within facilities, buildings, bathrooms, splash pads, pools, etc., and install sub-meters to monitor and actively manage water usage rates by 2028.
 - Groundwater smart metering project Kensington.

10%

10% of the action has been completed.

- Action 14.4: Collect rainwater runoff from buildings and store rainwater to irrigate landscaped areas.
 - Stony Creek Nature Center has 2 rain barrels installed.
 - Lake St. Clair Park Office has 1 rain barrel installed.

1%

1% of the action has been completed.

- Action 14.5: Establish targets for water use reduction.
 - Groundwater smart metering project Kensington.

5%

5% of the action has been completed.

- Action 14.6: Reduce irrigation of landscapes, implementing resilient plantings and identifying areas to reduce turf.
 - Groundwater smart metering pilot project Kensington.
 - Installation of natural shoreline at Stony Creek Metropark using native plants.
 - Installation of rain garden and bioswales at Lake Erie Metropark using native plants.

5%

5% of the action has been completed.

- Action 14.7: Evaluate potential for irrigation with gray water using cisterns, rain barrels, and other local stormwater storage elements.
 - Prioritize to years 2-5.

0%

0% of the action has been completed.

- Action 14.8: Install timer and motion sensor faucets, waterless or low volume urinals and toilets, dual flush valves (low versus full volume flush), and other water use reduction equipment on all new facilities by 2028.
 - New construction facility Willow Park Office
 - Various bathroom updates throughout the system
 - New construction facility Stony Creek Boat Launch

25%

25% of the action has been completed.

- 10% Complete, anticipated completion timeframe, 2028: Create and measure inventory of metered water usage.
- 10% Complete, anticipated completion timeframe, 2028: Development of water use reduction strategies, each including a financial analysis.
- 10% Complete, anticipated completion timeframe, 2028: Implementation of pilot projects to collect rainwater runoff from buildings to be reused onsite.
- 10% Complete, anticipated completion timeframe, 2028: Installation of water saving equipment in new facilities.
- 10% Complete, anticipated completion timeframe, 2028: Policies created to address water usage.

Long-term Actions

- Action 14.9. Dedicate staff and resources to maintain water utility installations and hardware. Evaluate potential for retrofit on existing facilities by 2033.

0%

0% of the action has been completed.

- Action 14.10: Evaluate splash pads and other aquatic facilities' ability to capture, filter, and reuse water in operation. In new facilities or infrastructure, show preference on design of systems with reuse of water.

0%

0% of the action has been completed.

- Action 14.11: Develop 1) a policy to use compressed air to blow grass clippings off mowing equipment and golf carts and 2) best management practices of washing equipment off into turf areas, where water can infiltrate rather than being conveyed into storm or municipal sewer.

0%

0% of the action has been completed.

Objective 15: Monitor and protect quality of water resources adjacent to and in close proximity of the Metroparks from pollution, erosion, contamination, and other detrimental effects exacerbated (i.e., accelerated or increased) by climate change.

Near-term Actions

- Action 15.1: Actively monitor and treat algal blooms, identify trends, and establish survey protocol and areas at Kent and Stony Lakes by 2028.
 - 271 acres of Kent Lake received three treatments to control Eurasian Watermilfoil and Curley-leaf pondweed, both invasive aquatic plants and 126 acres of Stony Creek Lake received two treatments. Treatment at Stony Creek helps with invasive aquatic plants and is proactive in preventing harmful algal blooms.
 - Lake treatment for 2024 is complete. Kent Lake and Stony Creek Lake were treated on 3 occasions, Lake Erie Marina was treated twice, and Skip’s Landing at Hudson Mills was treated once. The goal of treatment is to control invasive aquatic plants like Eurasian Watermilfoil and Curley-leaf Pondweed and prevent harmful algal blooms.
 - A potential cyanobacteria algal bloom was observed on Saturday, October 26 at Stony Creek Lake. EGLE and Macomb County Health Department were notified. The algal bloom dissipated before testing could occur the following business day.



25% of the action has been completed.

- Action 15.2: Identify and evaluate potential training for staff to have certification for soil erosion and sedimentation control authority over Metroparks projects to ease administration of stormwater improvement projects.
 - Engineering Department SESC Standards implemented on every construction project 1 acre in size or within 500 feet of a watercourse through SESC Permit administration through outside agencies. Cost feasibility study needed to determine if this should be administered internally as a SESC Authority.



0% of the action has been completed.

- Action 15.3: Identify and design stormwater green infrastructure that will capture or filter an additional 10 million gallons annually by 2028.
 - Ongoing projects (GLRI-EPA Lake Erie Green Infrastructure Project), Stormwater Pollution Prevention Plan Initiatives implemented. Bioswales and a rain garden were installed at Lake Erie Metropark by converting ditches and turf grass into native plantings.
 - In early 2021, the Huron-Clinton Metropolitan Authority (HCMA) received a National Fish and Wildlife (NFWF) grant to provide improvements to Willow Metropark, including pavement reductions, bioswale installation, bioengineered slope stabilization, and riparian buffer.
 - Work is still occurring this spring/summer to gather water quality metrics. The final grant report was included in the quarter 3 update.
 - 3.5 million gallons are captured or filtered annually between these two projects.
 - In 2024, the first phase of natural shoreline was installed at Eastwood Beach at Stony Creek Metropark. This project was designed to be completed over 5 years, for a total

of 500 linear feet of shoreline restoration.



30% of the action has been completed.

- Action 15.4: Create public education pieces surrounding nutrient pollution (e.g., *Escherichia coli* or *E. coli*), related closures and reasons for closures, and methods the Metroparks are pursuing to reduce nutrient loads and keep lakes open.
 - Two public blog posts scheduled June 5 and 19, 2024 on summer storms and managing beaches to discuss E.coli and algal blooms.
 - Blog Posts and closures
 - NPDES Non Point Source Stormwater Permit related measures for public education administered by the Natural Resources department.
 - Natural Resources department annually participates in goose management, which is in coordination with DNR best management practices and permitting.
 - Natural Resources Dept. joined the Clinton River Public Advisory Council for the Beach Closings Subcommittee for the Clinton River Area of Concern.



100% of the action has been completed and ongoing.

Metrics of Success

- 25% Complete, with anticipated completion timeframe, 2028: Community monitoring plan for algal blooms created.
- 0% Complete, benchmark current stormwater capture using the EPA National Stormwater Calculator.
- 30% Complete, with anticipated completion timeframe, 2028: Increase the gallons of stormwater treated or captured annually, including increased storage based on pre and post-construction capacity on stormwater projects.
- 100% Complete/Ongoing: Published blog and/or social media posts educating about nutrient pollution and the Metroparks' efforts to reduce it.
- 0% Complete, based on analysis, installed and/or retrofitted stormwater infrastructure to best manage stormwater within the Metroparks.

