

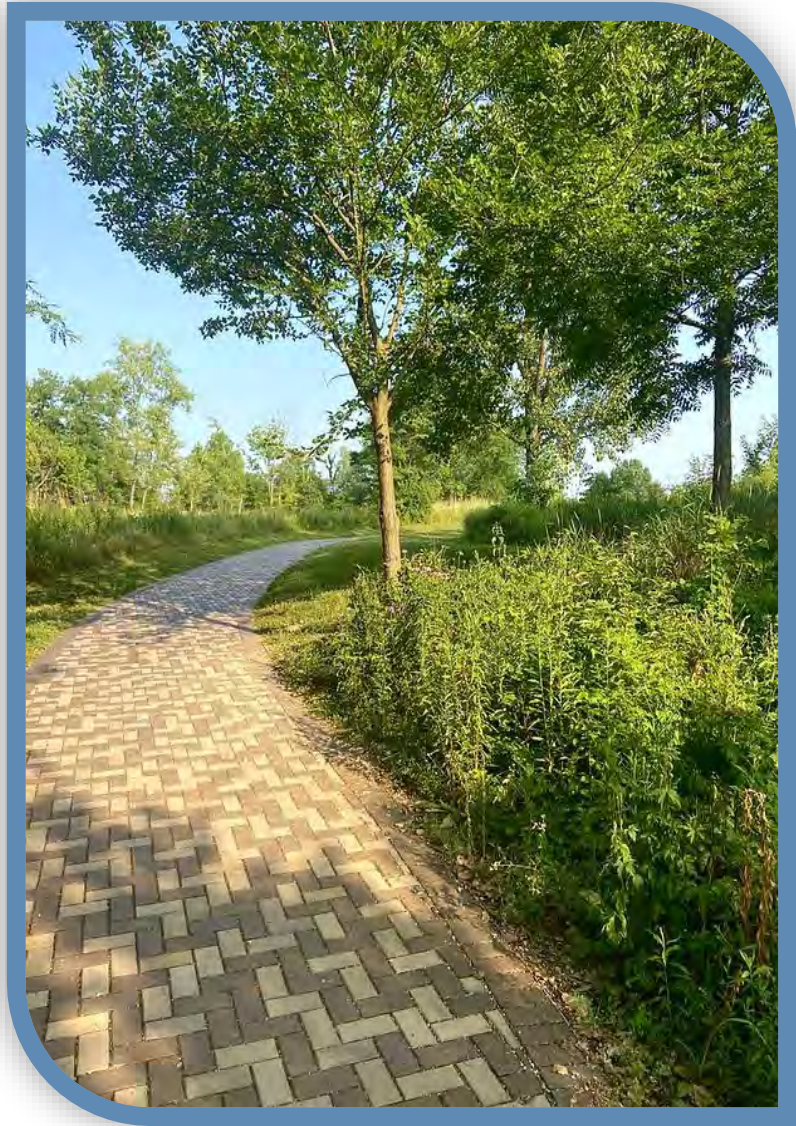
Five Rivers MetroParks



Cox Arboretum MetroParks

Master Plan

2019



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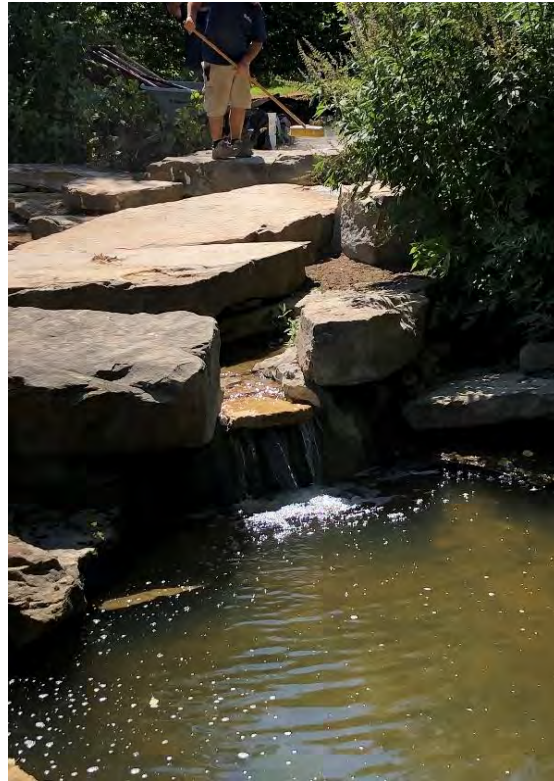
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SECTION 1: EXECUTIVE SUMMARY

1.1 BACKGROUND AND PURPOSE

In 2016, Five Rivers MetroParks (FRMP) completed a [Comprehensive Master Plan](#) (CMP) to guide the agency for the next ten years and beyond. The plan included extensive staff and public feedback from intercept and online surveys, focus groups, public meetings, individual interviews with community leaders, and a formal statistically valid survey. Studies were conducted to benchmark FRMP to other outstanding park agencies across the country. The resulting plan included several tools to guide FRMP, such as new park typology, level of service standards, and a detailed implementation plan. One of the primary recommendations in the implementation plan was to update or develop new master plans for each MetroPark.



In 2017, FRMP began developing site plans for several parks and conservation areas as the first step in developing park master plans for each location. These plans ensure the organization's three pillars, conservation, education, and recreation were foregrounded and interconnected. To support the planning process, a comprehensive set of [Planning Guidelines](#) were developed to help ensure the integration of the three pillars. The park master plans consist of several components that will guide planning and implementation of the parks' functions that support the world-class amenities and services provided to the region:

- Conservation, preservation, maintenance, programming, interpretation, public safety, philanthropy, and business operations
- Capital investment and phasing
- Operational impacts and budgets

1.2 MASTER PLANNING PROCESS

Development of the Cox Arboretum MetroPark Master Plan began with the development of the site plan. A core team of approximately 20 FRMP employees whose work is key to the success of the park was formed to provide direct input to the process. The planning process was led by FRMP Planning and Projects staff. A two-day work session gathered input from staff, volunteers, the public, and key stakeholders and visited key areas to gain a detailed understanding of the parks and conservation area. Two public meetings were held during the two-day session to gather input and understand the needs and interests of park users.



This park master plan will be reviewed and updated in five years. After ten years, FRMP will determine whether a new master plan is needed or if a second update to this plan will be adequate to provide direction for the park's future.

1.3 MAJOR RECOMMENDATIONS

Several components of the site plan (See [Appendix 4.7](#) for the complete site plan) include projects that respond to some of the highest priorities in the CMP, including taking care of existing assets, providing access to amenities, and increasing trail and play opportunities:

- Connect the Arboretum to the regional trail network by creating a new multi-use paved pathway connecting to the proposed pathway soon to be constructed by Miami Township to the south, through Cox Arboretum MetroPark, and then to the north through the neighborhoods and connecting to the Great Miami River Trail at West Carrollton.
- Update and define specific uses for each of the buildings on campus to better utilize each space
- Create natural trail connections to the neighbors on the north and south side of Cox Arboretum MetroPark to allow easy pedestrian access to the park
- Develop a new nature play area
- Improve the existing natural surface trail system to meet the strategic trails initiative

Major Recommendations:

The site plan includes several components of the long-term vision for the park. FRMP should constantly work towards exploring opportunities to evolve toward these concepts as part of the capital projects that are implemented.

- Create new patio spaces and retractable wall systems at the Zorniger Visitor Center to allow for a wider and larger array of meetings and special events
- Add new restrooms facilities to better serve visitors. Restrooms include expanded restrooms at the Kettering Learning Lab and new restrooms near the existing Butterfly House and off the Fifth Third Room in the Zorniger Visitor Center
- Replace the bird blind in Conservation Corner
- Replace the gazebo in the Shrub Garden

Opportunistic Short-Term Recommendations

Some recommendations could be achieved at a relatively low-cost using staff resources:

- Relocate Outdoor Connections staff currently located in the Zorniger Visitor Center to the Barbara Cox Center for Sustainable Horticulture (BCCSH) and the Events Coordinator to the Zorniger Visitor Center Offices, freeing space for a catering or bride ready room
- Remove walls from the space that was previously the gift shop and the cubicle storage area to create open space outside of the Mead Theater for rentals and events
- Make the recommended natural trail modifications with the Sustainable Trails Initiative (STI) Team including formal pedestrian connections to neighborhoods. These new park entrances will include formal park entrance and wayfinding signage to welcome and direct park visitors from the surrounding neighborhoods
- Begin to implement mixed plantings of ornamental and native plants in the developed area and reduce mowing by combining small beds into larger more sweeping landscapes
- Transition mowed areas to naturalized areas - focus on area north of the entry drive and crabapple collection area at the west end of the farm drive
- Modify the Maimon Memorial Edible Landscape Garden (ELG) fenced area per the site plan
- Develop the interpretive circles along the paver loop path to better inform visitors about what they are seeing and what elements they will be encountering on their visit

SECTION 2: THE PLAN

2.1 PARK POSITION DESCRIPTION

Cox Arboretum MetroPark (Cox Arboretum) is a 174-acre park located in a dense residential area of Miami Township along State Route 741. Two schools abut the park: Laveta Bauer Elementary School, part of the Miamisburg School District, to the south, and Bishop Leibold, a Catholic PS-8 school across S.R. 741 to the east. Interstate 75 borders the park to the west. Cox Arboretum is well known for its 46 acres of manicured grounds that offer horticultural beds, tree and shrub plantings, the Maimon Memorial Edible Landscape Garden (ELG), and more structure elements such as the ponds, stream, Tree Tower, and Butterfly House. The architecture is stunning as well, providing form to the campus. The Barbara Cox Center for Sustainable Horticulture (BCCSH) hosts a growing facility for Five Rivers MetroParks' (FRMP) cultivation of native plant material. Nearly three-quarters of the park offers an array of natural habitats: prairies, wetlands, woods, and woodland gardens.

Because of the intensity of amenities and experiences in the park that require greater resources within the context of significant natural habitat, Cox Arboretum is classified as a Community Park in FRMP's park typology system. It is consistently a selected park in the Dayton Daily News' "Best of Dayton" series. The campus buildings include the Zorniger Visitor Center, the Kettering Learning Lab, the Wallace Botanical Library, and the BCCSH. On the grounds, the Tree Tower is architecturally stunning and visible over much of the park. From its highest deck at 65' above the ground, visitors have a 360-degree view of the surrounding landscape. The Butterfly House displays butterflies at all stages of evolution and is surrounded by pollinator plantings that host the same species and cycles in a more natural environment. Each year, hundreds of pounds of produce from the ELG is donated to a local food bank. An array of specific, curated plant collections are dispersed throughout the grounds, connected by walkways that lead to intimate spaces, long beautiful views, and broad inspiring vistas.

