

Master Plan and Environmental Assessment

October, 2010

Wisconsin Department of Natural Resources / Dane County Parks Division

# **Capital Springs State Recreation Area**

## Master Plan and Environmental Assessment

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# **Executive Summary**

The landscape of the proposed Capital Springs State Recreation Area (CSSRA) was first developed in 1969 under a project created by the Department of Landscape Architecture at the University of Wisconsin-Madison, through a grant from the National Endowment for the Arts. This project, called the E-Way, worked to develop the land of the Nine Springs area into a managed parkland and natural area emphasizing environmental education and awareness. The E-Way existed relatively unaltered until the year 2000.

As the Wisconsin State Parks centennial year approached, the state hoped to enhance the E-Way plan by creating a new park to commemorate the new millennium and serve as the "crown jewel" of the Nine Springs region. In December of 2000, the Wisconsin Department of Natural Resources Board created the Capital Springs Centennial State Park<sup>1</sup> and Capital Springs State Recreation Area project. This state park and recreation area total 2,519 acres of land and water within the larger E-Way.

The state is not the sole owner of land within the recreation area. There are other large public land owners, including Dane County, the Madison Metropolitan Sewage District (MMSD), and the City of Monona, that manage and coordinate a system recreation, conservation and educational efforts within this recreation area.

The planning process for this new property, the Capital Springs State Recreation Area, began in 2002 and has involved several different planning phases and included the involvement of state and local governments, environmental and other agencies, and numerous private citizens.

Continuing in the tradition of the original E-Way planning effort, the primary goal of the Capital Springs State Recreation Area is to further the vision of an educational, ecological, esthetic, exercise, and environmental corridor system. While these goals and recommendations apply to the entire property, the Capital Springs landscape has been broken into eight units for ease of planning. These units are:

- E-Way Unit
- Jenni and Kyle Preserve Unit
- MMSD Wildlife Observation Unit
- Monona Wetland Conservancy Unit
- Nevin Springs Unit
- Upper Mud Lake Unit
- Capital Springs State Park Unit
- Lake Farm County Park Unit

Table ES-1 summarizes future developments within the CSSRA. The majority of new development is targeted for the Capital Springs State Park, Lake Farm County Park, and E-Way Units. These developments will include expanded camping opportunities, a dog park, trail developments and educational enhancements. The other units will have limited developments. For all units, the estimated total cost of new development is approximately \$8 million.

Each of these units offers a different outdoor recreation experience and creates numerous opportunities for outdoor recreation and environmental education. These recreation uses are summarized in Table ES-2.



<sup>1</sup> Referred to in this plan as the Capital Springs State Park Unit.

	FACILITY			
	EXISTING	FUTURE	TOTAL	ESTIMATED TOTAL COST
Trail Miles	#			
14' Commuter Boardwalk	0.00	1.00	1.00	\$3,500,000
8' Paved Bicycle/Pedestrian Trail	0.30	0.00	0.30	
10' Bicycle/Pedestrian Boardwalk	0.00	0.45	0.45	\$425,000
8' Limestone Accessible Walking	0.00	0.20	0.20	\$19,000
Hike/Cross-country Ski	5.70	3.30	9.00	\$5,000
10' Paved Bike	4.70	3.50	8.20	\$554,000
10' Limestone Bike	0.00	0.70	0.70	\$75,000
Nature Water	1.40 0.00	0.90 5.20	2.30 5.20	\$6,500 \$3,000
5' Wide Accessible Floating Boardwalks	0.00	0.40	0.60	\$3,000 \$416,000
6' Wide Accessible Floating Boardwarks	0.20	0.40	0.25	\$208,000
2	1 cars/1 bus		526 cars/1 bus	\$132,000
Disc Golf Course	0	175 cars 5	1	\$100,000
Dog Exercise Area	0	1	1	\$200,000
Non-motorized Water Launch/Access	0	2	2	\$10,000
Bicycle/Pedestrian Bridges	3	2	5	\$350,000
Three-sided Interpretive Kiosks	1	5	6	\$48,000
Two-sided Informational Kiosks	1	3	4	\$4,500
Master Signs	1	4	5	\$16,000
Open Shelter with Restrooms	4	4	8	\$90,000
ADA Fishing Access Piers	5	0	5	_
Wheelchair Swings	2	0	2	_
Accessible Waterfowl Observation Blinds	0	3	3	\$15,000
Campground Expansion	54	50	104	\$375,000
Yurts	0	7	7	\$105,000
Heritage Center Educational Expansion	1	1	2	\$250,000
New Road Miles	0	1.38	1.38	\$345,000
Shop Building	0	1	1	\$350,000
Observation Deck/Tower	2	2	4	\$120,000
Trailheads	3	2	5	\$4,000
Amphitheater	0	1	1	\$300,000
Total estimated cost, all facilities				\$8,076,500



