CONCLUSIONS

CONCLUSIONS

CONSERVANCY LANDS ARE A KEY FEATURE OF MIDDLETON

Middleton's public lands system sets the City apart from other communities in the county and in the state. Middleton is distinguished in both the scale of its public lands system and the commitment to conservation of natural areas. The 835 acres of conservancy lands account for over 14% of the total land in Middleton, and its off-road trail system stretches over 27 miles.

Impacts of the conservancy lands system include:

- Conservancy lands are part of Middleton's community identity
- Conservancy lands area a critical part of the infrastructure that makes Middleton a great place to live, work and play.
- Conservancy lands maintain and improve property values
- Conservancy lands keeps the City competitive with other communities for businesses, residents, and events.

Middleton is additionally unique in that the City owns the majority of public lands within city limits. Adjacent municipalities, like the City of Madison and City of Fitchburg, have a larger proportion of open space that is managed by outside entities, such as the State of Wisconsin (e.g. State trails), the WDNR, Dane County Parks, or UW-Madison (e.g. UW-Madison Arboretum in Madison). An advantage of Middleton's ownership of public land is its connectivity to City parks, City trails, and community centers. However, challenges include limitations in staffing and funding.

The beauty and accessibility of the conservancy lands are a key element of what makes Middleton such as desirable place to live – Survey respondent, 2018

LOVE LOVE LOVE our free parks and walking/hiking/bike paths The Public Lands make Middleton an absolute gem – Resident, 2012 – Survey respondent, 2018

Middleton has a great conservancy system. The funding and effort Middleton spends on the conservancy is much appreciated. These lands are what sets Middleton far above other areas around Madison and make it a great, family friendly place to live – Survey respondent, 2018

Conservancy lands preserve the natural functions of wetlands, creeks, springs and ponds in Middleton, and protect historic communities, such as prairies, sedge meadows, oak savannas, and oak woodlands. Despite an otherwise urban environment, Middleton's conservancy lands support a variety of resident and migratory wildlife. The Pheasant Branch Conservancy, for example, supports over 235 species of birds alone. Middleton's commitment to conservation is evidenced by the award of multiple major State and Federal grants over the last decade. The City received over $472,000 in support for restoration, wildlife management and stream bank stabilization since 2011.

THE CONSERVANCY LANDS SYSTEM MUST RESPOND TO FUTURE CHANGES IN MIDDLETON

This Plan documents changes since the writing of the 2011-2016 Conservancy Lands Plan. Changes over the last six years include:

- 15% population growth in Middleton since 2010
- Increased development and urbanization within Middleton
- Increased public interest in recreation and changing recreational preferences
- Reorganization of Public Lands, Recreation and Forestry staffing
- Establishment of a Storm Water Utility
- Addition of the Metropolitan Refuse District land
- Establishment of the Middleton Area Public Lands Endowment (MAPLE)
- Expansion of Middleton's accessibility initiatives
- Award of State and Federal grants for restoration, wildlife management and stream bank stabilization

Compared to prior versions of the Conservancy Lands Plan, this Plan was the first to perform a dedicated conservancy lands survey and incorporate public input received from the survey and public meetings. This plan was also the first to include a discussion of accessibility, e-bike policy and dog policy.