Long-term Actions

- Action 15.5: Address critically eroded shoreline areas identified in the Stormwater Management Plan, restoring 30% of these areas by 2028, and 60% of these areas by 2033.



0% of the action has been completed.

- Action 15.6: Create a stormwater plan element that identifies and prioritizes facilities and proposes to capture 100% of rainfall of a two-year, 24-hour storm event in all developed areas of the parks. Target 10 projects within this element to be installed by 2033.



0% of the action has been completed.

Objective 16: Partner with regional organizations, including government agencies, watershed councils, non-profits, and corporate and philanthropic organizations to identify alignment and advance mutual goals of water quality protection in a changing climate.

Near-term Actions

Action 16.1: Identify regional organizations who share mutual goals of water quality protection and establish meaningful partnerships centered on water quality in each of our service counties.

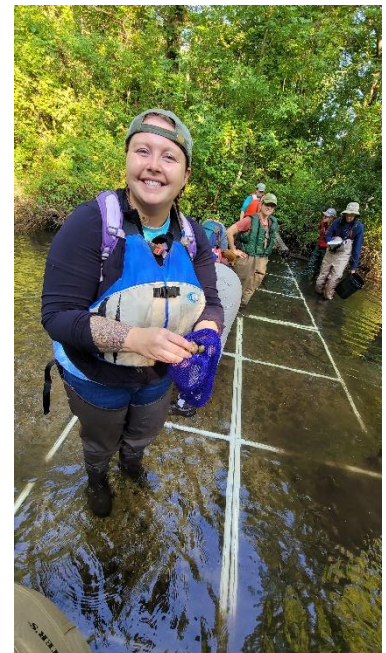
- Water Quality subcommittee is developing a process to establish stronger relationships with existing partner or pursue new partner (one per each county) with focus on water quality.

Michigan Natural Shorelines Partnership, in collaboration with HCMA, is hosting the Annual Michigan Certified Natural Shoreline Professional (CNSP) Training at Stony Creek Metropark. This training includes in-class instruction and field day to implement a shoreline softening project near Eastwood Beach.

- HCMA will be receiving a report from stormwater consultants Drummond & Carpenter, which will highlight opportunities to improve stormwater management and Partnerships. HCMA is in partnership with Washtenaw County Water Resources Commission, Friends of the Detroit River, Oakland County Water Resources Commission, River Raisin Watershed Council, Rain Catchers Collective: Clinton River Watershed Council, Friends of the Rouge, and Huron River Watershed Council to share education with the community on stormwater management through the Southeast Michigan Master Rain Gardener Class.
- Planning and Development Dept. joined the SEMCOG Green Infrastructure Sub Committee
- In partnership with US Fish and Wildlife Service, staff is increasing community awareness of mussel reintroduction and developing educational outreach for the public.
- Natural Resources Dept. joined the Clinton River Public Advisory Council for the Beach Closings Subcommittee for the Clinton River Area of Concern.
- Planning and Development and Natural Resources departments are seeking grant pursuits to continue partnership with Wyandot of Anderdon Nation following our current GLRI-EPA grant partnership related to green infrastructure and restoration efforts for both Six Points property and Lake Erie Metropark.



Planning meeting with MSUE, GEI, NR Dept, and Operations at Stony Creek in December 2023.



Mussel reintroduction in partnership with USFW service.

100%

100% of the action has been completed and ongoing.

- Action 16.2: Participate in professional groups, to meet potential partners and collaborate on water quality issues.
 - HCMA participates in the Michigan Natural Shoreline Partnership, which provides training for contractors to install and maintain natural shorelines.
 - HCMA will be receiving a report from stormwater consultants Drummond & Carpenter, which will highlight opportunities to improve stormwater management and Partnerships. HCMA is in partnership with Washtenaw County Water Resources Commission, Friends of the Detroit River, Oakland County Water Resources Commission, River Raisin Watershed Council, Rain Catchers Collective: Clinton River Watershed Council, Friends of the Rouge, and Huron River Watershed Council to share education with the community on stormwater management through the Southeast Michigan Master Rain Gardener Class.
 - Planning and Development Dept. joined the SEMCOG Green Infrastructure Sub Committee
 - In partnership with US Fish and Wildlife Service, staff is increasing community awareness of mussel reintroduction and developing educational outreach for the public.
 - Natural Resources Dept. joined the Clinton River Public Advisory Council for the Beach Closings Subcommittee for the Clinton River Area of Concern.
 - Planning and Development and Natural Resources departments are seeking grant pursuits to continue partnership with Wyandot of Anderdon Nation following our current GLRI-EPA grant partnership related to green infrastructure and restoration efforts for both Six Points property and Lake Erie Metropark.

100%

100% of the action has been completed and ongoing.

- Action 16.3: Identify funding opportunities that support partnerships around water quality.
 - Potential collaboration with Great Lakes Commission identified by Natural Resources Dept.
 - Exploring partnership with the St. Suzanne Cody Rouge Community Resource Center, Friends of the Rouge, and the Sierra Club Michigan Chapter with their Detroit Stormwater Specialist Training
 - Planning and Development and Natural Resources departments are seeking grant pursuits to continue partnership with Wyandot of Anderdon Nation following our current GLRI-EPA grant partnership related to green infrastructure and restoration efforts for both Six Points property and Lake Erie Metropark.
 - ERB Foundation Grant completed, and next phase includes partnerships for funding opportunities.

25%

25% of the action has been completed.

- Action 16.4: Seek to be included or represented on boards pertaining to matters of water quality.
 - Committee is discussing staff or consultant to represent Metroparks on Public Advisory Councils such as Ecorse Creek Watershed Committee, Detroit River Advisory Committee.

0%

0% of the action has been completed.

Metrics of Success

- 25% Complete, with anticipated completion timeframe, 2028: Form a minimum of one partnership per county in the Metroparks service region focused of water quality.
- 25% Complete, with anticipated completion timeframe, 2028: Identified and pursued funding opportunities to enhance partnerships.

Long-term Actions

- Action 16.5: Create a Strategic Partnership Matrix that identifies high, medium, and low priority partners in this work. Then create the plan to engage and nurture those partnerships.

0%

0% of the action has been completed.

- Action 16.6: Engage with the Metroparks' lobbying firm to connect with existing and potential partnerships.

0%

0% of the action has been completed.

Objective 17: Advocate for the protection of water resources.

Near-term Actions

- Action 17.1: Work with our Lobbying firm to engage and inform the Metroparks Caucus on pursuing action on Metropark priorities concerning water quality.