The number of visits to Cox Arboretum ranks in the middle as compared to other MetroParks in the system. The park offers an array of activities to visitors to the park, which attracts broad age ranges. Local residents are the most frequent visitors, but the park is a regional destination as well. Many rentable venues host an abundance of events: weddings and other ceremonies, social gatherings, business meetings, seminars, and conferences. The BCCSH is the focus of FRMP's production of native plant material led by the Parks and Conservation staff and offers interpretive information throughout. It is designed to host guided education and volunteer engagement. Hiking is popular at Cox Arboretum as it is at other MetroParks, and offers those who are less able, whether small children, older adults, or disabled individuals, pathways to walk throughout the manicured areas.

Cox Arboretum offers striking natural beauty in a landscape garden setting. The curated grounds are inviting to visitors ranging from families with young children to older adults. The park is a favorite location to experience significant life moments as evidenced by the number of weddings and graduation and prom photos that occur. Long, bucolic views that evolve through varied features and gardens in the park create a sense of welcome and immersion. Each detail offered by Cox Arboretum is a rich and rewarding experience. Given these assets, Cox Arboretum's identity in the FRMP system is a park that envelops visitors in an experience of great care and beauty, well beyond the pressures of their daily lives.



2.2 PARK HISTORY

James M. Cox, Jr. bought a farm on the south edge of Dayton in January 1952, and three years later he bought an adjacent 68 acres. A pleasant house set back in the woods served as a quiet week-end retreat for him and his wife, Helen. Cox named the farm Spring Running.

James M. Cox, Jr. and his wife were childless. After his wife died, he faced the question of what to do with Spring Running. Except for two nearby schools, almost all the surrounding land was rapidly developing. A home builder made him a tempting offer and showed him a plan. It called for 200 small lot homes along curving streets surrounding a few acres of green space.



Cox shared the development plan with Jean Mahoney, a family member and avid gardener that he admired and trusted. Jean, who had been working with fellow gardeners Jean Woodhull and Marie Aull on a Save our Open Space Committee, expressed their concerns about vanishing green space. “Well,” he barked, “go figure something out.” She prepared a thoughtful proposal to establish an arboretum on the Cox property identifying critical issues to be considered. Cox accepted, and on December 3, 1962, papers were filed with the Montgomery County Common Pleas Court transferring title of Spring Running to the James M. Cox, Jr. Arboretum Foundation (Cox Foundation).

Jean Mahoney (left) and Jean Woodhull (right)



Volunteers at Cox Arboretum in the 1960's

For many years, the property was cared for by dedicated volunteers who also governed the Foundation. Through the 1960's, these volunteers, including Jean Mahoney, Jean Woodhull, and Marie Aull, supervised the planting of lilacs, crabapples, linden trees, pines, junipers, spruce as well as a collection of plants donated from Dawes Arboretum in Newark, Ohio.

In the early 1970s, Foundation members Harry Price and Horace Huffman started to consider how to assure the long-term survival and continued growth of the James M. Cox, Jr. Arboretum. Dick Lawwill, Executive Director for the Montgomery County Park District, now Five Rivers MetroParks, and Harry Price, Commissioner for the Park District, were also on the Foundation Board. Discussions developed about the relationship between the James M. Cox, Jr. Arboretum and the Park District. In 1972, the James M. Cox, Jr. Arboretum Foundation gifted the property to FRMP. This began a unique and successful public-private partnership. Fundraising by the Foundation supported the needs for full-time staffing beyond what FRMP provided and the construction of educational and maintenance facilities, while FRMP managed the operations.



Shrub Garden in 1971

Fundraising continued through the 1970s, leading to the construction of a visitors' center in 1979. A new site master plan was developed in 1981 which proposed some of the signature features of Cox Arboretum we know today: a water garden and deck next to the visitor's center, wildflower, hosta and fern gardens, the Crabapple Allée, the Monet Bridge, and the ELG. The park blossomed into 174 acres of manicured gardens, woodlands, and prairies. Marvin Olinsky, Cox Arboretum's first director, developed the first year-round calendar of events and expanded Cox Arboretum's collection, including thousands of bulbs funded by a gift from Frank and Nancy Zorniger.

By 1989, the increasing number of education programs at Cox Arboretum were outgrowing the Zorniger Visitor Center. In 1990, the Cox Arboretum Foundation's Executive Committee concluded that Cox Arboretum needed a new master plan. Renowned landscape architecture firm JJR of Ann Arbor, Michigan, was retained to develop the new master plan. The following years brought staged improvements to the park based on that plan, including land stewardship practices for each habitat of the park. The plan also envisioned a new visitor center complex as "a series of low connected buildings... to accommodate the needs of administration, orientation, classrooms, library, restaurant, board room, utilities, etc." Over the next several years, the Foundation worked to make the master plan a reality.



Zorniger Education Campus upon completion



Butterfly House

In 1998, Cox Arboretum opened its native Butterfly House. At that time, it was one of only four such facilities in the United States (U.S.). Now there are many butterfly houses and exhibits throughout the U.S. and the world, but Cox Arboretum's Butterfly House remains one of the few that exhibits all native butterflies.

In 2001, the Bell Children's Boxwood Maze was completed which provides a fun space for children and adults alike to experience a unique garden space.

After years of fundraising and planning, Cox Arboretum unveiled the Zorniger Education Campus in 2004. It included the new Zorniger Visitor Center, PNC outdoor classrooms, the Kettering Learning Lab, Wallace Botanical Library and volunteer center, grow house, and maintenance building. This set the stage for expanded classes, camps, exhibitions, festivals, and special events.

But work was not done. In 2006, the master plan returned to the forefront of the Foundation's attention, this time it focused on the landscape design far into the future. World renowned landscape designer from Belgium, François Goffinet, was hired to create this plan.

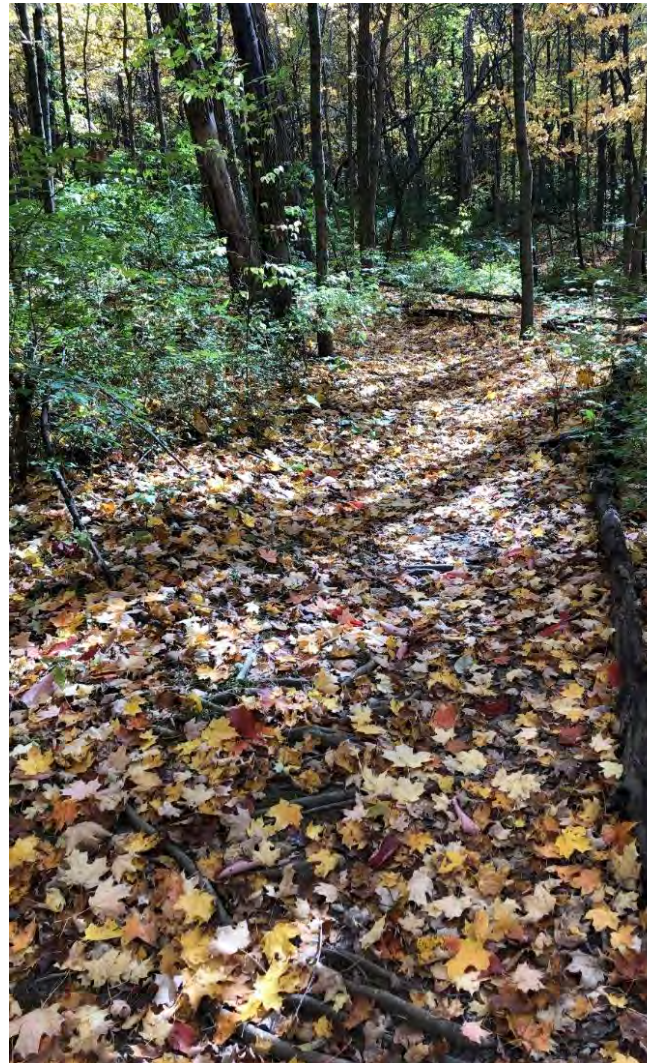
An Iris Garden and the Maimon Memorial Garden were both dedicated in 2009, and an observation Tree Tower opened in 2012.

In 2014, a new arbor was designed and installed at the end of the Crabapple Allée. The aging crabapples were replaced with Kousa Dogwoods and then with London Plane Trees in 2018.

In 2015, the Niehaus Lilac and Magnolia Collection was officially established with funding to expand and maintain the collection.

In 2016, a new half mile permeable paver loop was created to help visitors access all the parts of Cox Arboretum and the Monet Bridge was replaced with a new ADA accessible version of the bridge.

Thanks to a generous gift from the estate of Barbara Cox, planning and design for a new center for sustainable horticulture was completed. The new facility included a full renovation of the existing greenhouse complex and improvements to the space located between the Kettering Learning Lab and greenhouses. The BCCSH focuses on the production of native trees, shrubs and wildflowers and provides education about these important species to the public. The Center was dedicated in 2018.



2.3 SITE PLANNING PROCESS AND FINDINGS



FRMP has established a [site planning process](#) that was used to develop the site plan for Cox Arboretum. FRMP planning and project staff led the process to develop the park's site plan. A core team of key, cross-agency staff was established to guide the plan throughout the process. The core team participated in a two-day kick off process to provide orientation and input, and continued to be closely engaged throughout the development of the plan, providing feedback at each key decision point and engaging individually as various issues and opportunities arose that pertained to their

work responsibilities. Core team members also gathered feedback from other staff, and additional staff members directly associated with the park had an opportunity to provide their ideas, insights, and issues.

The public also had several opportunities to provide input into the development of the site plan. Two public open houses were conducted during the two-day kickoff session where attendees were able to talk to staff. Intercept surveys were provided to meeting attendees and were online for those who were not able to attend. Due to the 2020 COVID-19 Pandemic, additional public input meetings were not able to be conducted.

FRMP also engaged key stakeholders in the project to collect input and feedback. Stakeholders included the neighboring jurisdictions of Miami Township, Miamisburg, West Carrollton, and Moraine. These meetings provided insight to the context around the park, identified opportunities and issues, and explored future partnerships.



Data and Analysis Summary

The most recent master plan for Cox Arboretum, completed by François Goffinet of Belgium in 2007, was also consulted. The Tree Tower, Butterfly House, and loop trail were elements of the plan which were implemented. The primary recommendations which were not implemented included relocating the main entrance to the south end of the park with a new visitor center, a long allée through the prairie area, and relocating the operations area to the southwest part of the arboretum. These recommendations were not implemented due to budget and conservation restraints.

2019 Park Master Plan Input Summary

The following input and resulting program are a result of public, staff and stakeholder input received during the initial two-day master planning kick off sessions.