Future changes

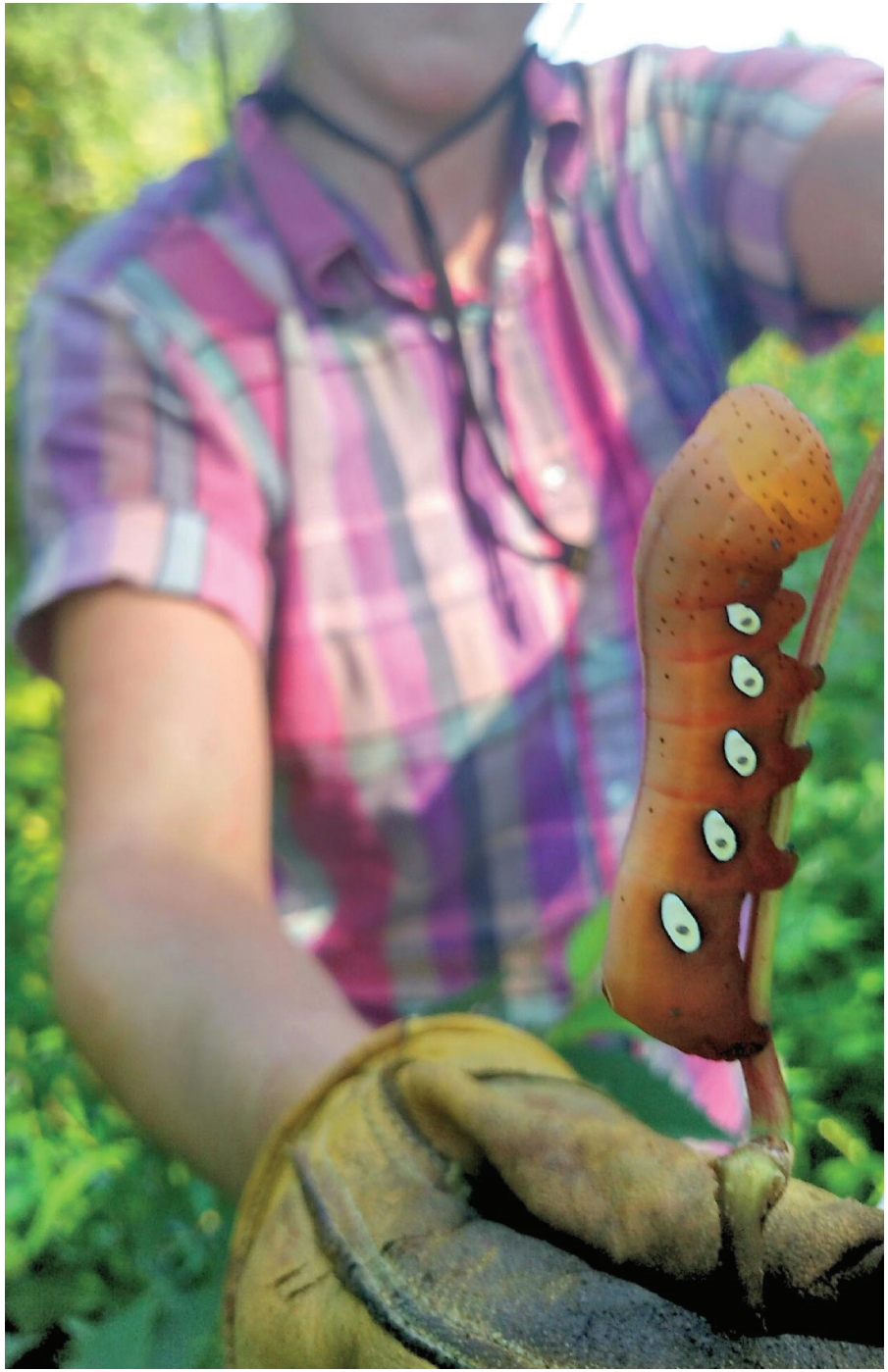
New topics discussed in this Plan reflect changes in conservancy land usage and changing recreation trends. Future management of conservancy lands must address changing recreational preferences, increased interest in recreation, and increased recreation demands given population growth. Concurrently, conservancy lands management must address increased demand for ecological services, such as protecting water quality, managing storm water, and providing habitat for rare and threatened species, particularly as Middleton becomes more developed. Ongoing threats to the conservancy lands system include development and urbanization, invasive species, and the disruption of natural processes, such as hydrology.

Conservancy lands staffing and funding levels should be commensurate with increased recreational and ecological demands on the conservancy lands system.

UPDATE PUBLIC GIS AND USE GEODATABASES AS LAND MANAGEMENT TOOLS

Public Lands, Recreation and Forestry should coordinate with other City departments in situations where management of conservancy lands and the public lands trail system involves multiple departments. Delineation of management responsibilities and establishment of a clear and shared future desired condition for a conservancy area or trail could improve efficiency of vegetation management.