0%

0% of the action has been completed.

Metrics of Success

- 0% Complete: Annual Metroparks Caucus letter issued.

Long-term Actions

- Action 17.2: Seek Board of Commissioners resolutions that support goals pertaining to water quality protection, formalizing Metroparks support for internal and external water quality initiatives.

0%

0% of the action has been completed.

GOAL 4. TRANSPORTATION

Reduce carbon emissions associated with transportation vehicle miles traveled and provide equitable transportation options to and within the Metroparks to help mitigate the impacts of climate change.

Objective 18: Identify and evaluate efforts to reduce the vehicle miles traveled by Metroparks staff and reduce current levels of carbon emissions emitted.

Near-term Actions

- Action 18.1: Establish the current carbon emissions baseline and provide recommendations on ways to reduce it.
 - Transportation committee discussed options for establishing a baseline and has already started collecting baseline data, such as vehicle and equipment fuel usage using our Fuel Master System. Once we have sufficient baseline data, we will work towards developing recommendations to reduce carbon emissions through a variety of options:
 - 2024- Option #1: RFP to establish our Carbon Emissions baseline and associated recommendations.
 - 2024-Option #2: Initiate as a Master Project through MSU, UofM or another University to do the same.
 - 2024- Both options will require the development of a Scope of Work Document that outlines recommendations and clarifies what our intended goals are.
 - A meeting was held in February with Planning, Natural Resources, and Transportation Committee members to discuss both options and the development of a scope.
 - Next Step- A follow-up meeting has been scheduled in March to further discuss this action and others that related.
 - As a result of this work, a draft RFP was developed and reviewed by an internal team. This RFP addresses 5 different actions: 18.1, 18.3, 19.2, 10.1 and 10.5. It will also capture within the RFP, but was not originally captured in the CAP, which is the Facility Emissions Baseline.
 - RFP submittal process is closed and was internally evaluated.
 - Update: RFP was awarded to CIS during the October board meeting.
 - Through proposed audit methods detailed in the proposal, CIS will be responsible for the assessment and establishment of the following:

A	Carbon Storage Baseline
B	Fuel Assessment and Carbon Release
C	Emissions Reduction from No-Mow Areas
D	Fleet and Equipment Emissions Baseline
E	Transition to Electric Fleet
F	Facility Emissions Baseline

- Deliverables at the conclusion of this report will include an executive summary, results, and recommendations for further study, as well as guiding principles and high-level coherent actions for strategy development.

- Separately, IT arranged a demo with Samsara to see how their product can help track and reduce / optimize fuel usage of our vehicles and equipment.



33% of the action has been completed.

- Action 18.2: Advocate, promote, and incentivize alternatives to autocentric development patterns through close coordination between state, county, and local governments.
 - B2B Trail expansion to connect Dexter-Huron and Delhi was recently completed.
 - HCMA Connectors-Phased implementation of the 5 gaps of the Metroparks Connectors
 - Great Lakes Way- Lake Erie Trail- Applying for TAP grant.
 - Livingston County Trail Connections RFP- Hiring consultant for design.
- Next Step- The committee will work with each department on the development of a comprehensive list of the many ways we are advocating, promoting, and incentivizing alternatives to autocentric development.
 - Promoting non-motorized connections with regional trail systems, Statewide significant Iron Belle Trail, and International non-motorized connections with our Trail GAP Study public outreach efforts.
 - Participate in the Great Lakes Way Advisory Committee efforts
 - Participation in GLWAC along with partners and promotional campaign through marketing dept. as these connections are completed (example non-motorized facility protected bike lanes on new Gordie Howe Bridge and its connection of parks, greenways and trails internationally).



25% of the action has been completed.

- Action 18.3: Calculate emissions reductions made by creating new no-mow areas.
 - Committee researched amount of reduced mowing: HCMA has reduced mowing by 561 acres from 2018 to 2023 (see mow reduction document)
 - Metroparks already tracks mow acreage reductions from year to year and has a general calculation for measuring emission reductions related to creating new no-mow areas.
 - An emission calculation was developed that shows the environmental benefits of reducing mowing (1 acre mowed = XXlbs carbon reduced/ 1 acre of added no-mow reduces 20lbs of carbon emission per mow or about 580 lbs/year.
 - 561 acres of no-mow reduced carbon emissions by 325,380lbs CO2 annually.
 - The identification of new areas to be enrolled in the "no-mow" program will be ongoing.
 - A meeting was held in February with Planning, Natural Resources, and Transportation Committee members to discuss the implementation of the emissions calculation for tracking purposes and determine next step for considering future mow reductions. It was determined that there have been considerable reductions over the past couple of years, so the focus in 2024 will be updating our "no-mow" mapping and ensuring it aligns with current mow patterns. It was also determined that we should evaluate mower fuel usage to determine if it supports our emissions calculation. It was shared that the Eastern District has shown a reduction of 6 mow hours per week or 132 hours a season.

- Update: As a result of this work, the committee completed a draft RFP. One goal of the RFP is to hire a consultant to help establish a calculation related to emissions reductions made by creating new no-mow areas.
- RFP submittal process is closed and was internally evaluated.
- Update: RFP was awarded to CIS during the October board meeting.
- Through proposed audit methods detailed in the proposal, CIS will be responsible for the assessment and establishment of the following:

A	Carbon Storage Baseline
B	Fuel Assessment and Carbon Release
C	Emissions Reduction from No-Mow Areas
D	Fleet and Equipment Emissions Baseline
E	Transition to Electric Fleet
F	Facility Emissions Baseline

- Deliverables at the conclusion of this report will include an executive summary, results, and recommendations for further study, as well as guiding principles and high-level coherent actions for strategy development.
- A tracking mechanism has been established to track acreage associated with past and newly established no-mow areas.
- Metric of Success: The development of the appropriate calculation and continued expansion of the no-mow program, where deemed appropriate.



50% of the action has been completed.

Metric of Success:

- 33% Completion of the Study and development of associated recommendations and phased implementation of those.
- 0% Completed: Miles of trail completed.
- 0% Completed: The number of additional acres added to the "no-mow" list per year and associated carbon emissions reduction.

Long-term Actions

- Action 18.4: Revise parking requirements, including reduction of parking and consideration of options for reducing reliance on single-occupancy vehicles and switching to climate-friendly travel options.
- Action 18.5: Support and participate in state, regional, and local infrastructure planning with a unified approach to planning for transportation investments.

Objective 19: Explore the viability of using an EV fleet and developing EV charging infrastructure by 2033.

