



# Montrose Point Bird Sanctuary

## Master Plan 2015

**Prepared for:**  
Chicago Park District

**Prepared by:**  
Conservation Design Forum

# acknowledgements

---

## Client

Chicago Park District  
541 N. Fairbanks, Chicago, IL 60611  
(312) 742 - 7529

## Planning and Design

Conservation Design Forum  
185 S. York Street, Elmhurst, IL 60126  
(630) 559 - 2000

## Stakeholder Working Group

US Fish & Wildlife Service  
Illinois Department of Natural Resources – Coastal Management  
Bird Conservation Network  
Montrose Point Bird Sanctuary Stewards  
Bill Jarvis Migratory Bird Sanctuary Stewards  
Friends of the Park  
Audubon Chicago Region  
Center for Humans and Nature, Chicago  
Chicago Police Department  
Chicago Ornithological Society  
Field Museum  
Lincoln Park Advisory Council  
Lincoln Park Zoo  
The Nature Conservancy

## Cover Photo Credits

*Left:* Tom Gill  
*Center Left and Right:* Phil Hauck  
*Right:* Sonny Cohen

## Funding Partners



## table of contents

---

1. Introduction .....	4
2. History .....	6
3. Planning Process .....	10
4. Analysis .....	12
Natural Features Assessment.....	13
Facilities Assessment.....	17
5. Vision .....	21
Planning Principles .....	22
Ecology.....	24
Facilities.....	34
Safety & Security.....	45
Communication & Annual Planning.....	46
6. Implementation and Phasing .....	48
Master Plan Phasing.....	48
Project Partners Roles.....	51
Phases 1-4.....	52
7. Annual Progress .....	62
Monitoring Progress.....	62
8. Bibliography.....	63
Appendix 1: Responses to Stakeholder Concerns.....	65

# 1. introduction

## *Introduction*

Montrose Point Bird Sanctuary dramatically juts out into Lake Michigan shoreline on the north side of the City of Chicago. While Montrose Point is valued as one of the few “wild places” within the City, it was man-made in the 1930s when fill material was placed on the Lake Michigan bed (Hey 2004). Since its creation, Montrose Point has become an important stopover for migratory birds flying along the shoreline and is internationally recognized by ornithologists for the incredible diversity of birds that regularly visit the site. Located in a dense urban neighborhood that is accessible by public transit, Montrose Point provides a unique opportunity for Chicago residents to view birds from all over the world without leaving their city.

The Master Plan is intended to guide improvements to Montrose Point Bird Sanctuary and the long-term management and stewardship of the landscape so that it sustains as critical habitat for migratory birds, and continues to provide great value to the people of Chicago. The last plan for Montrose Point was completed in 2004, and the habitat has developed significantly in the ensuing decade. This master plan documents the changes that have occurred and offers a vision for the future both in terms of Montrose Point’s natural habitat and its park facilities. The plan was developed with an inclusive community process to identify and address a wide range of issues. In addition to the physical and ecological park elements and long-term stewardship, the plan addresses on-going safety concerns, education, operations, management, and monitoring. The Master Plan is intended to be used to communicate the vision and long-term plans for the park to a broad audience, to build upon the Chicago Park District’s successful volunteer stewardship program, and to help secure funding and other resources for facilities improvement and habitat enhancement.

A Natural Areas Management Plan (NAMP) was developed concurrently with this Master Plan. The NAMP provides a higher level of ecological detail to aid the Chicago Park District (CPD) in achieving the vision establish in this master plan. The NAMP is intended as a ‘living document’ that will be continually updated by CPD staff as a part of their adaptive management strategy. The master plan and NAMP are meant to be used in conjunction with one another and frequent cross-references are found throughout both plans.

# 1. introduction



Montrose Point Bird Sanctuary is one of the few natural areas in the City of Chicago that extends out into Lake Michigan. Migratory birds following the shoreline are attracted to Montrose Point and land there seeking shelter and food.

## 2. history

### Origins

Montrose Point was created in the 1930s as part of the Montrose Harbor extension of Lincoln Park (Brown 1999). In 1938, Alfred Caldwell, a famous prairie school landscape architect, developed plans for naturalistic plantings of trees, shrubs and grasses throughout the site, but these plans were never fully implemented. During the Cold War, NIKE missiles were stored on Montrose Point and barracks were constructed. A hedge of Tartarian honeysuckle was planted along the barracks to provide privacy (Hey 2004). The military decommissioned the site in the late 1960's, and Montrose Point was once again available for public use. By the 1970s, birders noticed that the honeysuckle hedge installed by the military attracted an incredibly diverse group of migratory birds, and so the group of shrubs came to be known as the "Magic Hedge" (Brown 1999).

### Previous Planning Efforts

A number of organizations have worked to improve the quality of the bird habitat at Montrose Point, including the Chicago Park District, the Chicago Chapter of the National Audubon Society, and the Illinois Audubon-Fort Dearborn Chapter. In the 1980s, these groups planted over 300 dogwood, viburnum, and sumac shrubs on Montrose Point (Brown 1999). In the 1990s, the Lincoln Park Advisory Council, in partnership with the Chicago Park District and the United States Forest Service, hired consultants to develop specific planting and habitat management plans (Hey 2004). Wolff Clements was hired as a landscape consultant and Hey and Associates provided ecological consulting. Focus group sessions were conducted with various users of Montrose Point including bird watchers, people who fish, historic preservationist, yacht club members, general users, volleyball



1939: Montrose Point was recently created and minimal vegetation was established.



1973: Military structures have been removed and the Magic Hedge is visible.



## 2. history

players, and the CPD personnel with responsibility for Montrose Point (Hey 2004). The CPD created the Montrose Point Working Group to engage various stakeholder groups in the planning process. Members included the Chicago Park District, Lincoln Park Advisory Council, the Lake View Citizen's Council, the Fort Dearborn Chapter of the Illinois Audubon Society, the Chicago Ornithological Society, and the Bird Conservation Network (Hey 2004).

As a result of these planning efforts, Wolff Clements developed landscape plans for enhancing the habitat value of Montrose Point while respecting Alfred Caldwell's original design intent for the space. Hey and Associates documented the existing plant communities present at Montrose Point and

provide management guidelines to accompany the landscape plans. These plans were presented to the Lincoln Park Advisory Council in November 1999, and again in September 2000 with modifications. While the plan was never formally adopted, it has guided much of the landscape enhancements and stewardship activities since then. Planting and seeding were carried out from July 2000 to November 2001 (Hey 2004) and have continued since then.

### Policy Points from Previous Planning Efforts

The intent of this master plan is to build upon and reinforce key elements of these previous planning and management efforts. Some of the key points from those efforts were summarized in a research paper by Paul



2002: Woody vegetation is starting to fill in the site.



2010: Dense woody vegetation is established around the perimeter of the site.

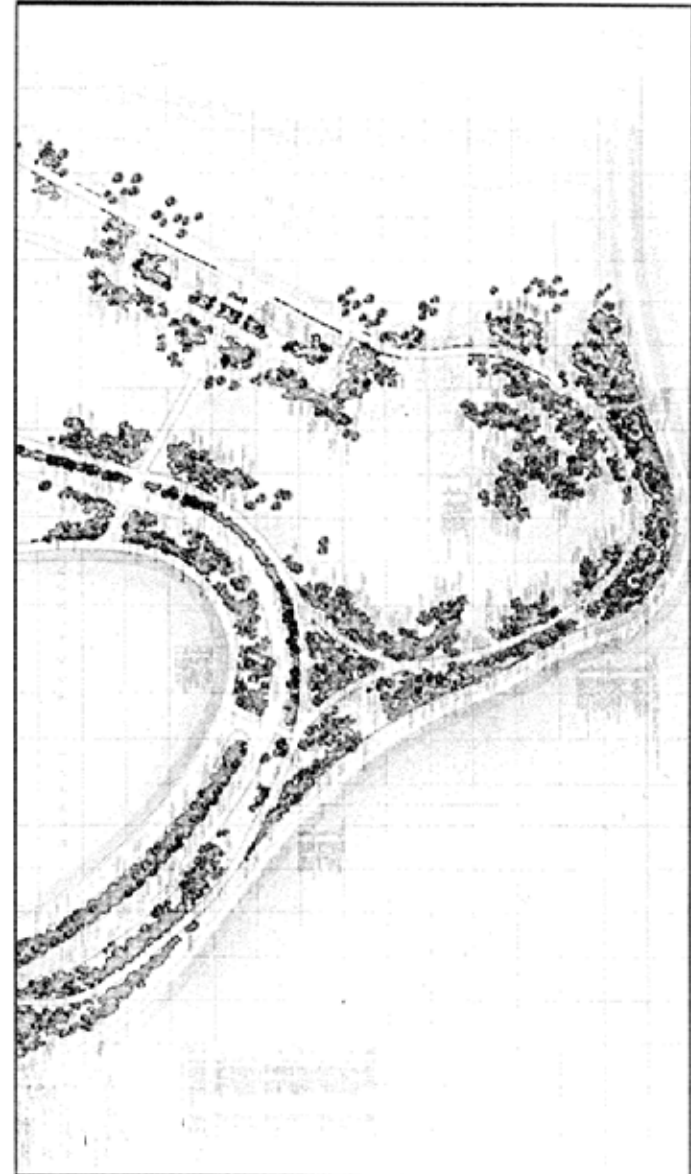
## 2. history

Gobster and Susan Barro (2000) that documented the planning process that occurred for Montrose Point in the late 1990s. These points include:

- The plant palette should be chosen to achieve sustainability, habitat, and biodiversity while respecting the multi-layered vegetation structure recommended by Caldwell.
- The Magic Hedge should remain in place. Overtime, the existing invasive woody species including honeysuckle should be replaced with native trees and shrubs that will continue to provide food and habitat.
- Use a low-profile prairie mixture in the central meadow surrounded by bands of taller grasses, forbs and shrubs to evoke Caldwell's layered, outdoor room aesthetic.
- Provide a gravel path suitable for disabled access and smaller mown paths through the site for use by birders and other users.
- CPD should install and manage the central meadow and mowed grass paths. Volunteer organizations and individuals to maintain other areas. The Montrose Point Stewardship Group was intended as the primary entity for coordinating volunteer efforts.

### On-going Evolution of Montrose Point

In 2014, Montrose Point continues to serve as a critical resting place for migratory birds. Birders from the Chicago region and elsewhere are drawn to Montrose Point to appreciate the incredible diversity of birds that pass through each year. Since the landscape naturalization efforts have been underway, the site draws other visitors eager to find solace and a brief escape from the stresses of urban living. While its location is somewhat isolated, the Montrose Point Bird Sanctuary is set within an active park,



Original Plan for Montrose Point  
by Alfred Caldwell, 1938



## 2. history

with boaters, picnickers, cyclists, joggers, and many others seeking active recreational pursuits in the surrounding park space.

The site and landscapes are a work in process. The paths and portions of the landscape are compacted by intensity of human use, from cyclists and those wandering off of marked paths, and nuisance animals. The physical elements must be stabilized and improved so that they can provide appropriate access, protection to vegetation, security, and interpretation. The living elements of the site are dynamic; invasive plants affect the site and limit the viability of maintaining the site as an ecosystem. The proliferation of trees and shrubs over the past few decades has resulted in reduced visibility, amplifying public safety issues and concerns. The landscape must be managed to reach a point of stability in harmony with natural process while supporting its role as critical habitat for migrating birds.

The challenge is to continue to find a way to protect and nurture the unique role this site has in the Lake Michigan flyway for migratory bird populations, nurture the landscape for biodiversity and beauty, and manage human activities in a way that supports the health of the site ecology while allowing for enjoyment and learning from this great resource.

