









CHESTER WOODS PARK MASTER PLAN

ADOPTED BY OLMSTED COUNTY BOARD ON OCTOBER 18, 2016









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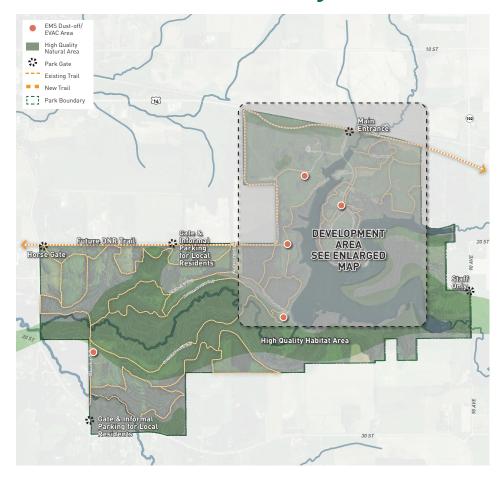
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Executive Summary



With over 1,300 acres of forest, prairie, and open water, Chester Woods Park is the largest park unit in the Olmsted County Park System. Its campground, nature trails, and reservoir have been well loved by County residents for 20 years. This document is intended to guide future investment and development in this park, to ensure Chester Woods continues to meet the needs of residents in the years to come.

The Chester Woods Park Master Plan seeks to plan and prioritize the next 20 years of park development, operations, maintenance, and programming. The plan will also serve as a guide for natural resource management. The plan was developed to meet the requirements of the Greater Minnesota Regional Parks and Trails Commission (GMRPTC) in order to seek funding for future improvements.

PROJECT PROCESS

This master plan was created as part of a larger project to identify future needs for the Olmsted County Park System as a whole and for each individual park unit within the County. During the spring and summer of 2016, the project staff and consultant team worked to develop plans for Chester Woods Park, Oxbow Park and Zollman Zoo, Root River Park, the White Bridge Fishing Pier, and the Olmsted County Park System by analyzing existing conditions, conducting community engagement, and developing concepts.

CHESTER WOODS PARK

Vision

Chester Woods Park is a high quality, natural resource based park that serves the residents of Olmsted County and visitors and tourists from the surrounding region. A campground, lake recreation, nature trails, restored prairies, forest conservation areas, abundant wildlife viewing, naturalist programming, places of reflection, and other amenities serve park users and foster environmental stewardship.

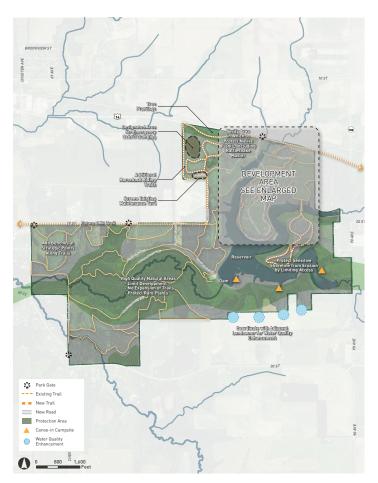
Established 1995

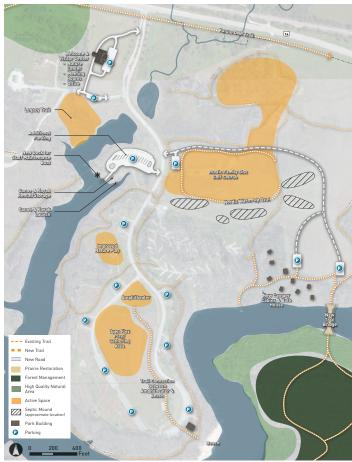
Size

1,333 wooded and prairie acres surrounding a 118 acre reservoir

Amenities

- » Campground
- » 15 miles of primitive hiking trails
- » Beach
- » 7 picnic shelters
- » Paddle Boat, Canoe, Kayak, and Paddle Board rental
- » 4 fishing piers
- » Boat launch for non-gas motor boats
- » Two playgrounds
- » Natural playscape
- » Horse trails
- » Cross country ski trails





DEVELOPMENT MASTER PLAN

The master plan for Chester Woods primarily adds facilities and amenities to the developed area of the park located around the entrance area and campground. The protection of high quality natural resources in the park surrounding Bear Creek and the reservoir was considered throughout the entire planning process.

Planned improvements for Chester Woods Park include:

- » Pedestrian bridge to provide access to eastern peninsula
- » Reconfigured and expanded parking near existing boat launch
- » Canoe/kayak/paddle board/paddle boat launch and additional storage
- » A new dock for the staff maintenance boat
- » Welcome and Visitors Center
- » The Friends of Chester Woods Legacy Trail
- » Rustic family disc golf course

- » Nordic warm-up oval
- » Additional camper cabins with a new bath house
- » A vehicular access road ending in new parking areas to serve the expanded campground and pedestrian bridge
- » An amphitheater
- » Expanded nature play area
- » Expanded equestrian and hiking trails
- » Canoe-in camp sites on south side of reservoir
- » DNR state trail connection



This document presents the master plan for Chester Woods Park in Olmsted County, Minnesota. Chester Woods Park is the largest park unit in the Olmsted County Park System with over 1,300 acres of forest, prairie, and open water. Its campground, nature trails, and reservoir have been well loved by County residents for 20 years.

The master plan consists of the following chapters:

- » The Introduction gives an overview of the park, its context within Olmsted County and the region, and defines the process undertaken to complete the plan.
- » Existing Conditions identifies existing conditions, issues, and opportunities.
- » The Vision outlines the system vision, mission, and values, summarizes public input, and describes demographics, recreation trends, economic trends, and public health values that support the vision.
- » The **Development Master Plan** describes desired park improvements in the next 10-20 years.
- » The **Natural Resources Plan** defines the ongoing management and future restoration strategies for ecological and land resources.
- » The Implementation, Management, and Sustainability Plan establishes programming, operations, maintenance, and implementation strategies, processes, and priorities. This section also contains cost estimates for future improvements.

CHESTER WOODS PARK

Established

Opened in the spring of 1995. The park developed in conjunction with the South Zumbro Flood Control Project

Size

1,333 wooded and prairie acres surrounding a 118 acre reservoir

Annual Revenue

In 2014 the park generated \$78,755 in entry permits, \$70,244 in camping fees, and \$26,500 in other revenue.

Amenities

- » Campground has 42 Electric and 9 Non-electric sites. Also one camper cabin
- » 15 miles of primitive hiking trails
- » The Beach is open weather permitting from Memorial Day through Labor Day
- » There are 7 picnic shelters, all with access to pit toilets
- » Paddle Boat, Canoe, Kayak, and Paddle Board rental is available on a first come first serve basis
- » 4 fishing piers
- » Boat launch for non-gas motor boats
- » Two playgrounds (one ADA accessible) and a natural playscape
- » Horse trails are open weather permitting May 1 - November 1
- » Five miles of groomed classic and free-style cross country ski trails

Staffing

4 FTE as well as seasonal; in 2014 they received the equivalent of 4.8 FTE of volunteer time; Friends of Chester Woods funded 1 intern, Zumbro Valley Audubon Society funded 1 intern, and MN DNR Aquatic Invasive Species Prevention Aid funded 1 intern, during 2015, for a total of 1,200 hours

Master Plan Purpose

This master plan has the following objectives:

- » Inventory the existing conditions and facilities of each park and analyze issues and opportunities within the parks
- » Meet the requirements of the Greater Minnesota Regional Parks and Trails Commission (GMRPTC) in order to attain regional designation and to seek funding for future improvements
- » Engage the community in order to learn about and plan for issues, opportunities, and future improvements
- » Plan and prioritize for the next 20 years of park development, operations, maintenance, and programming
- » Plan for long-term natural resource management within the park land
- » Provide a user-friendly guide for future decision making

Project Process

This master plan was created as part of a larger project to identify future needs for the Olmsted County Park System as a whole and for each individual park unit within the County. During the spring and summer of 2016, the project staff and consultant team worked to develop plans for Chester Woods Park, Oxbow Park and Zollman Zoo, Root River Park, the White Bridge Fishing Pier, and the Olmsted County Park System. The following process was used for all parks:

- » Organization & Inventory (April): background research, site visits, and field inventory
- » Site and Needs Assessment (May): stakeholder engagement, public meeting, and summarization of issues and opportunities
- » Concept Development (May-June): preliminary concepts developed for each park, and reviewed by staff, Park Commission and public
- » Prepare Master Plans and Approvals (July-September): cost estimates and implementation plans are prepared, master plan document is assembled, draft documents reviewed by staff, Park Commission, and public, and approved by County Board.

Overview of Olmsted County Park System

Olmsted County first provided park services in 1968 when the State of Minnesota turned Oronoco State Park over to county management (note - Oronoco Park is now owned by the City of Oronoco). From that initial 33 acres, the system has grown to more than 2,200 acres in multiple sites across the county. In addition to Chester Woods, the Olmsted County Park System includes Oxbow Park and Zollman Zoo, Root River Park, and White

Bridge fishing access. In addition, Olmsted County owns Mayowood Corridor, an improved trail operated by the City of Rochester. Olmsted County parks offer a variety of natural resource based outdoor recreation and educational opportunities to southeastern Minnesota.

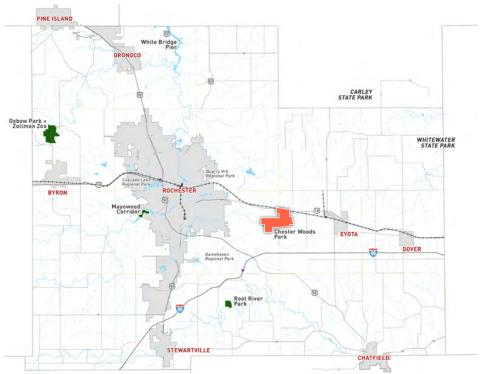
MISSION

The mission of Olmsted County Parks is to foster an appreciation of the natural world through environmental education, natural resource management, and public participation in the stewardship of our park lands.

VISION

Learning life-long lessons in natural places





Park Overview & Description

Chester Woods Park consists of 1,333 acres of diverse natural systems. The natural features in the park include, but are not limited to mature upland forest, oak savannah, both natural and restored prairies, bluff lands, wooded valleys and bluff valley streams. Of specific note is the presence of several threatened and endangered flora and fauna in the park that have been recorded and categorized and listed with the Department of Natural Resources Natural History Database. In addition, the 118 acre reservoir is a welcome amenity to the region due to its DNR sponsored fish management program, which includes a reduced bag limit to insure extended opportunities for the fishing public.

PARKS ARE OLMSTED COUNTY'S HIGHEST RATED SERVICE

Parks and recreation was rated as the top county service in the 2008, 2013, and 2016 Olmsted County Resident Surveys

GREATER MINNESOTA REGIONAL PARKS & TRAILS COMMISSION

The Greater Minnesota Regional Parks and Trails Commission was established by the Minnesota State Legislature in 2013 in order to approve designation of regional parks and trails in Greater Minnesota and to make funding recommendations to the legislature regarding park and trail projects. The funding is provided by the Minnesota Legacy Amendment Parks and Trails Fund. Chester Woods is already designated as a Regional Park. This document is a new Master Plan that replaces the original.

LOCATION DESCRIPTION

Chester Woods Park is located 7 miles east of Rochester, MN on US Highway 14 in Marion and Eyota Townships, Olmsted County.