We recommend updating the City's GIS system and creating a conservancy lands geodatabase as a means of improving data sharing across departments and improving efficiency of data management given Public Lands, Recreation and Forestry's limited staff resources. Geodatabase applications related to conservancy lands include: up-to-date system and facilities maps, mapping and monitoring of invasive species, mapping and monitoring of rare and threatened species (e.g. wildlife monitoring), documentation of management activities and expenses, documentation of trail maintenance and expenses, documentation of events (e.g. volunteer events), database of management plans, and database of grants and donations received.



SUPPORT ONGOING RESTORATION AND PROTECTION OF NATURAL AREAS

Ongoing management and enhancement of conservancy lands is an investment in protecting services provided by conservancy lands. Restoration of natural areas to native plant communities provides superior benefits to the Middleton community than degraded natural areas. Thus, restoration of Middleton's conservancy lands preserves the value of these lands into the future.

The values of conservancy lands include:

- Protection of native plant communities and associated wildlife
- Protection of wildlife habitat
- Climate change mitigation
- Protection of water quality, storm water and flood water infiltration, and erosion mitigation
- Protection of air quality
- Economic benefits to the Middleton community
- Recreational opportunities
- Education
- Public health

Protection and restoration of Middleton's conservancy lands require active and ongoing management. Successful land stewardship should:

- Take a scientific approach to management. Routine monitoring and evaluation should inform future management tactics. Implement data collection systems and use data to inform management, funding and policy.
- Address new and existing threats to conservancy lands such as urbanization, development, recreational demand, and invasive species. Staffing level, staffing expertise, and funding should be commensurate with demands on the conservancy lands system.
- Prioritize management. Land management priorities should be informed by natural resource value, impact on water resources, past investment in management/ restoration, and public influence considerations
- Maximize return on past investment. Perform ongoing management following intial project investment.

RESTORATION IS POSSIBLE THROUGH COLLABORATIONS AND PARTNERSHIPS

The City should seek to maintain and expand its partnerships with groups supporting conservancy lands and entities maintaining lands of similar management within the region. Middleton's conservancy lands-supporting friends groups, the Friends of Pheasant Branch, Bock Community Gardeners, and the Friends of Kettle Ponds provide an invaluable service to the community by providing educational and volunteer opportunities for residents, and by supporting restoration of natural areas. The City should work collaboratively with these Friends Groups and other supporting non-profits, like the Clean Lakes Alliance, to promote continued opportunities for citizen involvement in conservancy lands. Seek new or enhanced partnerships to promote citizen monitoring of wildlife.

Collaborative management of natural areas should involve regional land management entities, such as Dane County Parks and the City of Madison. Memoranda of Understanding can improve outcomes of land management activities by pooling labor and funding efforts towards a shared goal.

Public Land, Recreation and Forestry should maintain relationships with local representatives of state and federal agencies (e.g. WDNR, USFWS), and pursue state and federal support for ongoing restoration and wildlife management.

Middleton is located at the intersection of the Madison metropolitan area and relatively undeveloped lands to the north and west of the city. Thus, there is an opportunity for strategic acquisition of land or connection to land that strengthens contiguous environmental corridors between Lake Mendota and areas to the north, northeast, and west of Middleton, and an opportunity for recreational corridors between urban centers and regional recreational areas. Develop and long-term and regional vision of environmental and recreation corridors when visioning the future of Middleton's conservancy lands.

With the proper collaboration... we can make [Middleton] a better place – Public meeting attendee, 2018

SUMMARY OF RECOMMENDATIONS

This Plan documents past land stewardship activities in conservancy lands, and changes since the writing of the prior plan (2011), gathers and incorporates public input about conservancy lands, and provides management recommendations. Recommendations provided in this plan pertain to land management, policy, funding, staffing and development. These recommendations are intended to highlight opportunities for improvement, mitigate threats to the conservancy lands system, and focus management priorities.

Our recommendations are informed by 1) public input gathered as part of the Plan writing process and 2) the stated conservancy lands goals and objectives (as listed in Chapter 3). A summary of our recommendations is organized by the conservancy lands goal that most aligns with the intent of each recommendation (Table 10-1).