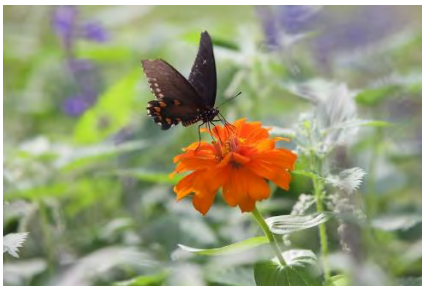
- The Arboretum is used to enjoy nature and be outside
- A place for the community to come and recharge and celebrate
- A tool to connect horticulture and nature to the community
- A place to drive the conversation about the acceptable aesthetic of what is considered a beautiful landscape in the region
- The park is an introduction to other FRMP habitats
- The park needs better trails
- The park provides programs for a wide variety of audiences



Master Plan Program

There are several areas of focus that will be addressed in the new Cox Arboretum MetroPark Master Plan:

- Define the overall purpose and organizing theme for Cox Arboretum - What is its function, vision, and purpose?
- Define how the overall mission, vision, and purpose of FRMP are integrated into the park and communicated to park visitors so that they can implement them on their own properties
- Define and develop a successful volunteer model for the future to ensure that the current funding and workload is sustainable or potentially expandable
- Define the necessary elements to create connections to and wayfinding within the park to create a better user experience
- Define the future purpose and utilization of the buildings that make up the campus including repurposing or reconfiguring spaces as needed to support user or programming needs.
- Define how the BCCSH will be integrated into the Cox Arboretum experience
- Define the purpose of each major element or feature as a use area throughout the park to determine its continued value as a part of the defined mission and purpose for the MetroPark
- Define methods to raise visitor awareness and comfort about the natural areas of the park for better utilization by park visitors
- Define expectations along with park improvements or processes which will ensure sustainable operational success



Program Elements

- Define the overall purpose and organization for Cox Arboretum
 - Define the purpose and vision of the MetroPark
 - Explore opportunities to connect horticulture and nature to the community and especially younger generations
 - Explore opportunities to expand the production of native species of trees, shrubs, and native wildflowers
 - Explore opportunities to provide sources of native species to the region beyond FRMP (Either produced at the BCCSH or other local sources)
 - Explore accreditation as an arboretum
 - Explore opportunities to make the MetroPark “the” source in the region for accurate information related to native and sustainable plant horticulture and ecology
 - Explore opportunities for visitors to take information away and implement on their own property
 - Explore how plantings and programming at Cox Arboretum can create a culture for visitors as a “learning landscaping arboretum” to demonstrate key messages and themes related to ecology and horticulture
 - Explore ways to help the public learn about which plants, including native, naturalized, and non-invasive plants perform well or in a sustainable manner in the Miami Valley
 - Explore ways to recapture adult learners
 - Explore opportunities to partner with green industry professionals

- Explore ways to use the MetroPark to drive the conversation about and the norms related to the acceptable aesthetic of what is considered a beautiful landscape is in the region including:
 - Fully native landscapes
 - Sustainable lawns
 - Integrated ornamental and native landscapes
- Ensure the MetroPark continues to be a place for the community to come and recharge and celebrate
- Explore opportunities to use Cox Arboretum as an introduction to other FRMP habitats including:
 - Prairies
 - Fossils (geology)
- Define the overall design organization of the MetroPark
 - Define the overall design concept for Cox Arboretum. Some options include:
 - A collection of plants (arboretum)
 - A series of display gardens/ landscapes (botanic garden)
 - A park with a horticultural and/or educational focus (MetroPark)



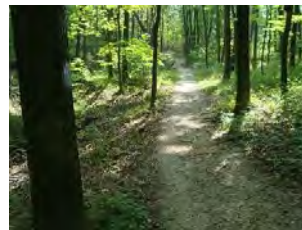
- Define the visitor experience
 - Define the visitor flow through the park including:
 - Access to after-hours restrooms
 - Goal of the visit
 - Define the take-away for the visitor
 - Define how the overall organization of the park is used to attract and teach visitors about defined concepts that they can implement
- Explore ways that native plants are integrated into the developed areas
- Philanthropy
 - Cox Arboretum Foundation
 - Explore ways to include the Cox Arboretum Foundation in project phasing to help with fund raising efforts to implement the master plan
 - Explore additional opportunities to utilize the Cox Arboretum Foundation to support programs or events beyond the financial capacity of FRMP



- Volunteers
 - Volunteers
 - Explore ways to ensure park maintenance efforts are sustainable including:
 - Utilization of volunteer efforts which currently consist of 143 hours per week which help maintain Cox Arboretum
 - Explore ways to utilize existing interior spaces to create meaningful support space for volunteers to promote a sense of community
 - Explore ways to create volunteers from visitors
 - Explore ways to better utilize required group (including school or corporate) volunteer service hours
 - Explore engaging volunteers in a more holistic and meaningful manner
 - Explore ways to provide regular communications related to updates on the master plan, projects, and their progress
 - Explore opportunities to engage volunteers in planning efforts such as seed or plant ordering, planning, and design processes
 - Explore methods to develop a robust community of volunteers
 - Explore ways to include social interaction as a critical component to engage and retain volunteers
 - Explore ways to develop better connections with staff
 - Need to define which staff
 - Explore ways to offer continuing education
 - Volunteers “want to learn and not just pull weeds”
 - Explore ways to continue to build and take advantage of specialized expertise



- Explore creative learning opportunities for staff and volunteers - incentivize becoming a volunteer
- Explore ways to diversify volunteer group makeup
- Explore ways to increase recognition of what volunteers provide in the park to park visitors
- Enhance connectivity to the surrounding neighborhoods and the Miami Valley
 - Explore opportunities to connect the MetroPark to the regional paved trail network
 - Explore opportunities to connect the MetroPark to the neighborhoods to the north
 - Explore opportunities to connect the MetroPark to the apartment complex to the south
 - Explore opportunities to connect to the schools surrounding the MetroPark
 - Explore opportunities for school groups to have a better arrival experience
 - Explore opportunities with Greater Dayton Regional Transit Authority (GDRTA) to ensure safe access to the MetroPark
 - There are currently two adjacent stops with a lack of formal access into the MetroPark
 - Explore pedestrian connections into the park from the new traffic light to the east



- Nature and Conservation
 - Explore opportunities to continue to rebuild healthy soils throughout the MetroPark
 - Explore ways to integrate natives throughout the developed areas of the park
 - Continue to remove invasive species from the park
 - Explore opportunities to educate visitors about these species
- Tell the Story of the Cox Arboretum
 - The creation of this park is very closely related to the story of the creation of the MetroPark in terms of purpose - the how and what is just a little different than other MetroParks - this is a story that is shared during group tours and other introductions to the arboretum experiences
 - Cox Arboretum is an integration of functional connected systems
 - Explore opportunities to show visitors the importance of each of the areas at the MetroPark and how they work together
 - Continue to expand ways to teach visitors about horticulture and the natural world
 - Explore ways to better label plant materials. Currently, visitors do not seem to know that plants are labeled
 - Explore opportunities for easily changed and updated information. Examples include:
 - Shepherd hooks
 - Chalk boards with vases to showcase what can be found blooming in the MetroPark
 - Electronic newsletters or communications
 - Explore the use of the Tree Tower to orient visitors to the region
 - Explore opportunities to educate visitors using a unique vantage point

- Park- General
 - Explore the future of butterfly and/or pollinator education
 - Re-Evaluate the Butterfly House structure
 - Explore the inclusion of pollinators beyond just butterflies
 - Explore ways to educate park visitors about the use of herbicides and pesticides and their effect on butterflies and pollinators
 - Explore opportunities to partner with outside agencies to tell the story
 - Aullwood Audubon
 - Cincinnati Zoo



- Explore ways to make the ELG more inviting to park visitors
 - Explore opportunities to further activate the space including small music events, more weddings, or programming that supports the garden
- Plan for more restroom facilities
 - Better wayfinding
 - Better options during hours when the building is closed
 - Explore additional restroom near the current Butterfly House

- Explore ways to enhance the park for children including:
 - Nature play
 - Support for schools, home schoolers, and family outings
 - Options for urban youth
- Explore ways to enhance the park for active older adults
 - Heart healthy loop
 - Horticulture education
- Explore ways to create shady gathering places throughout the park
 - There is very little shade on the main paver loop
 - Explore better facilities for picnics/class lunches
- Explore opportunities to increase the impact of the BCCSH
 - Define the desired circulation to, through and from the Center
 - Ensure the Center is inviting to park visitors
 - Define how the various spaces are utilized
 - Explore ways to make the BCCSH more kid friendly. Examples include:
 - Adjustable height tables
 - Entry and wayfinding

- Explore opportunities to better utilize the Kettering Learning Lab
 - Define the desired circulation to, through and from the Kettering Learning Lab
 - Ensure the Kettering Learning Lab is inviting to park visitors
 - Define how the space is utilized or programmed
- Explore opportunities to better utilize the Zorniger Visitor Center
 - Define the desired circulation to, through and from the Zorniger Visitor Center
 - Ensure the Zorniger Visitor Center is inviting to park visitors
 - Define how the space is utilized or programmed
- Explore ways to make access to the park and the parking lots more pedestrian friendly, including bike parking



- Evaluate aging features in the park to determine their continued value to meeting the defined purpose of Cox Arboretum or the overall mission of FRMP. Examples include:
 - Iris Garden
 - Ornamental Grass Garden
 - Boxwood maze
 - Compost demonstration area
 - Plant collections including the crabapple display area
 - Need to ensure donor impact and history related to each of these areas prior to elimination or modifications
- With the Introduction of dogs at the MetroPark, ensure that needs, both of dogs and visitors are being met including:
 - Waste stations
 - Water sources
 - Explore excluding dogs from parts of the MetroPark
- Park - Trails
 - Explore ways to better utilize the paver loop and orientation plazas
 - Complete the loop around and/or through the Zorniger Center
 - Explore formalizing and signing user-generated trails which are utilized to access the park
 - Explore methods to encourage use of the trails through the natural habitats
 - Explore opportunities to expand the trail system to the northwest part of the woods
 - Explore designating trails for specific uses such as family friendly, heart healthy, time available



- Indoor Facilities (Public Areas)
 - Explore ways to increase utilization of the indoor facilities including:
 - Develop a structure to balance rentals and programming activities to allow for better utilization of the facility
 - Education or community events
 - Allied groups, such as horticultural clubs or green industry groups use
 - Cost to many groups has become prohibitive
 - Rentals
 - Consider staffing to allow twice a day rental
 - Corporate
 - Weddings
 - Private parties
 - Evaluate extending or modifying open hours to better meet the needs of park users
 - Explore opportunities which would allow portions of buildings to remain open for longer hours
 - Explore ways to improve lighting for demonstration type programs

- Explore making modifications to the Mead Theater to expand its use
- Explore modifying the purpose of the Kettering Learning Lab including:
 - To support volunteer needs
 - Park Interpretation
- Explore modifications to the Wallace Botanical Library to expand its use
- Explore ways to make spaces which can provide for a wide variety of uses and have some spaces that can get dirty
- Note: The Fifth Third Room has a 12% utilization rate while the Mead Theater has a 6% utilization rate (based on 2019 data for the hours used versus the time the building is open)
- Operational Issues
 - Explore ways to ensure operational requirements can be met and sustained including:
 - Exploring better utilization of volunteer labor to maintain the MetroPark
 - Exploring ways to reduce maintenance requirements
 - Explore creative ways to activate the MetroPark without increases to FRMP budgets
 - Define better storage space and locations
 - Program/education materials
 - Outdoor storage in operations area