CLASSIFICATION

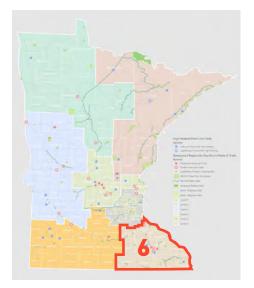
Natural Resource Based Regional Park

TOTAL ACREAGE

1.333 total acres

In Timothy Engrav's 2005 book entitled: County Parks of Minnesota, Chester Woods Park was rated 4th under the section entitled: 25 Favorite County Parks. Park amenities include a 52 unit campground with 42 electrical hook-ups, two of which are ADA accessible; 9 non-electric sites; one camper cabin; a modern shower/restroom facility centralized in the campground; seven separate and distinct picnic areas with shelters; a paved boat launch, two sets of modern playground equipment and a Natural Playscape; and approximately 15 miles of trails that provide both pedestrian and equine access. Within the park, there are over five miles of groomed ski and snowshoe trails, a swimming beach, modern changing and shower facilities, and two ADA accessible fishing piers. Boat rentals are available featuring kayaks, canoes, paddle boats, and paddle boards.

Public programs are featured at Chester Woods Park with a full-time naturalist employed. Interpretive programs are offered year-round by staff and volunteers to serve both the campground and day park visitors. Special operational programs implemented include: A resource management-based controlled deer hunt, a youth turkey hunt, and a Disabled American Veterans Deer Hunt. All of these special programs are collaborative and draw on partners in the community, including the DNR, the Veterans Service Office of Olmsted County, Mayo Hiawatha Chapter 28 of Disabled American Veterans, The Blufflands Whitetail Association, The Wild Turkey Federation and others.



The diagram above is taken from the Greater Minnesota Regional Parks and Trails Commission "2016 System Plan and Work Plan." The diagram identifies District 6 in the southeastern corner of Minnesota.

Regional Significance

Olmsted County is one of only four counties in Minnesota that does not have a natural lake within its boundary, highlighting the importance of the reservoir as a great resource for Southeastern Minnesota. A comprehensive resource management plan tracks and monitors resource management applications on the myriad of eco-types present in the park. The database allows for comprehensive understanding of the benefits of different land use activities related to species protection and propagation.

The contiguous, 1,333 acreage encompassing Chester Woods Park fills a vital need in the Greater Minnesota Regional Parks and Trails Commission District 6. Chester Woods Park, a mere 7 miles away from the city limits of Rochester is the largest, natural resource based park within 30 miles of Rochester's core. Further, the educational outreach and recreational opportunities that county park staff and volunteers facilitate for the region and our world-wide visitors represents a permanent, protected tract of land for generations to come. The park's amenities as described in this document and the inclusion of the 118 acre Chester Lake represent a comprehensive recreational facility for all residents of District 6, greater Minnesota, and our neighboring states.

Regional Context

It is estimated that Chester Woods Park visitation exceeds 125,000 annual visitors and the park serves southeastern Minnesota, western Wisconsin, and northern Iowa. Chester Woods Park not only hosts out of state guests, but also serves local visitors and groups that include (illustrative only): boy scouts, boys and girls club, high school cross country and cross country

ski groups, grade schools, senior citizens, church organizations, family YMCA, organized orienteering and trail race activities, and ice fishing events designed for youth and families.

Chester Woods Park is located seven miles east of Rochester, MN; a rapidly growing destination due to the proximity of the world renowned, Mayo Clinic and its new initiative, Destination Medical Center. The District 6 population exceeds 490,000. The 2014 census of Olmsted County indicates 150,000 citizens reside in Olmsted County. The park is easily accessible from US Highway 14 and the Chester Woods Trail will eventually connect to the Rochester Trail System with future links planned to connect to other communities in District 6. The projected population growth for Olmsted County indicates that from 2010 to 2040, the County will add over 70,000 residents, which will take it from its 2010 population of 144,248 to 215,870 people in 2040 (this information was gathered from the U.S. Decennial Census and Rochester-Olmsted Planning Department).

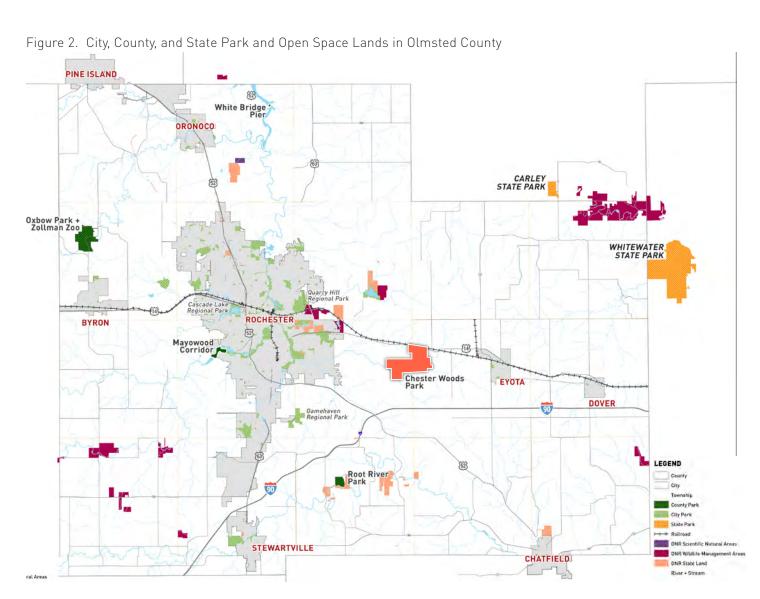


Table 1. City, County, and State Park and Open Space within Olmsted County Lands Inventory

| | Activity | City Community/ Athletic/ Neighborhood Parks | Gamehaven (under development) | Quarry Hill | Cascade Lake (under development) | Oxbow | Chester | Richard J. Dorer Memo- rial Hardwood State Forest (public and private lands) | White- water State Park | Carley State Park | Root River | Oronoco Priarie SNA | Multiple WMAs |
|--------------------|-------------------------------------|--|-------------------------------------|-------------|--|-------|---------|--|----------------------------------|-------------------------|---------------|---------------------------|------------------|
| | Jurisdiction | Multi | Rochester | Rochester | Rochester | ОС | ОС | DNR | DNR | DNR | OC | DNR | DNR |
| | Acres | 3,602 | 260 | 320 | 246 | 620 | | 1,016,204 total (~34,500 Olmsted County) | 563 | 209 | 125 | 80 | 5,897 |
| z | Nature Observation | Х | X | X | X | X | Х | Х | X | X | X | X | X |
| REATIC | Picnicking | X | Х | X | Х | X | Х | х | X | X | X | | |
| E RECF | Canoe/ Kayaking | x | Х | | Х | X | Х | Х | | | X | | |
| PASSIVE RECREATION | Fishing | Х | Х | Х | X | X | Х | Х | X | X | X | | |
| <u>A</u> | Hunting | | | | | | Х | х | | | | | X |
| TRAILS | Hiking/Walking | Х | X | X | X | X | Х | Х | X | X | X | X | X |
| | X Country Skiing/ Snowshoeing | Х | Х | X | | X | Х | Х | X | X | X | X | |
| | Horseback Riding | | | | | | Х | Х | | | X | | |
| LODGING | Camping | | | | | Х | Х | Х | X | X | | | |
| NATURE CENTER/Z00 | Nature Center/ Zoo | Х | | Х | | Х | | | | | | | |
| | Swimming Beach | X | | | X | | Х | | X | | | | |
| NOI | Playground | X | X | Х | X | X | Х | | | X | | | |
| CREAT | Archery | X | X | | | | | | | | | | |
| ACTIVE RECREATION | Mountain Biking | X | X | | | | | Х | | | | | |
| | Disc Golf | X | X | | | | | | | | | | |
| | Athletic Fields/ Courts | X | | X | | | | | | | | | |

MORE DEVELOPED LESS DEVELOPED



Site Location & Context

Chester Woods Park is a 1,333 acre county park located in central Olmsted County. The park is approximately seven miles east of Rochester along U.S. Highway 14. The highway serves as the main connection between the cities of Rochester and Winona. The park is surrounded by agricultural and rural residential uses.

The main feature of the park is the Bear Creek Reservoir which resulted after a dam was installed along Bear Creek for flood control measures for the South Zumbro River watershed in the early 1990s. The resulting lake and the surrounding open space became the Chester Woods Park, managed by Olmsted County. Southeastern Minnesota has very few lakes, so this manmade reservoir provides desired water-oriented recreational facilities and an interesting landscape for the area.

A NATURAL AND HISTORIC LANDSCAPE

A comprehensive resource management plan, actively pursued, tracks and monitors resource management applications on the myriad of Eco-types present in the park land. A database allows for comprehensive understanding of the benefits of different land use activities related to species protection and propagation. Over 90 separate resource management zones are delineated in the park, and rare and endangered species are located and managed accordingly. Further, county staff and volunteers participate in



Prairie seed collection



Controlled burning



Reservoir management

intensive exotic species control, seed collection, propagation of additional prairie areas, and timber management.

A great portion of the 1,333 acre park has been left in its natural state, with the primary development of guest service facilities centrally located, and bracketed by the lake on three sides. The lightly developed portion of the park affords visitors nearly a thousand acres of diverse wild land with landscapes, vegetation types, wildlife, and features that represent the best that Southeastern Minnesota has to offer.

A comprehensive trail system allows access to the park's interior and enables guests to experience the ecological diversity of their park. The natural features present include, but are not limited to mature upland forest, oak Savannah, both natural and restored prairies, bluff lands, wooded valleys and bluff valley streams. Of specific note, is the presence of several threatened and endangered flora and fauna in the park that have been recorded and categorized and listed with the Department of Natural Resources Natural History Database. Park staff are trained in prescription burning, timber stand improvement, chemical application methods, species identification and other resource-based specialties. Olmsted County is one of only four counties in Minnesota without a natural lake. Bear Creek Reservoir, stocked and collaboratively managed with the DNR, provides a productive, dynamic fishery for visitors in both summer and winter.

HISTORY

The park was purchased from private developers to assist in the flood control project for the City of Rochester, through the Bear Creek Reservoir, which was finished in late 1994. The dam and the park were created using federal funding and the park formally opened in spring of 1995.

