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CONSERVANCY LANDS INVENTORY

Conservancy Lands Plan 2018-2023

CONSERVANCY LANDS SYSTEM FACILITIES MAP

As part of the Plan update, we created updated maps of Middleton's natural areas. The Middleton conservancy lands Existing Facilities map is included in Appendix D. The maps highlight existing facilities in Middleton, including conservancy lands, active parklands, and trails, as well as public lands and trails in adjacent communities.

The Middleton Public Lands system is categorized as Conservancy Lands, Parks, and Other Open Space. Individual Conservancy Lands and Parks are labeled along with vistas, schools, parking lots, boat launches, and benches. Trails within the City are highlighted by surface type, and off-street shared use routes are also included. The Existing Facilities maps include the extent of the City of Middleton at a large scale, and are further divided into seven sub-areas of the City for additional detail.

Data for the Existing Facilities maps was provided by the City of Middleton and Dane County in various GIS formats. Additional data was gathered from Wisconsin DNR and the WisconsinView Data Portal. The provided GIS data was modified significantly to reflect spatial and naming updates. As such, the Existing Facilities maps represent a re-creation of maps of the conservancy system rather than a simple update of previously produced maps.

The Existing Facilities maps can be at a variety of scales, and are designed to function as digital interactive PDF maps. The interactive features of the PDF allow users to easily customize the map for their particular interests, and provide an easier interface to navigate the information shown on the map. The interactive features generally fall into three categories: "layers", "pop-ups", and links. The PDF map includes layers that can are simple to turn on and off. The default configuration when the file opens is a basic but legible depiction of the Existing Faculties. Additional ayers such as air photos, watersheds, terrain (e.g. hillshade) and the historic vegetation cover can be accessed on the left side of the screen. The PDF includes several popup features that provide information that would be otherwise difficult to see without zooming into features. Pop-ups include property names, trail names, and trail segment distances. Finally, there are numerous links within the PDF document. These links provide easy access to views within the document (i.e. the user can click a Conservancy property name on the Existing Facilities overview map, and come to a zoomed in view of this property on subsequent pages). Links also provide access to outside information such as websites, pictures, and previously produced reports (e.g. Master Plans).

PRIORITIZATION MATRIX

An objective of this Plan was to create a mechanism for City staff to identify priorities for maintenance and development efforts within the conservancy system. We strived to create an objective scheme for rating Middleton's conservancies given their natural resource value, impact on water resources, past investment in management/restoration, and public influence considerations (Table 6-1). Prioritization matrix factors were assigned maximum point values based on 25 criteria (Table 6-2). These criteria incorporate issues raised during the public participation process, and input from City staff and the CLC.

The sum of point values assigned to each conservancy allowed us to classify the conservancies into 4 priority categories: "very high," "high," "medium" and "low", with 6-7 conservancies in each ranking class. The relative priority categories may inform allocation of operating funds and prioritization of capital improvement projects.

The priority matrix is not a static ranking, but rather a framework for continued assessment of the conservancy lands system. Point values were determined given known and available information. However, information was lacking in some factor categories for some or all conservancies. For example, there is currently limited information about Threatened and Endangered species in Middleton's conservancy lands. As conservancy area Master Plans are updated, new available information will inform priority matrix assessments.

CONSERVANCY ^A	PRIORITY CATEGORY	PRIORITY SCORE TOTAL	COMMENTS
Pheasant Branch Conservancy	very high	278	Partners: Dane County Parks, WDNR, FOPB, Clean Lakes Alliance, USFWS
Lakeview Conservancy (and Mary E Jacobson Conservancy)	very high	253	Proximity to Lake Mendota.
Stricker Pond Conservancy	very high	248	Migratory bird stopover.
Tiedeman Pond Conservancy	very high	229	Migratory bird stopover.
Pheasant Branch Creek Corridor	very high	227	Creek corridor. Trail corridor.
John C Bock Community Forest	very high	208	Partners: Dane County Parks, WDNR, FOPB, Bock Community Gardeners, Clean Lakes Alliance
Metropolitan Refuse District	very high	196	High-quality wetland north of former landfill. In Dorn Creek environmental corridor.
North Fork of the Pheasant Branch Creek	high	193	Grassland birds present.
Middleton Bike Park	high	191	Trail maintenance and grant funding partners include MadNorSki, Capital Off-Road Pathfinders, Blackhawk Ski Club
Graber Pond Conservancy	high	174	Potential for expansion of the Graber Pond Trail
Esser Pond Conservancy	high	163	
Middleton Hills Conservancy: Pond	high	160	
South Fork of the Pheasant Branch Creek	high	162	Creek corridor and oak woodland. Trail corridor.
Middleton Hills Conservancy: Wetland	high	155	
Orchid Heights Conservancy	medium	144	AIS grant for water hyacinth rand water lettuce removal in ponds. Herbaceous invasive species include wild parsnip, sweet clover
Middleton Hills Conservancy: Outlots 63&64	medium	144	Some of the native seed sown on site provided by Dane County Parks.