### 3. planning process

#### *Planning Process*

This master plan is intended to build upon the on-going planning and management efforts to date as discussed in the last section. The planning process was structured to catalogue and summarize these previous activities and plans, assess current conditions, and identify or re-confirm planning priorities and objectives through an open, inclusive stakeholder and community engagement process. The process benefited from the passionate involvement of a wide range of experts in ecological land management, bird habitat, local knowledge, and public safety. This provided a comprehensive foundation upon which a series of recommended strategies and elements were articulated.

The master plan includes a site plan and details that illustrate a series of physical improvements to help achieve the planning priorities, along with a set of long-term management strategies informed by and supportive to on-going landscape restoration and stewardship activities. The plan includes recommended implementation and phasing strategies, further informed by the planning priorities and knowledge of best management practices.

In order to engage a wide variety of stakeholders and the public at large, the Chicago Park District and the consultant team:

1. hosted four meetings with a stakeholder working group;
2. invited the public to two public meetings; and
3. interviewed Montrose Point experts including the volunteer stewards.

Individuals from the following organizations attended the stakeholder working group meetings:

- US Fish & Wildlife Service
- Illinois Department of Natural Resources – Coastal Management
- Bird Conservation Network

- Montrose Point Bird Sanctuary Stewards
- Bill Jarvis Migratory Bird Sanctuary Stewards
- Friends of the Park
- Audubon Chicago Region
- Center for Humans and Nature, Chicago
- Chicago Police Department
- Chicago Ornithological Society
- Field Museum
- Lincoln Park Advisory Council
- Lincoln Park Zoo
- The Nature Conservancy
- Chicago Park District
- Conservation Design Forum (consultants)



Photo from public meeting.

### 3. planning process

The stakeholder working group guided the development of the master plan. They provided input on what is valued about the Montrose Point Bird Sanctuary, issues and concerns, types of users and activities, and the desired outcome of the master plan. The group developed a set of Planning Principles to guide the planning process and reviewed drafts of the master plan as it developed.

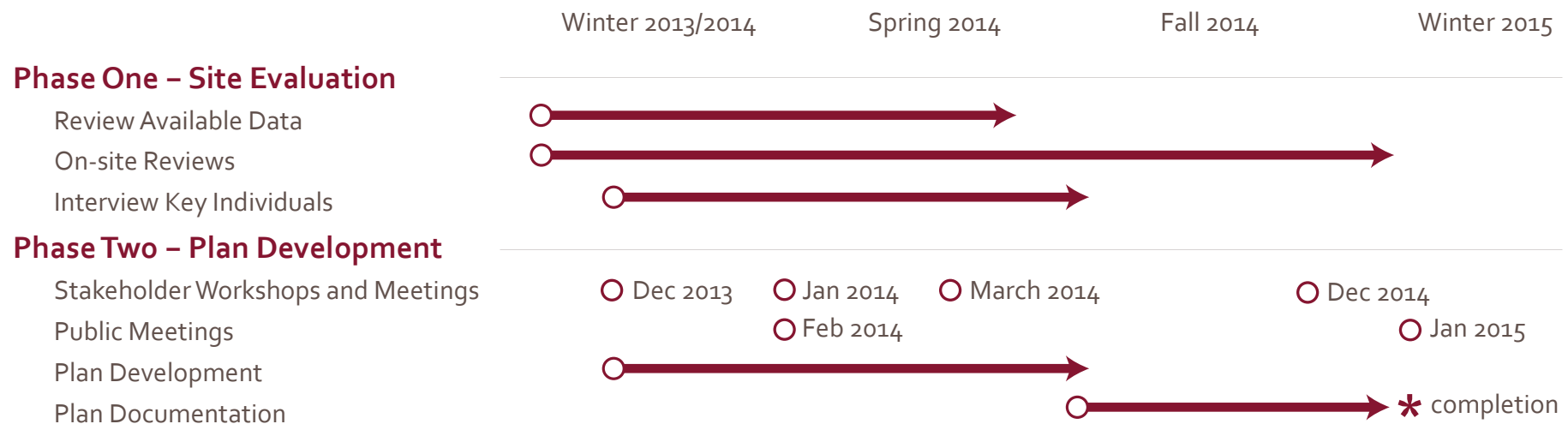
Two public meetings were held to inform the public of the planning process and receive feedback. At the first public meeting (February 3, 2014), participants provided feedback on the initial planning priorities and voiced concerns and opportunities that should be addressed in the master plan. At the second public meeting (January 22, 2015), participants provided feedback on the draft plan. Appendix 1 summarizes changes that were

made to the master plan based on comments from stakeholders and public meeting participants.

Conservation Design Forum conducted interviews with individuals that have been deeply involved with the development of Montrose Point in order to attain in-depth information about stewardship approaches.

Individuals interviewed included:

- Joe Krischon, Pizzo and Associates
- Judy Pollock, Bird Conservation Network
- Doug Stotz, Field Museum
- Montrose Point Bird Sanctuary Volunteer Stewards



## 4. analysis





### ***Natural Features Assessment***

In 2013 and 2014, Conservation Design Forum conducted three visits to the project site in order to perform a vegetation inventory and to assess relevant management issues. The vegetation inventory was assessed using Floristic Quality Assessment (FQA) methods. Please refer to the field report included in Appendix 5 of the Natural Areas Management Plan (NAMP) for a list of the vegetation recorded from the site. Well over 230 plant species have been recorded from the site, nearly 154 of which are native to the Chicago region. A brief summary of the landscapes that comprise the Montrose Point Bird Sanctuary is presented below and is followed by an assessment of facilities at the site.

#### **Magic Hedge and Magic Clump**

This is perhaps the most celebrated and utilized birding area at Montrose Point. The vegetation comprises a dense thicket of various woody trees and shrubs. Although a wide range of native species are present, problematic invasive species that are present include white mulberry and Tartarian honeysuckle. The ground layer vegetation is relatively sparse due to the shade caused by the dense woody canopy.



Magic Hedge



Magic Clump



## 4. analysis

### **Eurasian Meadow; Artificial Wetland; Interior Prairie Restoration**

The interior field that comprises the ‘Eurasian Meadow’ and ‘Prairie Restoration Interior’ have some common native prairie and wetland plants; however, the vegetation is dominated by cool season grasses. In some areas the vegetation is overgrown with wild bergamot and tall goldenrod. There are a few established trees of sugar maple and honey locust, and various saplings of these and other tree species.

The ‘Artificial Wetland’ on the southeast side of the central meadow is a small pond fed by potable, City of Chicago water. The water feature provides important habitat for birds and it is a favorite spot for bird watching and photography. Occasional water main breaks have caused flooding at various locations throughout Montrose Point.

### **Lawn with Park Trees**

West of the split rail fence, the ‘Lawn with Park Trees’ is an open, mowed turf area with various planted trees. This area is currently not considered part of Montrose Point Bird Sanctuary but this master plan recommends expansion of the site to include this area.



Artificial wetland



Interior prairie restoration



Eurasian meadow



Eurasian meadow



Lawn with park trees



## 4. analysis

### Mixed Thickets and Mature Trees; Dense Woody Thickets

The peripheral landscapes of ‘Mixed Thickets and Mature Trees’ and ‘Dense Woody Thickets’ are dominated by a mix of weedy and native understory trees, shrubs, and a few larger trees. The ground layer vegetation within this woody growth is barren or sparse and when present is dominated by weeds and non-conservative native species. Portions of these woody habitats in the northern tier of the site have sandy soils, and a few small stands of conifer trees.



Dense woody thickets



Bare soil in woody areas

### Revetment Prairie Restoration

The ‘Revetment Prairie Restoration’ located across the eastern portion of the site along the lake revetment is a prairie reconstruction that was installed as seed approximately ten years ago. Overall this *de novo* prairie landscape is attractive is the best managed portion of the site in terms of a native landscape restoration.



Revetment prairie restoration



### Foredune

There is a narrow band of ‘Foredune’ that has become established along the northern tier of the project site. Beach grass is common in these sandy soils, as are a mix of other grasses and woody vegetation.



Foredune





## 4. analysis



### ***Facilities Assessment***

The current condition and use patterns of the trails and other facilities within the Montrose Point Bird Sanctuary were evaluated via site visits and feedback from the stakeholder working group, public meetings and interviews. The following assessment documents how the physical features of Montrose Point are used and identifies opportunities for improvement.

#### **1. Trails and Accessibility**

Informal entrances exist on all sides of Montrose Point, but the site is primarily accessed from the south and west. There are two accessible parking areas; one on Montrose Drive to the south and one near the beach house to the west. The lot near the beach house has significant drainage issues that limit its functionality. Parking is also available along Montrose Drive. Paved sidewalks define the edge of Montrose Point along Montrose Drive to the south, along the beach to the north and the revetment to the east. Mown and mulched paths provide access to the interior portions of the site.

A variety of groups use the trails within Montrose Point. Many people fish along the shore and walk through Montrose Point carting their fishing equipment. Birders prioritize access to the Magic Hedge and Magic Clump, but enjoy observing birds throughout the site and the adjacent lakefront. Many visitors value the sense of solitude and connection to nature that is available along the small, informal paths that wind throughout the meadow and wooded areas. Photographers, social groups, individuals and families all come to Montrose Point to enjoy what it has to offer.

However, some uses detract from this enjoyment and negatively impact the landscape. Inappropriate behavior along the trails ranges from benign disrespect to illicit and illegal activities. For example, some people bike along the trails or walk their dogs, although neither of these activities is allowed within Montrose Point. Many people wander off the main trails,

which compacts the soil, causes erosion and disrupts wildlife. Some illegal activities that take place off of the main trails pose public safety risks in addition to causing soil compaction and habitat disruption.

#### **Assessment:**

- Montrose Point lacks an accessible trail.
- The trails are not clearly marked and lack hierarchy.
- The design of entrances, trails, and signage does not effectively communicate how to behave appropriately in order to respect the ecological sensitivity of site.
- Stronger police presence is necessary to reduce illegal activities.



Dense vegetation along mulched path.



## 4. analysis

### 2. Fencing

A variety of different types of fencing have been installed in order to manage access to various portions of Montrose Point. The CPD installed a split rail fence to define the west edge and south edges of Montrose Point. Mesh, rope and wood lathe fences are being used to discourage visitors from wandering off the main trails. Many of these fences are constructed of temporary materials, are not well maintained, and are ineffective in controlling access.

#### **Assessment:**

- Clearly identify hierarchy of fencing/restraints to manage access to various portions of the site.
- Identify appropriate locations for replacing temporary fencing materials with permanent structures.
- Dense or thorny shrubs could be used to manage access rather than fences.

### 3. Signs

Signs at main entrances identify Montrose Point Bird Sanctuary and prohibit various activities such as dog walking and cycling. However, these signs are not visually dynamic and are hidden by overgrown vegetation.

#### **Assessment:**

- Montrose Point Bird Sanctuary should be clearly identified to the general public.
- Signs should convey the ecological importance of Montrose Point and appropriate behavior.



Mesh and wood lathe fencing in need of repair.



### 4. Water

On the southeast side of the central meadow there is a small pond fed by potable, City of Chicago water. The water feature provides important habitat for birds and it is a favorite spot for bird watching and photography. Occasional water main breaks cause flooding throughout Montrose Point.

#### Assessment:

- The water features creates valuable habitat, but it should have a more sustainable water supply.
- Water could be pumped into the water feature from Lake Michigan.
- A call number should be posted on the entrance signs so that water line breaks can be reported.

### 5. Security

When visitors report illegal activities to the police they struggle to communicate their exact location within Sanctuary.

#### Assessment:

- Provide identifiable points within the Montrose Point Bird Sanctuary. Provide map coordinates to police so that they know where to go when people call for help.
- Provide emergency phones so that people feel that they can call for help if necessary.