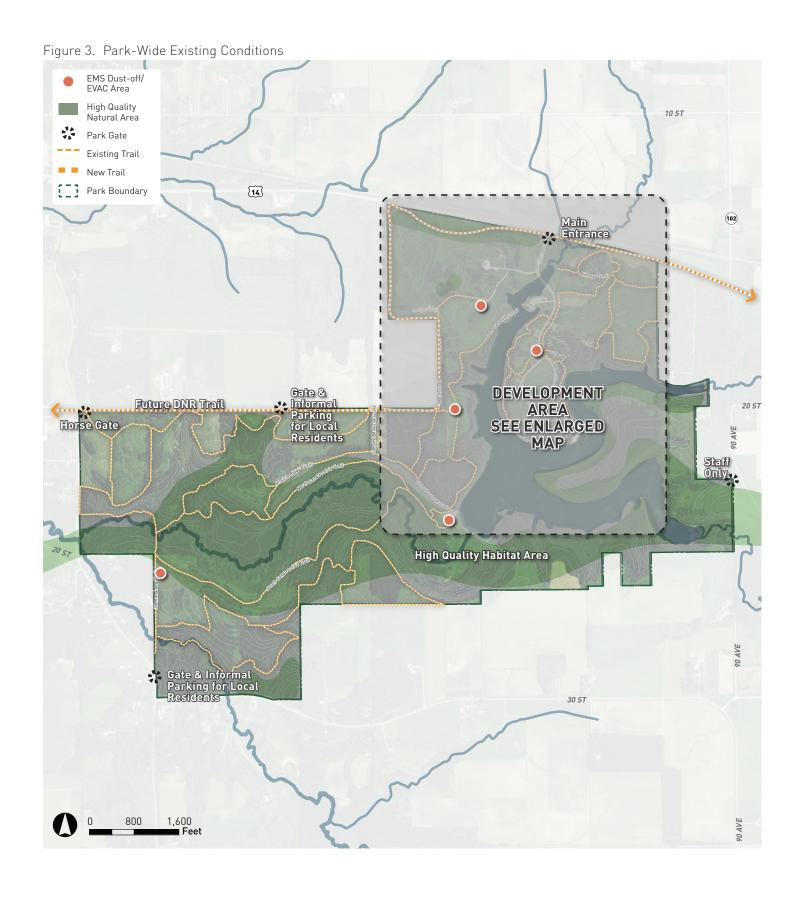
RECREATION AMENITIES AND FACILITIES OVERVIEW

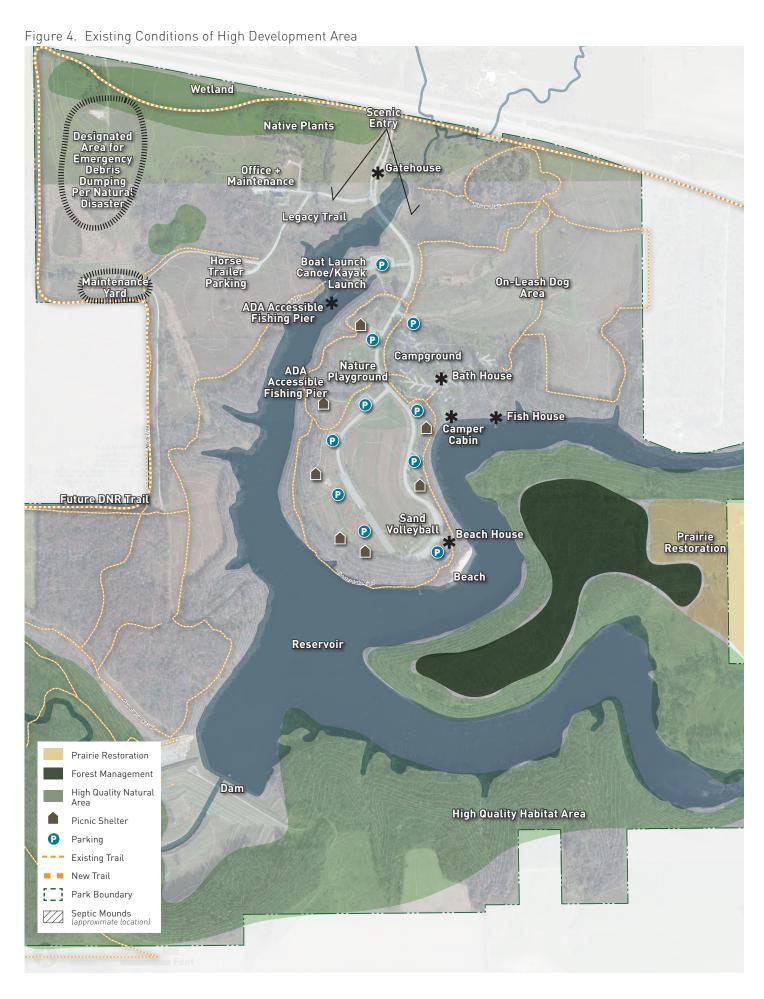
Seven separate and distinct picnic areas with shelters, a paved boat launch, two sets of modern playground equipment, a Natural Playscape, and approximately 15 miles of trails provide both pedestrian and equine access to the park's interior.

In season a swimming beach, modern changing and shower facilities, and two ADA accessible fishing piers provide access to the lake shore for fishing, bird watching, etc. Boat rentals are available featuring kayaks, canoes, paddle boats, and paddle boards.

Access

- » Main Entrance off of U.S. Highway 14 with a gate house this is an entrance for all vehicles and directs visitors to parking areas and campsite loop
- » As seen on the "Existing Conditions" Map there are two additional gates which are used for informal parking for local residents. These connect to the North Trail, the Zieman Loop Trail, and the Prairie Ridge Trail





- » There is also an access point for equestrian users at the northwest corner of the property.
- » Staff have an access at the eastern border of the property and there is an additional staff access point to the dam at the southern border of the park.

Campground & Camper Cabin

Park amenities include a 52 unit campground with 42 electrical hook-ups, two of which are ADA accessible, 9 non-electric sites, and one camper cabin. The camper cabin has already been very popular with full reservations every weekend in the past summer. In 2014, 2615 camping nights were registered in the campground. Based on an estimate of 3.5 campers per site, over 9,000 customers experienced a night of camping at Chester Woods. A modern shower/restroom facility is centralized in the campground.

- » 52 unit campground loops through an attractive wooded area
- » 42 sites with electrical hook-ups
- » 9 sites with no electrical hook-up
- » Two sites are handicapped accessible
- » Camper cabin
- » Restrooms with showers
- » Water spigots located throughout the campground
- » Dump Station/Trash Deposit Area
- » Two sets of playground equipment near campsites, along with several informal play fields. The larger playground equipment is handicapped accessible.

Boat Launch and Rental Equipment

A paved boat launch is located near the park entrance. A small parking lot serves the boat launch for fishing boats and non-motorized craft. Kayaks, canoes, and paddle boats are available for rent at this site as well. The Friends of Chester Woods hosts a seasonally available rack for privately owned kayaks and canoes.

Swimming Beach and Picnic Area

South of the main entrance and the campground, is a loop road that provides access to several parking lots, picnic shelters, and the beach. The sandy beach has an ADA accessible platform and almost 300 feet of sandy lake front for swimming access to the reservoir. A beach house provides restrooms and changing areas. New in 2016, paddle boards are available for rent at this site. A sand volleyball court is near the beach house, across the road from the beach.

Nature Play Area

A nature play area is located near the campground and the picnic areas. The natural features were constructed from mostly donated materials and assembled with the help of volunteers. Future expansion could occur with more donations and volunteers.



Camper Cabin



Swimming Beach



Picnic shelter



Nature Play Area



Trail Bridge



Ice Fishing



Disabled American Veterans Deer Hunt (DAV)

Trails - Equestrian, Hiking, and On-Leash Dogs

Chester Woods Park contains 15 miles of hiking trails, 8.5 miles of which have facilities for equestrian uses. The trails are all natural surface and wind through forested and prairie areas. Equestrian trails are all located on the west side of the park. On-leash dogs are allowed on trails to the east of the entrance drive, north of the campground.

Legacy Trail

The Legacy Trail, to be completed in 2016, includes a memorial path and gardens for park users that wish to honor or remember their lost loved ones. Information in Chapter 4: Development Master Plan describes the plans for this area with an associated graphic.

Winter Recreation

Winter sports activities include: over 5 miles of groomed ski trails, both traditional and skate-style are offered, snowshoe trails, and ice fishing on the lake with portable shanties.

Management and Operations – emergency area

An approximately 10 acre area on the north side of the park, west of the office and maintenance area, is identified as a space for emergency dumping of debris in the case of natural disaster or other major catastrophe.

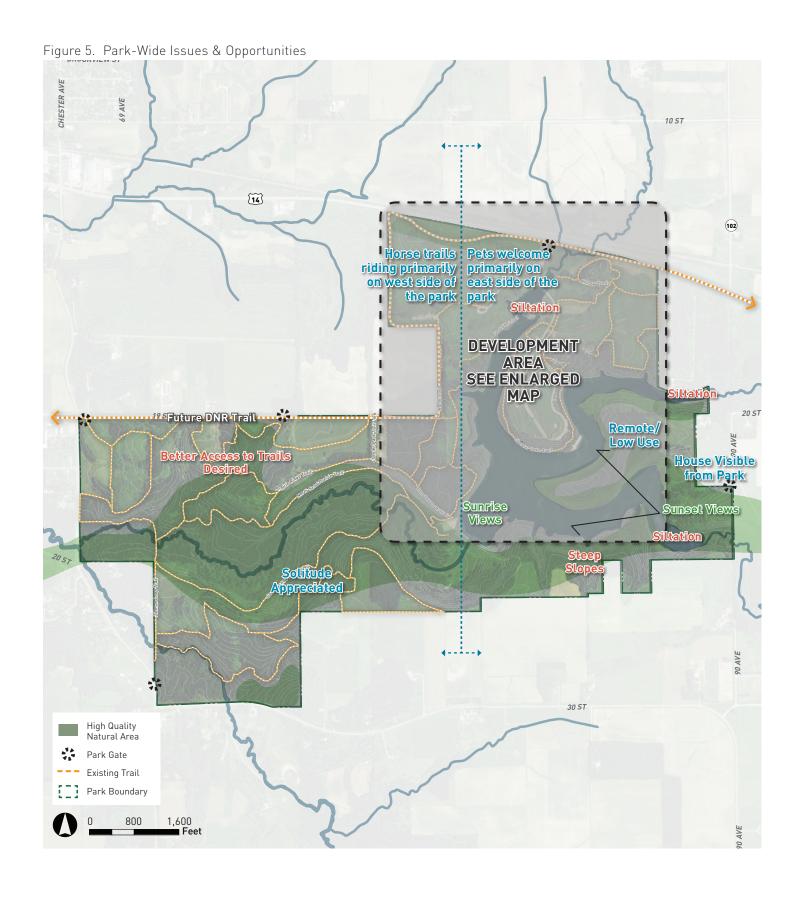
PROGRAMMING

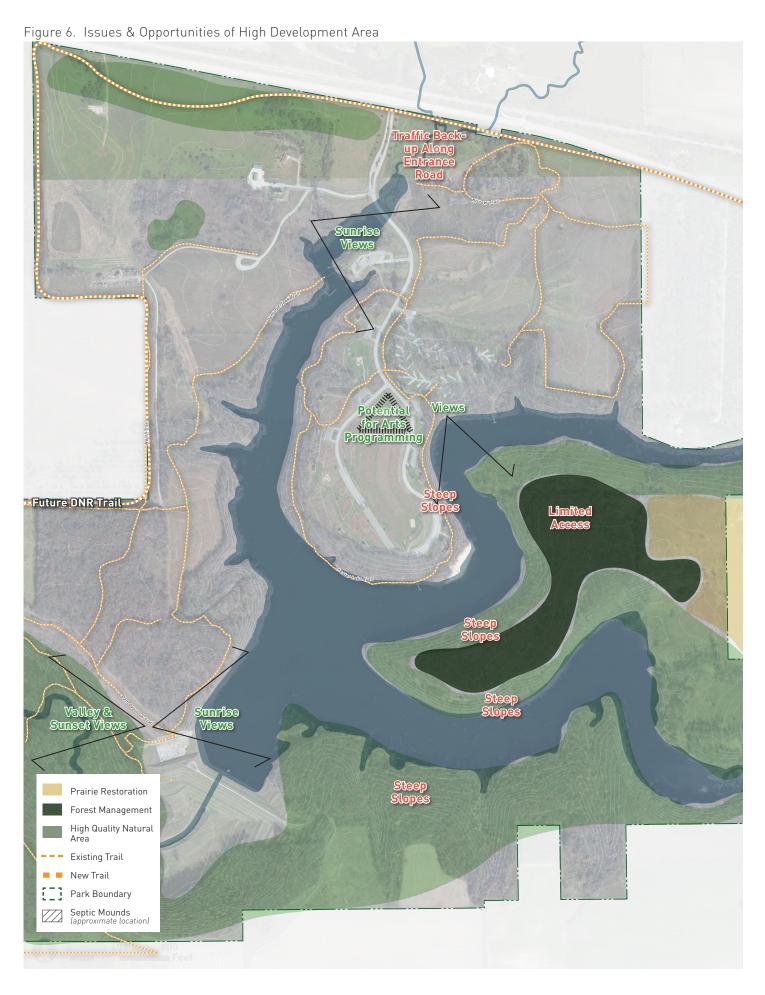
Programming at Chester Woods Park focuses on exploring the natural resources and creating stewards of the next generation by learning about flora and fauna in the park and learning how to manage existing natural areas.