Table 6-1. Conservancy Lands Maintenance Prioritization Matrix

^A Conservancy areas are separated by subunit where past management, management plans, grant funding or partner involvement has been individual to subunit.

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Conservancy Lands Plan 2018-2023

Table 6-1. Conservancy Lands Maintenance Prioritization Matrix

CONSERVANCY ^A	PRIORITY CATEGORY	PRIORITY SCORE TOTAL	COMMENTS
Pheasant Branch Ridge Drainageway	medium	142	PARC grant for trail establishment. Potential acquisition of adjacent undeveloped land to improve trail connectivity
Middleton Hills Conservancy: Oak Savanna	medium	139	
Middleton Hills Conservancy: Gaylord Nelson Pond	medium	135	
Hidden Oaks Conservancy	medium	123	
Stonefield Conservancy	medium	116	
Capital Ice Arena Conservancy	low	113	Adjacent to Hidden Oaks.
Quarry Park Conservancy	low	107	Oak woodland with low density of invasive species in understory.
Tiedeman Pond Conservancy: Elm Lawn Savanna	low	81	
Boundary Road Conservancy	low	76	Mature oak woods with invasive brush understory.
Shorecrest Detention Pond	low	71	
Spring Hill Detention Pond	low	71	

Table 6-2. Prioritization Matrix Factor Descriptions

FACTOR	CATEGORY	WEIGHTING (MAXIMUM VALUE)	DESCRIPTION
Site has management plan	environmental	30	Points awarded if the site has a dedicated management plan noting desired future condition (30 points minus years from last plan).
Size >10 acres	environmental	10	In general, larger sites provide more ecosystem services and more habitat value.
Has remnant prairie, savanna, oak woodland or wet prairie	environmental	20	This ranking criteria describes sites with an intact native plant community. This could include presence of prairie grasses and wildflowers, oaks, or other native woody or herbaceous vegetation.
Has restored prairie, savanna, oak woodland or wet prairie	environmental	10	This ranking criteria describes sites with a restored native plant community. This could include presence of prairie grasses and wildflowers, oaks, or other native woody or herbaceous vegetation.
Habitat quality	environmental	50	Highly ranked sites have a low proportion of invasive, non-native species to native species. Other factors contributing to a high ranking include presence of mature oaks, which are irreplaceable in our lifetime. These provide the necessary structure for savanna and oak woodland. Habitat for endangered, threatened, rare and sensitive species (1=low, 50=excellent).
Contributes to flood and stormwater abatement	environmental	10	Assigned to conservancy lands with wetland features.
Hydrologically connected to Lake Mendota	environmental	10	Conservancy lands with a direct surface water connection to Lake Mendota with the potential to improve water quality by reducing nutrients and sediment.
Has or had grant funding or in-kind donation	funding	5	Site currently has grant funding for conservancy improvements (# of grants).
Has volunteer support	public influence	5	Site currently has active support from volunteers.
Had volunteer support	public influence	5	Site formerly received support from volunteers.
Opportunities for education	public influence	5	Accessible to school groups and citizens.
Public comment/interest/support	public influence	10	Conservancy mentioned in comments received from City staff and/or during plan writing process.