### 6. Restrooms

The nearest public restrooms are located in the beach house to the west of Montrose Point. However, many birders visit the site in the early morning and during the off-season when the restrooms are not open. In the summer, port-a-johns are installed closer to Montrose Point. Fishermen sometimes use the far end of Montrose Point as an impromptu “restroom” rather than walking to the port-a-johns (over 0.5 mile distance).

#### Assessment:

- Current restroom facilities do not serve the needs of all visitors.



Trail flooding created by water main break.

## 4. analysis

### 7. Storage Facilities

The volunteer stewards lack storage space for their tools and materials. The stakeholder group identified the following needs:

- Water source for stewardship activities such as herbicide application and supplemental irrigation.
- Climate controlled space for seed storage.
- Interpretive materials for volunteer training.
- Vehicular access for delivering mulch, seed, and other supplies.



Sign at main entrance to Montrose Point.

### *Planning Principles*

This master plan was developed to address a comprehensive set of issues, many of which had been addressed at least in part by previous efforts, but not compiled into one document. Many of these issues are inter-related, such as the need for improvement of accessible paths while avoiding impacts from misuse from cyclists and others that trample and compact restoration areas, or coordination between restoration activities and controlling access by birders and others through certain areas, especially during vegetation establishment. In order to establish a clear framework for all plan recommendations, the stakeholders and participating public helped articulate a comprehensive set of Planning Principles. These serve as the guiding principles for this master plan, and as such, collectively form the vision for Montrose Point Bird Sanctuary.

The twenty Planning Principles are organized into four categories- *Ecology, Facilities, Safety/Security, and Communications and Annual Planning*. While they are organized in these categories for ease of comprehension, they are closely interrelated and meant to be taken as a whole.

The following Planning Principles were developed with the input of the stakeholder working group in order to guide the development of the master plan.



## 5. vision

### I. ECOLOGY

#### **Preserve the Magic in the Magic Hedge**

- Montrose Point Bird Sanctuary continues to provide critical habitat for migratory songbirds;
- The important role of Montrose Point in annual bird migration is clearly articulated on-site and elsewhere; as well as other parts of the city that provide habitat/resting opportunities;
- Bird/plant associations are documented;
- The presence of invasive species are reduced over time;
- Dense woody plant material is managed to facilitate herbaceous understory growth;
- Prairie is transitioned to a native low profile prairie as appropriate for local conditions;
- Access to site is controlled to avoid any impact when certain sensitive species of concern are present.

### II. FACILITIES

#### **Beautifully Crafted Features Support Best Use**

- A hierarchy of trails is clearly established and improved to provide better access and to enforce acceptable use;
- A range of permanent and temporary fencing/restraints is established to help control access to various portions of the site for vegetation establishment and protection;
- Security and policy information is clearly posted to reinforce safety and management compliance; staff/park personnel on-site to help communication and enforcement of policies;
- Montrose Point Bird Sanctuary is clearly identified;
- Suitable resources for on-going maintenance and management of park are established and prioritized, including volunteer stewardship program; funding for capital improvements, maintenance, replacement and long-term management of facilities and landscapes; and staff resources;
- The Master Plan to include identification of all proposed improvements and maintenance/management activities with budget estimates, priorities, and timeline for implementation.

### III. SAFETY and SECURITY

#### All Feel Welcome in this Great Lakefront Park

- Montrose Point becomes free of disturbances caused by undesirable elements;
- Security and management is coordinated with the Chicago Police Department, stewards, and neighborhood;
- Mapping with coordinates is established to help identify specific locations on-site to first responders.

### IV. COMMUNICATION AND ANNUAL PLANNING

#### Montrose Point is an Environment for Learning

- The Master Plan identifies a mechanism for data collection to inform adaptive management by phase of activity;
- Stewardship and operations activities best suited to volunteer participation are clearly articulated and supported;
- Measures of success are clearly defined.



## 5. vision

### *Ecology*

The habitats present at Montrose Point have been shaped by complex human and natural factors. Some have arisen spontaneously when the area ceased to be mowed. Others were encouraged by the Chicago Park District staff and volunteer stewards. Since Montrose Point is an artificial landscape there is no former, pre-settlement habitat type that can be truly ‘restored’ to the site.

The primary intention of ecological management at Montrose point is to provide critical habitat for birds. Vegetation also dramatically shapes visitor’s experience, sense of safety, and the overall aesthetics of Montrose Point. This master plan recommends a balanced approach to ecological management that will result in world-class bird habitat; healthy, native vegetation; and create a safe, welcoming environment for Montrose Point visitors.

A variety of different habitat conditions are present at Montrose Point. The habitats are broken into distinct management units. The Natural Area Management Plan that has been prepared concurrently with this master plan provides more specific stewardship recommendations for each management unit. This section of the master plan includes a description of the current conditions in each management unit and a vision for the future conditions.

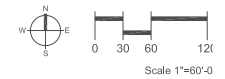
Some management units describe habitat conditions that are truly unique to Montrose Point such as the Magic Hedge and Magic Clump. Other units such as mesic savanna, shrubland, mesic woodland and prairies are intended to mimic native plant communities in order to provide additional habitat for birds and insects. Where native plant communities are used as a model for a management unit, we have included a brief definition of the typical conditions of the relevant plant community.

## 5. vision

### Management Units



Montrose Point Bird Sanctuary  
Chicago Park District  
2010 Aerial Image



### Management Units

- 1 Magic Hedge
- 2 Magic Clump
- 3 Butterfly Meadow
- 4a-e Mesic Woodland with Shrubs
- 5a-b Shrubland
- 6a-b Conifer Stand
- 7a-c Low Profile Prairie
- 8 Wetland
- 9a-b Mesic Savanna with Shrubs
- 10 Mesic Prairie
- 11 Fore dune
- \* Bird Monitoring Point



## 5. vision

### 1: Magic Hedge

*Current Conditions:* This is perhaps the most celebrated and utilized birding area at Montrose Point. The vegetation comprises a dense thicket of various woody trees and shrubs. Although a wide range of native species are present, problematic invasive species are also present including white mulberry and Tartarian honeysuckle. The ground layer vegetation is relatively sparse due to the shade caused by the dense woody canopy.

*Vision:* The Magic Hedge will continue to provide world-class bird habitat and birding opportunities. The layered structure of the shrubs and trees will be preserved. Densely spaced trees will be thinned to allow for healthy growth of fewer trees. Shorter stature shrubs will be planted in close proximity to create a layered effect. In order to demonstrate sound ecological practices, non-native species will be replaced with native species that provide food and shelter for birds. The restoration work will be completed over the span of several years, and replacement of the woody structure will be accomplished in a timely manner so as not to disrupt usage by migratory birds.

### 2: Magic Clump

*Current Conditions:* Like the Magic Hedge, the Magic Clump provides excellent bird habitat and bird viewing opportunities. It offers uniquely layered woody habitat structure that many birds, including warblers, desire for perching and foraging. Layered vegetation on the north side of the Clump creates a sheltered alcove, which is frequently utilized by numerous birds and provides viewing opportunities for birders.

*Vision:* The Magic Clump will continue to provide high quality bird habitat and opportunities for birding. Non-native species will be replaced with native species that provide food and shelter for birds. The diverse, layered structure of the Magic Clump will be maintained. Like the Magic Hedge,



Magic Hedge

the restoration work will be completed over the span of several years, and replacement of the woody structure will be accomplished in a timely manner so as not to disrupt usage by migratory birds. The unique structure of the Magic Clump could be replicated at three additional “Birding Alcoves” throughout the site. A few species that may be used to create the Birding Alcoves include chokeberry, alternate-leaved dogwood, and Illinois rose.



Magic Clump

### 3: Butterfly Meadow

*Current Conditions:* Lawn, shade trees and ornamental trees currently occupy much of the area proposed to be a butterfly meadow.

*Vision:* Most of the existing mature shade trees will remain. As the existing trees die-off they will slowly be replaced with mesic savanna species. Low-growing native grasses such as prairie dropseed, little bluestem and sideoats grama will dominate the groundcover, allowing open views between the trees. A variety of milkweed species and other wildflowers that support butterflies will be a common element in this habitat unit.



Current conditions of proposed butterfly meadow

## 5. vision

### 4a-d: Mesic Woodland with Shrubs

*Definition:* Mesic woodlands are dominated by upland trees such as oaks, hickory, basswood and maple. Healthy mesic woodlands have a layered habitat structure with an herbaceous groundcover layer, shrubs and small trees in the understory and large shade trees in the overstory. Woodlands tend to have a more open overstory than forest habitats with 50-80% canopy cover.

*Current Conditions:* These areas are important for bird watching and as habitat. They do not, however, represent a long-term native woodland. Frequent foot traffic in the woodlands compacts soil, damages herbaceous groundcover, and disturbs birds and other wildlife. Some areas lack diversity due to monocultures of thicket-forming shrubs like gray dogwood and staghorn sumac. Some tree species that do not provide exceptional bird habitat are overly represented, including Freeman's maple and quaking aspen. Dense shrubs and trees also prevent understory growth and limit the potential for trees and shrubs to flower and produce fruit.

*Vision:* The woodlands will transition into a stable, diverse habitat, with healthy vegetation throughout the overstory, understory and groundcover layers. In the overstory, Freeman's maple and quaking aspen will be thinned to allow more sunlight to reach the forest floor. Trees that provide bird habitat including oaks, elms and hackberries will be added where space allows. In the understory, all invasive species will be removed to demonstrate sound ecological practices. Sumac thickets will be reduced by approximately 75%. Thickets that crowd the paths will be targeted for removal in order to create open sightlines for visitor's safety and comfort. Some clumps of taller shrubs and understory trees will be maintained throughout the woodland in order to create a complex, layered woody structure. Shrubs that offer more value to birds including serviceberry, black haw viburnum, dogwood and American hazelnut will be installed in

these pockets. Some shorter stature shrubs will also be planted to reinforce the layered habitat structure. Thinning the overstory trees and understory shrubs will allow more light to reach the forest floor. Sedges, ferns and other native herbaceous woodland plants will be introduced, although some sparsely vegetated, bare areas will still exist.

The unique structure of the Magic Clump will be replicated at "Birding Alcoves" within the mesic woodland. Where possible, existing vegetation will be pruned to match the layered structure of the Magic Clump and native trees and shrubs will be added as necessary. A few species that may be used to create the Birding Alcoves include chokeberry, alternate-leaved dogwood, and Illinois rose.

At the main entrance on the south side of the site, some of the taller shrubs will be removed to allow more sunlight to reach the understory. Pockets of shrubs and tall herbaceous vegetation will be maintained around some of the existing overstory trees. The groundcover will be transitioned to low stature native grasses, sedges and forbs. The plantings at the entrance will be intentionally selected and managed to create a visually welcoming aesthetic for visitors. Native species with ornamental qualities such as attractive foliage and long bloom periods will be used, and plants will be established from live plugs and container-grown material.



### 5a-d: Shrubland

*Definition:* Shrubland refers to woody habitat areas where regular disturbance from fires, flooding or other events prevent trees and shrubs from maturing. Shrubland is an important landscape type that provides habitat for a wide variety of birds including song birds, hawks, owls, and other game birds. Birds find a variety of resources in shrubland habitat including nectar, seeds, insects, and nesting sites.

*Current Conditions:* A mixture of trees, shrubs and forbs exist in the areas designated as shrubland.

*Vision:* Shrubland habitat will be cultivated as a transitional habitat between the central low-profile prairie and the woodland areas. This habitat will consist of a mosaic of low, multi-stemmed woody vegetation interspersed in herbaceous cover. Thorny species that benefit birds and that might deter foot traffic such as Carolina rose, wild raspberry, and common blackberry will be included. Where shrubland habitats occur naturally, they are the result of frequent disturbance by wind, fire or flooding. Consequently, regular disturbance such as prescribed burns will be an important part of the management of this habitat type.