#### Table ES-2: Capital Springs State Recreation Area Summary

#### **Capital Springs State Recreation Area Goals**

- Further the E-Way vision of an educational, ecological, esthetic, exercise, and environmental corridor system
- Support and expand the cultural, historical, and educational efforts that have been initiated by the Lussier Family Heritage Center, Lake Farm Archeological District, and the historic Nevin Fish Hatchery
- Provide a variety of cultural, environmental, and outdoor educational opportunities and experiences for all ages and abilities
- Preserve, protect, manage, and enhance water resources, plant communities, wildlife, and threatened and endangered species on a regional basis
- Provide a range of low impact, nature-based land and water recreation activities in environmentally suitable locations

	SIZE	PRIMARY OBJECTIVE	EXISTING RECREATION USES	FUTURE DEVELOPMENT/ RECREATION USES
E-Way Unit	625 acres	Recreation Management	Hiking Jogging Bicycling Rollerblading Roller-skating Wildlife Observation Seasonal Hunting	Bicycle Hiking Cross-country Ski Trail Canoe/Kayak Trail Equestrian Trail Community Gardening Dog Exercise Area Disc Golf Scenic Driving
Jenni and Kyle Preserve Unit	170 acres	Recreation Management	Fishing Hiking Wildlife Observation Jogging Bicycling Rollerblading Roller-skating	Hunting Wildlife Observation Blinds Hiking Trails Observation Deck
MMSD Wildlife Observation Unit	265 acres	Habitat Management	Bird Watching Waterfowl Hunting Canoe/Kayak Wildlife Observation	MMSD Management Water Trail
Monona Wetland Conservancy Unit	260 acres	Habitat Management	Fishing Wildlife Observation	Pedestrian Underpass Boardwalks Trail Linkages
Nevin Springs Unit	285 acres	Habitat Management	Hunting Trapping Wildlife Observation Hiking Jogging Bicycling Rollerblading Roller-skating	Environmental Educatiion Wildlife Observation Hiking/Biking Trails
Upper Mud Lake Unit	260 acres	Habitat Management	Hunting Fishing Wildlife Observation	Parking Lot Boardwalk
Lake Farm County Park Unit	328 acres	Recreation Management	Lussier Family Heritage Center Group Campground Lighted Boat Landing Hiking Trail Cross-country Ski Trails 3 Shelters Overlook Tower Observation Deck 5 Playgrounds Seasonal Hunting	Campground Expansion 7 Yurts Hiking Trails Bike Trail Picnic Area Heritage Center Expansion
Capital Springs State Park Unit	356 acres	Recreation Management	Hiking	Hiking Trails Bike Trail Amphitheater 2 Observation Deck Cross-county Skiing Fishing Camping Observation Tower





### CHAPTER 1

# Introduction

The vision for Capital Springs State Recreation Area (CSSRA) started in January 2000, with a successful proposal to the State of Wisconsin from Dane County to establish a centennial park that would serve as the "crown jewel" of the Nine Springs E-Way project. The state was seeking proposals to create a new park to celebrate and commemorate the new millennium. The E-Way concept began in 1969 when the National Endowment for the Arts authorized funding of an environmental model and plan developed by graduate students of the Department of Landscape Architecture at the University of Wisconsin-Madison, as directed by Professor Philip Lewis, Jr. The goal of this plan was to develop a model where natural and manmade areas in Madison and Dane County were linked for the purposes of environmental education. The model was called the E-Way, "E" standing for educational, ecological, exercise, esthetic, and environmental.<sup>2</sup> The boundary for the area was delineated along a system of water, wetlands, and steep topography that created a buffer between the natural and urban areas in the Nine Springs region.