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
GOAL 1: PROTECT AND RESTORE NATIVE LANDSCAPES AND DESIGNATED CONSERVANCY LANDS TO MAINTAIN AND IMPROVE NATURAL HABITAT, SCENIC BEAUTY, PASSIVE RECREATION AND OUTDOOR EDUCATION FOR PERSONS OF ALL AGES AND ABILITIES.			
Maintain a grants geodatabase relevant to public lands, and conservancy lands specifically. A grants geodatabse should: 1) Document grants applied for and grants received (project area, project description, funding amount, City match, length of project/funds) 2) Create a grant calendar of available grants, grant deadlines, and other funding opportunities. Update at least annually.	(5) Conservancy Lands Operations	1.6, 1.1	Table 5-11
Maintain database of donations received to public lands, and conservancy lands specifically.	(5) Conservancy Lands Operations	1.6, 1.1	
Maintain a geodatabase of sign location, sign type, sign condition, installation date, and maintenance record. Perform an annual review of sign conditions. Create an annual maintenance and replacement budget. Anticipate longevity of signs and schedule replacements.	(8) Conservancy Lands Trails: Trail Maintenance	1.5	Table 5-7
All conservancy areas should be subject to growing season vegetation surveys. Monitoring and assessment of past management activities should inform changes in management tactics in response to results of previous management. Consider using UAV aerial imagery as an assessment tool.	(7) Conservancy Lands Management: Vegetation and Wildlife	1.4	
Identify and protect areas with unique natural resources, such as remnant and restored vegetative communities. Identify locations of rare and threatened species and areas of critical habitat. Map areas of special protection (remnant and restored areas, and known locations of rare and threatened species). Prioritze these areas for allocation of resources, and consider special protection of these areas, such as policies reducing human and pet impact.	(7) Conservancy Lands Management: Vegetation and Wildlife, (4) Public Outreach	1.1, 1.3, 1.6	Tables 7-1, 7-2, 7-2, 7-6, 7-7, 7-8
Prevent introduction and spread of invasive species. Perform active and regular monitoring of invasive species. Eradicate new invasions of non-native species while they are limited in extent and easier to remove. Prevent invasive seed production. Consider using mapping tools to track the locations and extent of invasive species. Mapping tools can be used to monitor new infestations and evaluate management efforts.	(7) Conservancy Lands Management: Vegetation and Wildlife, (4) Public Outreach	1.4, 1.6	Box 4-1, Table 7-2, Table 7-4
Management and policy of conservancy lands should protect user interests such as wildlife viewing and birdwatching, while also supporting activities such as recreational biking, mountain biking and pet exercise where appropriate. Impacts of conservancy usage on wildlife and birds should be explored through monitoring.	(9) Planning Considerations, (8) Conservancy Lands Trail System	1.2	Figures 9-2, 9-3, 9-4