Current conditions of mesic woodlands



Current conditions of shrubland

## 5. vision

### 6a-b: Conifer Stand

*Current Conditions:* At present there are two areas on the site where a few conifer species have become established. At the northeastern entrance to the site from the dune landscape to the north there is a small clump of upright junipers. At the northwestern entrance to the site there are a few pines and junipers mixed with other deciduous trees and shrubs.

*Vision:* The existing conifer stands will be expanded with native conifer species such as Eastern red cedar, jack pine, and Eastern white pine that offer year round food and shelter for birds.



Current conditions of conifer stand

### 7a-c: Low-Profile Prairie

*Definition:* Prairies are herbaceous communities dominated by a diverse mix of grasses, sedges and forbs. Prairie plants have deep, fibrous roots that build rich top soil over time. The vegetation in some prairies, called tallgrass prairie, can grow to be five to six feet tall or more. Other prairies, typical of drier soils are dominated by grasses that grow no more than two to three feet tall when mature. Few if any trees exist within prairie landscapes.

*Current Conditions:* This is the central open area of Montrose Point. The Magic Hedge, Magic Clump and other wooded areas surround the area and form the ‘walls’ of this large outdoor ‘room.’ Currently, most of this area is dominated by Eurasian grasses with scattered trees and shrubs. Several



An example of a prairie in the Chicago area dominated by lower vegetation.



cultivar and ornamental trees have been planted including crabapple, Amur corktree and thornless honey locust. In the eastern portion of this area, a variety of native prairie and wetland forbs are present such as New England aster and stiff goldenrod. Some of these species are relatively tall in stature and create an uninviting enclosed experience for visitors.

*Vision:* In order to respect the essence of the historic Caldwell design, a low-profile prairie will be established to keep the “long-views” across the central portion of the landscape. Low-growing grasses, sedges, and wildflowers will be selected that attract insects and provide nectar or seed food sources for birds. Native grasses and sedges are an important food source for birds and provide an appealing aesthetic to the prairie. Modifying these landscapes from their present state to prairie will be staged so as not to disturb the entire central portion of the site at one time. Pockets of tall vegetation scattered across the habitat will continue to provide diversity.

### 8: Wetland

*Current Conditions:* The water feature on site is a magnet for attracting birds, bird watchers and photographers. The water feature is surrounded by tall, course vegetation that limit views of the water during the summer and fall.

*Vision:* The water feature could be converted into a meandering prairie stream to provide expanded habitat for birds and viewing opportunities for visitors. A prairie stream would attract a wider range of insect species to Montrose Point including midges, whose early life stage is confined to shallow water. A broader array of plant material acclimated to moist and wet soils will expand the diversity of food sources. The new water feature will gradually grade from open water to a wetland perimeter to accommodate woody, herbaceous and graminoid species that thrive in wetland habitats. Additional woody species may include: pussy willow, buttonbush, and meadowsweet, all of which are considered beneficial for providing or attracting food sources for birds. In addition to the woody plant material, native sedges, rushes and bulrushes will be planted to diversify available food sources. Aside from the benefits of providing additional food sources for birds, the expanded water feature will give greater access for the birds to drink and bath.

## 5. vision

### 9: Mesic Savanna

*Definition:* Mesic savannas are transitional habitats between forests and prairies with canopy cover between 10-50% and occasional shrubs. Oaks and hickories are common tree species in mesic savannas. Herbaceous flowering plants and grasses typical of both prairies and woodlands can thrive in the light, dappled shade of the savanna. Many bird species and other wildlife depend on the diverse habitat and food resources provided by mesic savannas. Many people are attracted to the open, pastoral aesthetic of the mesic savanna.

*Current Conditions:* Mesic savanna is planned for the existing clumps of trees and shrubs in the central open area and at the main entrance to the site. In the central area, there are honey locust, Amur corktree, American

basswood, and crabapple trees with Eurasian grasses and forbs in the understory. While these tree and herbaceous species are not typical of native savanna habitats, the physical vegetation structure of overstory trees surrounded by lower grasses and forbs does resemble a savanna. At the entrance, the existing habitat includes more woody shrubs such as common serviceberry, black haw viburnum, and Cornelian cherry.

*Vision:* In the central area, the existing mature trees will be maintained. Bur oaks, which are typical of native mesic savannas, will be planted. Overtime, the Eurasian grasses and forbs in the understory will be replaced with native grasses, sedges and forbs similar to the ones that will be established in the surrounding low-profile prairie.



An example of a typical mesic savanna in the greater Chicago area.



### 10: Mesic Prairie

*Definition:* Prairies are herbaceous plant communities dominated by a diverse mix of grasses, sedges and forbs. Prairie plants have deep, fibrous roots that build rich top soil over time. Few if any trees exist within prairie landscapes.

*Current Conditions:* This is a well-managed, created prairie in the eastern portion of the site.

*Vision:* The prairie provides attractive open views of Lake Michigan and the city skyline. The existing prairie will be continue to be managed as it has been in the past in order to encourage diverse prairie vegetation. Seeds collected from this prairie could be used to establish prairie in other portions of the site.



Current conditions of mesic prairie

### 11: Foredune

*Current Conditions:* In many areas the vegetation is dominated by healthy stands of beach grass while other portions have various prairie grasses and shrubby growth as well.

*Vision:* In Illinois, foredunes primarily occur in the sandy dunes along Lake Michigan. The beach grass growing throughout this unit helps to stabilize the sandy soils with their fibrous, rhizomatous roots. Overtime, organic matter will accumulate allowing other species of plants to establish in dune landscapes. The unit will be managed to retain the existing grassy vegetative cover and shrubs.



Current conditions of foredune

## 5. vision

### *Facilities*

The physical elements of the site are intended to support its use, and to be in harmony with the natural processes that sustain the diversity of life and habitat that continues to evolve at Montrose Point. The master plan recommends a series of improvements to the trails, fencing, signage, and support facilities to be done in close coordination with on-going landscape restoration and stewardship activities. Construction activities will be planned, staged, timed, and clearly communicated to minimize any potential conflict with bird migration, stewardship activities, and any other natural phenomena or cultural activity. Physical improvements will be phased according to priority and available funding (see Section 6).

#### **Restorative Development Practice**

In support of the planning priorities, proposed improvements will be done in a way that supports the ecology and habitat of Montrose Point. This includes the use of high-performance, sustainable materials and practices. All surfaces will be closely attentive to supporting infiltration-based hydrology, which is essential to sustain appropriate conditions and habitat for native and naturalized plantings. Materials used for trails, fencing, and structures will be durable and easily maintained, and closely coordinated with long-term maintenance and operations planning. Soil management is critical and will include protection of any areas that are stable from compaction. Soil restoration in support of the landscape restoration will be done in concert with physical improvements.

#### **Overall Site Plan**

The overall site plan for the Montrose Point Bird Sanctuary illustrates the arrangement of existing and planned improvements to Montrose Point Bird Sanctuary. The improvements build upon the structure of trails and features that exist, and the plan proposes enhancements that address the range of issues previously identified. The plan is illustrated with various symbols that represent the plan elements, including trails, access points, fencing, and signage. Illustrations of potential site features are included on the following pages to communicate their intended character, but the specific nature of each feature will be confirmed in later phases of design.

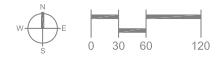


## 5. vision

### FACILITIES IMPROVEMENT PLAN



Montrose Point Bird Sanctuary  
Chicago Park District  
2010 Aerial Image



#### Proposed Elements

##### Trails

- accessible path - 5' gravel
- foot path - 3' mulch

##### Other Features

- potential structure
- interpretive sign on railing
- entrance signs and treatment
- potential seating
- emergency phone

##### Fencing

- rope
- precast concrete

##### Signage

- kiosk
- interpretation

## 5. vision

### 1. Entrances

Entrances are an opportunity to shape visitors' perceptions of Montrose Point Bird Sanctuary so that they treat the habitat within with appropriate respect. Gateway features, clearly posted rules, and interpretive signage will mark the transition from the typical, urban park setting of Lincoln Park to the unique, world-class bird habitat within Montrose Point. Directional signage will be added to make it clear how the site is to be accessed. In order to prevent cyclists from riding through the park, accessible stiles could be installed at all entrances.

#### Primary Entrance

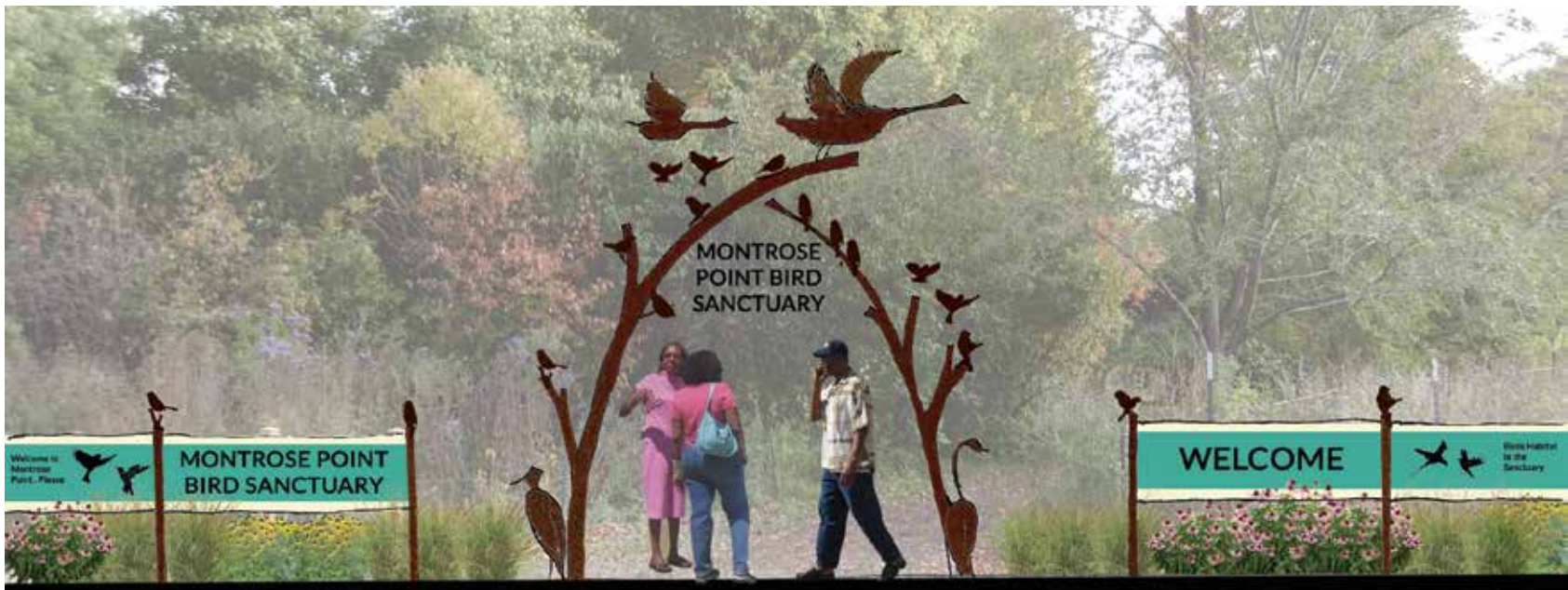
*Features:* A bird-themed, artisan designed and built gateway structure would highlight the unique habitat within. The section below provides one possible example of the type of structure that could be installed.

*Location:* Primary public access will be from West Montrose Drive.

#### Secondary Entrances

*Features:* Every entrance should have signage that welcomes visitors, provides interpretive information, and clearly communicates the park's rules.