The current Nine Springs E-Way boundary extends about seven miles from Dunn's Marsh near Seminole Highway to Lake Farm Park on Lake Waubesa (the proposal to the state included E-Way lands only as far west as the state-owned Nevin Fish Hatchery property). Dane County Parks has been responsible for acquiring and overseeing parcels of land within this corridor since 1970.<sup>3</sup>

#### **Overview of Master Plan**

In 2002, the State of Wisconsin and Dane County began a master planning process for the approximately 2,519 acres of land that will become Capital Springs State Recreation Area. The process includedmany public informational meetings and planning workshops that were well attended by private citizens, special interest groups, representatives of local governments, and representatives of other government agencies. The master planning process was divided into five phases: site inventory and analysis, development of project vision and goals, selection of a preferred plan alternative, completion of a Master Plan report document and Environmental Impact Statement, and county and state approval of the Master Plan.

It was not the intent of this planning process to substantially change land use and management policies for properties within the recreation area boundary. Rather, this document is intended to provide a uniform vision for future operation, management, and development of all lands within the project area. This vision is a synthesis of many past planning projects that have already been completed for the Nine Springs E-Way, Nevin Fish Hatchery, and Madison Metropolitan Sewerage District lands.

A private consulting firm completed a site inventory and analysis report for the project in June 2002. In this report entitled "An Ecological Overview for the Capital Springs Centennial State Park and Recreation Area," geology, hydrology, soils, flora, and fauna of the study area are described in detail. The report also lists restoration and interpretive opportunities for the natural communities found within the recreation area.

Phases two and three of the project were completed with the assistance of Jennings and Associates, Landscape Architecture Consultants. A vision statement and supporting goals for the project were generated during phase two, and were carried out over the summer of 2003. The vision statement and goals of this project are presented in Chapter Two. Phase three, creation and selection of a preferred plan alternative, was ongoing throughout the summer of 2004. There was a considerable amount of public comment regarding the issue of equestrian use in the new Capital Springs State Recreation Area. Final recommendations for the recreation area preferred alternative plan were identified through state and county efforts during 2008.

Existing park and recreation facilities within the Capital Springs State Recreation Area are primarily found at the following locations: Nevin Springs, Jenni and Kyle Preserve, and Lake Farm County Park. Facilities generally include parking areas, shelter/restroom facilities, and trails. Approximately four miles of the Capital City State Trail traverse the recreation area.

Map 1.1 shows all existing and future recreation facilities within the Capital Springs State Recreation Area.

<sup>&</sup>lt;sup>2</sup> Dane County Regional Planning Commission, 1981.

<sup>&</sup>lt;sup>3</sup> University of Wisconsin Institute for Environmental Studies, "Nine Springs Watershed and Environmental Corridor," (1996), pg. 7.





## CHAPTER 2

# Management, Development, and Use

#### **Designation and Authority**

#### Property Name and Designation:

**Authority:** The DNR's authority to acquire and manage land within the Capital Springs State Recreation Area derives from s. 23.09(2)(d),Stats. The county is authorized to acquire and manage lands within this project area by Resolution 31, which includes these properties as elements of the 2006-11 Dane County Parks and Open Space Plan.

Acreage Goals: Capital Springs State Recreation Area: 2,519 acres.

**Approval Dates:** The Master Plan and acreage goals for these properties were approved by the Dane County Park Commission on May 12, 2010, and by the Dane County Board on June 17, 2010, by the Natural Resources Board on October 27, 2010,

#### **Property Vision**

Dane County, the WDNR, and their partners hold the following vision for the future of the Capital Springs State Recreation Area, a critical part of the Nine Springs E-Way that demonstrates community-wide corridor principals:

Capital Springs State Recreation Area, located on the urban edge, is a place that embraces heritage, education, nature, and recreation. Visitors enjoy a rich system of marshes, springs, creeks, and lakes, which provide a healthy place for outdoor learning, outdoor activities, solitude, and reflection. The Lussier Family Heritage Center is a focal point of the area where visitors may learn about Native American culture, local settlement patterns, and natural systems. This recreation corridor is a key link in the statewide trail system, connecting neighborhoods within Dane County and other parts of Wisconsin.