- Explore converting, eliminating, or modifying older, high maintenance or failing areas to reduce maintenance or create more mission-centric conditions. Examples include:
 - Crabapple display
 - Composting area
 - Rock Garden
 - Ditch along 741 (Drainage and maintenance issues)
 - Lawn areas (Sustainable practices and reduction of mowed area)
- Continue to upgrade and modify buildings and facilities for sustainability
 - Better controls on A/C System
 - Energy efficiency based on the Heapy Energy Audit
 - Explore expanding composting to support FRMP district wide and possibly the community
- Consider adding a gate at the main entrance to close the park during snow events
- Explore irrigation throughout the MetroPark
 - Automatic
 - Water tank feeding drip systems
 - Provide water hydrants throughout the park
 - Convert above ground to underground

2.4 CONSERVATION PLAN

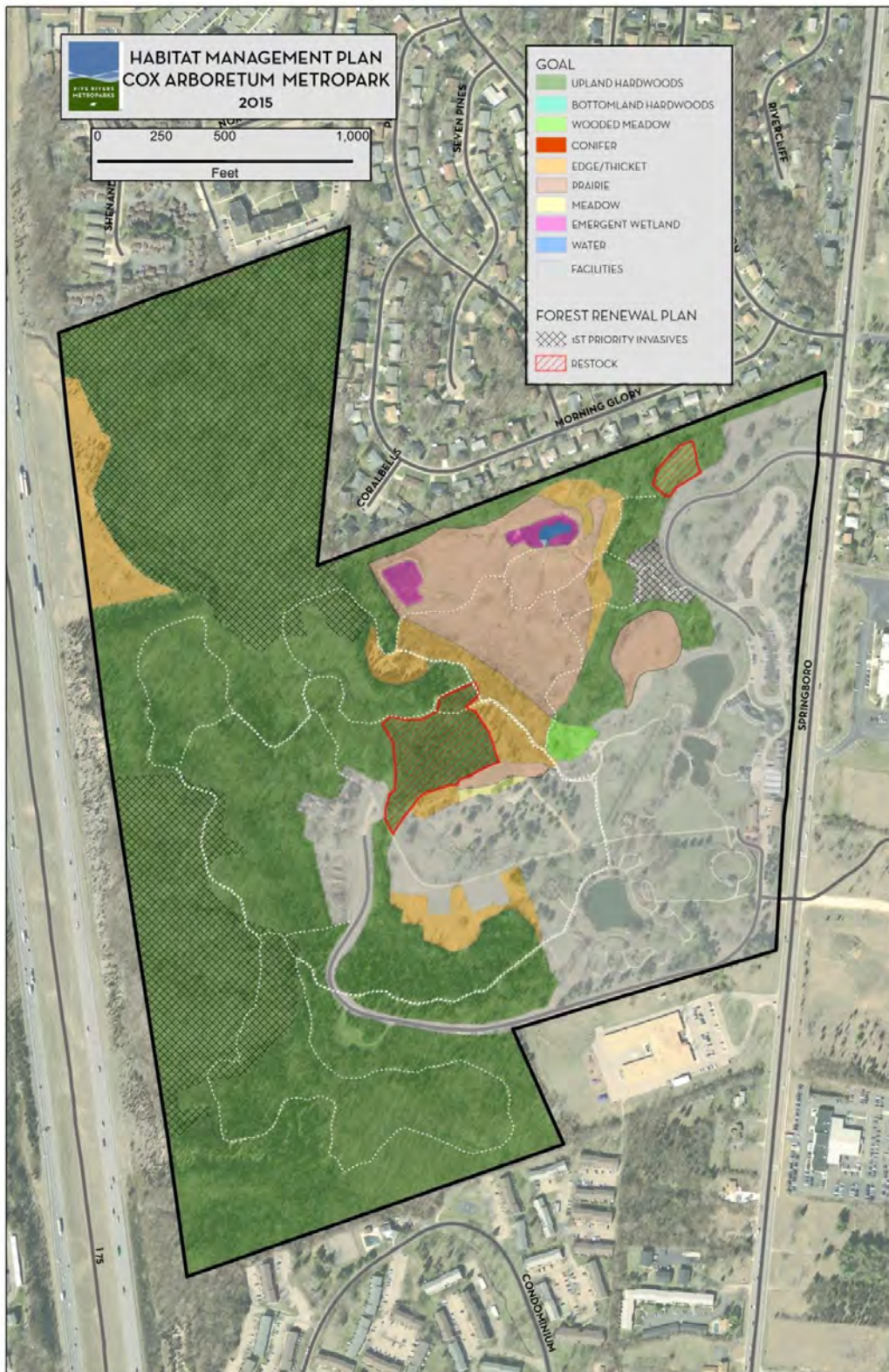
Based on the [Natural Areas Management Guide](#), a series of park-specific goals have been developed as a part of the site planning process. These goals should be used as a guide during the implementation of the plan to minimize impacts to sensitive habitats and the wildlife that depend on these special places. The activation of spaces within natural areas that have not before been promoted for public use will require thorough assessment and a thoughtful approach to minimize impacts.

Cox Arboretum contains high quality mature woodlands, dense cedar glades, young forests, and prairie and wetland restoration projects.

Cox Arboretum possesses a unique opportunity to demonstrate the use of native plants in a more formal landscape setting.

Conservation goals for the site plan include the following:

- Protect the existing mature woodlands throughout the park. Manage honeysuckle and other invasive species in all habitats as designated
- Permit natural succession to occur in designated areas to maximize forest size and minimize edge effects within large tracts. Reintroduction and planting of native mast species in designated areas to augment succession and ensure a diverse future forest
- Maintain edge/thicket habitat, a transitional habitat important to many types of wildlife. Reintroduce a variety of native shrubs in designated areas to promote the re-establishment of these species
- Manage meadows and prairies to maximize habitat for grassland nesting birds and the continuation of grassland ecological processes
- Manage unique areas such as ponds and wetlands to benefit wildlife that is dependent on these habitats
- Design and maintain trails to maintain the integrity of the managed habitats while maximizing the user experience



2.5 INTERPRETIVE PLAN

Cox Arboretum consists of approximately 174 acres of mixed habitats ranging from landscaped gardens, woodlands, prairie, and wetlands. The MetroPark is located between the neighborhoods of Miami township (including Miamisburg), West Carrollton, Moraine, Kettering, and Washington Township. It has a history of providing open space for the community since the 1960s. Cox Arboretum Foundation gifted the property to FRMP in 1972. The Cox Arboretum Foundation continues fundraising while FRMP operates and manages the MetroPark. Volunteers originally opened and operated Cox Arboretum and continue to serve an important role in maintaining the arboretum experience today. Volunteering is a significant opportunity for community members to enrich their horticultural interests.

The natural assets and facilities of the park are ideally suited to serve as a gateway to other FRMP facilities and a launching point for strengthening one's relationship with nature. The landscaped gardens are enjoyed by visitors coming for a stroll but also offer gardeners and homeowners an opportunity to see varieties that grow well in our region as all the collections of trees and woody plants have accession tags. Adding connectivity to the park as well as improving wayfinding within the park can connect visitors to the broad range of entry-level experiences Cox Arboretum offers. Within the park, the entry experience through landscaped park settings is approachable to visitors seeking a neighborhood walk. The less developed areas of the park provide topography of hills and ravines with trails leading through woodlands, bird habitat with a bird blind feature in conservation corner, and spring seeps that feed wetland areas within the park. The space provides rejuvenating nature within the surrounding residential areas. The FRMP Comprehensive Master Plan lists this park's typology as a community park.



Audience

After the site visit and discussions with FRMP staff and stakeholders, the following by “Falk Visitor Types” identifies current and potential audiences, as well as activity, which are defined below:

- Explorers—motivated by personal curiosity and seek to learn more about whatever they might encounter (i.e. life-long learners)
- Facilitators—motivated by sharing experience with other people and focus on their companions needs (i.e. a parent bringing a child)
- Experience-Seekers—motivated by the desire to see a place, often don’t stay long and get satisfaction from just visiting and desires photos of themselves with iconic resource (i.e. been there, done that; seeks a story to tell)
- Professional/Hobbyists—motivated by a high affinity for the site, they are highly knowledgeable about a site’s subject matter (i.e. the visitor that wants in-depth behind the scenes or occasionally a scholar researching a specific topic)
- Rechargers—motivated by a desire for a contemplative or restorative experience (i.e. sit or stroll)
 - *Note: The same person can have different motivation on different visits.*

Cox Arboretum Audience

- Explorers
- Rechargers
- Facilitators (*schools and families*)

Cox Arboretum Potential Audience

- Experience Seekers – seasonally

Cox Arboretum User Groups

- Walkers (*including for fitness*)
- Multi-generational families with children
- Older adults and others with mobility issues
- Picnicking/Shelter
- Hikers
- Trail running
- Dog walkers
- Nature play area
- Bird watchers
- School inquiry-based learning
- Wellness forest bathing
- Potential to engage nearby schools



Intended Visitor Experience

Visitor experience provided for all visitor types and activities listed above:

- Layout, landscaping, and wayfinding provide a sense of comfort and safety while offering healing in nature when participating in a range of passive recreation activities such as walking, picnicking, hiking, nature observation, and social park gatherings. In peak use, visitors can choose to socialize or enjoy nature in small groups without feeling crowded
- Visitors can learn and connect to nature and the agency's conservation ethic by incorporating the concepts of experience design of the horticultural displays and inclusion of interpretive media, while not necessarily conducting timed or facilitated experiences
- Visitors can dig deeper through facilitated beginner horticultural program offerings and connect to other FRMP facilities
- Basic needs are met, such as restrooms, water fountains, picnic shelters, clear orientation/wayfinding and access. Improvements to trails and wayfinding are critical to the visitor experience at Cox Arboretum



FRMP System-Wide Themes/Storylines

An interpretive theme is the overarching message. It is more detailed than a broad topic; it is a complete thought in one to two complete sentences. The theme may be used verbatim in signage or verbally in talks, or it may be unspoken, but guide the general feel the project aims to have for the visitor experience on site. A theme will help answer the “so what?” – “the moral of the story.” Themes connect tangibles: those things you can touch, see, feel, smell, and taste with intangibles, and those things that are symbolic or metaphoric.

Theme: A succinct, central message about a topic of interest that a communicator wants to get across to an audience. (Ham, 2013).

Storyline: Part of the thematic hierarchy: theme, sub-theme, and storyline. Storylines are the details of the interpretive content.

Central Themes relevant to parks:

Parks make our lives healthier and happier.