*Location:* The number of entrances to Montrose Point should be limited to prevent the creation of informal paths and protect the habitat. Most existing entrances will be maintained, but a few will be abandoned.



primary entrance: an example of the type of arching gateway and interpretive signage that could be located at the primary entrance

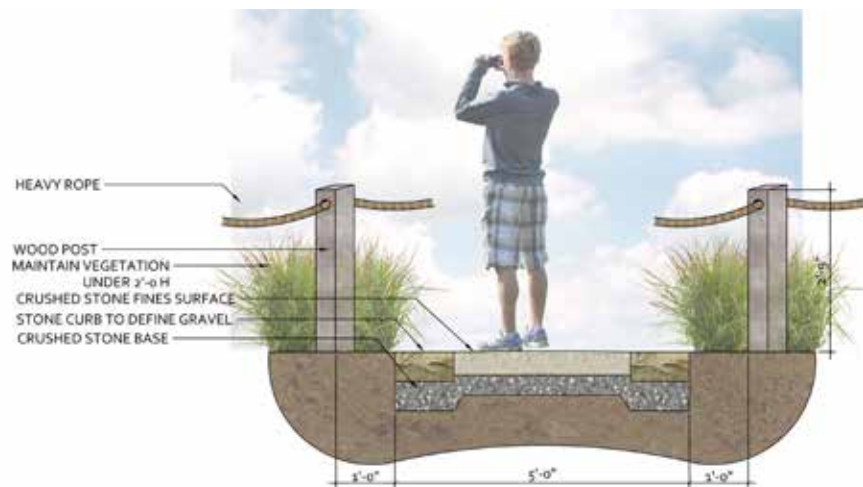


## 2. Trails and Accessibility

The proposed trail system follows the alignment and layout of existing paths. Paths will be enhanced and stabilized according to use and accessibility. Some existing paths will be closed to create larger, contiguous habitat areas.

### Primary Path: Crushed Stone (0.8 miles)

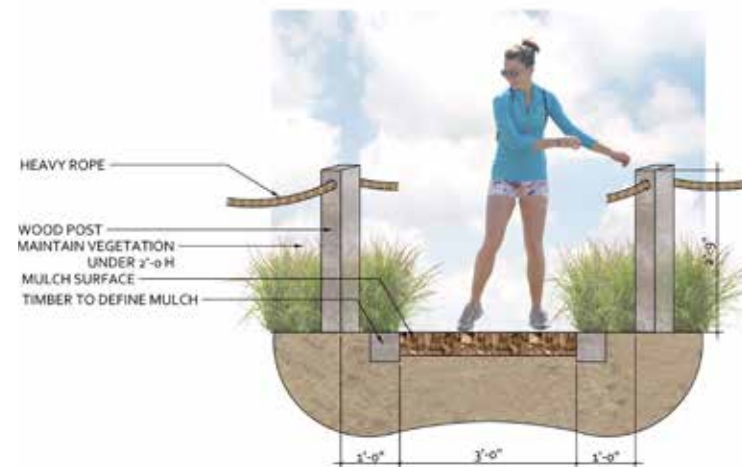
*Features:* Compacted, finely graded, crushed stone provides a stable, easy to navigate surface in wet and dry conditions. Stone or concrete block should be used to define the edge and keep the crushed stone in place.



primary accessible path: compacted gravel

### Secondary Path: Mulch (0.6 miles)

*Features:* Wood mulch provides a soft walking surface that fits with the natural setting of Montrose Point and prevents excess erosion along foot paths. Mulch will need to be replaced every two to five years, but this may not be problematic since wood mulch is readily available to the Chicago Park District. Timbers can be used to define the edge of the mulch paths.



secondary path: mulch

## 5. vision

### 3. Fencing and Edge Treatments

A wide variety of fencing materials are in use currently at Montrose Point. This plan proposes more durable types of fencing to define the perimeter of the area and to protect and control access to various restoration areas within the site.

#### Perimeter Treatment

*Features:* The perimeter treatment fencing is intended to identify the edge of Montrose Point Bird Sanctuary and to direct visitors to enter the site only at designated locations. Split rail fence is currently used to define the western edge of Montrose Point Bird Sanctuary. Precast concrete post and board fence would provide a more durable alternative in keeping with the current aesthetic.



precast post and board fence

#### Fencing to Define Trails

*Features:* Heavy manila rope suspended between wooden posts should be used to limit access to sensitive habitat areas. This type of fencing is intended to provide a cue to typical park users such as birders and photographers to respect these landscapes. Rope fencing like this is currently used to protect restoration efforts in other locations within Lincoln Park. The cross-sections on the proceeding page show how the rope fence could be located in relationship to the trails.

Rope fencing may not prevent illicit use of natural areas at Montrose Point. However, it will clearly mark which areas are appropriate for public use so that security personnel and other park users can easily identify when individuals are making inappropriate use of the park.



rope fence protecting a prairie restoration in Lincoln Park

### 4. Signage and Wayfinding

Signage serves several purposes. It is meant to welcome visitors, direct them how and where to access the site, and guide proper use of trails and facilities in a way that is sensitive to and appropriate for the habitat. Signage is also meant to inform, educate, and help interpret what exists, the context of the site relative to Chicago regional ecology, and the on-going management and stewardship activities that have a direct relationship with the diversity and richness of bird, insect, and plant species found at Montrose Point.

#### Interpretation, Wayfinding, Rules and Policies

The interpretive, wayfinding and rules and policy signs should be updated in order to clearly identify Montrose Point Bird Sanctuary to the general public. To the extent possible, all signs at Montrose Point Bird Sanctuary should communicate three messages:

- orient the visitor to their surroundings
- provide information about the unique habitat features
- convey what behavior is appropriate and respectful given the unique value of the habitat

Linking the park's rules and policies to interpretive information should encourage visitors to respect and value the habitat. Some signs may provide more interpretive information about key features such as the Magic Hedge and prairie stream. The signs at the entrances should list the park's rules and policies in addition to providing general information about the natural areas within Montrose Point Bird Sanctuary. Signs at key trail junctures should include a trail map and a 'you are here' locator. All of the signs should have a consistent graphic style in order to create a coherent image for Montrose Point.



interpretive signage could be installed at the prairie stream or the overlook



## 5. vision

### 5. Open Water Element

The existing water feature, commonly referred to as the “bird bath,” provides an important component of the habitat as well as the visitor experience. The open water and adjacent wet landscapes provide water source for birds to drink and bath in, as well as varied soil moisture that supports greater plant diversity.

In order to sustain over time, the water feature and associated landscape should be stabilized and become reliant on local water sources and renewable energy. In terms of the physical structure of the birdbath, stakeholders suggested a prairie stream to create a variety of habitat conditions for diverse bird species.

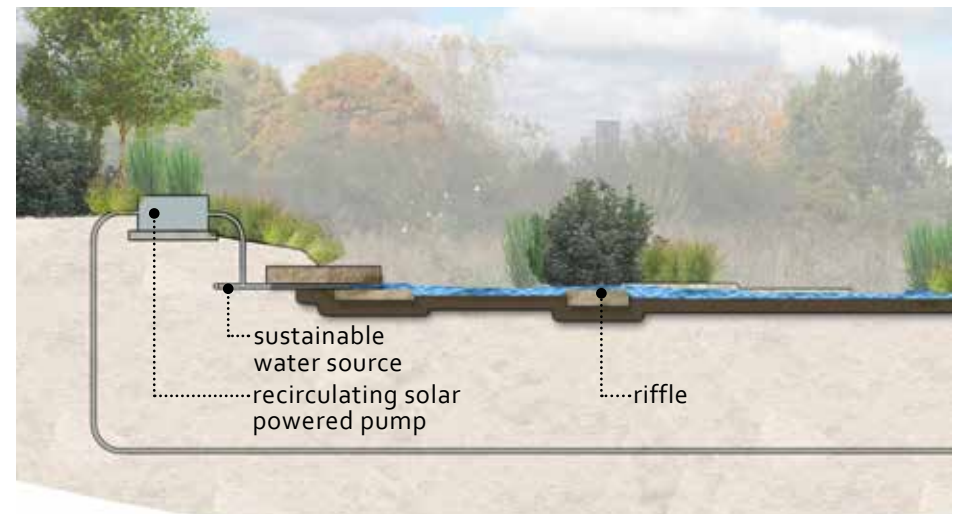


prairie stream habitat to be constructed at Montrose Point

#### Prairie Stream

Prairie stream will include a open water pond area surrounded by a wetland shelf with occasional limestone outcroppings to define the perimeter. The emergent wetland shelf will also serves as a safety ledge around open water. The pond should be deeper than the typical frost depth in the Chicago area (four feet) in order support aquatic life over winter. The pond and stream should be lined with clay in order to ensure that pond holds water. Other alternatives that could be explored during a detailed design phase include concrete and rubber liners.

Water will be pumped from the pond to the head of the stream via a solar powered pump. The stream should include shallow rocks and sandy areas for birds to interact with water. Birds and people will be attracted by the sound of water falling over riffles and shallow rocky areas along the stream.



## 5. vision

Boardwalk crossings at the head of the stream and along the pond will provide visitors with views of the stream and open water. Naturalistic perches for birds, such as a snag or log, should be installed along the stream in locations that provide viewing opportunities for birders and photographers.

Along portions of the stream, wetland soil pockets should be created in order to accommodate woody, herbaceous and graminoid species that thrive in wetland habitats. Woody species that could be located along the stream include: pussy willow, buttonbush, and meadowsweet, all of which are considered beneficial for providing or attracting food sources for birds. Native sedges, rushes and bulrushes can be planted to diversify available seed as a food source.





## 5. vision

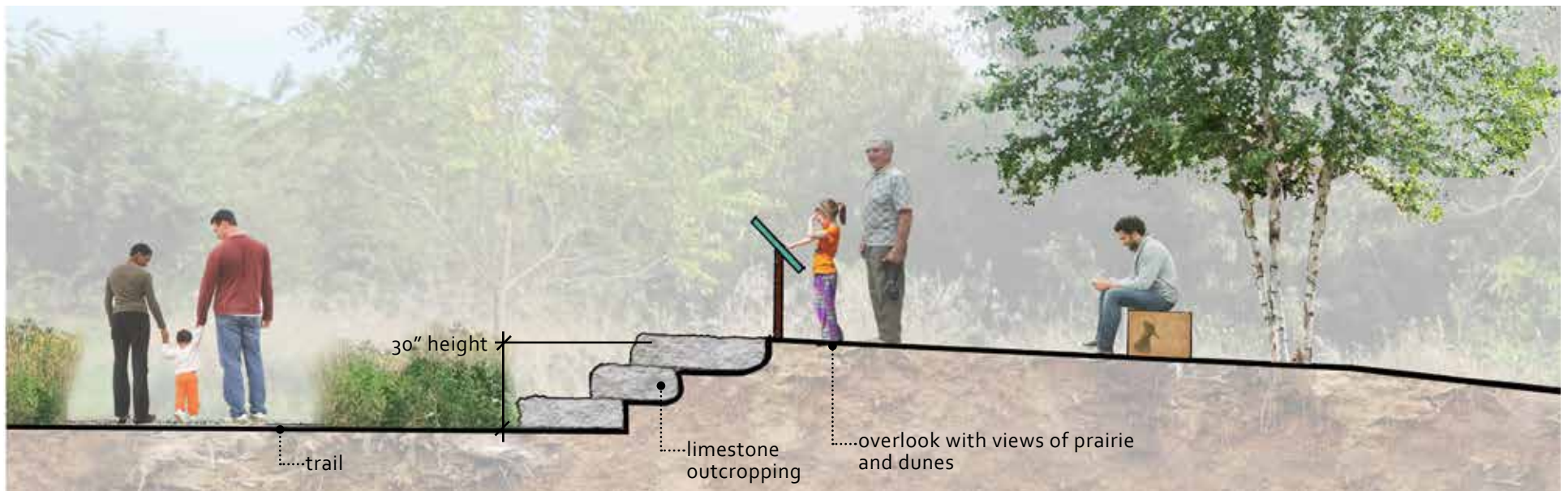
### 6. Prairie Overlook

A slightly elevated overlook at the north end of the interior open space could provide panoramic views of the prairie to the south and the lakeshore dunes to the north. Children or visitors using wheelchairs may especially appreciate the opportunity to rise above the vegetation enough to appreciate these views.