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Use the Conservancy Lands Plan Update Survey as a baseline for future surveys. In future surveys Middleton should seek increased participation from the 18-29 age group, respondents less than 18 years of age, and respondents over 65.	(4) Public Outreach	1.6	Figure 9-1
Incorporate changing recreation demands in future planning, while maintaining a long-term vision of conservancy areas. Promote recreation opportunities that have minimal impacts on Middleton's natural resources.	(8) Conservancy Lands Trail System, (9) Planning Considerations	1.5, 2.6	Figures 9-2, 9-3, 9-4
Future trail development should accommodate increased trail demands while protecting the mission of conservancy lands as a natural resource. Consider acquisition of new conservancy lands as a means of accommodating a growing population while mitigating impacts of increased recreational demand and increased development in the city.	(8) Conservancy Lands Trail System, (9) Planning Considerations	1.5, 2.6	Figures 9-2, 9-3, 9-4
When replacing signs, create signs with consistent and recognizable style. Consider sign audience. Etiquette signs should be legible to pedestrians and faster-moving bicyclists. All signs should consider accessibility issues – adhere to signage guidelines on ADA-compliant trails. Use available published resources.	(8) Conservancy Lands Trail System, (9) Planning Considerations	1.5, 2.2	
Consider relocating the Graber Pond kayak/canoe port to a more accessible location. Consider length of trail and availability of parking.	(9) Planning Considerations: Accessibility	1.2, 1.5, 4.2	Box 9-1
Continue partnerships with the Friends of Pheasant Branch and other organizations to promote programming for seniors, those with cognitive challenges and those with limited mobility, such as the "Make a Memory Days" coordinated by the Friends of Pheasant Branch in 2017.	9) Planning Considerations: Accessibility	1.2, 1.5, 4.2	Box 9-1
Comments received in the Conservancy Lands Plan Update Survey request more mileage stickers and trail distances on maps. Trail distances on physical maps and trail markers are helpful for users planning a walk or run, and allow users with mobility impairments to determine the desired length of their trip.	(8) Conservancy Lands Trail System: Conservancy and Trail Signage	1.5	
Seek replacement of "poor" condition signs. Update trail system maps: of 15 Trail System Maps across the conservancy system only two signs are rated in good condition; the remaining 13 signs are faded such that sign use is difficult. Consider replacing all trail system map signs with an updated map.	(8) Conservancy Lands Trail System: Conservancy and Trail Signage	1.5	Appendix D
Enforce State motor bike/e-bike regulations (i.e. no motor bikes nor electronic scooters) with the exception of personal assistive mobility devices. Keep informed of expected changes in State legislation with respect to e-bikes in 2018. Should Wisconsin laws regarding E-bikes change, consider accessibility issues as relates to e-bike use. Coordinate with the ad hoc Accessibility Committee regarding on e-bike use among individuals with mobility impairments. When creating motor bike/e-bike policy, consider policies in surrounding communities, such as the City of Madison, given the connectivity of bike trails.	(8) Conservancy Lands Trail System: Conservancy and Trail Signage, (9) Planning Considerations	1.2, 1.5, 4.2	Box 8-1

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Natural surface trails (such as the trail through the Bock Community Forest woodland) are typically not accessible to bikes. Since walking/hiking is the most popular activity in conservancies, creating more hiking-only trails may be an option for reducing conflict between bikers and pedestrians.	(8) Conservancy Lands Trail System, (4) Public Outreach	1.2, 1.5, 4.2	Figure 9-3
Each conservancy should have a dedicated Management Plan/Master Plan. A Master Plan should have a minimum lifespan of 10 years but no longer than 25 years. Addendums may be appropriate if site conditions change significantly within 10 years of writing a Master Plan. Changes in site conditions include: change in extent of boundary, signification change in vegetation (e.g. restored to native landscape), stakeholder and/or partner involvement, or other unforeseen changes.	(7) Conservancy Lands Management: Vegetation and Wildlife	1.6, 5.3	Table 5-10, Table 6-3
Develop and maintain a variety of native plant communities. Existing native plant communities are protected and enhanced, and additional communities are established to the extent possible given the limitations of size, surrounding land use, and available resources. Native plant communities provide habitat for insects, wildlife and birds	(7) Conservancy Lands Management: Vegetation and Wildlife	1.1, 1.3, 6.3	Table 7-1, Table 6-3
Management of conservancy lands should involve restoring natural processes to a landscape. The City actively restores fire regime to many conservancy areas through prescribed burning. Human-caused modifications in hydrology also impact the health of natural communities. Restoration of natural hydrology should also be a priority. Past restoration includes the removal of drain tiles in the western portion of the Pheasant Branch Conservancy.	(7) Conservancy Lands Management: Vegetation and Wildlife	1.3, 6.1	Table 7-2
Prescribed fire is a critical land management tool necessary for maintaining the prairie, savanna, and wetlands in Middleton. When planning prescribed burns, fuels on adjacent properties should be evaluated. Firebreaks width and type should correlate with both the vegetation on conservancy lands, and the vegetation and structures to be protected on adjacent lands. Conduct prescribed burns only when air quality conditions are moderate or better, and smoke dispersal conditions are fair, good, or excellent.	(7) Conservancy Lands Management: Vegetation and Wildlife	1.1	Table 7-2
Establish a policy regarding the use of "drones," unmanned aerial vehicles (UAV's), in conservancy lands.	(8) Conservancy Lands Trail System	1.5	
GOAL 2: EXPAND PARTNERSHIPS FOR MAINTENANCE OF CONSERVANCY LANDS AND HANDS-ON RESTORATION AND LEARNING OPPORTUNITIES FOR THE RESIDENTS OF MIDDLETON.			
Incorporate findings from the Wisconsin SCORP 2017-2022 into upcoming City of Middleton Parks and Open Space Plan	(9) Planning Considerations: Trends in Recreation	2.3	Figure 9-2, Figure 9-4
Continue partnerships with Clean Lakes Alliance, Friends of Pheasant Branch and Bock Community Gardeners. Consider creating a coordinating committee with facilitating groups.	(5) Conservancy Lands Operations: Contributions of Volunteers	2.4, 6.2	Table 5-1, 5-2, 5-3