Theme for the Park:

- Nature evolves with the seasons, just as we evolve through the seasons of our lives

Sub-themes:

- There is always something to explore as nature changes throughout the year
- De-stress, stay active, and improve your mental and physical health by connecting with nature
 - People have seasons they go through, connecting with emotions helps us grow
- Habitat management benefits both humans and wildlife
- Sustainable habits will lead to a healthier life and community for you and your family



Storylines specific to Cox Arboretum:

- Habitat management benefits both humans and wildlife
 - People benefit from nature
 - De-stress through a stroll on paver trail among gardens and trees soaking in the beauty and respite time that nature provides
 - De-stress and get active hiking or running natural surface trails through woodlands as outdoor fitness benefits our mind and body
 - Nature improves our quality of life. It's fun to play outside without phones and computers and TV screens
 - Plants need pollinators to reproduce and we need pollinators for food
 - Shown in prairie management, pollinator area, and edible landscape garden
 - Wetland management
 - Wildflower and pollinator areas
- There are many ways homeowners and renters can practice conservation and sustainability at home
 - Native landscaping combined with ornamental
 - Rain barrels, cisterns, green roofs, etc.
 - Benefits of sustainable living at home (*draft concept?*)
- Volunteering helps you be active in conservation in our community



Park Position statement: Cultivate Wonder

Other opportunities to connect to agency-wide themes:

- Partnerships create healthy and vibrant communities
- We can all take part in conservation
 - Active conservation manages land to remove invasive species, for reforestation and to restore prairies and wetlands, protecting it for future generations
- Each park within the FRMP system tells a story from the past
 - Storyline of farmland transforming into an arboretum by hours of dedication from volunteers who envisioned protecting greenspace as development around the area continued

Interpretive Media Recommendations

Aspirational personal programs by topic:

- Horticulture
- Native landscaping
- Bird/wildlife observation
- Fitness (*by audience already attending for trail running*)

Non-personal interpretation:

- Opportunity for largescale interpretive art displays

Interpretative Opportunities

- Interpretive Wayside Exhibits:

Cantilevered interpretive kiosks at paver nodes to aid in placemaking and wayfinding of visitors to discover nature evolves with the seasons just as we evolve through seasons of our lives.

- Size and specific content TBD in design phase
- Hardware selection cantilevered powder coated frame to match interpretive branding in FRMP marketing branding guide
- Recommend at least 1 at each paver node
 - Approximately 9 nodes in site plan as of 2021. The main entrance area already has a cantilevered kiosk, during design phase determine if the terrace though not a traditional node style would benefit the visitor having a similar style interpretive stop installed
 - If the location requires 2 stories and the node is larger, consider additional frames to accommodate the 2 relevant stories for place making and orientation
 - i.e. develop 2 signs instead of placing 2 stories on one frame as it can cause confusion to the experience
 - Currently in 2021, there are eight (8) paver nodes on-site, however one already contains a cantilevered kiosk and therefore is accounted for. As a quick win seven (7) cantilevered interpretive signs could be added at paver nodes to enhance placemaking and wayfinding for visitors

2.6 PROGRAMMING PLAN

Current Programming

Cox Arboretum is ideally suited to serve as a gateway to FRMP and launching point for strengthening one's relationship with nature. It's location, popularity, and classroom resources make it an easy and accessible starting point for learning about and connecting with nature. Programming and visitor experiences will be designed to meet people where they are in interest and comfort and build knowledge and connections to other MetroParks and community resources where they can learn more.



Visitors to Cox Arboretum come to the park for a variety of reasons including relaxation, socializing, enjoying the aesthetics of the landscape, and fitness. Future programming at this location will reflect those varied interests while promoting healthy lifestyles and biodiversity.

The programs are directed at specific audiences, and interpretive elements provided in the park are inventoried below.

Youth & Teens

Youth programs give children a sampling of diverse Ohio habitats including landscaped areas while also building visitor comfort to exploring parks. Guided and self-guided preschool, daycare, and school tours through the landscaped grounds and natural areas are the most common youth programs. Guided and self-guided tour experiences are offered to schools with students in Kindergarten through fifth grade to help them meet academic standards in science while they learn about fossils, forests, pollinators, and Ohio habitats. Cox Arboretum has the largest K-12 school visitation because of its ease of access, diverse habitats, and amenities.



Philanthropic grants have provided transportation and supplies for schools in underserved communities. Scout programs help participants earn badges for gardening and forestry. The key youth and teen program message is “These are your MetroParks and you are in charge of protecting them.”

Families

Family programs at Cox Arboretum provide a multigenerational experience in nature and conservation. Families get to experience the gardens and natural areas at night during owl prowls and night hikes. Offered year round, Conservation Kids programming empowers families to become conservationists through a three-step program progression. Conservation Kids programming at Cox Arboretum consists of Discover, Act, and Share level programming where participants explore the BCCSH, the landscaped gardens, and natural areas. Families learn nature exploration skills using the Cox Arboretum activity on the smart phone app, TaleBlazer. Get Outside Book Club is a partnership program with Dayton Metro Library that combines early literacy with getting children outdoors.

Adults

Adults learn horticulture and gardening skills during programs that include vegetable gardening, container gardening, garden trends, and disease prevention. Workshops give adults hands on experience seed saving, perennial dividing, wreath making, and bulb forcing. Tours of the BCCSH give adults an understanding of earth friendly horticulture practices and the conservation practices of FRMP. Photography programs give adults photography techniques and inspiration. Fly Fishing, backpacking, camping, paddle sports, and bicycle maintenance programs give adults the skills for active outdoor lifestyles. Advanced recreation enthusiasts can learn professional skills during American Canoe Association instructor certification courses and river rescue skill programs. Senior adults learn about gardening and tour the gardens during partnership programs through Sinclair Community College and the University of Dayton. Guided garden tours are offered to garden clubs and other community groups. Beginner and advanced natural history workshops for adults include birding and tree identification. Tram tours allow visitors with limited mobility access to the gardens and grounds. Teacher Nights Out, Teacher Field Schools, and Teacher Workshops help teachers include nature and the outdoors in classroom curriculum.

Multiple ages

Participants of all ages can learn about sustainability, landscape design, vegetable gardening, seed saving, tree planting, and wildflowers. Tram tours are provided to give visitors with limited mobility an extensive look at the landscaped areas.

Interpretation

Cox Arboretum has one of the most in-depth interpretive experiences in FRMP's system. Visitors to the BCCSH are invited to FRMP's sustainable horticulture and land restoration practices through interpretive signage and plant labels. The Butterfly House is a popular visitor attraction with butterfly identification and gardening for pollinators signage throughout the house and the surrounding area. A children's pollinator trail gives children a chance to explore pollinators while engaging in nature play. Butterfly Sculptures have faceted lenses as eyes giving visitors of all heights a view through a butterfly's eyes. Important trees for pollinators are labeled to help visitors plan their landscape to support pollinators. Arbor Day is Everyday sign series help visitors understand the importance of trees and how to care for them. Two kiosks help first-time visitors orient themselves to the features of the park. One kiosk is located near the building and one at the entrance to the natural trails. Cox Arboretum has earned the Miami Valley Leave No Child Inside's and Dayton Regional Green's "Connect to Nature Site Award". This award recognizes the facility for providing programs and access points to nature that enable the Ohio Children's Outdoor Bill of Rights to be exercised by youth.

Aspirational Programming

The site plan project priorities include improving the BCCSH area, classroom facilities, restrooms, and trails which will improve the experiences for tour groups, program participants, and visitors. As programming and interpretive efforts and resources evolve, activation of the new amenities and creating a recreational and educational use culture in the parks, whether through interpretation, programming, or independent use, will be our primary goal. This goal will be realized in various ways, depending on the audience.



Aspirational programs will include:

- Increased interpretive media to spark visitors' curiosity and interest in the landscape, building awareness of conservation practices at Cox Arboretum
- Less focus on gardening programs. While horticulture is still the heart of Cox Arboretum, the grounds and facilities provide learning opportunities for many interests
- An increase in introductory experiences related to experiencing nature and learning about the features, facilities, and ways to practice conservation and sustainability at home
- Stronger connections to other MetroParks or community organizations where participants can learn more
- Similar quantity of programming overall. Cox Arboretum currently hosts an average of 100 public programs and 150 tours per year. This level of activity is similar to, if not slightly higher than, others in the same typology
- Improved balance of programming across age groups. Currently youth and families are served by only 30% of Arboretum programming

To achieve success, it will be important to approach programming with intention. This includes:

- Regular review of audience needs and program goals to keep the program menu fresh and relevant to the community
- Working with partners to provide new content, connect with new audiences, and better serve the community
- Frequent communication and co-planning between Parks and Conservation and Outdoor Connections, to keep programming and operations aligned. Planning together will allow both teams to maximize the effectiveness of their work and could improve public understanding of the intent and importance of the work done at Cox Arboretum

- Planning and communication between Outdoor Connections and Philanthropy
 - Historically programming and rentals have utilized the same space. By creating defined use spaces throughout the main campus, each group can utilize and fully take advantage of these dedicated spaces and then, as required, coordinate use of other spaces as needed for unique or larger events.
 - Identifying funding needs and opportunities early in the planning processes can help the program team better serve the community

Audiences

Youth & Teens

Schools with elementary aged children can extend their stay with the Nature Play addition. A Nature Play Naturalist will help children unleash their instinct and feel comfortable playing in natural settings. Trail system improvements and additional restrooms will improve and extend the experience for guided and self-guided school and youth tours. High School STEM and Environmental programs can get involved with wildflower and tree propagation featured in the BCCSH.



Families

Trail extensions and improvements will enhance family programming allowing for strollers and access for families with varying mobility. These enhancements will provide the opportunity to deliver programs in more remote, natural areas of the MetroPark that are currently inaccessible to families. The Nature Play area coupled with the park's attraction to first time park users provides an ideal location to base the Nature Play Naturalists to help families learn to be comfortable with free play in nature. Maze improvements will create a destination for family programs.

Adults



New classrooms will improve program participant experience and allow for conference style programming on natural history, recreational, and horticultural topics. The classrooms will also allow for growth in the Miami Valley Leave No Child Inside Summit. Trail enhancements and extensions could improve access for adults with varying mobility as well as provide access to vibrant bird habitat and tree species not currently visible from the trails. Pollinator garden and native landscape plantings will provide rich content for adult tours and programs.

Interpretation

The interpretive circles off the main paver loop will provide orientation to the features of Cox Arboretum while providing an interpretive experience to connect visitors to the natural and horticultural resources at that location. The renovations of the trails will require a re-evaluation of the existing interpretive media.