The overlook could be constructed of ramped earth with limestone boulder outcroppings. Limestone is locally prevalent and was typically used by Alfred Caldwell, the original designer of Montrose Point, to evoke the aesthetic of the prairie.



potential location for prairie overlook



potential features of the prairie overlook

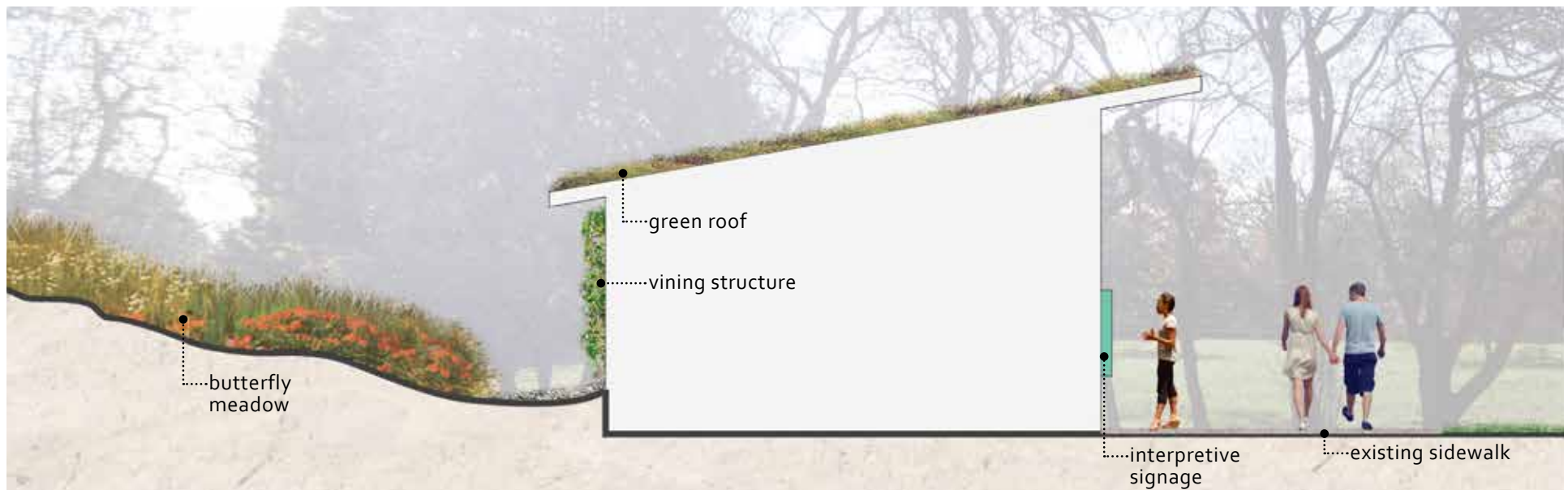


### 7. Potential Structure

Stakeholders identified the need for a four-season restroom in reasonable proximity to Montrose Point, storage for the steward's equipment and supplies, a warming shelter for stewards, and interpretive facilities. These could be addressed long term with a small structure. The plan explores the potential for a structure to be located in the expanded area to the west of the existing site. The structure should be sited to visually merge into the landscape. A green roof and vining structures could minimize its visual impact.



interpretive classroom located at Evelyn P. Tyner Interpretive Center in Glenview, IL



## 5. vision

### 8. Council Ring

Stakeholders identified the need for a seating area where students and other groups could meet before entering the Montrose Point Bird Sanctuary. A Council Ring in the expanded area to the west of the existing site could provide this function. Council Rings are highly typical of historic Alfred Caldwell landscapes throughout the Chicago area. Locating the council ring in the expanded area will negate any potential disturbance to the existing habitats within the site.



Council Ring at the Alfred Caldwell Lily Pool

### 9. Emergency Phone

Emergency phones are a crime deterrent, provide a sense of security, and enable police to respond quickly in an emergency situation. A solar-powered emergency phone can be installed at the northeastern entrance to Montrose Point from the revetment. This is one of the more remote locations within Montrose Point and placing an emergency phone there should enable faster response times.



A similar emergency phone will be installed at the northeastern entrance

## Safety & Security

Montrose Point has become a popular destination for a broad array of visitors. Since the landscape has been converted to a more naturalized, less open character, safety and security have become critical issues to address. In order for all to feel welcome to Montrose Point as one of the great lakefront parks in the region, visitors must feel safe and the site be kept secure from damage or impacts from inappropriate use. In addition to ecological and recreational benefits, recommended improvements described in this Master Plan are also intended to improve safety and security.

**Trail System:** The renovated trail system will improve access to the north side of the site and out to the lakefront. A hierarchy of trails will make circulation and access more apparent to first-time visitors to the site, in combination with directional signage and site maps. The improved primary trails will facilitate security inspection/patrol, and response to emergency calls.

**Fencing:** The fencing and path edge treatment will illustrate where park visitors are to walk, and make it much more evident that visitors are to refrain from walking into the naturalized landscape areas.

**Signage:** Directional signage, rules and maps will be posted at the main entrances to Montrose Point Bird Sanctuary. The special nature of this part of Lincoln Park will be emphasized, and the importance of following the rules to ensure the health of the landscape and bird habitat and enjoyment of the park for all. Keeping on designated trails, staying out of fenced areas (naturalized landscapes), walking bicycles (no bike riding), park hours, and other rules will be posted at all entrance locations.

**Landscape Character:** As described in the ecological restoration sections of this master plan, certain (non-native/invasive/aggressive) trees, shrubs, and other plants will continue to be selectively thinned and cleared, and the optimal tree/shrub structure replaced with non-invasive native and adapted plantings that are part of a living ecology and better suited for long-term site stability and improved biodiversity/habitat quality. This will result in improved visibility through portions of the site. Trees and shrubs will be maintained to allow more sunlight to reach the ground surface, helping to foster a healthy ground layer that will enhance habitat quality and aesthetics across the site. Thorny species that benefit birds and might deter foot foot traffic will be included in the shrubland management units.

**Emergency Response Coordination:** The Chicago Park District is in the process of establishing a district-wide system of mapping park sites with coordinates that will make it much easier to pinpoint locations where emergencies or issues have been called in.

**Rule Enforcement:** The District will further coordinate security with the Chicago Police Department, as well as volunteer site stewards, contractors, and regular visitors. Stewards, contractors, and visitors will be encouraged to alert park users not following the rules the importance of respecting Montrose Point to the degree they feel comfortable doing so, and to report any observed inappropriate or illegal activities immediately to authorities.



## 5. vision

### *Communication & Annual Planning*

Montrose Point Bird Sanctuary is in many ways an emerging paradigm for Chicago parks that have programmed space for naturalized landscapes. The on-going dialogue around this aspect of Montrose Point amplifies the need for clear communication and consistent messaging around the purposes, benefits, and practices involved in the establishment and long-term maintenance and stewardship of naturalized landscapes.

#### **Volunteer Stewardship Program**

The Chicago Park District operates a highly effective volunteer stewardship program to help provide appropriate ecological landscape management activities AND to offer a level of engagement with the landscape that would otherwise be unavailable. The site steward and the volunteers are key in successful native landscape implementation and the on-going vitality of the landscape. They are often the individuals who will first note a problem or deficiency and can be very effective in ensuring a timely response to address the problem. However, not all problems or deficiencies can be easily handled by a site steward and volunteer group alone. The site contractor is typically better equipped to address problems that require more widespread or aggressive measures such as control of aggressive herbaceous species; extensive removal of undesirable woody material; or implementing major restoration efforts.

An important component in the implementation and establishment of the native landscape at Montrose Point is a clear understanding of the duties assigned to the site contractor and the responsibilities to be carried out by the site steward and volunteer group. Clear communication between CPD natural resources staff, the site contractor and the site steward is necessary for effective implementation of the master plan.

#### **Annual Planning**

Regular meetings among the CPD staff, site contractor and site steward could facilitate effective communication about the appropriate division of labor. An annual implementation plan prepared with the input of all three entities may be a useful tool for coordinating work and providing clear direction for the management of the natural area. Bird monitors will also have important input to contribute and should be involved in the annual planning process.

The annual plan would be based on the priorities and phasing established in this master plan; available funding; anticipated volunteer group participation; and the annual monitoring report recommendations. Furthermore, the CPD may decide to develop a protocol for volunteer groups working with contractors. This protocol could address communication etiquette, responsible parties for management and how to address problems.

#### **Volunteer Education Program**

The stakeholder working group recognized the important role volunteer stewards can plan in educating the general public about the unique habitat at Montrose Point. In order to maximize the potential of this outreach opportunity, the CPD should provide educational programs for the stewards to expand their ability to function as docents.

## Annual Communication, Planning and Implementation Schedule



## 6. implementation and phasing

### Master Plan Phasing

The Master Plan for Montrose Point Bird Sanctuary presents a comprehensive vision for the stewardship of the site that will occur for many years. The realization of the vision described in this Master Plan is contingent upon the identification of funding and resources from a variety of sources, and therefore a specific timeline cannot be set at this time. For the purposes of planning and budgeting, the proposed master plan features and ecological stewardship activities have been grouped into five phases to guide the development of Montrose Point. Each phase includes recommended capital improvements and ecological stewardship activities to take place in specific management units.

#### Capital Improvement Phasing

Considerations that shaped the ordering of the capital improvement phases included the following:

- Capital improvements that address accessibility, safety and security issues will be implemented first.

- Features intended to convey the unique ecological value of Montrose Point to the general public, such as entrance enhancements and interpretation, will also be included in the first phases.
- Capital improvements that expand the diversity of visitor experiences, such as the Prairie Stream and Prairie Overlook will be installed in later phases.

Schematic level design for all improvements should occur prior to the implementation of any of the updates in order to create a cohesive, integrated space. The phasing strategy outlined in this plan is based on the best information currently available. The phasing strategy should be re-evaluated at the commencement of each phase so that implementation is responsive to changing circumstances of the site. Detailed construction documents for the relevant features will be developed at the start of each of the five phases.

Phase	Capital Improvements	Probable Budget	Associated Management Unit Implementation
1	Accessibility and Entrance Improvements	\$ 925,000	Unit 3: Butterfly Meadow Unit 4e: Mesic Woodland Unit 7b: Low-profile Prairie Unit 9a-b: Mesic Savanna
2	Primary Paths and Fencing	\$ 394,500	Unit 4a-b: Mesic Woodlands Unit 5a: Shrubland Unit 6b: Conifer Stand Unit 11: Fore dune
3	Secondary Paths and Fencing	\$ 262,300	Unit 4c-d: Mesic Woodlands Unit 5b: Shrubland
4	Prairie Features	\$ 435,900	Unit 6a: Conifer Stand Unit 7a-c: Low-profile Prairie Unit 8: Wetland
5	Potential Structures	\$ 188,600	
	<b>TOTAL PROBABLE BUDGET</b>	<b>\$ 2,206,300</b>	(capital improvements only)



## 6. implementation and phasing

### Ecological Stewardship Phasing

Ecological stewardship activities will be phased in tandem with capital improvements to minimize the extent of habitat disruption at any given point in time (See the ecological stewardship phasing plan). Each implementation phase highlights management units where major ecological improvements will take place such as establishing the butterfly meadow or restoring the woodland habitat. Some of the considerations that influenced the ecological stewardship phases presented in this master plan include the following:

- On-going maintenance activities will continue to occur in all the management units throughout the implementation process.
- Phasing the ecological stewardship activities will enable the project partners to evaluate the effectiveness of their actions and adapt management strategies over time.
- Some stewardship activities could occur independently of capital improvements, but others would be best installed in coordination with planned capital improvements. For example, major restoration activities for the prairie surrounding the existing water feature should not occur until the prairie stream is installed.