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Use Capra accreditation standards for volunteering as a model for Middleton's volunteer management. 1) Create a process for training and orienting volunteers. Encourage regular volunteers. 2) Create standard operating procedures for work in conservancy lands (e.g. hand weeding, plant identification, brush removal, seed collecting) that can be shared with volunteers. 3) Create an online database of volunteers and create an online version of the Public Lands Volunteer Program Guidelines release of liability and indemnification forms. Use the volunteer database as a mechanism of accountability and documentation of work performed. 4) Consider sending thank-you's and feedback requests to volunteers and/or hosting an annual volunteer gratitude event.	(5) Conservancy Lands Operations: Contributions of Volunteers	2.4, 6.2	Appendix C
We recommend clear posting of conservancy rules and etiquette and better utilization of web media for conservancy lands information and regulations.	(8) Conservancy Lands Trail System	2.1	
Support the Friends of Pheasant Branch in coordinating educational and service events with MCPASD schools.	(9) Planning Considerations: Youth Education	2.4	Appendix F
Seek to involve students and teachers in events occurring on conservancy lands.	(9) Planning Considerations: Youth Education	2.4	Appendix F
Explore potential use of mobile apps for citizen monitoring of wildlife and flora. Explore use of mobile apps and/or a QR code-based system as a mechanism for conservancy users to access seasonal interpretive media and up-to-date conservancy and trail information.	(8) Conservancy Lands Trail System	2.2	
We recommend clear posting of conservancy rules and etiquette and better utilization of web media for conservancy lands information and regulations.	(8) Conservancy Lands Trail System	2.1	
GOAL 3: IMPROVE WATER QUALITY WITHIN THE CONSERVANCY LANDS PROPERTIES.			
Identify a single entity to be responsible for vegetation management on land with native plantings, including storm water detention ponds. Costs of vegetation management may be shared across departments.	(7) Conservancy Lands Management: Vegetation and Wildlife	3.3	Table 7-3
Follow recommendations of the UW-Madison Water Resource Management (WRM) Practium report: Making Stricker's Pond a Better Resource for Middleton and Madison Residents (2016).	(7) Conservancy Lands Management: Vegetation and Wildlife	3.1, 3.2, 3.3	