2.7 SITE PLAN

Cox Arboretum has had the benefit of the partnership with the James M. Cox Jr. Foundation since becoming a MetroPark. This has allowed for plans to be developed and projects to be completed that would be beyond the ability of FRMP to complete. This plan builds on the plans that have been completed and proposes elements that will take Cox Arboretum into its next phase over the next ten to twenty years. While there are not significant structural changes proposed in this plan, there are many modifications that will make the MetroPark function in a more sustainable way and fit better under the mission of FRMP. One main difference, as compared to other site plans, is that there are not distinctive use areas with separate entrances or starting points for park users. Cox Arboretum has a series of use areas that function more like rooms that provide a unique set of experiences while visiting. Proposed improvements will also help to orient the visitor to the park and create arrivals points for the wide variety of users. Each of the areas are connected by a half mile paver pathway and a series of entry plazas that guide and orient visitors to the various use areas in Cox Arboretum. The various use areas include:

- Main Campus (Primary Use Area)
- Tree Tower and Conifer Collection
- Maimon Memorial Garden in the Edible Landscape Garden
- Shade Garden
- Allée and Arbor
- Butterfly Garden and Nature Play
- Shrub Garden
- Conservation Corner
- Pond Area
- Ruth Cummings Mead Woodland

A second important factor driving the development of this and all FRMP site plans is the Power of 10+, a concept, developed by Projects for Public Spaces, to evaluate and facilitate place making at multiple scales. Places thrive when users have a range of reasons—ten or more—to be there. These might include a place to sit, playgrounds to enjoy, art to touch, music to hear, food to eat, history to experience, and people to meet. Ideally, some of these activities will be unique to that place, reflecting the culture and history of the surrounding community. The following activities were identified in the planning process as appropriate for this park:

- Horticulture education
- Birding & Wildlife Viewing
- Weddings and Parties
- Special Event Photos



- Walking
- Connecting with Nature
- Hiking
- Have a meeting
- See the Miami Valley from the Tree Tower
- Plant an Acorn
- Nature Education
- Check out the fish and turtles
- Learn about growing food

Key Site Plan Recommendations

With a foundation of the concepts described above, key site plan recommendations were developed. Many of these recommendations have resulted in specific projects that are prioritized for the capital improvement plan. The full [site plan](#) provides graphic details not provided here.

Opportunistic Short-Term Recommendations

Some recommendations could be achieved at a relatively low-cost using staff resources:

- Relocate Outdoor Connections staff currently located in the Zorniger Visitor Center to the BCCSH and the Events Coordinator to the Zorniger Visitor Center Offices, freeing space for a catering or bride ready room
- Remove walls from the space that was previously the gift shop and the cubicle storage area to create open space outside of the Mead Theater for rentals and events
- Make the recommended natural trail modifications with the Sustainable Trails Initiative (STI) Team including formal pedestrian connections to neighborhoods
- Begin to implement mixed plantings of ornamental and native plants in the developed area and reduce mowing by combining small beds into larger more sweeping landscapes
- Transition mowed areas to naturalized areas. Focus on the area north of the entry drive and crabapple collection area at the west end of the farm drive

- Develop the interpretive circles along the paver loop path to better inform visitors about what they are seeing and what elements they will be encountering on their visit



Park-wide Recommendations

Define the Purpose of Cox Arboretum MetroPark

One of the primary goals of the park master plan was to define the purpose of Cox Arboretum in terms of its role as a MetroPark and a part of the FRMP system. Following is a purpose statement that was developed as a part of the master planning process:

A place where people come to celebrate, learn, relax, meet, and volunteer. While there, visitors learn to appreciate the beauty of our native plants and landscapes, to see how these plants can enrich their lives so that they, in turn, will go out into the community and become conservators of our natural habitats.

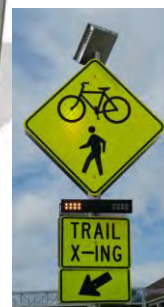
Integrate Native Species and Landscapes into the Developed Areas of Cox Arboretum

Create transitions between the natural and developed areas of the MetroPark to help draw visitors into the native landscape found at Cox Arboretum. Convert various lawn areas to native landscapes including meadows and prairies. Integrate native species throughout the designed planting beds to help educate visitors about native plants and how they can be incorporated into designed landscapes with other ornamental plants.

Circulation Recommendations

Connect Cox Arboretum to the Regional Trail Network

Connect to the proposed multi-use path that will extend to the southern boundary of the MetroPark. The path will extend north along SR 741 and wrap the overflow parking lot and extend to the northern boundary. The new paved path will provide easy access to the north east portion of the MetroPark. This section should be naturalized with a meadow of prairie plantings to reduce turf. Work with willing homeowners to obtain an access easement to access the residential streets and create a bike route with the surrounding municipalities to connect to the regional trail to the North. Create a safe marked roadway crossing of the entry drive. Three bike parking areas are proposed including one near the operations entry drive, one adjacent to the Zorniger Visitor



Center, and one near the north property line. These locations will promote users to park their bikes and enjoy the MetroPark on foot.



Connect trails to the Residential Neighborhoods on the North, South and East Sides of the MetroPark

Work with the neighboring associations to establish formal entries to the MetroPark using natural surface trails. Add signage at each entry point to identify the entries, provide wayfinding and list park rules. Additional natural surface trails will also need to be constructed in a sustainable manner to replace the user created trails that currently exist. With the addition of the new traffic light and connection to Vienna Parkway, ensure that a welcoming entrance for visitors utilizing this new entry have entry, wayfinding and regulation signage similar to other MetroPark entrances.

Connect to the GDRTA Bus Network

Work with GDRTA to relocate existing bus stops along SR 741 to align with proposed entry points near the Zorniger Visitor Center and the newly installed traffic light at Vienna Parkway at the south end of the MetroPark. Develop paved landing pads and walkways to safely provide ADA level access into the MetroPark.

Paver Loop Path

The paver loop will continue to function to orient visitors to all the main areas of the park. At the entry point for each main area, a large paver circle exists (or is proposed) that will be developed to include interpretive materials, space to meet or relax, and to orient the visitor about the main features of the MetroPark.

Create a loop walk connection beyond the Zorniger Visitor Center patio that would complete the Paver Loop Path and connect visitors to the BCCSH area. An interpretive paver circle would be added to direct visitors to the BCCSH area.

Expand and Improve the Natural Surface Trail System

Reroute, eliminate unnecessary sections, and expand the trail network to provide an intuitive loop system for MetroPark users. Trails will be developed to meet Strategic Trails Initiative Standards. Expand the natural surface trail system in the northwest portion of the MetroPark to provide access to visitors from the north and provide access to the mature woods in this area. Create a trail head where the trail system enters the Shrub Garden. Reconstruct the wooden creek crossing that also provides access to the creek. Take advantage of the many views in the wooded areas by aligning trails and providing benches.

Zorniger Visitor Center Circulation

A new drop off path will be added along the edge of the parking lot near the Zorniger Visitor Center to create a defined and safe drop off area for visitors. A new large paver plaza will be added at the current asphalt service drive that will welcome both visitors from the east side parking area, and welcome bus groups arriving for a tour at the BCCSH. The asphalt path around the east end of the Zorniger Visitor Center will be replaced with pavers that will continue to provide fire truck access but be more pedestrian friendly and inviting for groups.







Use Area Recommendations

Main Campus

The Main Campus consisting of the Zorniger Visitor Center, Kettering Learning Lab, and the BCCSH are situated as the front door for the MetroPark. These buildings function in a variety of ways supporting programing, meetings, and special events, along with providing visitors with information they need for their visit.

The master plan proposes both physical and use changes to all three buildings to allow for more efficient use and are detailed below.

Zorniger Visitor Center

The Zorniger Visitor Center will be primarily used for rental space including meetings, weddings, and corporate events. The spaces can also be used for programming but scheduled rental events will have priority. Proposed changes include relocating programming staff to the BCCSH and relocating the event coordinator to the main office space. This will open the current event office to become a bride ready room. The MeadWestvaco Theater will remain the same. The space outside of the MeadWestvaco Theater will be opened by removing the old store wall and storage space and can be used for rentals. The Huffman Gallery space will have



Example of a retractable Wall

retractable walls to allow for the two ends of the Zorniger Visitor Center to be used for separate events. The back wall of the gallery will also be fitted with a retractable wall which will open onto a new plaza seating area with an awning to expand the event space. The patio can also be used daily for park visitors as an informal meeting area and picnic space. The Fifth Third Room will also receive a retractable wall that opens the Huffman Gallery Plaza space. The room will also have new restrooms installed that are also accessible from the exterior when the building is closed or having an event. These restrooms will be located behind the existing fireplace. The existing concrete patio (PNC Classroom) off the Fifth Third Room will be replaced with a new expanded plaza with a seat wall to further expand event space.



Example of an awning to cover plaza space

Kettering Learning Lab

The Learning Lab will continue to function as mixed meeting and programming space. The existing restrooms will be expanded to provide more capacity for park users

Barbara Cox Center for Sustainable Horticulture (BCCSH)

The BCCSH will be the primary home for programming at the Arboretum. Program staff will have offices and storage space constructed where the current cubicles are located. The existing Wallace Botanical Library will be enclosed and upgraded to provide dedicated programming space which will be coordinated with Philanthropy staff. These modifications will provide a more logical entry space for visitors coming into the BCCSH for a tour of the greenhouse facilities.



The space outside of the current Wallace Botanical Library will be improved to continue the flavor of the paver plaza between the Kettering Learning Lab and the BCCSH. This new space will provide a more welcoming area to meet for tours or to take a break. The existing asphalt service drive will be replaced by a more pedestrian welcoming surface that will allow tour groups to be dropped off at the parking loop and make their way back to the BCCSH for their tour or program.



2019



Pollinator Garden and Nature Play

The old Butterfly House will be retired due to the age of the structure and a new understanding of displaying native butterflies. The new space will create a large Butterfly and Pollinator Area inside the existing paver circle where the current butterfly house is located. The gardens will also extend along the Paved Loop Trail from the native prairie where the butterfly goggles are to and around the tree tower by enhancing the native prairie areas and plantings. The more designed pollinator beds will terminate in natural prairies on both ends.

As a part of the project a new Pollinator Pavilion near the large paver circle in front of the current butterfly house will be designed and constructed which will include covered program space and restrooms. This will become the center of the new Butterfly-Pollinator Garden.

A new nature play space will also be created north of the current Butterfly house and will consist of a series of play spaces. The space was proposed by Bienenstock Natural Playgrounds whose team worked with staff and the Nature Play Committee to develop a concept for the space. The Pollinator Pavilion will also provide services for the proposed nature play space.



Example elements for the Pollinator Garden



Conceptual Plan for the Nature Play Area

Tree Tower and Conifer Collection

With the Tree Tower recently reconstructed, there is little work proposed for this area in the master plan. Work should continue to expand and maintain the evergreen collection. The natural areas are also proposed to expand from the north to reduce the amount of turf in this area.



Shrub Garden

Eliminate a large portion of turf in the Shrub Garden Area by installing meadow or short grass prairie areas. These areas should have defined curvilinear edges to create an elegant and maintained appearance and be integrated with the planted beds in the shrub garden area. Create designed native landscapes around the pond while leaving some selected turf access to the edge of the pond. Simplify the current pathway system by eliminating seldom used gravel paths and creating a simpler flow through the garden. Re-vitalize the maze garden with new drainage and a new planting design that is durable and interactive for the users of the maze. Redesign the shrub beds in the garden to create mixed plantings that showcase the shrub collection but also create stunning colorful displays that visitors can utilize in their own landscapes. Plantings should incorporate native species as much as possible. The shrub garden pond gazebo should also be replaced with an ADA accessible shelter that will function both as a small rental venue but also serve as a visual art piece in the garden.