#### **Property Goals**

The following goals were created based on project partner input, stakeholder input, and the site-specific historical, natural, and recreational opportunities:

- Further the E-Way vision of an educational, ecological, esthetic, exercise, and environmental corridor system.
- Support and expand the cultural, historical, and educational efforts that have been initiated by the Lussier Family Heritage Center, Lake Farm Archeological District, and the historic Nevin Fish Hatchery.
- Provide a variety of cultural, environmental, and outdoor educational opportunities and experiences for all ages and abilities.
- Preserve, protect, manage, and enhance water resources, plant communities, wildlife, and threatened and endangered species on a regional level.
- Provide a range of low impact, nature-based land and water recreation activities in environmentally suitable locations.
- Provide trail access from adjoining neighborhoods for recreation and commuting; maintain and enhance connections to regional land and water trail networks.

#### **Recreation Units**

The Capital Springs State Recreation Area is divided into eight different Recreation Units: Nevin Springs, Monona Wetland Conservancy, MMSD Wildlife Observation, Jenni and Kyle Preserve, E-Way, Upper Mud Lake, and Capital Springs State Park and Lake Farm County Park. Map 2.1 presents the all of the Recreation Units as they appear in the region.

#### **Unit/Property Designation**

#### Primary Ownership: Dane County

In 1969 the National Endowment for the Arts provided funds for the development of an environmental study model to "show how a community can identify and capitalize on existing natural and manmade resources in an effort to elevate environmental, ecological, and esthetic planning decisions to a higher priority within the community development decision-making process."<sup>4</sup> The entire Dane County E-Way is a 21-mile corridor linking urban and rural areas in and around Madison. Most of the Capital Springs State Recreation Area is within the Nine Springs Corridor of the E-Way. A number of planning projects for the Nine Springs E-Way have been completed since 1977 by various governmental agencies. More recently, much of the focus for the area has been on the impacts of developments adjacent to the corridor and the associated increase in stormwater runoff.

#### Land Management Classification

The E-Way Unit is classified as an NR 44 Recreation Management Area. The objective of this area designation is to "provide and maintain land and water areas and facilities for outdoor public recreation or education."<sup>5</sup> This unit will have a recreational use setting sub-classification of Type 3. The management objective of this sub-classification is "to provide readily accessible areas with modest recreational facilities offering opportunities at different times and places for a variety of dispersed recreational uses and experiences." <sup>6</sup>

#### **Property Boundary**

The total acreage of the E-Way Unit is about 625 acres. Map 2.2 illustrates the unit boundary and shows the location context of the unit within the entire recreation area boundary.

#### Land Management

Land management activities within this unit have primarily focused on the removal of invasive woody species and prairie restorations. Approximately 120 acres of this unit are working agriculture lands.

The majority of lands in this unit are wetland. Wetland areas are primarily classified as "degraded" or "transitional," meaning they are in the process of being degraded. Wetlands within the unit are primarily becoming monocultures of reed canary grass and cattails.<sup>7</sup> Dane County Parks has been removing woody invasives from about 100 acres of open grassland near the east end of the unit. This removal has been accomplished largely by spring management burns. The current grassland includes approximately 18 acres of prairie restoration. Approximately 10 acres of oak woods exists in the southeast corner.

#### **Future Land Management**

Approximately 15 acres of working agriculture lands immediately west of the Lussier Family Heritage Center will be converted to prairie restoration. Prairie seed for this project is being donated by the Graham-Martin Foundation and planting will be completed by Dane County Parks. Approximately 50 acres of working agriculture lands immediately west of Lake Farm Road will be converted to an off-leash dog exercise area and future disc golf course. Both facilities will be designed and constructed by Dane County.