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Improvement projects related to storm water management should be the responsibility of the Public Works Department. Capital projects include: Tiedeman Pond pump replacement and feasibility study/ stormwater abatement plan and study; Stricker's and Tiedeman Pond Stormwater Detention Pond; Tiedeman Pond dredging near sewer grate; dredging of Tiedeman pond forebays.	(7) Conservancy Lands Management: Vegetation and Wildlife	3.1, 3.2, 3.3	Table 5-9
Despite proximity to Lake Mendota, the City of Middleton has limited opportunities for water activities. Continue supporting water quality initiatives improving water quality in Lake Mendota. Consider future opportunities for Middleton's waterfront.	(9) Planning Considerations	3.2, 1.2	Figure 9-2, Figure 9-4
Coordinate with the WRMC in their investigation for runoff control measures in the North Fork of Pheasant Branch Creek. Potential land acquisition for corridor buffers, or stormwater detention basins, could provide multiple benefits for recreational, or wildlife habitat use.	(7) Conservancy Lands Management: Vegetation and Wildlife	3.1, 3.2, 3.3	
GOAL 4: INCREASE CONNECTIONS BETWEEN MIDDLETON'S CONSERVANCY LANDS AND OTHER ADJACENT AND REGIONAL CONSERVATION AREAS INCLUDING CORRIDORS AND LINKAGES WITH OTHER GOVERNMENT/MUNICIPAL LANDS OF SIMILAR MANAGEMENT.			
Coordinate with the Pedestrian, Bicycle and Transit Committee on issues related to trail use policy and trail connectivity. 1) Middleton's Bike and Pedestrian Plan has not been updated since 2009. The next iteration of the Bicycle and Pedestrian Plan should consider studying areas of high bike/pedestrian interface and propose alternatives to minimize negative interactions between bikers and pedestrians. Consider multiple types of bike users (multiple speeds) and multiple types of pedestrians. Use public input gathered in the public input process for this Plan. Promote etiquette between user groups through educational campaigns, signage, or other methods. 2) Coordinate with the Pedestrian, Bicycle and Transit Committee to promote increased connectivity of trails and bike paths within the City and to regional trails. 3) Consider adding a Pedestrian, Bicycle and Transit Committee representative to CLC.	(8) Conservancy Lands Trail System	4.1, 4.2, 4.3, 4.4, 4.6	

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Establish a memorandum of understanding (MOU) with partners to allow cross-boundary collaboration on land stewardship of the Pheasant Branch Conservancy and Stricker Pond Conservancy. 1) Managing the Pheasant Branch Conservancy as a whole rather than separate units may lead to lower per-acre costs, since equipment and personnel would be mobilized once rather than multiple times when conducting the same land management activity (e.g. prescribed burning, invasive plant spraying, etc). A memorandum of understanding (MOU) should contain language allowing cross-boundary land management activities between City of Middleton, Dane County Parks, the WDNR, and the Friends of Pheasant Branch. At a minimum it should allow prescribed fire, herbicide application, and invasive plant removal, within guidelines agreed to by the land managers for each entity. The MOU should note that each entity shares the common goal of managing and maintaining prairie, oak woodland, oak savanna and wetland communities.	(7) Conservancy Lands Management: Vegetation and Wildlife, (4) Public Outreach	1.1, 1.3, 1.4, 2.3, 3.2, 4.3	
Acquisition of conservancy lands should be a priority when the opportunity exists. Potential areas for acquisition include but are not limited to: the continuation of an urban greenway to the north and northeast of Middleton, a trail corridor around South Pond, and expansion of the Graber Pond Trail as development continues to east and west of Graber Pond.	(7) Conservancy Lands Management: Vegetation and Wildlife	4.6	Table 5-7, Table 5-9, Figure 7-2
Develop an explicit future desired state for each conservancy area or subunits within a conservancy. Engage with developers and conservancy neighbors to plant conservancy compatible vegetation along lot lines. For example, if an area contains prairie and prescribed burning is an intended management tool, encourage adjacent developments against planting heat-sensitive plans such as *Arborvitae*.	(7) Conservancy Lands Management: Vegetation and Wildlife	4.5	
Mark and maintain property boundaries. The boundary of public lands should be clearly marked to help orient visitors and staff, ensure land management activities occur within the property, and to discourage encroachment by neighbors.	(7) Conservancy Lands Management: Vegetation and Wildlife	4.5	
GOAL 5: PROVIDE ADEQUATE FUNDING, MANAGEMENT AND STAFFING TO OVERSEE THE MAINTENANCE OF CONSERVANCY LANDS.			
Seek public and private funds for development, restoration and management. Maintain partnerships with organizations and individuals.	(5) Conservancy Lands Operations	5.4	Box 5-2
Should opportunities arise for personnel change, consider hiring an additional full-time conservancy lands-dedicated staff with knowledge in land stewardship, native plant management, ecology, wildlife management, environmental education, and/or volunteer coordination.	(5) Conservancy Lands Operations	5.1	Table 5-1, 5-2, 5-3, Figure 5-1
Perform a cost/benefit analysis of the utilization of limited-term employment compared to full-time equivalent staff. Consider factors related to work output including level of knowledge and competency, level of required training, and level of required supervision.	(5) Conservancy Lands Operations	5.1	Figure 5-1