Extensive public programs are featured at Chester Woods Park and a full-time naturalist is employed. Staff and volunteers offer Interpretive programs year-round to serve both the campground and regular park visitors. Environmental Education Class participation in 2014 at Chester Woods Park was 6,074 attendees.

Some of the past and current programs at Chester Woods include the following: seed collecting, fall colors wagon ride, star gazing, full moon paddle and night hikes, prairie plant ID, etc.

Special operational programs implemented include: a resource management-based controlled deer hunt, a youth turkey hunt, a Disabled American Veterans Deer Hunt, and A Day in the Park. All of these special programs are collaborative and draw on partners in the community, the DNR, the Veterans Service Office of Olmsted County, Mayo Hiawatha Disable American Veterans Chapter 28, The Blufflands Whitetail Association, The Wild Turkey Federation and others.





NATURAL RESOURCES OVERVIEW

Chester Woods Park contains a mosaic of prairie, wetland, floodplain, and forest plant communities that provide critical habitat and refuge for a variety of flora and fauna. The Minnesota County Biological Survey (MCBS) identifies the western section of the park as an area of outstanding biodiversity significance and the eastern section as an area of high biodiversity significance. These areas support a variety of native plant communities and harbor numerous rare plant and animal species that are included in the Minnesota Department of Natural Resources (DNR) list of endangered, threatened, and species of special concern, and the list of Species in Greatest Conservation Need (SGCN). The park is also included in Minnesota's Natural Areas Registry (NAR) which recognizes tracts of public land that contain exceptional scientific and educational value and natural features of statewide ecological significance. County staff currently manages the site to preserve and restore existing native plant communities and control the spread of invasive species. The park is divided into management areas that have specific recommendations for site management and restoration.

Topography

As shown in Figure 7, a wide range of topographic relief occurs throughout the park which influences environmental and climatic conditions that support the various native plant communities found within the park. Bluff ridges are common along Bear Creek and along the shoreline of the flooded reservoir, with the south and west facing slopes containing bedrock bluff prairie habitat. Gullies and steep forested valleys occur sporadically along the valley walls of creek and occasional lowland depressions contain isolated wetlands. A wide and relatively flat floodplain occurs along Bear Creek downstream of the dam.

Surficial Geology

The following surficial geology description is derived from the Minnesota Geological Survey. The surficial geology of the park includes floodplain alluvium, bedrock colluvium, glacial-age alluvium, till, and bedrock. Floodplain alluvium contains primarily fine sand and silts on floodplains, including sand and gravel that infills modern river channels. Bedrock colluvium is comprised of hillslope deposits derived from bedrock and loess. Glacial-age alluvium contains stratified sand, gravelly sand, and gravel. Till is comprised of loam to clay-loam-textured, unsorted sediment with pebbles, cobbles, and boulders. Bedrock and weathered bedrock occasionally occurs within 5 feet of the surface.

Soils

Numerous soil map units occur within the park. The primary soils that occur include Plainfield sand, Kalmarville silt loam, Plainfield loamy sand, Lamont-Racine complex, Backbone sandy loam, Marlean silty clay loam, Channahon loam, Whalan loam, and Sogn loam. Small percentages of other soil units also occur within the park and are generally comprised of loam, silty loam, silty clay loam, sandy loam, flaggy loam, and flaggy sandy loam.

CHESTER WOODS PARK NATURAL RESOURCE HIGHLIGHTS

- » Nearly 1,000 acres of diverse natural features from upland forest, oak savannah, and restored prairie to bluff lands, bluff valley streams and wooded valleys
- » Reservoir provides great fishing opportunities for panfish, largemouth bass, channel catfish, and yellow perch
- » Exceptional ecological diversitynumerous rare plant and animal species occur within the park, including several threatened and endangered species
- » Numerous rare natural plant communities occur within the park
- » The areas surrounding Bear Creek in the southern region of the park are rated as areas of outstanding and high biodiversity significance by the Minnesota County Biological Survey
- » Remnant pockets of prairie plants provide critical genetic diversity and important local ecotype seed sources for onsite prairie restoration activities
- » Diverse habitats support a variety of resident and migratory birds, pollinator species, and upland and aquatic mammals
- » Over 150 species of upland and woodland birds and waterfowl have been observed within the park

Figure 7. Topography



Landcover

According to the Minnesota Land Cover Classification System (MLCCS), the park contains a diverse composition of plant communities including deciduous forest, deciduous shrubland, dry oak savanna barrens subtype, floodplain forest, floodplain forest swamp white oak subtype, grassland with sparse deciduous trees, lowland hardwood forest, medium-tall grassland, oak forest dry subtype, oak forest mesic subtype, oak woodland-brushland, saturated deciduous forest, saturated deciduous schrubland, seasonally flooded deciduous forest, short grasses with sparse tree cover on upland soils, upland coniferous forest, upland deciduous forest, and cultivated herbaceous vegetation. Adjacent land use around the park includes agricultural fields and low-density housing. Figure 8 displays the extent of each MLCCS category found in the park.

Wildlife and Rare Features

The Natural Heritage Information System (NHIS) identifies numerous rare plants, animals, and plant communities within the park. Rare plants include Nodding Wild Onion (Allium cernuum), White Heath Aster (Symphyotrichum ericoides), Hill's Thistle (Cirsium pumilum var. hillii), White Wild Indigo (Baptisia lactea var. lactea), and Rattlesnake Master (Eryngium yuccifolium). Rare animals include Cerulean Warbler (Setophaga cerulea), Bald Eagle (Haliaeetus leucocephalus), Western Fox Snake (Elaphe vulpina), Blue Racer Snake, Bull Snake, and Blanding's Turtle (Emydoidea blandingii). Rare plant communities include Dry Bedrock Bluff Prairie (Southern), White Pine - Oak Woodland (Sand), Dry Barrens Prairie (Southern), Red Oak - White Oak Forest, Red Oak - White Oak - (Sugar Maple) Forest, Sugar Maple - Basswood - (Bitternut Hickory) Forest, and Mesic Prairie (Southern).

Bear Creek Reservoir

The Bear Creek Reservoir is a constructed impoundment found entirely within the park boundary. According to the Minnesota Department of Natural Resources the lake is just over 118 acres in size and has an average depth of 16 feet with the maximum depth of 37 feet. The reservoir supports several species of fish including black crappie, bluegill, largemouth bass, channel catfish, yellow perch and white sucker. The lake management plan emphasizes maintaining a high population of largemouth bass to prevent overpopulation of and stunting of the bluegill population (MNDNR LakeFinder). The reservoir is known for its healthy, fishable populations of bluegill and largemouth bass. Fishing on the lake occurs in open water and from the ice surface in the winter. No gas motors are allowed on the lake and only portable fishing shanties are allowed during the ice fishing season. The reservoir provides a lake fishing environment not found locally and therefore is highly regarded by the public. The biggest threats to the reservoir include the introduction of aquatic invasive species and high nutrient/sediment loads contributed to the lake from the watershed.



Invasive Species Removal Efforts



Native Prairie

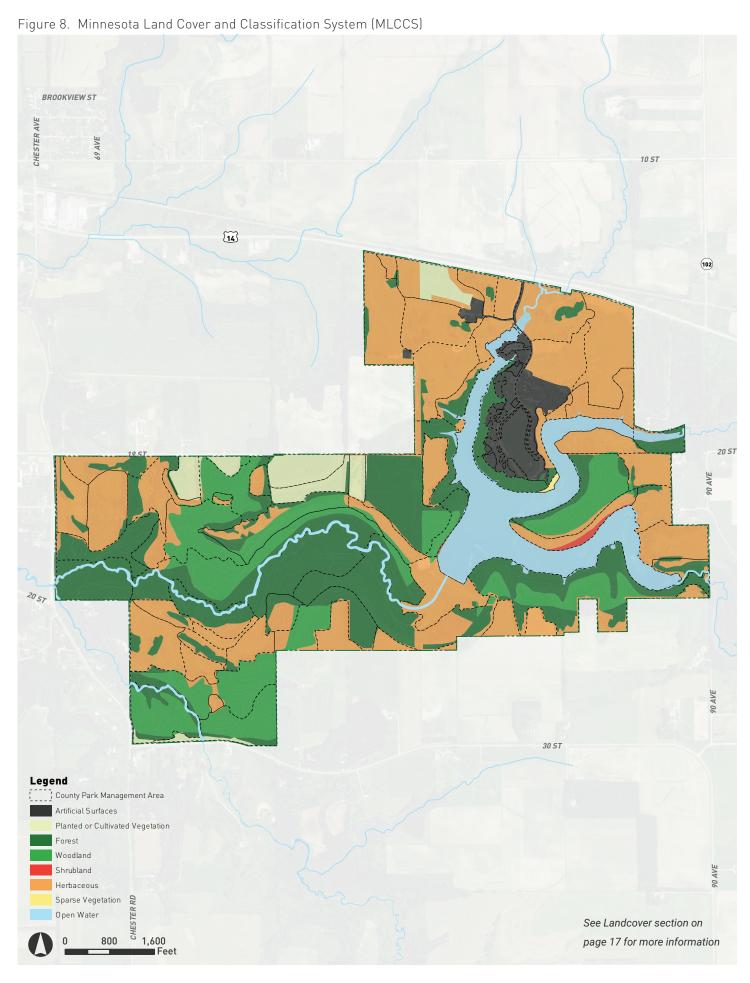


Woodland



Bear Creek Reservoir

17



- » The Bear Creek Reservoir was created in 1994 through the construction of a dam along Bear Creek. The reservoir provides a resource for boating, canoeing, kayaking, paddle boarding, paddle boating, swimming, and fishing. The reservoir has been stocked with large mouth bass, panfish, and channel catfish.
- » The areas surrounding Bear Creek through the southern portion of the park are considered "High Quality Habitat Areas". The access to the creek as well as the steep slopes of the area makes the area ideal for primitive hiking trails and conservation efforts.
- » The park hosts an abundant and diverse population of wildlife:
 - Mammals such as deer, weasels, voles, mink, shrews, red fox, gray fox, coyotes, beavers, raccoons, black bears, among many others.
 - Over 150 species of upland and woodland birds and waterfowl have been seen here.
 - A diversity of insects, including many butterfly species, pollinate plants and feed numerous birds, reptiles and amphibians.
 - Remnant communities of native prairie plants are augmented by staffdriven prairie restoration of many more acres. These are managed to reduce invasion by alien species and encourage propagation of the native plants and animals.