The Dane County Naturalist is in the process of creating a vegetative management plan that identifies types of vegetation communities as well as management strategies for this unit. In addition, it is recommended that a series of habitat scrapes be created in the wetland areas immediately west of U.S. Hwy 14. These scrapes would work to fragment the existing expanses of reed canary grass, thereby lessening the plant's negative impacts to the E-Way system.

#### **Existing Facilities and Recreation Uses**

#### **Existing Facilities**

Approximately 2.9 miles of the Capital City Trail run east to west through this unit. There are also approximately 1.7 miles of natural surface hiking/cross-country ski trails within the unit. A 20-25 car gravel parking lot on the south side of Moorland Road includes a unisex vault toilet and informational kiosk.

#### **Existing Recreation Uses**

The Capital City State Trail offers hiking, jogging, bicycling, rollerblading, and roller-skiing opportunities. Hiking and cross-country skiing are available on the natural surface trails south and east of the Indian Springs neighborhood. Deer archery hunting is also allowed by permit.

#### **Future Recreation Uses**

Future recreation uses within this unit include seasonal hunting limited to archery in designated areas and a general hunting area north of the Capital City Trail between U.S. Hwy 14 and Syene Road. Other uses include additional bicycle (Baxter Park Connector Trail), hiking, and cross-country ski trails, community gardening, a dog exercise area, disc golf, scenic driving, equestrian trail development, and development of a canoe/kayak trail. Hunting access into this unit will occur from the future Syene Road parking lot.

- <sup>5</sup> DNR, "Master Planning for Department Properties," NR44.06, paragraph (8a).
- <sup>6</sup> DNR, "Master Planning for Department Properties," NR44.07, paragraph (6a).

<sup>&</sup>lt;sup>4</sup> Professor Philip Lewis, "E-way, Nine Springs Creek Corridor," (Dane County Regional Planning Commission, Revised 1981), pg. 1.

<sup>&</sup>lt;sup>7</sup> UW Madison Institute for Environmental Studies, "Nine Springs Watershed and Environmental Corridor," (Dane County RPC, 1996), pg.17.

#### **Future Facility Development and Management**

#### **Community Gardening**

Increasingly, metropolitan user groups are showing interest in the provision of public lands for community gardening. Careful consideration for the siting of these program areas must be undertaken due to relatively hydric soils and high deer populations throughout the recreation area boundary. However, this plan recommends further site analysis and planning that can be completed by interested parties to explore implementation of a community garden program within the recreation area. Properties identified need to be approved by the public land owner agency for this use. This program needs to be managed and maintained by a non-profit group under a concessions permit.

#### **Scenic Driving**

There are excellent opportunities to view deer, turkeys, fox, sandhill cranes, and a variety of waterfowl along the south borders of the recreation area, particularly along an approximate 3.4 mile stretch of Lake Farm, Meadowview, Clayton, and McCoy roads. These roadways traverse a mixture of agriculture areas, woodlots, and wetlands and offer a rural driving experience close to city limits. Improvements to these roadways may include pull-off areas or widened gravel shoulders at locations that offer prime wildlife viewing opportunities. These sections of roadway may also be designated as a scenic driving corridor with associated signage.

#### Hunting

This plan recommends adding approximately 202 acres of land for controlled deer hunting, an acreage accommodating 2 hunters per 40 acres as shown in Map 2.17. The recreation area is within the DNR Chronic Wasting Disease management area, which has a goal of 10 deer per square mile. Large tracts of public land that do not allow hunting often result in large, concentrated deer herds, a situation that can be destructive to vegetative communities and to the overall health of the herd. Hunting in the E-Way Unit would be justified and favorable to control deer population levels. It is also recommended that waterfowl hunting be allowed within this zone to assist with control of urban duck and geese populations. A 100-yard no-hunting buffer should be established around all development, roads, railroads, and trails.

#### **Parking Access**

The MMSD Lagoon Restoration Project report recommends that the parking lot at the E-Way trailhead be expanded from its current capacity of 20-25 cars to accommodate 40 cars. This development should only be pursued if future parking lot use justifies the need and space allows for the expansion.