Near-term Actions

- Action 19.1: Pilot program with two EVs with EV infrastructure and collect usage data.
 - There have been discussions with EV companies (Rivian) and Utilities Companies previously to learn and collaborate.

- Approximately \$65,000 has been allotted for each District for EV projects. Below are project locations that are presently being considered:
 - Willow Park Office Conduit and electrical capacity in place already.
 - Willow Golf Course- Conduit, electric capacity, and pedestal is being bid for consideration. It would be an add on to the existing cart barn charging station project and funding is in place.
 - Stony Creek Boat Launch- Conduit and electrical capacity is in place already and funds have been allotted for an EV Charging Station.
 - Kensington Golf Course- Funds have been allotted for an EV Charging Station. The installation of conduit and an electrical upgrade would have to be a part of the project.
 - The proposed locations above could be subject to change as we learn of other possibilities.
- Update: EV installation of charging stations at Willow Golf Course (visitor use) and Willow Park office (employee use) have been approved by the Board and is taking place. The Pedestals will be provided by the company Red E
 - The committee is determining the specifications on charging stations to see what they provide and what else will be needed to compliment it to gather appropriate equipment for data collection.
 - The committee is seeking information on the charging stations to understand the types of data that will be collected. The committee will also work on a process to evaluate the program's success.
 - The carbon emissions RFP refenced earlier in this document will also help with evaluating program success.
 - A credit card swipe option for the public is available to use on the stations and a code for employee use.
 - DTE provided a \$4,000 rebate towards the installation of the stations.
- Two Mustang Mach E have been purchased which will be used by Community Outreach staff operating out of Willow Metropark.
 - Staff will create training checklist based off the vehicle manual.
 - Transportation committee will work with park mechanics to develop an employee survey.
 - Expectation on needed repairs and services will also be addressed.
 - Update: Both Mustang Mach E have been delivered.
- Engineering staff used one vehicle for travel to Columbus, OH (approx.190 miles) for a conference. Staff reported on their driving experinece:
 - Efficiency: Average consumption was 3.1 miles per kilowatt. The energy breakdown was 90-92% for driving, 3-5% for climate, 3% for accessories, and 2% for exterior temperature.
 - Route Planning & Range Anxiety: There was a brief moment of concern due to a construction detour, but a quick check on Google Maps helped find a shorter route, saving 10 miles and allowing the trip to be completed without a charging stop.
 - Battery Remaining: We arrived at the hotel with 17% battery left.
 - Final Thoughts:
 - Range Planning: Effective use of navigation tools like Google Maps helped to avoid the potential for range anxiety, especially with detours.



- Charging Infrastructure: Hotel charging stations were sufficient for our needs, and the ChargePoint app worked well.
 - Driving Technology: BlueCruise hands-free driving was a standout feature, but manual intervention was needed in specific driving conditions.
 - Overall Satisfaction: The trip was overall a success, with a spacious car and a smooth driving experience. There were no major issues with charging or range anxiety, and the vehicle performed well in terms of both comfort and efficiency. When planning for similar trips in the future, a combination of good route planning, efficient driving, and easy charging infrastructure will certainly make journeys even more enjoyable.
- Currently, we are working on understanding the data we want to collect and the avenues we should utilize to collect it, such as data available through the Altel EV stations themselves.
 - Anticipated Completion Timeframe: Winter of 2025 after the new EVs have one year of service time. Potential expansion opportunities in the Western and Eastern District would occur in 2026.



75% of the action has been completed.

- Action 19.2: Conduct an analysis to understand barriers to moving to electric, unexpected costs or savings, and expected carbon emission reductions.
 - Planning reached out to Muchmore Harrington Smalley & Associates to find relevant resources; there are consultants available that do this kind of work. Next step is to develop scope of work document.
 - This may require a consultant to do a feasibility study. If a graduate student can take 18.1, then available funds could be used for 19.2 that have already been allotted.
 - A meeting was conducted in February with Planning, Natural Resources, and Transportation Committee members to discuss both options and the development of a scope of work document.
 - As a result of this work, the committee completed a RFP which has been bid out.
 - RFP submittal process is closed and was internally evaluated.
 - Update: RFP was awarded to CIS during the October board meeting.
 - Through proposed audit methods detailed in the proposal, CIS will be responsible for the assessment and establishment of the following:

A	Carbon Storage Baseline
B	Fuel Assessment and Carbon Release
C	Emissions Reduction from No-Mow Areas
D	Fleet and Equipment Emissions Baseline
E	Transition to Electric Fleet
F	Facility Emissions Baseline

- Deliverables at the conclusion of this report will include an executive summary, results, and recommendations for further study, as well as guiding principles and high-level coherent actions for strategy development.



33% of the action has been completed.

- Action 19.3: Replace internal combustion engine equipment such as mowers and golf carts with electric options as equipment ages out.

The purchase of new electric equipment and the reduction of fuel powered equipment. Turning one golf course over from fuel carts to electric carts each year until all 7 have made the transition.

- Golf Cart Fleet
 - One golf course (Huron Meadows) transitioned to electric carts prior to 2024.
 - Three additional golf courses (Indian Springs, Willow, and Stony) will have transitioned to electric carts in 2024, leaving three remaining golf courses (Lake Erie, Hudson Mills, Kensington) with gasoline powered fleets.
 - Since Stony was originally scheduled to transition in 2025, the next course to transition will be Lake Erie in the Fall of 2025 or Winter/Spring of 2026. This will be dependent upon discounts available for an early purchase and Board approval of the necessary funds.
- The Transportation Committee developed a process to pilot EV equipment and track the outcomes.
 - Update: The Western District has investigated and requested two of its new mowers to be transitioned to battery / electric. These mowers have been prioritized for Board approval and purchase in 2025.
- Committee Members and the District Maintenance Supervisors and warehouse staff met to discuss developing baseline data associated with transitioning from fuel powered small equipment to battery operated and other alternatives.
 - A review of data from our Faster System has been conducted to establish a baseline for fuel and battery-operated hand tools (backpack blower, trimmers, chain saws). Over time, we will be able to report the number of conversions that are occurring. It will also help us provide a list of preferred alternatives to fuel powered equipment.
 - Developed potential list for alternatives.
 - Electric pedestals are installed at Willow’s Park Office for Interpretive Community Outreach staff vehicles, which Metroparks has purchased.



57% of this action has been completed.

- Action 19.4: Provide EV charging infrastructure for public use.
 - Engineering is presently working on the introduction of EV charging station at the Willow Golf Course as a pilot program.
 - The committee is seeking information on the charging stations to understand the types of data that will be collected. The committee will also work on a process to evaluate the program’s success.
 - The carbon emissions RFP referenced earlier in this document will also help with evaluating program success.