FRIENDS OF CHESTER WOODS

The Friends of Chester Woods is a 501(c)(3) group that was established in 2009 to provide organized volunteer labor and programming for Chester Woods Park. The group was modeled after the Friends of Oxbow Park, which has been organized since 1982.

The group meets on a regular basis, collects dues, provides volunteer labor and monetary or material donations. Their members are actively involved in monitoring and maintaining portions of the park in coordination with park staff. Recent improvements made possible by Friends of Chester Woods include canoe/kayak rental racks and assisting in the construction of the park's first camper cabin.





Volunteers working to maintain the park





Holiday themed events put on by Friends of Chester Woods

Issues & Opportunities

Early site analysis by the project team, combined with input from Olmsted County staff and various stakeholders resulted in the preliminary list of issues and opportunities for future park improvements. This list was later augmented with general public input, which resulted in the final master plan concept shown in Chapter 4.

Issues

- » Siltation
- » Better access to trails
- » Steep slopes on the south side
- » Limited access to west, southwest, and southeast sides of park
- » Traffic back-up along entrance road
- » Conflict between users with dogs wanting more dog access and users without dogs wanting less dog access
- » Viewshed impacted by house developed on east side
- » Fee skippers
- » Invasives
 - Buckthorn
- Honeysuckle
- Garlic mustard
- Spotted knapweed
- Wild parsnip
- · Queen Anne's Lace

Opportunities

- » Improved wheel chair access to Chester Lake
- » Beautiful vistas sunset & sunrise views
- » Additional horse trails
- » Solitude appreciated south of Bear Creek
- » Potential for arts programming & themed event programs throughout the year
- » More events
- » Additional canoe/kayak/paddle board rentals note that additional storage and staff may be needed
- » More camper cabins
- » Entrance building to provide offices and interpretation
- » Improved water quality coming in
- » Handicap accessible trails track chairs
- » Potential for grazing for prairie management
- » Amphitheater
- » Memorial area
- » Expansion of natural playground engage with nature
- » Improved regional access through DNR Trail
- » Mountain biking opportunity but potential for degradation and need may already be served by City of Rochester
- » ADA chair lift for Chester Lake and Beach with improved wheelchair access to lake



System Mission, Vision, and Values

As part of its mission, the Olmsted County Parks Commission developed a set of Planning Guidelines and Values to guide the development, management, and operations of the system. The mission, vision, and guidelines and value statements provided the foundation for the development of concepts for each park.

MISSION

The mission of Olmsted County Parks is to foster an appreciation of the natural world through environmental education, natural resource management, and public participation in the stewardship of our park lands.

VISION

Learning life-long lessons in natural places

GUIDELINES AND VALUES STATEMENT

» Prioritize outcome-based planning to improve natural resources, including consideration of those listed by State and/or Federal agencies, when found to be of significant value.

CHESTER WOODS ROLE IN OLMSTED COUNTY PARK SYSTEM

Natural resource park that is focused on preserving high quality natural areas and enabling day and overnight visitors to be immersed in nature and participate in lake related recreation.

- » Prioritize preservation of viewshed areas surrounding Olmsted County parks when making zoning and land purchase recommendations and decisions.
- » Prioritize acquisition of properties with special natural resources or historically significant structures.
- » Provide opportunities for people of all abilities and ethnicities to get outdoors and interact in sustainable ways with nature.
- » Place high value on preserving historical aspects of buildings and other features.
- » Balance broad community interests and uses with requests for specialized uses.
- » Plan corridors to connect to other natural resources in the area.
- » Maintain adequate staffing levels and quality employment, volunteer, and community service opportunities at Olmsted County parks.
- » Support current revenue sources and strategically consider future revenue sources.
- » Promote and maintain current county park unique features, resources, and dedicated missions.
- » Sustain and develop collaborative relationships with other local and regional agencies.
- » Encourage a strategy of concentrating infrastructure development within an area limited to no more than 20% of Olmsted County park acreage.
- » When acquiring new public land, consider acquisition or properties that would create access to current parks where feasible.
- » Develop collaborative arrangements with local recreation groups to seek, acquire, develop, and maintain appropriate properties for specialize uses.
- » Continue to use project population figures to drive planning for future park needs and purchases.

Local & Regional Demographic Information

Olmsted County is located in southeastern Minnesota, about a one hour drive south of the Twin Cities Metro Area. Rochester is the largest urban area, located in the center of the County. The rest of the County is mainly agricultural land use with some natural river valley areas, state forest land, and karst topography. A few other small cities and towns dot the landscape of the County. Interstate 90 and U.S. Hwy 52 cross through the County bringing national and regional commuters through the area. Western Wisconsin and northeastern lowa are within 30 miles of the County and have similar land use and landscape patterns.

The population of the county is approximately 145,000, with almost 3/4 living in the city of Rochester. Other communities in the county include Byron, Stewartville, Eyota, Oronoco, Chatfield, Pine Island, and Dover, with the rest of the population being rural residents. Most of the County population is white, with approximately 15% of the population identifying as non-white, which is

comparable to the state proportion. The median household income is \$67,089 (2014), which is 10% higher than the Minnesota state median income, and 25% higher than the national average. Approximately 10% of the Olmsted County population is considered to be living in poverty, which is lower than both the state (11.5%) and national (14.8%) amounts.

Relevant Recreational Trends Information

AGING

As the baby boomer generation ages, there is a greater need for recreation that serves the senior population. Seniors tend to be interested in passive recreation, such as hiking, walking, and low impact active recreation, such as tennis and pickleball.

INCREASED DIVERSITY

The majority of the population in Olmsted County is white. However, immigrant populations are increasing in higher numbers than people who have been here for generations. These immigrant populations tend to be interested in picnicking and large family gatherings at natural, outdoor locations.

SUSTAINABILITY & ENVIRONMENTAL ISSUES

With the increased attention paid toward climate change and sustainability, people are generally more concerned with the health of their surrounding environment. There is a high interest in Olmsted County for natural area conservation, preservation, and restoration. People are also interested in saving energy, using resources wisely, and using renewable resources. There has also been an increase in the amount of 100-year storms and natural disasters due to climate change – planning for natural areas and development that can withstand impacts due to these storms is key to resilient parks that will last for generations to come.

HEALTH & OBESITY

With obesity levels on the rise, more people are increasingly looking for opportunities to recreate in a fun, family-friendly manner. Olmsted County parks offer miles of hiking trails, water sports, play areas, and programming to get kids and families outside and moving their bodies.

Public Health Values

Chester Woods Park offers Olmsted County and surrounding area residents many different opportunities to exercise and recreate in the outdoors: walking trails through woodland and prairie environments, boating, swimming, picnicking, camping, fishing, skiing, and horseback riding.









Precedent images representative of relevant recreational trends





Community input was gathered at two public open houses

Olmsted County parks foster and encourage the stewardship of our natural environment. Research has shown that environmental stewardship and regular interaction with natural systems, including trees, water, parks, open space, and other people recreating, creates a sense of well-being among people. (Source: Erika Svendsen, PhD, Cultivating Health and Well-Being through Environmental Stewardship, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222392/)

Olmsted County parks supports clean land, water, and air by conserving and managing natural plant and water resources that contribute to a healthy ecological system. Poor air and water quality have been linked to many diseases and other negative healthy impacts on humans. As Mayo Clinic attracts people to the County who are not well and more sensitive to outside health impacts, the quality of natural areas and opportunities to recreate in clean air is important to the region.

Economic Development and Tourism Opportunities

The City of Rochester is home to the world renowned Mayo Clinic, which serves over 1 million people every year. (Source: http://www.mayoclinic.org/about-mayo-clinic/facts-statistics) Rochester is Minnesota's fastest growing community, with its major employers being Mayo Clinic and IBM. (Source: http://raedi.com/rochester.html) The city is also known for having a high quality of life.

Public Engagement

The project team sought input from park staff, volunteers, stakeholders, and the general public in order to incorporate as many perspectives and interests as possible. Following is a summary of input received during the process.

PARK STAKEHOLDERS, PARKS COMMISSION, AND STAFF INPUT

On April 5, 2016, a meeting was held with the Friends of Chester Woods and Friends of Oxbow to gain initial input on the Olmsted County park system and the issues and opportunities regarding Chester Woods, Oxbow, Root River, and White Bridge areas. These groups were also engaged at other points throughout the master planning process in order to gain input on concept ideas, recommendations, and the draft master plans.

- » Parks Commission Meeting on April 19, 2016
- » Staff and Project Team Charrette on May 3, 2016
- » Joint Meeting of the Olmsted County Parks Commission & City of Rochester Park Board on June 9, 2016
- » Parks Commission Meeting on June 21, 2016
- » Parks Commission Meeting on August 16, 2016

April 2016 Friends and Parks Commission Input

Generally, the group favored more protection and management of the natural resource areas, but they were in favor of more events and development in the central area of the park.

Strengths that were mentioned include the following:

- » Nice trails, well maintained park, good signage
- » A variety of people use the park due to the wide range of activities available
- » The natural areas are appreciated for their peacefulness, views, and high quality plant life
- » The programming works well

Potential opportunities for the park include:

- » More events
- » Construction of the proposed new amphitheater
- » Completion of the Legacy Trail
- » Integration with the new DNR trail
- » More storage and staff to manage rental boats and other equipment
- » More camper cabins to accommodate the popularity of the existing cabin
- » A new entrance building for park offices and interpretation
- » Water quality management outside the park
- » Trails that are handicap accessible
- » Potential to manage the prairie areas with grazing animals
- » Improved ADA access to Chester Lake at beach area including lift

Issues that need to be addressed include:

- » The east side of the park is inaccessible to park users
- » Some areas on the west side of the park are difficult to access
- » The park needs more promotion and marketing, not enough people know about it
- » The vehicle entrance fee is seen as a barrier to some people, others skip the fee and enter at other points around the park
- » Several invasive plants in the park are impacting the natural resources buckthorn, garlic mustard, wild parsnip, honeysuckle, spotted knapweed, poison ivy – these need to be managed more aggressively

June 2016 Parks Commission Input on Preliminary Concepts

- » Concern about relocating rental boats to the beach area. Staff will look into expanding the parking area at the current boat launch.
- » The proposed amphitheater is a way to draw new users to the park. There is some concern about the proposed location being too close to the campground and being noisy at night. There is also concern about the amount of available parking near the proposed site for the amphitheater.
- » The proposed trail bridge needs to be big enough for staff vehicle access
- » There is concern about providing additional trails for mountain bikes and dogs -- this access may be provided in other parks in Rochester
- » There is a need to connect the park to eastern communities with a connection to the proposed DNR trail.



Online input summary for Chester Woods Park

» Parks Commission members would like to see less park development, suggest trying out a couple canoe in campsites to see if they are utilized, before adding more. "Every square inch of the park does not need to be programmed with a facility."

COMMUNITY ENGAGEMENT

Two community meetings, with corresponding online engagement, were held as part of the park master planning process. On April 19, 2016, community members were presented the purpose for the master planning process and existing conditions at the parks. Attendees were asked to provide comments on issues and opportunities.