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Use the conservancy lands Prioritization Matrix as a method of prioritization maintenance and development efforts.	(6) Conservancy Lands Inventory	5.3, 1.1-1.3	Table 6-1, Table 6-3
Paved trail maintenance capital projects should come from Pedestrian, Bike and Transit Committee. This would align requests for new path development with maintenance. PLRF would oversee the contractors completing work.	(8) Conservancy Lands Trail System	5.1, 5.2	Table 5-8, Table 8-2, Table 8-3, Table 8-4
Secure necessary funding to maintain ecological restorations through at least the first 10 years of post-planting maintenance. The initial phases of restoration, site preparation and post-planting maintenance require timely and intensive effort by land managers. As the restoration matures and desirable vegetation establishes, maintenance needs and costs decrease. When initiating a native plant establishment project, we recommend a 10-year establishment period prior to shifting the project from capital to maintenance budgets.	(7) Conservancy Lands Management: Vegetation and Wildlife	5.1, 5.3	Table 5-6, Table 5-7
GOAL 6: PROMOTE CONSERVATION OF WILDLIFE AND WILDLIFE HABITAT IN MIDDLETON'S CONSERVANCY LANDS.			
Identify and protect areas with unique natural resources, such as remnant and restored areas, and known locations of rare and threatened species. Consider protection of these areas such as reducing or eliminating human and pet impact. Comply with federal and state regulations regarding protection of threatened and endangered species. 1) Follow management guidelines in the WDNR's Broad Incidental Take Protocol for Grasslands and Savannas 2) Review the USFWS's Conservation Management Guidelines for the Rusty-Patched Bumble Bee (*Bombus affinis*). Consult with local USFWS ecologists.	(7) Conservancy Lands Management: Vegetation and Wildlife	6.3	Table 7-1, Table 7-6, Table 7-7, Table 7-8
Create a system for monitoring wildlife and use collected data to inform management. Establish a framework for submitting observations that can be used by City staff as well as citizens and volunteers. Identify and monitor threatened and endangered species. 1) Consider hosting an iNaturalist bioblitz in a defined conservancy area. 2) Link with established local projects such as the WDNR's Snapshot Wisconsin project and the UW-Madison's Urban Canid project. Snapshot Wisconsin is a volunteer-based partnership to monitor wildlife across the state. Participants submit trail camera footage that is classified (species identified) using crowdsourcing methods.	(7) Conservancy Lands Management: Vegetation and Wildlife	6.2, 2.4	
Continue urban deer damage management. Do not exceed the WDNR standard for the Madison Metropolitan area of 10 deer/square mile as a target for deer herd size. Assess herd size every 3 years using aerial flyovers or UAV flyover.	(7) Conservancy Lands Management: Vegetation and Wildlife	6.2, 6.3	

[A] Refer to Goals and Objectives listed in Chapter 3

Table 10-1.Conservancy Lands Plan 2018-2023 Recommendations and Associated Conservancy Lands Goals and Objectives

DESCRIPTION	ASSOCIATED CHAPTER	ASSOCIATED OBJECTIVE[A]	ASSOCIATED TABLES AND FIGURES
Trails and trail use policy should consider impacts to wildlife. With respect to pet-exercise in conservancy lands: 1) Evaluate compliance with current rules, feasible methods of enforcing rules and repercussions for not following rules. 2) Consider further surveying attitudes towards dogs in conservancies and policy options. 3) Consider pilot studies restricting dogs from sensitive areas or sensitive areas/sensitive times of year (i.e. breeding bird season).	(7) Conservancy Lands Management: Vegetation and Wildlife	6.4	

[A] Refer to Goals and Objectives listed in Chapter 3