100% of the action has been completed.

Metrics of Success

- 75% Complete: Initial EV usage data collected.
- 57% Complete: EV infrastructure analysis.
- 57% Complete: Some internal combustion engine equipment has been

replaced with electric options as equipment ages out.

- 100% Complete: EV charging infrastructure in place for public use in at least one location per district by 2028.

Long-term Actions

- Action 19.5: Act on the findings of the pilot program, such as installing EV infrastructure for the public in all parks by 2033.

0%

0% of the action has been completed.

- Action 19.6: After evaluation of pilot program, transition Metroparks fleet (police, maintenance, operations, and administrative vehicles) to EV.

0%

0% of the action has been completed.

Objective 20: Increase connectivity within our parks.

Near-term Actions

- Action 20.1: Based on a trail gap study, identify connectivity options between disconnected Metroparks by 2024.
 - The Metroparks Trail Gap Study has been completed in the summer 2024 and will be used as a guide moving forward to develop connections between the parks. The study provides preliminary cost estimates for each gap and will break down the larger gaps into smaller sections to phase funding and construction. Planning has been leading this project since 2023.
 - Current Project: The US-23 Gap has transitioned from the study to the design phase. This project will ultimately connect Brighton State Rec. Area, Huron Meadows, Island Lake RA, and Kensington Metropark.
 - In addition, a grant has been submitted for the design of the Gap between Lower Huron Metropark, French Landing Twp Park and on to the 275 non-motorized pathway.

100%

100% of the action has been completed.

- Action 20.2: Identify partners to address trail gaps by 2024.
 - The identification of partners will be included in the implementation strategy plan prior to pursuing funding for design/construction for the individual Gap projects. The partners will vary

depending on the Gap. This will be an ongoing process that is part of each project as they are pursued, a part of planning and design.

- Some partners were identified during the trail gap study process. However, more potential partners will be determined as each segment is addressed.



50% of the action has been completed.

Metrics of Success

- 100% Complete: Completion of the study and identification of options between Metroparks by 2024
- 50% Complete: Development of a non-motorized infrastructure funding strategy by 2025
- 50% Complete: Development of a trail connectivity plan that includes partners input to prioritize segments for detailed engineering design/construction.

Long-term Actions

- Action 20.3: Complete at least one trail gap identified by 2033.



0% of the action has been completed.

- Action 20.4: Continue to expand the length of trail networks (hike-bike, nature, and rustic trails) to increase ability for non-motorized movement within Metroparks.



0% of the action has been completed.

- Action 20.5: Complete all trail gaps identified by 2050, and all Metroparks are connected via non-motorized trails.



0% of the action has been completed.

Objective 21: Increase access to the Metroparks by centering environmental justice through every transit investment.

Near-term Actions

- Action 21.1: Partner with existing public transit agencies to develop efficient and equitable transportation to the Metroparks by 2026.
 - A pilot partnership between SMART and Lake St. Clair was established in 2021 to provide public transportation to the park. The bus route runs Memorial Day to Labor Day. Conversations between partners continues.
 - This year, the SMART Schedule will expand to be 7 days a week between Memorial and Labor Day, rather than just on the weekends.
 - This action has been scheduled for discussion in 2025.



8% of this action has been completed.

- Action 21.2: Identify locations to support public transit, including strategically placed destination/origin points by 2028.
 - In 2020, a Park Access Plan was completed. This plan identified existing conditions and future recommendations. The subcommittee will use this plan to identify next steps within this action. This action has been scheduled for discussion in 2025.



0% of the action has been completed.

- Action 21.3: Explore viability for public transit discounts to and from the Metroparks, including a financial impact analysis by 2028.
 - A pilot partnership between SMART and Lake St. Clair was established in 2021 to provide public transportation to the park. The bus route runs Memorial Day to Labor Day. Conversations between partners continues. This action has been scheduled for discussion in 2025.



0% of the action has been completed.

Metrics of Success

- .8% Complete: Establishment of Public Transportation Service partnerships or Circulator or Commuter service in all three park districts by 2030.
- 0% Complete: 100% of equity population zip codes within the Metroparks' five counties have access to transit service within a 10-minute walk to visiting Metroparks by 2030.
- 0% Complete: Transit incentive programs increase visitation from community members living in equity zones by 25% by 2030.

Objective 22: Create an internal EV transit system within the Metroparks that have the highest vehicle counts.

Near-term Actions

- Action 22.1: Partner with existing public transit agencies to develop alternative vehicle transit opportunities for visitors to travel within the Metroparks by 2028.
 - The subcommittee has determined that Actions 21.1 – 21.3 need to be accomplished prior to working on this action. This action has been scheduled for discussion in 2025.

0%

0% of the action has been completed.

- Action 22.2: Pilot circulator services at Kensington and Stony Creek Metroparks by 2028.
 - The subcommittee has determined that Actions 21.1 – 21.3 need to be accomplished prior to working on this action. This action has been scheduled for discussion in 2025.

0%

0% of the action has been completed.

Metrics of Success

- 0% Completed: Establishment of Public Transportation Service partnerships with EV transit.
- 0% Completed: Pilot project implemented and completed.
- 0% Completed: Infrastructure (bus stops, charging stations, and staff) available to support an internal EV transit system.

Objective 23: Explore the viability of micro-mobility modes of transportation within Metroparks.

Near-term Actions

- Action 23.1: Conduct an assessment on the viability of micro-mobility options, including a financial analysis, including our own bike-rental facilities by 2025.
 - A micro-mobility Subcommittee will assess current facilities and identify gaps within the Metropark system.
 - The micro-mobility subcommittee developed a survey for Operations Managers/Supervisors to complete.
 - A survey was also developed and completed by the locations within Metroparks that presently rent bikes or have a concession bike rental agreement.
 - It will be used to determine needs within the existing operations and potential opportunities to expand. It will help show the value of this service and why it is important.
 - The survey helped establish revenues and expenses associated with the various rentals, as well as usage information.
 - In 2024, the committee did extensive research on the availability of micro-mobility opportunities, including two demo days (Type 1 and Type 2 electric bikes).

- The Transportation Committee’s target was to have 23.1 and 23.2 wrapped up early enough in 2024 so any parks considering expanding or adding micro-mobility opportunities can develop proposals to align with the 2025 budget cycle. The committee was successful in doing this.
- 3 Parks within the Metroparks already offer rental bikes (Hudson Mills, Stony, and Willow)
- Lake St. Clair offers rental bikes through vendor: Simple Adventures.

100%

100% of the action has been completed.