Chapter 6 of the NAMP outlines specific stewardship activities, performance targets, and responsible partners for implementation and maintenance for each management unit. However, prior to the implementation of each phase detailed restoration plans including plant lists will be developed. The Chicago Park District will work closely with stakeholders and experts to develop detailed restoration plans that are respectful of the fine-grained, well-loved habitat at the Montrose Point Bird Sanctuary.



ecological stewardship phasing plan

## 6. implementation and phasing

### ***Project Partner Roles***

Potential project partners and supporters who already are or could be involved in implementing various aspects of the plan and their roles

#### **Chicago Park District Staff**

- Coordination of volunteers, contractors, and stakeholders
- Financial management and budgeting
- Annual planning

#### **Montrose Point Bird Sanctuary Stewards**

- Vegetation management and monitoring
- Annual planning
- Community engagement and education

#### **Site Contractor**

- Vegetation management
- Vegetation monitoring

#### **Chicago Police Department**

- General safety and security
- Participation in GPS locating emergency response points

#### **US Fish & Wildlife Service**

- Oversight and funding

#### **Illinois Department of Natural Resources – Coastal Management**

- Oversight and funding

#### **Lincoln Park Advisory Council**

- Coordination of plans and events within the surrounding area

#### **Audobon Chicago Region**

- Monitoring of bird populations
- Coordination of bird conservation throughout the Chicago region

#### **Bird Conservation Network**

- Monitoring of bird populations
- Coordination of bird conservation throughout the Chicago region

#### **Oversight and Coordination Partners:**

Friends of the Park

Chicago Ornithological Society

Center for Humans and Nature, Chicago

Field Museum

Lincoln Park Zoo

The Nature Conservancy

## 6. implementation and phasing

### Ongoing Ecological Stewardship

#### Description

Minor, on-going stewardship activities will occur in all the management units throughout the implementation process. Because of the importance of the Magic Hedge and Magic Clump for bird migration, all improvements to these areas will occur very gradually over the course of the entire implementation period. The Montrose Point Bird Sanctuary Stewards will lead the stewardship activities taking place within these two management units. Annual monitoring will allow the volunteers and Chicago Park District staff to modify their implementation plans based on the results of the previous years efforts.

#### Management Unit Activities

##### Units 1 and 2

- Reduce presence of woody species to 80% canopy cover.
- Improve presence of native woody species.
- Implement weed control.
- Improve presence of herbaceous species.

#### Partners

Montrose Point Bird Sanctuary Stewards

- Vegetation management and monitoring
- Annual planning

Chicago Park District Staff

- Annual planning and coordination with stakeholders





## 6. implementation and phasing

### Phase 1: Accessibility and Entrance Improvements

#### Description

The first phase will be focused on providing accessibility and improving the public image of Montrose Point. The existing trail connecting the two parking lots will be improved to ensure full accessibility. Edging will be installed along the path to clearly communicate which areas of Montrose Point are intended for public access. Features intended to convey the unique ecological value of Montrose Point to the general public will also be included in this phase such as the primary entrance archway, interpretive signage at the primary entrance, and highly visible rule signs at all entrances. The butterfly meadow expansion to the west will also improve the image and visibility of Montrose Point.

#### Partners

Montrose Point Bird Sanctuary Stewards

- Monitor effects of improvements
- Community outreach and engagement

Chicago Park District Staff

- Coordinate schematic design process
- Coordinate capital improvements

Site Contractor

- Implement major construction and stewardship activities

### Phase 1: Capital Improvements Budget Recommendations

Item	Description	Unit	Unit Price	Quantity	Extension
1.01	Schematic Design for Entire Site	ls	\$109,900	1	109,900
1.02	Gravel Trails	s.f.	\$4	11,360	45,400
1.03	Paver Edging for Gravel Trails	l.f.	\$11	4,550	50,000
1.04	Mulch Trails	s.f.	\$4	1,150	3,100
1.05	Timber Edging for Mulch Trails	l.f.	\$10	770	7,700
1.06	Parking Lot Drainage Improvements	l.s.	\$30,000	1	30,000
1.07	Rope fencing	l.f.	\$10	4730	47,300
1.08	Pre-cast Split Rail Fence	l.f.	\$30	1,250	37,400
1.09	Primary Entrance Gateway and Interpretation	ea.	\$80,000	1	80,000
1.1	Demonstration Garden	s.f.	\$6	5,820	34,900
1.11	Secondary Entrance Upgrades	ea.	\$10,000	3	30,000
1.12	Post-Mounted Rules Sign	ea.	\$1,200	10	12,000
1.13	Install CPD Kiosk	ea.	\$2,000	1	2,000
1.14	Council Ring	ls	\$51,000	1	51,000
				Subtotal	540,600
				Contingency 30%	216,200
				Demolition and Mobilization 10%	75,700
				Design and Engineering 10%	75,700
				TOTAL	908,200

## 6. implementation and phasing

### Capital Improvements

- Perimeter fence
- Path upgrades and edge treatments
- Primary entrance archway and interpretation
- Secondary entrance upgrades
- Rule signage at all entrances
- Demonstration garden
- Butterfly meadow expansion
- Council ring



### Management Unit Activities\*

- Unit 3: Butterfly meadow (convert tree areas to mesic savanna, convert lawn to mesic prairie)
  - Unit 4e: Mesic woodland (convert woody thickets to mesic woodland)
  - Units 7b: Low-profile prairie (convert Eurasian meadow to prairie)
  - Units 9a-b: Mesic savanna (convert to mesic savanna)
- \*See NAMP, Chapter 6 for specific activities, performance targets, and responsible partners



## 6. implementation and phasing

### Phase 2: Primary Paths and Fencing throughout Site

#### Description

The second phase will be focused on completing improvements related to accessibility, safety and security throughout the site. The existing path along the prairie and an interior path loop will be improved to provide full accessibility. Edging will be installed along the path to clearly communicate which areas of Montrose Point are intended for public access. The remaining perimeter fencing will be installed along the north and east sides of the site. A solar-powered emergency phone will be installed at the northeast corner of the site.

#### Partners

Montrose Point Bird Sanctuary Stewards

- Monitor impacts of improvements
- Community outreach and engagement

Chicago Park District Staff

- Coordinate capital improvements

Site Contractor

- Implement major construction and stewardship activities

Field Museum

- Potentially participate in interpretive signage design

### Phase 2: Capital Improvements Budget Recommendations

Item	Description	Unit	Unit Price	Quantity	Extension
2.01	Gravel Trails	s.f.	\$4	9740	34,100
2.02	Paver Edging for Gravel Trails	l.f.	\$11	3,900	42,900
2.03	Rope fencing	l.f.	\$10	2,480	24,800
2.04	Pre-cast Split Rail Fence	l.f.	\$31	2,190	68,000
2.05	Paver or concrete sidewalk at revetment	s.f.	\$11	520	5,700
2.06	Emergency phone	ea.	\$7,500	1	7,500
2.07	Secondary Entrance upgrades	ea.	\$10,000	4	40,000
2.08	Stair repair	ea.	\$10,000	2	20,000
2.09	Interpretive signage	ea.	\$8,500	4	34,000
Subtotal					242,900
Contingency 30%					72,900
Demolition and Mobilization 10%					31,600
Design and Engineering 10%					31,600
TOTAL					378,900



## 6. implementation and phasing

### Capital Improvements

- Perimeter fence
- Primary path upgrades and edge treatments
- Concrete path at revetment
- Emergency phone
- Entrance upgrades
- Stair repairs
- Secondary entrance upgrades

### Management Unit Activities\*

- Units 4a, 4b: Mesic woodland (convert woody thickets to mesic woodland)
  - Unit 5a: Shrubland (convert woody thicket to shrubland)
  - Unit 6b: Conifer stand (convert woody thicket to conifer stand)
  - Unit 11: Foredune (create diverse, native foredune landscape)
- \*See NAMP, Chapter 6 for specific activities, performance targets, and responsible partners



## 6. implementation and phasing

### Phase 3: Secondary Paths and Fencing throughout Site

#### Considerations and Requirements

This phase includes relatively minor improvements to the secondary mulch paths throughout the site. Interpretive signage for various habitat types along the trail system could also be installed during this phase.

#### Partners

Montrose Point Bird Sanctuary Stewards

- Participate in mulch trail installation
- Monitor impacts of improvements
- Community outreach and engagement

Chicago Park District Staff

- Coordinate capital improvements

Site Contractor

- Implement major construction and stewardship activities

#### Phase 3: Capital Improvements Budget Recommendations

Item	Description	Unit	Unit Price	Quantity	Extension
3.01	Mulch Trails	s.f.	\$4	8370	29,300
3.02	Timber Edging for Mulch Trails	l.f.	\$10	5,580	55,800
3.03	Rope fencing	l.f.	\$10	5,580	55,800
3.04	Interpretive signage	ea.	\$8,500	5	42,500
Subtotal					183,400
Contingency 30%					55,000
Demolition and Mobilization 10%					23,800
TOTAL					262,300

## 6. implementation and phasing

### Capital Improvements

- Path upgrades and edge treatments
- Interpretive signage

### Management Unit Activities

- Unit 4c, 4d: Mesic woodland (convert woody thickets to mesic woodland)
- Unit 5b: Shrubland (convert woody thicket to shrubland)
- \*See NAMP, Chapter 6 for specific activities, performance targets, and responsible partners





## 6. implementation and phasing

### Phase 4: Prairie Features

#### Considerations and Requirements

The Prairie Stream and Prairie Overlook will expand the diversity of habitats and visitor experiences available at Montrose Point. These features should be installed simultaneously to take advantage of efficiencies related to mobilizing construction equipment. Soil excavated to create the stream and wetland could possibly be used to create the overlook. After the features are constructed, restoration activities can begin in the surrounding management units.

#### Partners

Montrose Point Bird Sanctuary Stewards

- Monitor impacts of improvements
- Community outreach and engagement

Chicago Park District Staff

- Coordinate capital improvements

Site Contractor

- Implement major changes to management units

#### Phase 4: Capital Improvements Budget Recommendations

Item	Description	Unit	Unit Price	Quantity	Extension
4.01	Prairie Stream and Boardwalk	l.s.	\$216,300	1	216,300
4.02	Prairie Overlook	l.s.	\$51,000	1	51,000
4.03	Benches	ea.	\$2,000	6	12,000
4.04	Interpretive signage	ea.	\$8,500	3	25,500
Subtotal					304,800
Contingency 30%					91,400
Demolition and Mobilization 10%					39,600
Design and Engineering 10%					39,600
TOTAL					435,900

## 6. implementation and phasing

### Capital Improvements

- Prairie Stream
- Prairie Overlook
- Interpretive Signage

### Management Unit Activities

- Unit 6a: Conifer stand (convert woody thicket to conifer stand)
- Unit 7a, 7c: Low-profile prairie (convert Eurasian meadow to prairie)
- Unit 8: Wetland (create a diverse, native wetland and prairie stream)

\*See NAMP, Chapter 6 for specific activities, performance targets, and responsible partners



# 6. implementation and phasing

## Phase 5: Potential Structure

### Considerations and Requirements

The programmatic scope of this phase will be defined as funds are identified. At a minimum the structure could provide storage for the volunteer steward’s equipment.