#### **Signage and Kiosks**

Directional and informational signage (design to be determined) will be located along the Capital City Trail at the Baxter Park and Schuepbach Spring Spur Trail intersections. These signs will provide trail users with location information. Non-obtrusive directional and educational signage will also be placed along the E-Way Waterway Trail. Three-sided kiosks will be constructed at bicycle pedestrian rest stops at an overlook location east of the Schuepbach Spring Spur Trail intersection and just west of Lake Farm Road along the Capital City Trail. A Capital Springs State Recreation Area master sign will replace the existing Nine Springs E-Way sign on the west side of U.S. Hwy 14. A master sign will also be placed on the prairie hillside east of the E-Way parking lot.

#### **Dog Park**

The dog exercise area will incorporate the most current development techniques used at other locations throughout the county. The site would be completely enclosed with a 4' high woven wire fence and planted with visual screenings. Entry into the area will occur through a double gate system. Approximately 4-5 acres of the dog exercise area will be designated as a small dog area and will be enclosed by an internal fence. A gravel parking lot that will initially accommodate up to 60 cars will be constructed at the north end of the site. The parking lot will be constructed in a manner that will allow for future expansion of spaces to the west if needed. The road to access the parking lot will connect to Lake Farm Road at the south end of the property. The road access will comply with MUTCD standards for traffic flow and safety. Landscape plantings will consist of native trees and shrubs, and a mix of native wild flower prairie vegetation. Limestone trails and open mown turf areas will meander throughout the dog exercise area. Dane County will fund all development, operation and maintenance costs associated with the proposed dog exercise area.

#### **Disc Golf**

Development of a disc golf course will be investigated northwest of the proposed dog exercise area that is currently being used for agriculture. Dane County Parks staff will work with disc golf advocates to design the course and determine needed infrastructure. Dane County will fund all development, operation and maintenance costs associated with the proposed disc golf course. Consider acquisition or transfer of these lands from State to County ownership. It is envisioned the disc golf course will share road access with the dog exercise area.

A paved spur trail could be constructed from the dog exercise/disc golf parking lot to the Capital City Trail.

<sup>8</sup> Smith Group JJR, "Lagoon Restoration Project," (March 2000) p.20.

#### Trails

#### **Baxter Park Spur Trail**

This trail will utilize the existing gravel access road between the Capital City Trail and the MMSD lift station. Dane County Parks has installed approximately 300' of boardwalk to an existing clear span bridge over Nine Springs Creek. Dane County Parks will complete construction of approximately 4000' of 10' wide crushed limestone trail north from the bridge to Baxter Park. The trail will be paved as funds allow.

#### Schuepbach Springs Spur Trail

Approximately 3,600' of 10' wide crushed limestone trail will be constructed from the Capital City Trail north to an approximate 50' long by 8' wide bridge that would cross the Nine Springs Creek immediately south of the Schuepbach Spring. The trail will continue north and east to access both Indian Springs Park and the planned Baxter Park Spur Trail.

#### Indian Springs Hiking Trail

Approximately 3,800' of 8' wide mowed grass trail would be maintained throughout natural areas north of the Capital City Trail and south of Baxter Park. The trail would include a 40' long by 8' wide bridge for hikers and cross-country skiers.

#### **Equestrian Trails**

Dane County Parks has been able to successfully work with equestrian rider groups on development of trail networks that travel outside of park boundaries. Equestrian volunteers investigate obtaining voluntary easements from private property owners for trail riding purposes. The long term vision would be to create an equestrian trail network throughout the entire county, very similar to the snowmobile program. If equestrians are able to secure five miles of continuous trail easements from surrounding landowners, creation of a parking area within the E-way Unit to provide trail access will be explored.

#### **Capital City Trail Head**

A 20-car parking lot area with two-sided kiosk will be created on the west side of Lake Farm Road that will serve as a trailhead to the Capital City Trail. It will also function as an overflow parking area for special events at the Lussier Family Heritage Center.