Maximum priority score

304

Table 6-2. Prioritization Matrix Factor Descriptions

FACTOR	CATEGORY	WEIGHTING (MAXIMUM VALUE)	DESCRIPTION
In environmental corridor (e.g. Dane County NRAB, or linked with undeveloped land)	environmental	10	Land is contiguous with other open space and/or part of a county designated natural resource area boundary.
Threatened & Endangered species	environmental	10	Conservancy contains state or federal listed threatened or endangered species.
Development threat (consider for new areas, trails)	public influence	20	Site is adjacent to undeveloped land that could be incorporated as conservancy lands or trail corridors. Adjacent land is susceptible to development (residential, commercial) that would change the character of the conservancy of interest.
Water level impacts conservancy or park features (e.g. trails)	environmental	5	Water levels of ponds and streams within conservancy lands impact features and improvements within public land.
Water level impacts outside conservancy	environmental	10	Water levels of ponds and streams within conservancy lands impact property off site.
Groundwater recharge	environmental	10	Site is a groundwater recharge area.
Vulnerability	environmental	10	Could include threats to the area including invasive species, stormwater runoff, development on or near site.
Partner involvement (# of partners)	public influence		One point assigned for each partner organization assisting with management of the conservancy.
Potential/existing trail connection	public influence	10	Points awarded if the site already has trails or is located near proposed trail locations.
Public access	public influence	10	If there is a trail public access = 10. immediately adjacent road, access = 5 (survey indicated pleasure driving as an activity).
Visitation	public influence	24	Visitation rank as determined by the conservancy lands plan update survey (24 = most visited, 0 = least visited).
Tourism feature/recreation site	public influence	5	Site is featured in Middleton tourism outreach media.
Includes cultural features (e.g. Native American sites)	environmental	10	Site contains cultural features.

Maximum priority score

INVENTORY OF CONSERVANCY LANDS

Middleton's conservancy lands system contains over 835 acres of land and shares over 27 miles of off-road trails with City's park system. A summary of conservancy lands is found in Table 6-3. Single-page descriptions of each conservancy area are located in Appendix E.

Table 6-3. Inventory of Middleton's Conservancy Lands

CONSERVANCY ^A	ACRES	FACILITIES	NATURAL COMMUNITIES	PRIORITY CATEGORY
Pheasant Branch Conservancy	325.2	Shared use bike/ped ADA-accessible trails (crushed limestone, paved), parking lots, wildlife viewing platform, boardwalks, bridges, interpretive and wayfinding signage. Passive hiking-only trails and bridge. Two scenic vistas including duckblind overlook. Trail loop is contiguous with Dane County Parks trails	wetlands, sedge meadow, restored prairie, restored/remnant oak savanna/oak woodland, marsh, natural springs, stream, seeps, fresh/ wet meadow, mixed hardwoods, surrogate grassland (hayfield)	very high
Lakeview Park Conservancy	30.5 (14.7)	Paved shared use bike/ped trail, ADA- accessible fishing port, interpretive signage, Adajcent to Lakeview Park facilities (includes parking lot, pavilion with restrooms, disc golf course)	Stream, planted wet-mesic/wet prairie, restored sedge meadow, mixed hardwoods	very high
Lakeview Park Conservancy: Mary E. Jacobson Conservancy	15.8	None	Wetland, marsh, shrub communities, remnant sedge meadow, mixed hardwoods	
Sticker Pond Conservancy Area	25.1	Crushed limestone and natural surface shared used bike/ped trail, benches, scenic vista, interpretive signage, nesting boxes, purple martin bird houses. Trail connects with City of Madison's natural surface trail to loop around pond. Pond accessible for ice skating	Glacial kettle pond, wetlands, marsh, shrub communities, restored mesic prairie, restored oak savanna, mixed hardwoods	very high
Tiedeman Pond Conservancy	34.1 (32.2)	Shared use bike/ped trail loop (paved and natural surface), ADA-accessible boardwalk, wildlife viewing platform and scenic vista, interpretive signage. Pond accessible for ice skating	Glacial kettle pond, wetlands, marsh, restored mesic/wet-mesic/wet prairie, mixed hardwoods	very high
Tiedmean Pond Conservancy: Elm Lawn Savanna	1.9	Paved shared use bike/ped trail, nature study area for Elm Lawn Elementary, bench, interpretive signage	Restored oak savanna, and mixed hardwoods	
Pheasant Branch Creek Corridor	58.7	Paved shared use bike/ped trails, benches, birding alcoves, interpretive and wayfinding signage	Stream, wetlands, mixed hardwoods, oak savanna	very high
John C. Bock Community Forest	19.1	Crushed limestone shared use bike/ped trail, natural surface hiking-only trail, interpretive signage and kiosk, community garden, monument	Restored prairie, restored oak savanna, restored/remnant oak woodland (management includes wooded area of Pheasant Branch Conservancy east of the East/Southeast Trail)	very high