Examples of landscapes and gazebo

Edible Landscape Garden

Reduce the current footprint of the Edible Landscape Garden (ELG) by moving the existing fence on the west side east. Focus efforts on developing the planting beds in the ELG and around the pavilion into show beds showcasing how food producing plants can be incorporated into ornamental plantings. Explore ways to make the perimeter fence less institutional using plantings or other creative techniques. Create a more welcoming public entry using a paver pathway and interpretive circle and a new upgraded garden gate.



Create a formal connection between the new Vienna Parkway pedestrian entrance and park. Add fencing or other visual clues to ensure visitors do not enter the Operations Area.

Conservation Corner

Replace the Bird Blind and boardwalk with a more user-friendly design that also reflects the style at Cox Arboretum. Consider implementing fireproof public art pieces in the Conservation Corner Area to attract more users to the space. This can include permanent or temporary pieces. Continue to maintain and improve native habitats in this area by adding more diverse native species and control invasive species.

Improve awareness of this part of the park with improved trailhead interpretive signage to direct visitors out into this part of the park



Examples of bird blinds and public art

Shade Garden

Continue to maintain and improve the Shade Garden plant collection by adding new native species and creating additional mixed planted beds for visitors to enjoy. Ensure visitors are aware of the garden by implementing interpretive materials at the shade garden interpretive circle on the loop path.

Pond Gardens

Continue to maintain the ponds to ensure quality aquatic habitat. Add new mixed planting beds that incorporate native species around the pond edges to help reduce the geese population. Add a new natural stone terrace and relocated walkway between the Zorniger Visitor Center and lower pond to allow visitor access to the pond. Continue to replace older asphalt walkways with pavers.



Allée and Arbor

With the recent renovation of the arbor and allée, there is little need for additional work in this area of the MetroPark. Continue to maintain and improve the rock wall gardens by incorporating native species along with ornamental selections.

Ruth Cummings Mead Woodland

Continue to maintain the woodland areas with invasive species control and introduction of native species. Take advantage of the many views in the area by relocation of trails. As outlined above, make improvements to the overall trail network to improve the experience. Replace the aging creek crossing and creek access with a new structure utilizing more sustainable materials. Update the habitat management plan to maintain the cedar groves at the southwest portion of the woodland area. Continue to maintain the large cluster of Paw Paw in the south portion of the site.



Level of Service Amenities

- The following amenities outlined in the CMP are included in the site plan:
 - (0.58) Paved Trails (Miles)
 - (0.6) Soft/ Non-Paved Trails (Miles)
 - (1) Nature Play Playground

2.8 LAND PROTECTION PLAN

FRMP's [Land Protection Plan](#) identifies priorities for land protection based on criteria addressing conservation, the park, and the user. Due to the density and type of surrounding land uses, Cox Arboretum has little opportunity or need for expansion. Land protection strategies are as follows:

- Obtain an access easement on the north side of the MetroPark to construct access for the multi-use trail

2.9 VOLUNTEER PLAN

FRMP's volunteers are a diverse group of citizen advocates who are integrated in all levels of the organization through active participation in volunteer service opportunities that are mission centered and mission driven. Volunteerism at FRMP is a staff-led, volunteer-supported relationship that educates and engages citizens in the protection and stewardship of the natural and cultural heritage of the Miami Valley. These efforts have been vital to maintaining agency operations and programming for more than 50 years and will be critical in the agency's expansion in years to come.

Volunteers are a part of the agency's staffing plan and should be treated as part of the team. Each facility welcoming volunteer service should plan for volunteer needs by providing an area or specific space for permanent volunteers to safely store their belongings, refill their water bottle, access restrooms, and take a break as needed. This place should be one that is accessible to permanent volunteers and should ideally be located where the staff lead, and other staff are gathering for similar needs. This may be an appropriate place for volunteers to connect with their staff lead, check-in for their volunteer opportunity, receive instructions and appropriate tools, and personal protective equipment (PPE), or check-in may happen separately in the field at the site of service. Permanent volunteers should be shown where this area is and how to access it in their orientation to the site and/or at the beginning of their service.

As part of the Human Resources Department, Volunteer Services facilitates volunteer engagement with the agency. Recruitment of volunteers takes place throughout the year and through a variety of methods including volunteer fairs, social media and news media promotion, as well as through promotion at our parks, programs, and events. The most powerful form of volunteer recruitment is word of mouth from engaged volunteers. Interested candidates can expect to complete appropriate application paperwork, attend an orientation, participate in a meeting with a volunteer coordinator, and pass a background check depending on their volunteer position. They can also expect an introduction to the team they will be supporting, an introduction to their work site, ongoing support and training from their designated staff lead, as well as appropriate evaluation and recognition of service.

Staff should plan to provide all necessary tools and personal protective equipment (PPE) for each volunteer opportunity. Volunteers should prepare for service by bringing a full water bottle, sunscreen and/or bug spray, if needed; a snack, and by wearing attire suitable for both the weather and the task. Permanent volunteers should wear their volunteer t-shirt and volunteer nametag.

Groups completing one day service opportunities with the agency and other episodic volunteers, should also expect reasonable accommodation when traveling to our parks to volunteer. A meeting point and check in process, as well as plans for restroom and water access, should be established with the designated staff lead and shared with the volunteer(s) before the day of service.

Volunteer Services will work with staff leads to find meaningful ways to evaluate and recognize the service of the agency's volunteers and to provide quality training that builds on and extends volunteer knowledge and skills. Season openers, potlucks, and trainings will be coordinated by Volunteer Services with staff leads for volunteers throughout the agency to share information, outline season objectives, advance skill sets, build knowledge, and celebrate successes.

Learn more about volunteerism with FRMP by exploring the following links or contacting Volunteer Services:

www.metroparks.org/volunteer

Five Rivers MetroParks Agency Volunteer Policy

[Five Rivers MetroParks Volunteer Policy Handbook](#)

SECTION 3: IMPLEMENTATION

3.1 INTRODUCTION

The [Cox Arboretum MetroParks \(Cox Arboretum\) Master Plan](#) identifies a comprehensive proposal and [cost estimates](#) for the improvement of this MetroPark. From those recommendations, it was necessary to prioritize the various proposed projects. Applying priorities established in the Comprehensive Master Plan, FRMP established [Capital Project Criteria](#) to identify projects that will be incorporated with other projects throughout the district into Five Rivers MetroParks' (FRMP) Capital Improvement Plan (CIP). To reflect total project costs of the prioritized projects, operational cost estimates were developed for conservation, maintenance, programming, interpretation, law enforcement, and businesses operations. Also included are estimates for revenue generation through earned income, such as program fees and rentals, and alternative revenue, such as donations, sponsorships, and endowments. These operational costs and revenue will be evaluated alongside the capital costs to identify the projects' placement in the CIP to identify year-by-year investment.

3.2 CAPITAL IMPROVEMENT PLAN (CIP)

The proposed site plan represents the long-term vision for the park. The plan proposes a number of capital projects that will move the park toward that long-term vision. In this park master plan, specific improvement projects, as well as repair and replacement projects identified in the comprehensive master planning process, have been identified as priority projects for the upcoming ten-year period. When applicable, the improvement projects include the furniture, fixtures, and equipment investments necessary to provide a complete project. These priority projects are listed below. Capital improvement projects and priorities will be evaluated on an annual basis to determine status of planned projects, funding availability, and potential changes to the park master plan and CIP schedule.

- Create new reservable space and offices for Outdoor Connections
 - Anticipated Budget: \$215,625
 - Work includes new enclosed work offices, storage and support space, defined hallway to direct visitors through the Barbara Cox Center for Sustainable Horticulture (BCCSH) experience, and create a separated reservable space for programming and other rental uses
- Add rear and side patio spaces to Zorniger Visitor Center
 - Anticipated Budget \$684,756

- Add outdoor plaza spaces at the rear of the Zorniger Center and outside of the Fifth Third Room to expand rental capabilities. Rear Plaza includes canopy, 10 sets of movable tables and chairs, and 2 trash cans. Side Plaza will utilize the seat wall for regular use
- Develop Nature Play Area - Phase 1
 - Anticipated Budget \$32,000
 - Develop the nature play area as proposed from the Bienenstock plan and the Nature Play Team using in house installation
- Install new partition walls and exterior walls and install new restrooms at the Zorniger Visitor Center
 - Anticipated Budget \$576,150
 - Develop new retractable interior walls to allow for separation of spaces and replace a portion of the rear wall of the gallery and side wall of the Fifth Third Room to provide easy access to the rear plaza space. Design and install new restrooms off the rear of the Fifth Third Room with a similar configuration to the restrooms on either side of the MeadWestvaco Theater which will be accessible from the outside and the Fifth Third Room
- Transition the Butterfly house to the Pollinator Garden including Installing new restroom
 - Anticipated Budget \$545,790
 - Remove the existing butterfly house structure and develop new plantings and interpretive signage to create the native pollinator garden. Develop a new restroom building that includes a flush/vault system with two stalls per side and include a storage space. Space would include 4 additional benches and 2 trash receptacles
- Make connections between SR 741 and Cox Arboretum
 - Anticipated Budget \$116,610
 - Add new pathways to connect visitors to SR 741 and into the park. Replace the asphalt and aging pavers to the Maimon Memorial Edible Landscape Garden (ELG) to create a visitor friendly entry to Cox Arboretum. Work with Greater Dayton Regional Transit Authority (GDRTA) to locate a bus shelter near the visitor center. Add signage and

other enhancements between the new pathway and the operations area to visually prevent visitors from entering the operations area. Projects will include approximately 500' x 10' of new pavement

- Update the Bird Blind
 - Anticipated Budget \$228,390
 - Create a new destination bird blind to replace the existing bird blind and board walk. Assumes utilizing low maintenance materials
- Replace the Shrub Garden Pavilion
 - Anticipated Budget \$156,940
 - Replace the existing gazebo with a signature new shelter, new plaza area, and accessible access walk. Assumes using low maintenance materials
- Renovate the Maze Garden
 - Anticipated Budget \$153,180
 - Utilize the existing hardscape walkways and replace the boxwoods with a mixed sustainable planting. Ensure drainage is also functional. Add new interpretive signage
- Develop the Multi-Use Trail
 - Anticipated Budget \$641,010 (Anticipate applying for a grant)
 - Develop the new paved section of trail through the park. Trail would be 3100' x 12' of new concrete, general directional signage and bike racks/ shelters, trail barriers at the north end. Work with neighboring municipalities to install street level signage/sharrows through the neighborhood. Assumes local municipalities would cover local costs outside of MetroPark boundaries

3.3 PARKS AND CONSERVATION

The Parks and Conservation Department staff is responsible for the care and maintenance of facilities and natural areas within Cox Arboretum. This work includes tasks such as daily cleaning and inspection of areas, completion of general repairs, and completion of conservation tasks that protect the biodiversity of natural areas and are recorded and tracked in the Annual Habitat Action Plan. The completion of the routine tasks outlined below ensure that all areas are maintained to FRMP standards for safety, cleanliness, and appearance, and that FRMP visitors have high quality experiences.