### Partners

- Montrose Point Bird Sanctuary Stewards
- Participate in defining the programmatic scope of the potential structure
  - Community outreach and engagement
- Chicago Park District Staff
- Coordinate capital improvements

### Phase 5: Capital Improvements Budget Recommendations

Item	Description	Unit	Unit Price	Quantity	Extension
5.01	Volunteer Work Shed, plumbing electricity	s.f	\$300	400	120,000
5.02	Interpretive signage	ea.	\$8,500	2	17,000
Contingency 30%					36,000
Demolition and Mobilization 10%					15,600
Design and Engineering 10%					15,600
TOTAL					188,600



## 6. implementation and phasing

### Capital Improvements

- Potential structure with plumbing and electricity
- Interpretive signage

### Management Unit Activities

- On-going maintenance in all units.



## 7. annual progress

### *Monitoring Progress*

One of the purposes of this master plan is to put in place a vehicle to facilitate the expansion of knowledge around habitat potential, especially beneficial relationships between plants and insects, birds, and other fauna. The accompanying Natural Areas Management Plan is set up to allow adaptation over time based upon the effectiveness of various practices and plant establishment. Further, the site lends itself to more in-depth study of these relationships. The Chicago Park District is open to partnerships with universities, organizations, and others who can collect data on observed bird and plant relationships, as well as potential success of native plant establishment and other ecological results and study these aspects long-term.

Regular site assessments should be performed monthly through the growing season (April – October) jointly by the site steward and site contractor to identify potential problem areas during the growing season. This would include but not be limited to invasive or problem species, replacement plantings, soil erosion, fence damage, nuisance species damage, foot traffic damage, etc. From these regular site assessments, select management activities can be identified and scheduled. For atypical management needs, documentation of the problem and recommended solution should be prepared and presented to the CPD. Bi-annual monitoring should be implemented; conducted in mid-spring and in late summer. A monitoring protocol should be developed so that the chosen monitoring methodology assesses the success of the project through achievement of stated performance standards and is repeatable each year.

Two different forms of monitoring would be beneficial in determining the success of the project. The first monitoring method would assess the success of installed vegetation. All installed plant material should be monitored to determine if it has established and are reproducing. This is critical for an understanding of what native species are suitable within the various landscape types. Depending upon what is noted, it may be advisable to change the suggested plant list if there was poor establishment of the initial installation.

The second monitoring method would assess the usage of vegetation by various bird species. This monitoring protocol should be developed by birding experts. The data obtained from this type of monitoring would further the understanding of what vegetative species are preferred by migrating as well as nesting bird species. This type of monitoring would allow birders to contribute to that effort by documenting what bird species are noted utilizing specified vegetation at select monitoring points across the site. Potential monitoring points were suggested by Audubon staff and are included on the management unit plan.

The results of the site monitoring should be compiled in an annual report that will inform the implementation goals for the following year. In addition to a discussion of the monitoring methods and data collected during the growing season, the monitoring report should identify progress of the native landscape, problem areas, all management and stewardship work completed during the growing season, and provide recommendations for the following year's stewardship activities.

## 8. bibliography

Audubon Chicago Region. (2013). Fall Migrants. Retrieved January 13, 2015, <http://chicagoregion.audubon.org/fall-migrants>

Audubon Chicago Region. (2013). Plantings for Spring-Migrants. Retrieved January 13, 2015, from <http://chicagoregion.audubon.org/plantings-spring-migrants>

Brown, M. (1999) Memorandum to Bridget Gainer, Re: Flora of Montrose Point. Chicago: Chicago Park District.

Chicago Park District. (1997). Ecological Rehabilitation Plan: Lagoons and Natural Communities within Twenty-four Parks of the Chicago Park District. Chicago: Chicago Park District.

Chicago park District. (1999). Jackson Park South Shore Cultural Center South Lakefront Framework Plan, Phase 2.

Chicago Park District. (2001). Chicago Park District Natural Areas Assessment. Chicago: Chicago Park District.

Chicago Park District. (2014). Rainbow Beach Dunes Natural Areas Management Plan.

Chicago Park District. (2012). South Shore Cultural Center Natural Areas Management Plan.

Chicago Park District. (2014). Chicago Park District Natural Areas Manual. Chicago.

Chicago Wilderness Magazine. (2001). (Fall).

City of Chicago. (2006). Chicago Nature and Wildlife Plan. Retrieved from City of Chicago, Zoning and Land Use Planning: [http://www.cityofchicago.org/city/en/depts/zlup/supp\\_info/chicago\\_nature\\_andwildlifeplan.html](http://www.cityofchicago.org/city/en/depts/zlup/supp_info/chicago_nature_andwildlifeplan.html)

eBird. (2012). eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: <http://www.ebird.org>.

Freyman, W. and L. Masters. (2013). The Universal Floristic Quality Assessment (FQA) Calculator Com-puter Program; [www.universalfqa.org](http://www.universalfqa.org). 2014 USACE Chicago Region Database.

Glennemeier, K. and J. Pollock. (2013). The Shrubland Habitat Study. Chicago, IL. Audubon Chicago Region.

Gobster, P. and S. Barro. (2000). Negotiating Nature: Making Restoration Happen in an Urban Park Context. In Gobster, P. and R. Hill. Restoring Nature: Perspective from the Social Sciences and Hu-manities. Island Press. Washington D.C.

Hey and Associates, Inc. (2004). Management Plan for Montrose Point Bird Sanctuary. Chicago Park District.

Illinois Department of Natural Resources. (2012). The Standards and Guidelines for the Illinois Natural Areas Inventory; Draft. Illinois Department of Natural Resources. Springfield, IL.

Lichvar, R et al. (2014). The National Wetland Plant List: 2014 Update of Wetland Ratings. Phytoneuron 2014 1: 1-42.



## 8. bibliography

Northeastern Illinois Planning Commission. (2003). Protecting Nature in Your Community / Indiana Addendum. Chicago, IL: Chicago Region Biodiversity Council.

Pollock, J., K. Glennemeier, & D. Stotz, (2004). Migrant Bird Habitat Study, Final Report. Chicago, IL: Audubon Chicago Region and Field Museum.

Packard, S. and C. Mutel, eds. (1997). The Tallgrass Restoration Handbook. Island Press. Washington, DC.

Rich, T. C.-E. (2004). Partners in Flight North American Landbird Conservation Plan. Ithaca, NY: Cornell Lab of Ornithology.

Smith, E. (2014). Scrub-shrub Birds. Fish and Wildlife Habitat Management Leaflet Number 42. Natural Resources Conservation Service.

Swink, F. and G. Wilhem. (1994). Plants of the Chicago Region, 4th ed. Indiana Academy of Science. Indianapolis. IN.

Thomas, S. (1998). The Natural Communities of Cook County. An Ecological Classification System for Terrestrial Communities. Forest Preserve District of Cook County. River Forest, IL.

## Appendix 1: Responses to Stakeholder Concerns

Concern Voiced by Stakeholders and General Public	Change Made to the 2015 Master Plan and NAMP in Response to the Concern
<b>Ecology</b>	
Changes to the Magic Hedge and Magic Clump should be gradual and managed by the volunteer site stewards.	The phasing plan reflects the desire for gradual, adaptive, volunteer stewardship of these management units.
Reducing the density of overhead canopy vegetation in the Magic Hedge to 70% would be too drastic and would change the essential character of the Magic Hedge.	Overhead canopy density goal changed to 80% for the Magic Hedge and Magic Clump.
Changes to the vegetation should be informed by data about bird use of specific habitat areas.	Potential bird monitoring points suggested by Chicago Audobon staff are indicated in the master plan. A planting plan will be developed with the input of the site stewards, CPD, and site contractors prior to the removal of significant vegetation.
Woody and herbaceous plant species should be encouraged that provide food for songbirds, hummingbirds, and butterflies year round and especially during migration.	The master plan and NAMP offer suggestions for appropriate plant species and recommend that a detailed planting plan be created before the implementation of each management unit.
The existing trees in the central meadow are well used by migrating birds and should be maintained.	The master plan and NAMP recommends that these trees be maintained. Overtime, as individual trees die, they will be replaced by native mesic savanna trees such as bur oak and hickory.
Stream habitat could expand the variety of food sources available to migrating birds. Changes to the water feature should maintain key features such as perches and shallow areas for bird bathing that are well-located for viewing and photography.	The master plan reflects these preferences.
Shrubs provide crucial habitat type for many birds. The plan should recognize the importance of diverse, layered vegetation.	Shrubland is a designated management unit. The importance of shrubs in the woodland and savanna is highlighted in the master plan and management plan.

# Appendix 1

## Appendix 1: Responses to Stakeholder Concerns

Concern Voiced by Stakeholders and General Public	Change Made to the 2015 Master Plan and NAMP in Response to the Concern
<b>Facilities</b>	
The primary entrance should be located closest to the Magic Hedge.	The master plan reflects this preference.
Proposed elevated wood platforms would detract from wilderness aesthetic.	The originally proposed wood platforms have been replaced with the Prairie Overlook which will be constructed of bermed soil and limestone outcropping stone in order to blend into the landscape.
Five foot wide primary paths with two feet shoulders would fragment habitat and encourage cut through traffic.	Primary path cross-section reduced by two feet.
Too many entrances will encourage inappropriate cut-through traffic.	Four of the original 12 proposed entrances were removed from the final master plan.
Need for restroom facilities closer to Montrose Point and accessible during the off-season for extended season birding.	Portable toilet indicated at the northwest parking lot.
Too much rope fencing would detracts from wild, open feeling of Montrose Point	Rope fence removed from central prairie area.
Storage structure should not intrude on the wilderness feeling of Montrose Point.	The master plan locates the structure in the expansion area rather than within the current boundary of Montrose Point.
Some lawn should be maintained to the west of Montrose Point for picnics and recreation.	The master plan reflects this preference.
Visiting school groups need space to gather for instruction prior to entering Montrose Point.	Council ring proposed in the expansion area.
The extent of the accessible gravel path system should be limited to the minimum necessary.	The accessible path is limited to an interior loop providing access to key features and an exterior route to the pier. Sections of path near the Magic Clump originally designated as gravel were downgraded to three foot mulch paths after stakeholder input.



## Appendix 1: Responses to Stakeholder Concerns

Concern Voiced by Stakeholders and General Public	Change Made to the 2015 Master Plan and NAMP in Response to the Concern
<b>Safety and Security</b>	
Changes to the vegetation are not a sufficient response to security concerns.	The plan recommends the installation of a security phone at the most remote portion of the site. The Chicago Park District is creating a system of gps located emergency response points that will facilitate faster emergency response times. Signs at all entrances will encourage park users to report illicit activities to the police department. The Chicago Park District will continue to coordinate with the police department to address security concerns.
Rules should be clearly posted and enforced.	Signs at all entrances will clearly communicate rules for appropriate behavior. Clearly defined paths, entrances and fencing will encourage appropriate behavior.
Cut through bicycle traffic should be discouraged.	The master plans recommends the installation of stiles (ADA accessible) at all entrances to discourage cyclists.
Use thorny species to deter inappropriate foot traffic.	Thorny species that benefit birds are suggested in the shrubland management units.
<b>Communication and Annual Planning</b>	
Restoration and improvement projects should be coordinated with the volunteer stewards.	The master plan calls for the preparation of an annual implementation plan with the input of volunteer stewards, the CPD, bird monitors, and site contractors.
The CPD should offer educational programs for the volunteer stewards.	The master plan suggests that CDP should provide educational programs that expand the capacity of stewards to serve as docents for visitors.
Changes to the vegetation should be informed by data about bird use of vegetation.	The master plan identifies potential bird monitoring points and recommends the creation of a bird monitoring protocol. The master plan recommends that data collected through the bird monitoring program should inform the annual implementation plan.