Table 6-3. Inventory of Middleton's Conservancy Lands

CONSERVANCY ^A	ACRES	FACILITIES	NATURAL COMMUNITIES	PRIORITY CATEGORY
Metropolitan Refuse District	72.6	Conservancy area excludes dog parks and leased land. No public access to conservancy and Public Works-managed areas	Wetland, remnant sedgemeadow, surrogate grassland (mowed field)	very high
South Fork of the Pheasant Branch Creek	34.2	Paved shared use bike/ped trail, benches, interpretive and wayfinding signage	Stream, wetlands, marsh, shrub communities, oak woodland	high
North Fork of the Pheasant Branch Creek	65.3	Paved shared use bike/ped trails, interpretive and wayfinding signage	Stream, wetlands, marsh, shrub communities, planted wet-mesic/wet prairie	high
Graber Pond Conservancy	32.8	ADA-accessible boardwalk and paved shared use bike/ped trail, adaptive kayak launch and fishing port, benches, interpretive signage	Glacial kettle pond, wetlands, restored mesic prairie, mixed hardwoods and oak savanna	high
Esser Pond Conservancy	27.5	Paved shared use bike/ped trail, bench, scenic vistas, interpretive and wayfinding signage	Glacial kettle pond, wetlands, marsh, wet- mesic/wet prairie	high
Middleton Bike Park	34.3	Mountain biking trails and pump track	Oak woodland/mixed hardwoods, restored prairie	high
Middleton Hills Conservancy	31.1			high
Middleton Hills Conservancy: Pond and Conservancy (Outlot 10)	3.1	Natural surface trail connecting to the Frances Hammerstrom trail.	Glacial kettle pond, restored wet-mesic/wet prairie, marsh, restored oak savanna, mixed hardwoods	
Middleton Hills Conservancy: Oak Savanna	3.2	Natural surface/woodchip trail, interpretive signage, benches	Restored oak savanna	
Middleton Hills Conservancy: Outlot 63 & 64	7.9	Scenic vista, stone bench	Restored mesic prairie, restored oak savanna	
Middleton Hills Conservancy: Wetland Conservancy	15.9	ADA-accessible boardwalk and alcove, natural surface hiking loop, interpretive signage	Wetland, marsh	
Middleton Hills Conservnacy: Gaylord Nelson Detention Pond	1.0	None	Detention pond, planted wet prairie	
Orchid Heights Conservancy	9.1	Shared use bike/ped crushed limestone and paved trails, mowed grass hiking-only trail. Adjacent to Orchid Heights Park facilities (includes parking lot, ball fields, pavilion with restrooms, all-terrain wheelchair storage facility)	Restored wet-mesic/wet prairie, two detention ponds	medium

Table 6-3. Inventory of Middleton's Conservancy Lands

CONSERVANCY ^A	ACRES	FACILITIES	NATURAL COMMUNITIES	PRIORITY CATEGORY
Stonefield Conservancy	5.4	Paved shared use bike/ped path connecting adjacent neighborhoods, natural surface hiking trail	Detention pond, planted wet prairie	medium
Pheasant Branch Ridge Drainageway	4.4	Paved shared use bike/ped path connecting Graber Pond Trail and Pheasant Branch Creek trail system	Detention pond, planted wet prairie	medium
Hidden Oaks Conservancy	14.6	Paved shared use bike/ped sidewalk	Detention pond, planted wet prairie, oak woodland	medium
Shorecrest Detention Pond	1.6	None	Detention pond, planted wet prairie	low
Boundary Road Conservancy	0.9	None. Adjacent to Boundary Road Park	Oak woodland	low
Quarry Park Conservancy	5.1	None. Adjacent to Quarry Skate Park	Oak savanna	low
Capital Ice Arena Conservancy	2.9	Paved shared use bike/ped sidewalk connecting to Hidden Oaks sidewalk	Planted mesic prairie	low
Spring Hill Detention Pond	1.4	None	Detention pond, planted wet prairie	low