- Action 23.2: Identify other areas in the Metroparks where it could be feasible to expand our bike-rentals by 2025.
 - A micro-mobility subcommittee assessed current facilities and identified gaps within the Metropark system.
 - The micro-mobility subcommittee developed a second survey that went out to parks that do not presently offer bike rentals to identify concerns and identify opportunities
 - The information was collected, reviewed, and consolidated into one document., along with 23.1.
 - 3 Parks within HCMA already offer rental bikes (Hudson Mills, Stony, and Willow)
 - Lake St. Clair offers rental bikes through vendor: Simple Adventures.
 - Update: A survey was completed to help identify locations without rental bikes and to identify potential opportunities and a list of “draft” recommendations have been developed. A follow-up step will be to schedule discussions with those that showed an interested.
 - Metroparks Staff had a demo at Pedego Walled Lake to try out a variety of Segways, e-bikes, UTV’s, and other non-fuel powered options available on the market for purchase or rental.
 - A second demo has been arranged at Lake Erie in June to test out Type 1 e-bikes.

100%

100% of the action has been completed.

- Action 23.3: Where the Metroparks do not have bike-rental facilities, if viable, partner with e-scooters, e-bikes, and other micro-mobility vendors to provide access for a more affordable mode transportation within the Metroparks.
 - The subcommittee has determined that Actions 23.1 and 23.2 need to be accomplished prior to working on this action. However, conversations were had with perspective partners and these conversations covered staff options as well as potential rental options for visitors. Therefore, this action has been moved as priority in years 2-5.
 - Update: A survey was completed to help identify locations without rental bikes and to identify potential opportunities and a list of “draft” recommendation have been developed. A follow-up step will be to schedule discussions with those that showed an interested.
 - Metroparks Staff traveled to a demo at Pedego Walled Lake to try out a variety of Segways, e-bikes, UTV’s, and other non-fuel powered options available on the market for purchase or rental.
 - A second demo was held at Lake Erie in June to test out Type 1 e-bikes.
 - With the recent connectivity of Hudson Mills, Dexter-Huron, and Delhi we do see a potential pilot opportunity with a local rental bike provider. We will be reviewing this opportunity further in 2025.



50% of the action has been completed.

Metrics for Success

- 0% Completed: Expanded bike-rental facilities (Metroparks owned or through vendors) throughout the Metroparks by 2028.
- 0% Completed: 10% increase in micro-mobility rentals by 2028.

GOAL 5. WASTE MANAGEMENT, RECYCLING, AND COMPOSTING

Decrease the amount of waste going to landfills by increasing efforts internally and with the public to refuse, reduce, reuse, repurpose, and recycle materials.

Objective 24: Increase waste diversion rates internally, including vendors, through reducing, reusing, and recycling.

Near-term Actions

- Action 24.1: Determine current levels of waste as a baseline by year-end 2024 and provide options for reduction with potential financial impacts.
 - Completed benchmarking of 2017-2023 waste and recycling.
 - Overall, landfill diversion rates were increasing from 2017-2023 at all parks. Diversion rates ranged from ~10% to ~60% indicating differences in the waste types generated at each park as well as opportunities for increasing diversion rates through staff training and public education. This effort included both internal single stream recycling items (plastic, cardboard, paper, metals, glass, and grayboard materials) and water bottle recycling bins located in public spaces throughout the parks which diverted a total of 1.1 million tons of plastic bottles from landfills between 2020-2023.
 - In spring 2024, an RFP for single stream recycling throughout the Metroparks was recently awarded which should aid this effort with expansion of single-stream recycling collected in public areas beginning in late-2024. Public facing recycling bins are being re-stickered during the off-season to promote additional recycling streams.



Location	Year	Landfill Tonnage	Recycling Tonnage	Total	Diversion Rate
Lake St. Clair	2023	164.72	44.19	208.91	21.2%
	2022				
	2021				
	2020				
	2019				
	2018	200.7	5.76	206.46	2.8%
	2017	220.54	5.28	225.82	2.3%
Kensington	2023	121.11	69.84	190.95	36.6%
	2022				
	2021				
	2020				
	2019				
	2018	176.85	36.41	213.26	17.1%
	2017	182.78	32.82	215.6	15.2%
Indian Springs	2023	44.2	13.75	57.95	23.7%
	2022				
	2021				
	2020				
	2019				
	2018	32.02	9.61	41.63	23.1%
	2017	34.48	7.04	41.52	17.0%
Lower Huron	2023	11.49	18.11	29.6	61.2%
	2022				
	2021				
	2020				
	2019				
	2018	100.05	3.24	103.29	3.1%
	2017	137.8	6.8	144.6	4.7%
Stony Creek	2023	152.01	15.53	167.54	9.3%
	2022				
	2021				
	2020				
	2019				
	2018	164.73	11.32	176.05	6.4%
	2017	161.97	6.92	168.89	4.1%
Willow	2023	3.68	8.04	11.72	68.6%
	2022				
	2021				
	2020				
	2019				
	2018	13.33	2.28	15.61	14.6%
	2017	21.51	3	24.51	12.2%
Wolcott	2023	16.11	6.03	22.14	27.2%

	2022				
	2021				
	2020				
	2019				
	2018	39.38	10.91	50.29	21.7%
	2017	40.3	8.8	49.1	17.9%
Lake Erie	2023	46.62	27.24	73.86	36.9%
	2022				
	2021				
	2020				
	2019				
	2018	55.37	10.75	66.12	16.3%
	2017	58.52	12.91	71.43	18.1%
Huron Meadows	2023	21.51	8.37	29.88	28.0%
	2022				
	2021				
	2020				
	2019				
	2018	17.71	1.08	18.79	5.7%
	2017	16	2.04	18.04	11.3%

- As part of the move to single-stream recycling Waste Management provided 8"x11" stickers for the recycling dumpsters at all 13 Metroparks. These stickers are meant for internal use so that all staff can clearly understand what can and cannot be recycled in these dumpsters. While many of these have been helpful, the Metroparks have also recreated this sticker in a larger size to cover previous wraps that indicate "cardboard only". Due to the amount of employees, especially part-time and seasonal hires that frequently change, these stickers help remove the guessing game out of recycling and helps to improve contamination.
- Waste Management is developing an internal training system for Metroparks staff that will be implemented in 2025.
- One-page flyers were developed and posted in workspaces throughout the Metroparks system covering what can and cannot be recycled, along with inviting all staff members to join a Climate Action Committee. The one-pager had a QR-code linking directly to the CAP plan.
- As part of the Climate Action Plan, staff brainstormed ways to address operations issues of large amounts of trash being left behind from events in picnic shelters and general littering throughout the park. Marketing staff worked on ways to make this message fresh and engaging and decided to try a comical illustrated approach. Graphics staff developed a "mascot" for this of a racoon character to tie into the public perceptions and connections of racoons with trash. Each time the racoon is used, they have a speech bubble to share a message with the readers and a QR code that links to information on "why" it's important to head the racoon's message.