April 2016 community meeting and online input

- » General satisfaction and appreciation of reservoir, canoeing, swimming, and camping
- » Invasive plants and plant diseases are issues that the public is concerned about in the park
- » There is a desire for more camper cabins and other amenities, such as skijoring trails, horse dismount areas, and ADA accessible amenities
- » Hiking trails considered the most important amenity, with swimming beach and camp ground also important
- Many respondents highlighted access for dogs or dog owners to be important to them – others raised concerns that dogs, especially off-leash, disturb the wildlife and other users of the park
- » Mountain biking/fat biking opportunities as well as connections for bicyclists to the facilities on roads
- » Horse trails
- » Respondents like the variety of options available at the Park appreciate that there are more "natural" areas and those more used – interested in focusing on access for some of the areas.

June 2016 community open house and online input

On June 21, 2016, a second open house was held to gain feedback from the public on preliminary concepts for improvements in the park. An online engagement questionnaire accompanied the meetings to obtain additional input from those that weren't able to attend the meetings. Below is a summary of comments received at the meeting and online:

- » There is a desire for more connections to and through the park, in the form of more entrances, trail connections to surrounding communities, and expanded trails within the park.
- » Desire for improvements for equestrian trails.
- » Desire for more dog access in the park on trails
- » Concern about the mountain biking and the expanded dog trails near each other -- these ideas need more thought and planning to work well
- » There was an equal amount of interest in increased development and interest in less development in the park -- need to balance the needs of nature preservationists and recreation enthusiasts



The master plan for Chester Woods primarily adds facilities and amenities to the developed area of the park located around the entrance area and campground. The high quality natural resources in the park surrounding Bear Creek and the reservoir are planned to be protected. This swath of high quality landscape is identified in the concept master plan graphic.

Facility Development

WELCOME & VISITOR CENTER

A new Visitor Center and office building is planned to be constructed just to the west of the main entry drive into the park. The building will be approximately 2,000-4,000 SF and will provide a nature center, meeting rooms, an office for park staff, and general park information. Restrooms will have interior and exterior entrances to allow use when the center is not open. A parking lot at the Visitor Center will also provide parking capacity for the Chester Woods Legacy Trail and for visitors who wish to connect to hiking trails from there. It is assumed the existing fee booth will remain as long as there is a fee for entry into the park.

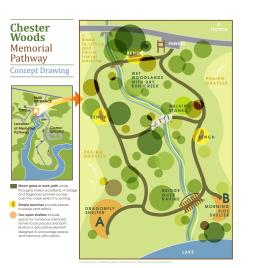


Construct new welcome & visitor center (pictured: Hartley Nature Center in Duluth, MN)

Add more parking to boat launch area



Construct canoe/kayak/paddle board launch near existing storage area







DNR TRAIL CONNECTION

A proposed DNR paved trail for pedestrians and cyclists will skirt the western and northern edge of the park. A park trail connection will be provided near the existing park entrance to the Welcome and Visitors Center. Future extension of the trail to the east will be accommodated on the north side of the park along Highway 14.

LEGACY TRAIL

The Friends of Chester Woods have helped to sponsor the Chester Woods Legacy Trail and Chester Woods donation funds. It is located near the main entrance of the park, adjacent to the lake, and close to the boat launch area. The purpose of the area is to be a designated area where users of the park can honor or remember their loved ones and give support to the park for the many fond memories the park has given them. The Friends of Chester Woods and staff are working on constructing this area with donated materials and volunteer labor.

BOAT LAUNCH

The boat launch area will be improved with more parking in order to accommodate the heavy usage in this area. A new canoe/kayak/paddle board launch will be constructed to the west of the canoe/kayak/paddle board storage area to provide separation from the trailer boat launch. A new dock for the staff maintenance boat will improve park operations.

ON-LEASH DOG AREA

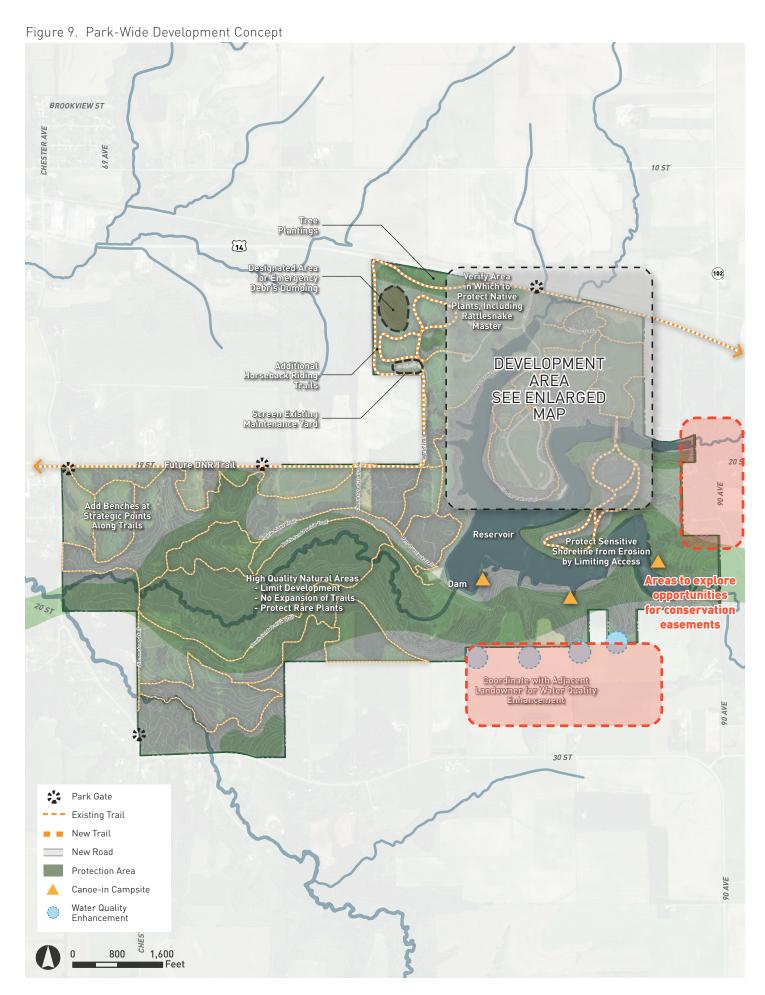
There are 165 acres available for dogs, in addition to the park's campground and picnic areas. The on-leash dog area to the north of the campground will be maintained.

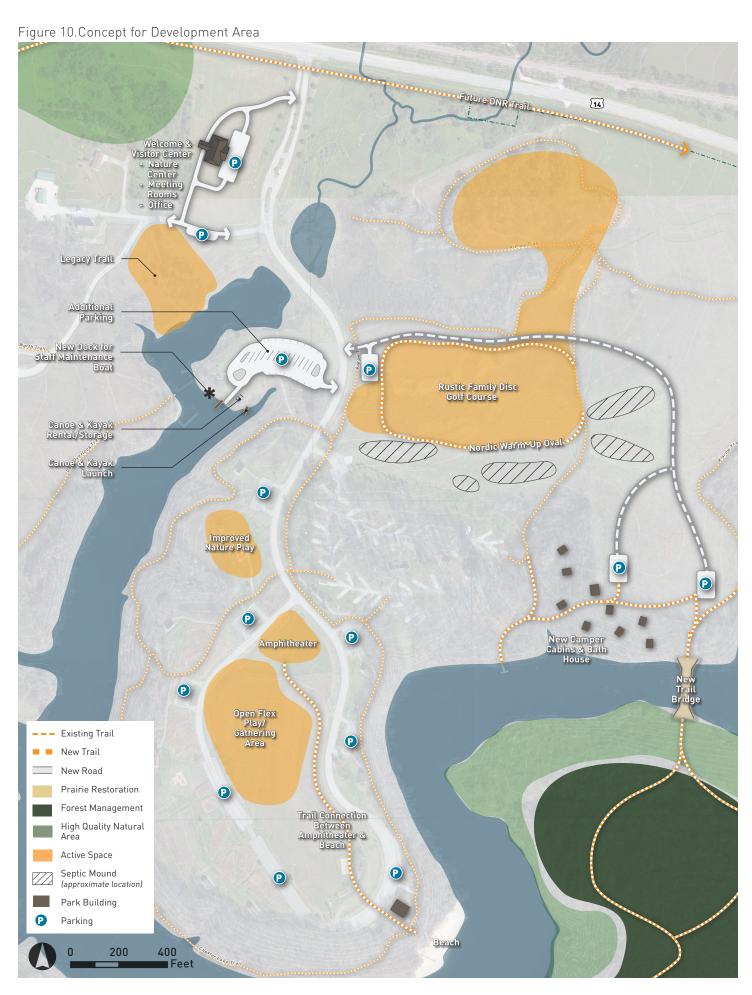
RUSTIC FAMILY DISC GOLF COURSE

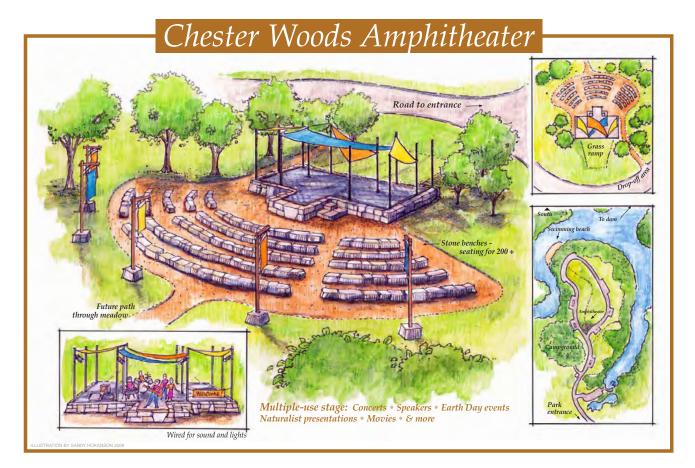
A new disc golf course will be located north of the campground on each side of the new trail/road extending east to the new bridge. The course will be integrated into the landscape so as not to have a large impact on the site and maintain the area for birders. A new, small parking area will serve this area. The disc golf course will provide an additional activity for campground and day park users.

NORDIC WARM-UP OVAL

A new warm-up oval for cross-country skiers will be developed to the north of the campground and south of the new trail/road. It will be served by the new parking area also constructed for the disc golf course.







EAST PARK & PENINSULA

Access to the southeast peninsula will be provided by a new floating bridge that is large enough for park maintenance vehicles. The peninsula will be improved with natural surface trails for walking, while the shoreline of the peninsula will be protected from human access in order to preserve the natural resources. In the near-term access to the bridge will be provided by a trail. Over the long-term a new road and two parking areas will be constructed to serve the bridge and a cluster of new camper cabins.

CAMPGROUND

The existing campground will be maintained at its current size. A new cluster of camper cabins with a new bath house are planned to the east at the terminus of a new access road.

AMPHITHEATER

A new amphitheater for 100 to 200 people will be built in the main park area at the north end of the picnic area and beach loop road. The site was selected as it will be easily accessible from the campground. A walking trail will connect the amphitheater to the parking area near the beach. The amphitheater is intended to have minimal amplification suitable for plays and acoustic music.