Current Primary Routine Tasks:

- Park Clean-up
 - Litter pick up
 - Bathroom cleaning
 - Shelter cleaning /checks
 - Drinking fountain cleaning/checks
- Facility (Zorniger, Kettering Learning Lab, BCCSH) Maintenance
 - Cleaning
 - Program and/or rental set up
- Roadway/parking lot/paved trail blowing
- Mowing (excluding trails)
- String trimming
- Natural surface trail trimming/mowing/tree removal
- Nature Play inspections--daily
- Park Inspections (including Tree Tower, Boilers, Greenhouses)
- Equipment/Vehicle repairs and service

- Horticultural maintenance
 - Watering
 - Weeding
 - Mulching
 - Planting
 - Pruning
 - Fertilizing
 - Greenhouse production



Current primary special tasks:

Parks and Conservation staff also complete work tasks that may be completed annually or monthly and require more time and attention than some of the routine tasks. These tasks may be tied to weather events or special projects. In some cases, special tasks involve timing in relation to the weather or events within the facilities. Other considerations for this work could include scheduling to reduce negative impacts on plant communities or animal populations.

- Snow removal-hand and truck
- Pressure washing shelters and bathrooms
- Park inspections
- Annual inspections
- Fixture maintenance
 - Plumbing repairs
 - Picnic table repairs
 - Trash/Recycle can maintenance
 - Graffiti/structure repairs
 - Gate maintenance
- Chemical (herbicide and fertilizer) application



- Horticulture maintenance
 - Large Tree and shrub plantings/pruning/watering/mulching
 - Spring/Fall cleanups
 - Leaf Removal by hand
 - Mulch leaf compost
 - Tree protection maintenance and monitoring
- Facility maintenance
- Winterizing and opening irrigation systems, backflows, and water fountains
- Natural/roadway/paved trail maintenance including trimming, mowing, berming, drain clearing, sand topdressing, and tree removal
- Deer management
- Plant surveys
- Invasive species management



Expected Increases to Primary Routine Tasks:

Upon review of the priority projects in the proposed site plan staff projects an increased need of 1,214.28 hours annually to complete primary routine tasks. A breakdown of projected increases is outlined by project below and equates to .594 full time equivalent staff (FTE). The detail of these projections can be viewed in the [costing spreadsheet](#) that was produced as a part of the park master plan process.

Project	Projected Hours	FTE Equivalent
Create new rentable space and offices for Outdoor Connections	0	0
Add rear and side patio spaces to Zorniger Visitor Center	182.09	.088
Develop Nature Play Area - Phase 1	125.33	.06
Install new partition walls and exterior walls and install new restrooms at the Zorniger Visitor Center	181.5	.087
Transition the Butterfly house to the Pollinator Garden including Installing new restroom	421.8	.203
Make connections between SR 741 and the MetroPark	68.01	.033
Update the Bird Blind	90.34	.044
Replace the Shrub Garden Pavilion	12.1	.006
Renovate the Maze Garden	32.06	.025
Develop the Multi-Use Trail	101.05	.048
TOTAL	1,214.28	.594

Expected Increases to Primary Special Tasks:

Upon review of the priority projects in the proposed site plan staff projects an increased need of 675.50 hours annually to complete primary special tasks. A breakdown of projected increases is outlined by project below and equates to .332 full time equivalent staff (FTE). The detail of these projections can be viewed in the [costing spreadsheet](#) that was produced as a part of the park master plan process.

Project	Projected Hours	FTE Equivalent
Create new rentable space and offices for Outdoor Connections	0	0
Add rear and side patio spaces to Zorniger Visitor Center	160.022	.077
Develop Nature Play Area - Phase 1	30	.014
Install new partition walls and exterior walls and install new restrooms at the Zorniger Visitor Center	8	.004
Transition the Butterfly house to the Pollinator Garden including Installing new restroom	55.43	.027
Make connections between SR 741 and the MetroPark	26.67	.013
Update the Bird Blind	163.43	.08
Replace the Shrub Garden Pavilion	3.08	.001
Renovate the Maze Garden	27.24	.018
Develop the Multi-Use Trail	201.63	.098
TOTAL	675.50	.332

One Time Tasks:

Staff identified plant surveys as a one-time task needed to support the implementation of the proposed site plan. This task would likely be required of Parks and Conservation staff as part of the construction of new amenities. These numbers are not included in the staffing projection that is included in the summary section below.

Natural Planting Areas

Staff identified an ongoing task of transitioning turf areas to intentional designed naturalized areas. This task would likely be required of Parks and Conservation staff. The elimination of turf and the expansion of prairies, meadows, and the incorporation of native species will demonstrate more sustainable planting designs. The labor hours are not included in the staffing projection that is in the summary section below. Depending on the design of the naturalized areas, some of the following tasks may be required to accomplish the project:

- Planting
- Mulching
- Pruning
- Fertilizing
- Watering
- Weeding



Current Staffing Levels at Cox Arboretum:

- Horticulturist
- Park Site Leader
- (2) Full-time Horticulture Technicians
- (2) Part-time Horticulture Technicians
- (2) Seasonal Horticulture Technicians
- (2) Horticulture Interns
- (1) Full-time Park Technician
- (2) Part-time Park Technicians
- (1) Part-time Custodial Technician
- (1) Seasonal Park Technician
- Conservation support provided by the south Parks and Conservation team

Summary of Operational Impacts:

Based on the costing spreadsheet that breaks down identified tasks for each project in the park master plan, staff identified an estimated 1,889.78 hours of additional annual labor needs that would be created for Parks and Conservation staff. These operational impacts total .93 FTE Technicians.

3.4 PROGRAMMING AND INTERPRETATION

Programming and Interpretation Projection

FRMP currently engages visitors at Cox Arboretum in a variety of ways. The programs and interpretive elements outlined by the site plan are described below:



The site plan proposes additions to interpretive elements. The improvements outlined below focus on areas of the park prioritized for improvements for Cox Arboretum.

Wayside Self-guided sites include single-style interpretive media, such as an interpretive panel or other interpretation method that connects visitors to a park feature. Priority projects that include wayside self-guided sites are Nature Play.

- Kiosks are the first decision point for visitors in the park and are designed to welcome and orient visitors with trail and feature descriptions. No new kiosks are recommended

Wayside Exhibit is an interactive experience that includes a variety of interpretive media and may include interpretive panels and interactive displays that are designed to provoke curiosity in visitors. The priority projects that includes a wayside exhibit are:

- Native Landscaping
- Fitness
- Bird and Wildlife Observation

The park master plan identifies capital costs for interpretive elements in priority project areas. Corresponding one-time personnel costs to develop these interpretive elements have been established below. Ongoing operational expense for the interpretive elements focus on periodic repair and replacement costs and the associated personnel costs. The capital and operational costs for these interpretive elements, matrixed by the individual project, is summarized in the table below.

Interpretation Priority Project Costs

Project	Capital Development Costs		Maintenance Costs	
	Materials	Personnel	Materials	Personnel
9 Interpretive Nodes: Wayside Exhibit	*	\$19,000	NA	\$1,650
Native Landscaping: Wayside Exhibit	*	\$19,000	NA	\$1,650
Fitness: Wayside Exhibit	*	\$19,000	NA	\$1,650
Bird and Wildlife Observation: Wayside Exhibit	*	\$19,000	NA	\$1,650
Nature Play: Wayside Self-Guided	*	\$5,213	NA	\$400

*Included in the [Capital Cost Spreadsheet](#) as a line item

3.5 BUSINESS OPERATIONS

Currently, all rentals and the associated revenue is handled by the Cox Arboretum Foundation and is used to help maintain and improve Cox Arboretum.

3.6 PUBLIC SAFETY

Implementation of the Cox Arboretum Park Master Plan will have some impact on the Ranger Division, but the impact will be minimal overall. Below are the considerations:

Current Patrol

- Patrol Area - Rangers are normally assigned a patrol area, or “beat.” The beats are North, South, East, and Central. Cox Arboretum is part of the South Beat, along with Possum Creek, Germantown, and Twin Creek MetroParks
- Patrol Strategies - Typically, the ranger assigned to a beat will patrol the parks in his or her assigned beat several times during a shift at various intervals, being careful not to have a predictable routine in patrol times and methods. Rangers frequently make informal contact with park visitors and are encouraged to contact people who have reserved a shelter. Rangers look for anything suspicious and contact people who may be acting suspiciously or possibly involved in criminal activity. The Ranger Division’s primary focus is preventing criminal activity, but rangers are encouraged to take enforcement action, including issuing citations and making physical arrests when appropriate
- Patrol Time Estimates - Rangers recently estimated the amount of patrol time spent actively patrolling in each park during a regular 10-hour shift while assigned to that area, not counting any drive-time from park to park or other non-patrol time
- In a typical 10-hour workday, the estimated average time the ranger spends on active patrol in Cox Arboretum is approximately eighty (80) minutes

Anticipated Changes to Patrol

- Vehicular traffic and parking – Most patrol conducted by rangers is done by driving through the park areas in a marked cruiser. Rangers also patrol park areas and trails by Bicycle. Given the minor changes proposed in the traffic pattern, parking areas, and pedestrian areas for Cox Arboretum, it is not anticipated that there would be any significant change to patrol strategies or patrol time
- Impact of changes to or additional paved and natural surface trails – While rangers sometimes walk trails or use bikes to patrol the paved and hiking trails, the proposed changes for Cox Arboretum are minor and require no significant change to existing patrol strategies or patrol times
- Impact of additional activities or visitation - It is expected that some increased usage of the park overall will occur due to the proposed improvements. This increased usage should not have a significant impact on the amount of patrol time rangers spend in the park. However, whenever there is an increase in the number of people in each location, generally there is the potential for increased criminal activity. In this case, there may be some additional minor crime offenses, but no significant increase is anticipated as a result of the proposed changes. There will likely be an increase in the number of routine calls for service due to the increased number of visitors

Impact/Cost to Public Safety

- Based on the changes and additions proposed in the Cox Arboretum Master Plan, it is estimated that an additional 15 minutes of patrol time per ranger, per shift, will be needed after the improvements are completed. The additional time considers the time that will be needed to respond to additional calls for service and the additional time needed to patrol the park and contacts that will come with an increase in the number of visitors
- An additional 15 minutes of patrol per shift x 3 shifts = 45 minutes of additional patrol per day x 365 days = 273.75 additional patrol hours per year

3.7 ALTERNATIVE REVENUE

The addition of new trails, features and amenities proposed in the Cox Arboretum Park Master Plan provides excellent naming, sponsorship and tribute opportunities. Based on item descriptions and notes from the park master plan the following elements could generate alternative revenue:

- | | |
|------------------------------------|-------------------|
| • Nature Play | Sponsor or naming |
| • Zorniger Visitor Center Patios | Sponsor or naming |
| • Trails | Sponsor or naming |
| • Pollinator Garden | Sponsor or naming |
| • Bird Blind | Sponsor or naming |
| • Benches | Tribute |
| • New Structures (Gazebo, artwork) | Sponsor or naming |

All donation amounts will include an endowment for a pre-determined specific period of time (3 years to 10 years) with the opportunity for the donor or sponsor to renew