- o Stickers and signage for use in the parks in high traffic areas where we were experiencing the greatest problems such as picnic shelter upright posts and river access points. The racoon mascot was also used on the new recycling bin stickers with a similar message about recycling and what can and cannot be recycled in the parks. These will go into use in 2025.
- o In 2025, this message and mascot will grow into additional ones as part of a “Keep it Clean” campaign to tie Climate Action Plan actions into public communications in the ways they can participate.



- o Discouraging patrons from bringing balloons and confetti during shelter rentals. The 2024 “Keep it Clean” Marketing campaign effort included adding language to shelter reservation receipts to discourage the use of certain items that often cause litter and environmental concerns. The following language was added to reservation receipts:

For environmental, animal, and habitat concerns please refrain from bringing balloons, water balloons, and confetti into the parks, at shelters, and at firepits.

It was followed up with blog posts shared out on our website and social media around memorial day and fourth of July about alternate environmentally friendly options for event decorations:

<https://www.metroparks.com/picnic-parties-strive-for-sustainable-events/> and <https://www.metroparks.com/sustainable-summer-celebrating/>

- o Zero waste field trip days were piloted at Lake St. Clair Nature Center to reduce food waste and disposable packaging generated from school field trips.



20% of the action has been completed.

- Action 24.2: Educate and/or share resources with staff on waste management strategies and solicit suggestions to get input across levels and departments by 2025.
 - o Attended Michigan Recycling Conference April 30-May 2, and EGLE virtual

conference Feb 14

- Staff signed up for Michigan Sustainability Conference Oct 1-2.
- In partnership with the Detroit Zoological Society, Lake St. Clair Metropark hosted its first E-Recycle event on September 22, 2024. This was one of the many exciting initiatives between the Detroit Zoo and the Metroparks to enhance our relationship and commitment towards meeting sustainable goals.



50% of the action has been completed.

- Action 24.3: Reduce dependency on single use products:
 - Increase the number of water bottle filling stations in the Metroparks by 20% by 2028. Ensure that staff have reasonable access to filling stations to avoid plastic water bottle usage (e.g., filling station needed at Kensington boat rental) by 2028.
 - Throughout the years, the Metroparks has installed indoor EI-Kay water bottle refill stations to help reduce the dependency on plastic water bottles. While several of these have been in place for years, there has not yet been an inventory system-wide or a baseline count. The below numbers establish this baseline and will allow for tracking of usage.
 - Water bottle filling stations are planned for North Marina Bathhouse renovation, Daysail trail development, and Walnut Grove campground modernization projects.

Park	Location	Baseline count in 20oz bottles (Oct 2024)
Stony Creek	Landing	17,777
	Park Office	7,499
	Nature Center	9,914
	Southdale	7,350
Lake St. Clair	Park Office	42,817
	Nature Center	18,579
Huron Meadows	Golf Course Clubhouse	6,393
	Cedar Ridge	4,386
Hudson Mills	Golf Course Clubhouse	2,507
	Kensington	5,947
Kensington	West Boat Launch	5,947
	Turtlehead	1,428
	Maintenance Breakroom	26,118
Indian Springs	Golf Course Clubhouse	560
Admin Office	Hallway	18,815
Lower Huron	Turtle Cove Breakroom	45,042
Willow	Park Office	866
	Maint. Lunchroom	7,220
	Food Bar	15,764
	Washago	30,461
	Golf Course Starter	3,284
Oakwoods	Nature Center Children	2,854
	Nature Center Adult	4,877

Lake Erie	Park Office	7,106
	Boat Launch	1,952
	Marshlands Museum	1,139
	Food Bar	3,310
	Maint. Lunchroom	1,527
	Golf Course Starter	2,789
	Maint. Lunchroom	723

- o Reduce the purchasing of paper by 10% annually through 2028.
 - The elimination of paper event calendar flyers/rack cards has eliminated significant amounts of paper and saved on printing and shipping costs. Individual cost centers will be assessing total paper usage in 2025 to look for additional reductions.
- o Adopt a plan for recycling of batteries for the Metroparks fleet of EVs, equipment, etc., by 2028.
 - As part of the CAP, staff are instructed to consider replacing worn-out landscaping equipment and power tools with gasoline two-cycle engines with comparable rechargeable battery powered equipment. This reduces carbon dioxide emissions and improves air quality within the Metroparks. To ensure that lithium-ion rechargeable batteries are properly recycled, information was disseminated to all Park Maintenance Managers for the inclusion of batteries in the Metroparks' annual recycling program as well as manufacturer recycling programs including those below.

Milwaukee: <https://www.milwaukeeetool.eu/header/sustainability/batteryrecycling/>

Stihl: <https://www.stihlusa.com/faq/products/battery/>



20% of the action has been completed.

- Action 24.4: Encourage staff to identify areas where material can be reused and work with the Metroparks' farm centers to identify best management practices and opportunities to better manage waste by 2025.
 - o Eastern district purchased lumber to reface existing picnic tables instead of buying new tables.
 - o RRS Compost Feasibility study at Kensington Metropark Farm Center is complete and recipes are identified.
 - o \$5000 grant was award by EGLE through the NextCycle Accelerator Program to allow pilot study at Kensington and Wolcott Mills Farm Centers in 2025. Pilot will involve testing composting recipes specific to the materials available at various Metroparks (wood chips, animal manure, grass clippings, seaweed, and food waste) at Kensington Farm Center and Wolcott Farm Center.



25% of the action has been completed.