Maintain existing campground



Construct a floating pedestrian bridge to connect to the eastern peninsula

FIB

Create an open play field adjacent to the amphitheater



Expand features & activities offered at the nature play area



Create canoe-in camp sites on the south side of the reservoir

OPEN FLEX PLAY + GATHERING AREA

This area facilitates informal activities, such as picnicking, family gatherings, pick-up games, etc. Its undefined structure allows the area to host a variety of activities as well as a variety of group sizes.

CHILDREN'S NATURE PLAY AREA

The existing nature play area will be improved with more features and activities that integrate with the play area's current design.

TRAILS

The park will continue to provide hiking, equestrian, and cross country skiing trails. Hiking trails are proposed to be expanded on the eastern peninsula with the construction of a bridge over Bear Creek. Equestrian trails will be concentrated in the western half of the park. Expansion of equestrian and hiking trails in the northwest section of the park should be explored over the long-term. Further planning would be needed given the emergency debris dumping area and the native plants that need to be protected along Highway 14. Existing cross country ski trails will be maintained and a warm-up oval added as noted previously.

CANOE IN CAMPING

A small number of canoe in campsites are proposed on the southern side of the reservoir to the east of the dam. The intent is to minimize natural resource impacts while providing a unique visitor experience. Further analysis will need to be conducted by staff to determine the most appropriate locations. These sites are intended to be primitive with campers expected to use a camping or pack-it-out toilet system.

Park Land Acquisition

Potential future acquisition of additional park land includes areas that are adjacent to the park that have value for nature resource conservation, habitat connections, or recreational amenities. Of particular focus may be the properties to the northeast where Bear Creek enters Chester Woods or to the south where water quality improvements for the reservoir could be made. At this time Olmsted County Parks is not actively seeking to expand Chester Woods. County staff will only entertain park land acquisition in the case of willing sellers, and all purchases will need to be approved by the Olmsted County Board.

CONSERVATION EASEMENTS

Opportunities to establish conservation easements on adjacent properties will be explored to improve the park's water quality and habitat. Easements, which can only be established by willing property owners, sell or donate the rights of the property owner to develop or use the property for specified purposes.



Land Management and Implementation

Primary management goals for Chester Woods Park include the protection, enhancement, and restoration of the native plant communities, protection of rare plants and animals, and the control of invasive species. It is imperative that continued protection and restoration of the natural plant communities occur to ensure that the ecological integrity of the plant communities remains intact. Preserving and restoring the native plant communities will also benefit the rare species that occur within the park and provide critical habitat to ensure long-term population survival. Careful planning of infrastructure, trails, or other improvements will be needed to prevent additional loss of biodiversity, habitat fragmentation, and incidental spread of invasive species within the park.

Olmsted County staff currently manages the various plant communities within the park. The entire park is divided into management areas that vary in size from less than an acre up to 40 acres. Major vegetation and habitat descriptions have been written by county staff and knowledgeable volunteers for each management area and include specific lists of native and invasive species that occur in each area. Primary management activities include prescribed burns, prairie planting and mowing, native seed harvest for use in restoration sites, native tree planting, timber stand improvements, and

invasive species control. These management activities typically follow the natural disturbance regimes associated with the respective plant communities and should continue to be implemented following appropriate management techniques.

The continued use of prescribed burns is strongly recommended to enhance and restore the prairie and fire-dependent forest plant communities. Prescribed burning will encourage native plant growth, promote nutrient cycling, and limit the spread of most herbaceous and woody invasive species, particularly in management areas vulnerable to woody invasive species encroachment. The timing of the burns should be carefully planned to reduce the impact to sensitive native plant, animal, and pollinator species. The MNDNR has recently published a guidance document titled "DNR Pollinator Best Management Practices and Habitat Restoration Guidelines" that outlines methods for enhancing and restoring habitat for insect pollinators. Important considerations outlined in the document pertaining to prescribed burns include the timing and rotation schedule of the burn, patch avoidance for insect and plant refuge, and selective habitat management. Aquatic Invasive Species (AIS) Prevention Funding and intern programming are already in place.

The continued use of local native seeds derived from within the park is also recommended for prairie establishment and restoration activities. The genetic makeup of local native seeds will provide the best chance for plant establishment and survival within the restoration sites. These plants have evolved and adapted to the local environmental and climatic conditions of the park and are best suited to the local ecotype. Similar to prescribed burns, it is recommended any mowing activities should be planned around sensitive flora and fauna. The timing of mowing, mow height, and patch refuge should be considered to limit the impact to sensitive species. Please refer to the MNDNR guidance document mentioned above for additional mowing techniques and considerations.

It is recommended invasive species management remain a top priority in all designated management areas in the park. The existing trail systems, watercourses, roads, and maintenance activities all provide potential pathways for invasive species distribution. Early detection and routine surveys should continue to monitor and control the spread of both aquatic and terrestrial invasive species. Proper management techniques should be followed for each targeted species based on the most recent management guidelines available. Many guidance documents have been produced in recent years that include new management approaches and techniques based on field research and refinement. Continued use of mowing, hand

pulling, and prescribed burns are recommended to manage herbaceous and woody invasive species. Any herbicide treatment selected should be as target-specific as possible and applied to the smallest area possible to meet management goals.

Specific recommendations for park management and restoration based on the site visit include:

- » Develop clear vision, goals, and strategies for park management
- » Continue to survey and document native plant communities and rare flora and fauna
- » Consider the use of goats on steep areas for invasive shrub management
- » Continue to manage and control oak wilt
- » Monitor and inspect for aquatic invasive species at the lake access
- » Consider restoring the black walnut plantation area and incorporate additional tree species, or convert to a different plant community
- » Flag and protect native tree and shrub species in areas of invasive shrub management
- » Continue management of native, local ecotype seed stock areas
- » Monitor sediment accumulation at lake inlet areas and plan for potential dredging
- » Continue excellent record-keeping of management activities
- » The continuation of the current management program and funding is recommended
- » Continue work on invasive species/monitor for new threats



Overview

The Chester Woods Master Plan presents a long-term vision for the park. While phasing of improvements is suggested, Olmsted County Parks should remain flexible to respond to funding and partnership opportunities, as well as changing trends. The investments outlined in the plan have been organized into the following three phases:

- » Short-term indicates that the project should be started in the next 1 to 5 years due to sensitive resources, desire for use, or the improvement needs to happen before another project.
- » Mid-term indicates that the project should be started in the next 6 to 15 years. These projects may be just as important as Short-term projects, but they may be more expensive or more planning needs to be completed before they can be implemented.
- » Long-term or Visionary projects are those that will be completed after 16 years. These are projects that may be difficult to complete due to land ownership, funding, or community support. More planning will need to be done in the next decade in order to determine if these projects will become reality.

Operations & Management

Management and operations will be primarily the responsibility of the Olmsted County Parks Division, in coordination with existing and future volunteers and groups, including the Friends of Chester Woods.

MANAGEMENT

The Olmsted County Board of Commissioners establishes policies and goals for its park system and through an annual budget, provide capital and operational funds for parks and trails.

GENERAL OPERATIONS

Olmsted County Parks Division staff will be responsible for the operation of Chester Woods Park. Where there are opportunities for operational partnerships, Olmsted County will enter a joint powers agreement with partner agencies. When possible, the County will encourage and advocate for volunteers to assist with improvements, outdoor education programs, patrol, park clean-ups and special events. This will primarily be accomplished through existing partnerships with Friends groups.

OPERATING HOURS

The park hours will be according to Olmsted County park ordinances or policies. Campgrounds are open 24 hours during the camping season.

MAINTENANCE

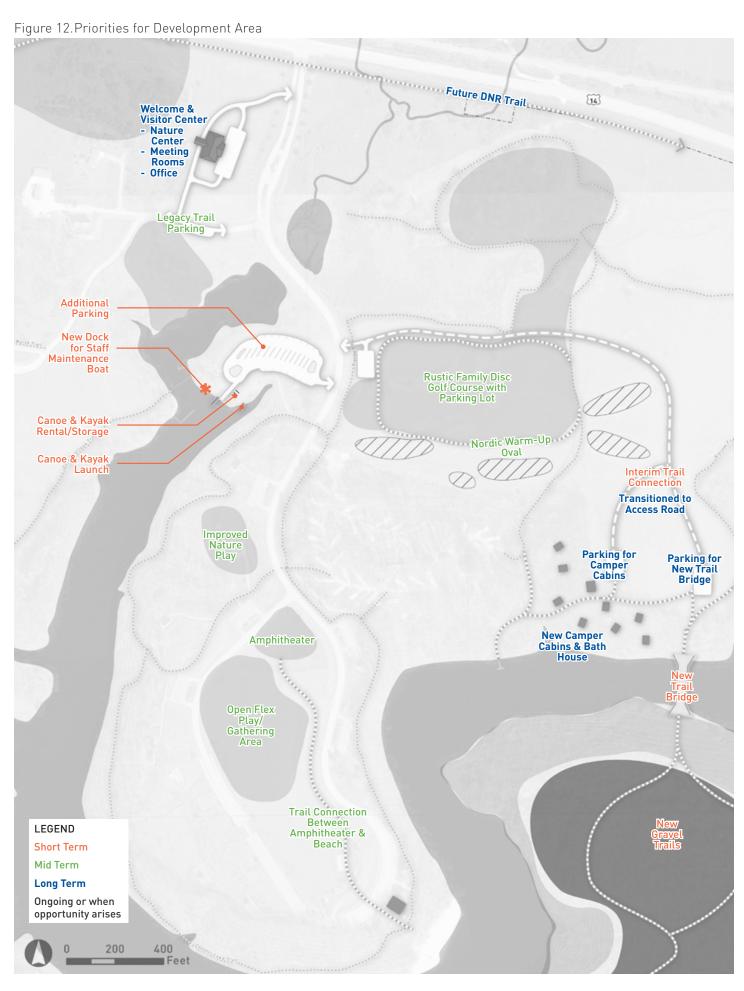
Regular maintenance activities for the park will include:

- » Mowing
- » Winter ski grooming
- » Trash collection
- » Tree trimming
- » Winter road and trail clearing
- » Trail repair and erosion control
- » Bridge repair
- » Sign maintenance
- » Park facility repair and maintenance

PAVEMENT MANAGEMENT

There are several paved roads and parking areas within the Olmsted County Park system. Pavement deteriorates as it ages. Regular pavement maintenance can prolong the surface's lifespan in a cost effective manner. The Olmsted County Public Works Department will work with the Parks Division to manage the paved areas in the parks.

Figure 11. Park-Wide Priorities BROOKVIEW ST 10 ST Tree Plantings 14 Verify Area in Which to Protect ***
Native Plants, 102 I Including
Rattlesnake Master DEVELOPMENT Additional Horseback AREA **Riding Trails** SEE ENLARGED **Screen Existing** MAP Maintenance Yard **Future DNR Trail** 20 S New Trail Loop Protect Sensitive Shoreline from Erosion by Limiting High Quality Natural Areas
- Limit Development
- No Expansion of Trails
- Protect Rare Plants Access 2057 Coordinate with Adjacent Landowner for Water Quality Enhancement 30 ST **LEGEND Short Term** Mid Term **Long Term** Ongoing or when opportunity arises 1,600 800



ENFORCEMENT AND SECURITY

Visitors will be informed of park and trail rules and regulations through postings at park facilities and strategically located signs that address specific information about hours, trails, permitted and prohibited activities, and directions. Local law enforcement and public safety agencies will be responsible for emergency and criminal complaints within the park. Chester Woods has onsite caretakers that manage security during the non-staffed park times.

CONFLICTS

Chester Woods is compatible with surrounding, primarily rural agricultural land uses. Minor conflicts will occasionally arise from private property owners' or neighboring residents' sensitivity to park recreation or maintenance uses. Olmsted County will work with individual landowners to resolve these issues case by case as the park is developed and expanded.

PUBLIC SERVICES

There may be a need for increased public services when development of park facilities occurs. In order to use sustainable building materials and methods, options such as solar powered lighting and self-composting toilets will be considered. Stormwater will be treated on site.

Programming, Marketing, & Evaluation

PROGRAMMING PLAN

Olmsted County Parks provide many programming opportunities. Oxbow Park and Zollman Zoo cater to school groups of all ages with environmental and animal related educational classes and tours. Chester Woods Park provides many environmentally and seasonally focused classes aimed at bringing families and people of all ages into the natural area and familiarizing them with activities and resources in the outdoors. The Friends groups assist County Parks staff with programs, and the existing program schedule will likely remain at its current capacity for the near term future. Potential future programming of the park may be associated with the construction of the Chester Woods Welcome and Visitor Center.

Programming at Chester Woods Park focuses on exploring the natural resources and creating stewards of the next generation by learning about flora and fauna in the park and learning how to manage existing natural areas. Some of the past and existing programs at Chester Woods include the following:

» Fall: seed collecting, fall colors wagon ride, Disabled Veterans Hunt, controlled management hunt, star gazing, full moon paddle, night hikes, "A Day in the Park," fishing, water craft safety, butterfly count, Halloween in the park

MARKETING & PUBLIC AWARENESS

Olmsted County will promote use of the park through their websites, media promotions, Public Service Announcements, brochures, and public events and meetings. Olmsted County Parks Staff regularly participate in radio broadcasts and have stories in the local media frequently throughout the year. Public awareness is also achieved through its partnerships with local institutions including schools, scouting groups, youth organizations, etc.

RESEARCH PLAN

Olmsted County will continue to participate in the Greater Minnesota Regional Parks and Trails Commission research initiatives (visitation counts, use profiles, recreation demands, and trends surveys, etc.) as these programs are developed over time. The County may continue to monitor park use and conduct more surveys or questionnaires in line with the physical development of elements within this park master plan.

Funding

Funding for initial capital cost and ongoing operations and maintenance costs is essential for a successful regional park. Funding will be primarily the responsibility of Olmsted County. There will be an emphasis on seeking outside funding in the form of grants and philanthropy. Costshare roles will be determined by the strengths of each agency and circumstances of each project. In-kind contributions of land, easement, design, engineering, construction and maintenance and operations are encouraged and will be outlined in joint powers agreements among agencies.

It is anticipated that most future capital projects will be well positioned to secure regional, state, and federal funds for recreation, transportation, water and habitat and that these sources will account for a majority of capital construction costs. Examples of outside funding sources include:

- » Clean Water, Land and Legacy Amendment funds
- » Foundations and non-profits
- » Statewide Health Improvement Program
- » Philanthropy
 - Private
 - Organizational

Funding for operating and maintaining the park and trail facilities will be the County's responsibility. Annual operating costs will be funded through Olmsted County's annual budget. Chester Woods does have the following user fees that contribute annually about \$115,000 in revenues.

- » Vehicle entry \$5 daily or \$25 annually (seniors \$20 annually)
- » Equestrian \$6 daily or \$30 annually
- » Camping \$30 sites with electricity, \$25 sites without electricity, \$60 camper cabin

PARTNERSHIPS

Olmsted County Parks currently partners with Friends groups to provide park services, maintenance, and improvements. Other partnerships, where applicable, will be sought with other agencies.

COST ESTIMATES

The cost estimates indicate projected capital costs for various development initiatives listed in this plan. The cost estimates are planning level and do not reflect construction level documents, nor do they include design and engineering costs (approximately 15-20% of capital cost).

Table 2. Development Concept Capital Cost Estimate

| | Short Term Action (0-5 years) | Number | Unit* | \$ Per Unit | Total Cost | Notes | |
|-----------|---|--------|-------|----------------|---------------|---|--|
| | Build New Paved Parking Lot | 42 | Space | \$3,500 | \$147,000 | Expanded parking for boat launch area | |
| LAUNCH | Build New Canoe/Kayak/Paddle Board Launch Dock | 1 | LS | \$5,000 | \$5,000 | New dock adjacent to existing boat ramp | |
| _ | Build New Kayak/Canoe Rental and Storage | 2 | LS | \$7,500 | \$15,000 | Near new launch area | |
| BOAT | Construct New Dock for Staff | 1 | LS | \$5,000 | \$5,000 | New dock adjacent to existing boat ramp | |
| | Add User Amenities (benches, trash/recycling, lighting) | 1 | Set | \$40,000 | \$40,000 | Near expanded parking near boat launch | |
| EAST PARK | Build New 6' Bike/Pedestrian Bridge | 133 | LF | \$750 | \$99,750 | New bridge to southeast peninsula | |
| | Develop Interim Trail Connection | 2,800 | LF | \$10 | \$28,000 | Connects to southeast peninsula | |
| ш | Build New 6' Gravel Trail | 7,500 | LF | \$10 | \$75,000 | Southeast peninsula trails | |
| | Build New Canoe-In Campsites | 3 | LS | \$2,000 | \$6,000 | South side of reservoir | |

SHORT TERM SUBTOTAL \$420,750

| Number | Unit* | \$ Per Unit | Total Cost | Notes |
|--------|----------------------------|--|--|--|
| 10 | Space | \$3,500 | \$35,000 | Parking for Legacy Trail |
| 1 | LS | \$50,000 | \$50,000 | |
| 1 | LS | \$50,000 | \$50,000 | Expand nature play area |
| 1 | LS | \$2,000 | \$2,000 | South of amphitheater |
| 1,500 | LF | \$10 | \$15,000 | Trails for nordic/disc golf, beach, & amphitheater |
| 1 | LS | \$20,000 | \$20,000 | 18 Hole Rustic Family Disc Golf Course |
| 18 | Space | \$3,500 | \$63,000 | New Disc Golf Course |
| 1 | Set | \$40,000 | \$40,000 | Near pedestrian bridge and amphitheater area |
| | 10 1 1 1 1,500 | 10 Space 1 LS 1 LS 1 LS 1,500 LF 1 LS 18 Space | Number Unit* Unit 10 Space \$3,500 1 LS \$50,000 1 LS \$50,000 1 LS \$2,000 1,500 LF \$10 1 LS \$20,000 18 Space \$3,500 | Number Unit* Unit Total Cost 10 Space \$3,500 \$35,000 1 LS \$50,000 \$50,000 1 LS \$50,000 \$50,000 1 LS \$2,000 \$2,000 1,500 LF \$10 \$15,000 1 LS \$20,000 \$20,000 1 Space \$3,500 \$63,000 |

MID TERM SUBTOTAL \$275,000

| | Long Term Action (16+ years) | Number | Unit | \$ Per Unit | Total Cost | Notes | |
|---------------|---|--------|-------|----------------|------------|--|--|
| PARK | Build New 20' Street | 2,800 | LF | \$200 | \$560,000 | From existing road to new pedestrian bridge | |
| EAST | Build New Paved Parking Lot | 25 | Space | \$3,500 | \$87,500 | Parking for new trail bridge | |
| CAMPER CABINS | Build New Bath House and Septic System for Camper Cabins | 1 | LS | \$100,000 | \$100,000 | | |
| ER C/ | Build New Camper Cabins | 6 | LS | \$25,000 | \$150,000 | | |
| CAMP | Build New Paved Parking Lot | 12 | Space | \$3,500 | \$42,000 | Parking for new camper cabins | |
| ME CENTER | Build New Community Building | 1 | LS | \$500,000 | \$500,000 | Welcome and Visitor Center - building cost only; Parking and Circulation included below | |
| WELCOME | Build New Paved Parking Lot | 37 | Space | \$3,500 | \$129,500 | Parking for Welcome and Visitor Center | |
| | Screen Maintenance Yard with Landscaping | 1 | LS | \$10,000 | \$10,000 | | |
| | Build New 6' Gravel Trail | 5,200 | LF | \$10 | \$52,000 | Expansion of equestrian/ hiking trails in northwest | |
| | Add User Amenities (benches, trash/recycling, bike racks, lighting) | 3 | Set | \$45,000 | \$135,000 | Near welcome center, camper cabins, and peninsula parking area | |

LONG TERM SUBTOTAL \$1,766,000

| * LS is Lump Su | m. LF is Linear I | Feet. EA is ea | ch. AC is acres |
|-----------------|-------------------|----------------|-----------------|
| | | | |

| \$2,461,750 | TOTAL |
|-------------|----------------|
| \$1,766,000 | LONG SUBTOTAL |
| \$275,000 | MID SUBTOTAL |
| \$420,750 | SHORT SUBTOTAL |

Table 3. Natural Resource Recommendations Cost Estimate

| Olmsted Parks Natural Resource Recommendations and Costs | Staff Hrs | Staff Costs (\$75/hr) | Consultant Hrs | Consultant Costs (\$130/hr) |
|--|-----------|-----------------------------|-------------------|-----------------------------------|
| Develop clear vision, goals, and strategies for park management | 40 | \$3,000 | 24 | \$3,120 |
| Continue to survey and document native plant communities and rare flora and fauna | 24 | \$1,800 | 50 | \$6,500 |
| Consider the use of goats on steep areas for invasive shrub management | 40 | \$3,000 | 24 | \$3,120 |
| Continue to manage and control oak wilt | 40 | \$3,000 | 24 | \$3,120 |
| Monitor and inspect for aquatic invasive species at the lake access | 30 | \$2,250 | | \$- |
| Consider restoring the black walnut plantation area and incorporate additional tree species, or convert to a different plant community | 40 | \$3,000 | 8 | \$1,040 |
| Flag and protect native tree and shrub species in areas of invasive shrub management | 36 | \$2,700 | | \$- |
| Continue management of native, local ecotype seed stock areas | 24 | \$1,800 | | \$- |
| Monitor sediment accumulation at lake inlet areas and plan for potential dredging | 24 | \$1,800 | 16 | \$2,080 |
| Continue excellent record-keeping of management activities | 40 | \$3,000 | | \$- |
| The continuation of the current management program and funding is recommended | | \$- | | \$- |
| SUBTOTALS | 338 | \$25,350 | 146 | \$18,980 |

| Const./Mat. | One-Time | Periodic | Annual | Notes |
|-------------|----------|----------|----------|---|
| | | \$6,120 | | Internal meetings, develop consensus on strategies |
| | | \$8,300 | | Request DNR support as alternate to consultant fees or have staff do it |
| \$5,000 | | \$11,120 | | Need a quote from info@goatdispatch.com, \$5,000 is placeholder |
| \$5,000 | | \$11,120 | | |
| \$100 | | | \$2,350 | |
| \$10,000 | \$14,040 | | \$2,000 | Some annual maint required during establishment period |
| \$3,000 | | \$5,700 | | |
| \$5,000 | | | \$6,800 | |
| | | \$3,880 | | |
| | | | \$3,000 | |
| | | | \$- | |
| \$28,100 | \$14,040 | \$46,240 | \$14,150 | |

CHESTER WOODS PARK **MASTER PLAN**