- Action 24.5: Create new recycling opportunities to reduce waste by adding recycling for aluminum by 2028.
 - New contract for waste & recycling services including aluminum recycling went live April 1, 2024.
 - HCMA issued RFP 2024-001 on January 22nd, 2024. The solicitation documents were posted on the Michigan Intergovernmental Trade Network (MITN) website, which provided notice to 309 vendors. 26 vendors downloaded the solicitation and two submitted a proposal; however, only one proposal was for comprehensive services.
 - The scope of work requested included contracting Waste Management to perform all aspects of waste and recycling services for the Authority including project management, container provision and maintenance, container mapping, recycling education, safety reporting, program usage tracking, and container removal at the conclusion of the contract. Collaborating closely with HCMA staff, they will optimize pickup schedules to enhance operational efficiency, reduce container quantities where possible, and implement new single stream recycling programs as they become available. Additionally, on an as-needed basis, the vendor will provide services for special events, bulk waste, hazardous materials, tires, and beach waste, ensuring regulatory compliance. Emphasizing coordination with HCMA, the aim is to deliver seamless day-to-day waste management operations.
 - The proposals were reviewed in depth by an evaluation committee consisting of each District's Superintendent and Maintenance Manager, as well as representatives from the Planning Department. After completing the review process, the evaluation committee reached consensus that Waste Management submitted the most responsive and responsible proposal. Following the review process, Purchasing entered negotiations with Waste Management and was able to negotiate favorable renewal terms, resulting in an estimated savings of \$53,000 over the three renewal periods.
 - A Waste Management Audit was completed in each district with the assistance of Waste Management. Containers were removed as needed, frequency of pickups were adjusted based on usage, and all containers received an identifying number to help streamline communication and identity of containers at pickups.
 - Stickers to identify containers for proper waste and recycling management and reduce contamination.
 - Waste Management provided 8"x11" stickers for the recycling dumpsters at all 13 Metroparks. These stickers are meant for internal use so that all staff can clearly understand what can and cannot be recycled in these dumpsters. While many of these have been helpful, the Metroparks have also recreated this sticker in a larger size to cover previous wraps that indicate "cardboard only". Due to the amount of employees, especially part-time and seasonal hires that frequently change, these stickers help remove the guessing game out of recycling and helps to improve contamination.
 - WM will set up a zoom meeting training for their dashboard. Date to be determined.
 - WM dashboard is live but roll-out is still in-progress as some historical data is currently missing.
 - Employee trainings
 - A flier was posted where employee gather and invited staff to join a committee.
 - A training video is being brainstormed and targeting for use in 2025.



20% of the action has been completed.

- Action 24.6: Update purchasing policies to improve the sustainability of purchased products:
 - When purchasing giveaway items, consider our options. Look for items that are low waste, recycled, recyclable, or reusable such as reusable straws, made from recycled plastic, carbon neutral deliveries, etc.
 - By 2025, 90% of paper products purchased should be recycled paper, and/or carbon-friendly paper products.
 - Encouraging the use of sustainable construction materials and diversion of demolition waste from landfills is being factored into new engineering project designs and implementation.
 - Review of the Metroparks' green food packaging efforts is in progress with an update for compostable food packaging and bulk purchasing policy expected in 2025.
 - Purchasing contracts are being examined with a goal of reducing waste, increasing recycling, and improving sustainability. For example, verbiage was added to RFP 2024-010, for Glo-Work Product Sales, stating that vendors shall remove and properly dispose of original packaging items of products, immediately upon sale. Any associated waste generated throughout the event was also to be properly disposed of. These contract assessments for environmental sustainability will continue in 2025.



50% of the action has been completed.

Metrics of Success

- 20% Complete: Completed assessment and benchmarking of current waste and recycling.
- 50% Complete: Vendors encouraged to use more sustainable products by sharing purchasing power, with the goal of reducing waste going to a landfill by 20% by 2028.
- 20% Complete: Increased recycling rates. Use baselines from the 2020-2023 recycling program, with a goal of increasing recycling rates 10% every year from 2024-2028.
 - Annual waste and recycling report – included into CAP's annual report in December.
 - Track El-Kay water bottle fillers for report.
- 50% Complete: Have attended or provided recycling resources/bins to at least five outreach events with our community partners by 2028.
- 100% Complete and Ongoing: Staff from at least two departments have attended recycling or sustainability-related conferences annually.
- 100% Complete and Ongoing: Staff from at least two departments have contributed to at least five blog posts related to waste management and recycling by 2028.
- 20% Complete: Contamination rates in recycling have been reduced by at least 10% annually.
- 20% Complete: Landfill waste has been reduced by 20% by 2028. This is the ultimate metric of success to show the above actions are working.

Long-term Actions

- Action 24.7: Create at least one composting facility in each district, to ensure composting opportunities are an asset for park operations.
 - Next Cycle application was accepted for composting feasibility
 - A kick-off meeting was held on the pilot composting project. The plan is to identify what we are missing in terms of staff resources and capital equipment, which would lead to a grant opportunity on needs.

- Staff presented at Next Cycle workshop at EMU on June 11, 2024 and in Novi on October 2nd on expanding composting operation and establish best practices to create quality compost for use within Metroparks. EGLE awarded \$5000 to kickstart this pilot project as a result. Funds will be used to address site needs for the sorting and storage of compostables and implementation of developed recipes.



20% of the action has been completed.

- Action 24.8: Add compost bins for capturing food waste by concession areas by 2030.
 - The feasibility and scale of this food waste diversion was assessed in Kensington Metropark in 2024. Consultation with Operations and the RRS feasibility study determined food waste generation in the non-public side (back-of-house) of park concession locations was minimal and collection would create a larger carbon footprint than it would offset.
 - As part of the Compost Pilot Project, Wolcott Mills Farm Center will be trialing food waste collection and composting from staff and public areas in 2025.
 - Further education of patrons on properly sorting food waste, recyclable, and non-recyclable will be necessary before systemwide implementation of food waste collection and composting.



20% of the action has been completed.

MONITORING AND REVISING

This CAP is a “living document,” meaning that adjustments are expected and encouraged as the work progresses and we learn how to refine our efforts in future versions of this plan. For example, actions seen now as easily accomplishable may require more concentrated efforts than anticipated. Others seen now as large challenges may prove otherwise and thus free up capacity for a new metric of success or further work on other actions. Because this plan is wide-reaching across the breadth of the Metroparks and the benefits they provide, we may also learn along the way that actions and goals have more connections and impacts to each other than originally thought. This may mean that priorities are adjusted to account for these synergies, or ripple effects, among efforts. Finally, within the five-year timeline of this plan, changes may occur that impact the Metroparks, the region and residents they serve. We write this plan in the spirit of flexibility to our dynamic world and our current knowledge about climate change.

This has been a departments-wide, parks-wide effort, and responsibility for accomplishing goals is integrated throughout our organization. Department Heads will lead the implementation of many of these actions, while capacity-building early in the timeline will encourage all staff members to understand how this plan impacts them, and how they can assist in the implementation of appropriate actions. We will report annually and at the end of this CAP’s timeline about our achievements on each of the actions. Financial metrics and considerations will be tracked annually and considered in action updates.

The CAP will be updated every five years (e.g., 2028, 2033, 2038), aligning with planning standards set by the National Recreation and Park Association’s Commission for Accreditation of Park and Recreation Agencies (CAPRA). Similarly, to other Metroparks plans, this CAP will be continually tracked, re-evaluated, and updated in the coming years.