#### E-Way Waterway Trail

Approximately 3 miles of water trail can be cleared along the Nine Springs Creek. An 8' wide x 10' long floating canoe launch will be constructed near the E-Way parking lot in Nine Springs Creek that will allow canoeists and kayakers to travel either upstream or downstream. Boats could be removed at multiple downstream locations on the Yahara chain including Lottes Park or Lake Farm boat landing. Currently, upstream waterway travel would come to a barrier at Syene Road. In order to provide a canoe launching space in this area, this plan recommends widening and enhancing the Nine Springs tributary ditch that parallels the east side of Syene Road. Improved water access will improve waterfowl hunting access by canoe to the proposed E-Way hunting area. The widened gravel shoulder along Syene Road will be a sufficient temporary loading zone for canoeists and kayakers, with permanent parking available in the adjacent proposed Jenni and Kyle Preserve Unit parking lot.

Map 2.3 and Table 2-1 present a summary of existing and future facilities in the E-way unit.

Table 2-1: Summary of Existing and Future Recreation Facilities, E-Way Unit					
FACILITY	EXISTING	FUTURE	TOTAL		
Trail Miles					
Hike/Cross-country Ski	1.70	0.70	2.40		
10' Paved Bike	2.90	0.90	3.80		
10' Limestone Bike	0.00	0.70	0.70		
10' Boardwalk	0.10	0.00	0.10		
Water	0.00	3.00	3.00		
Total	4.70	5.30	10.00		
Vault Toilet	1	0	1		
Parking	20-25 cars	100 cars	120–125 cars		
Dog Exercise Area	0	1	1		
Non-motorized Water Launch/Access	0	2	2		
Bicycle/Pedestrian Bridges	1	2	2		
Master Signs	0	2	2		
Scenic Driving Corridor	0	3.40 miles	3.40 miles		
Three-sided Interpretive Kiosks	0	2	2		
Disc Golf Course	0	1	1		

#### **Environmental Education and Development**

The E-Way Unit includes two of the proposed interpretive bicycle/pedestrian rest stop areas that were recommended as part of a 2003 University of Wisconsin Recreation Resources study. Interpretive information presented on the three-sided kiosk near the Schuepbach Spring Spur Trail intersection is proposed to discuss the reason for the abundance of swallow houses seen throughout the fields. The kiosk will explain the role swallows play in controlling mosquitoes in the area. The other three-sided kiosk located west of Lake Farm Road will provide information about the glacial history of the area. The location of this kiosk was selected because of the drumlin located immediately north of the site, which will be incorporated into the structure's interpretive discussion. Interpretive signage could also be placed adjacent the Schuepbach Spring.

#### **Boundary Adjustment**

Boundary expansion to consider in the E-Way Unit includes the 59-acre parcel immediately west of the MMSD sanitary lift station. Purchase of this land would facilitate a trail connection between the Indian Springs and E-Way hiking/cross-country ski trails on the south side of Nine Springs Creek and may also be a site for the future community garden program.

Another property to consider is the 16-acre parcel on the north side of Clayton Road at the intersection of CTH MM. Acquisition of this land may facilitate future realignment of the Capital City Trail to a location further north and outside of the road right-of-way.

To provide a buffer zone between the park and adjacent neighbors, 60 acres of land west of the Lake Farm Road parcel and south of the proposed dog exercise area should also be considered for purchase. These lands were identified to have high wildlife habitat value during the planning process, therefore additional trail expansion within these areas is not recommended.

This plan recommends adjusting the management unit boundary to include lands south of Moorland Road and west of Lake Farm Road. This will allow for improved boundary recognition by recreation area users. This adjustment would include the 40-acre parcel immediately west of Lake Farm Road that was originally included within the Capital Springs State Park boundary for establishment of a future dog exercise area. Table 2-2 summarizes boundary adjustment recommendations.

Table 2-2: E-Way Boundary Adjustment Summary				
Existing Boundary Acreage Total	625 acres			
Total Future Adjustment Through Fee Simple Land Acquisition	135 acres			
Future Boundary Reconfiguration Through Agreement/Easement	0 acres			
Plan Recommended Boundary Acreage	760 acres			



#### Capital Springs State Recreation Area – Jenni and Kyle Preserve Unit (170 acres)

#### **Unit / Property Designation**

#### Primary Ownership: Dane County

The vision for the Jenni and Kyle Preserve began with a generous gift of \$100,000 from Patricia and Harvey Wilmeth. This gift was given in memorial to their grandchildren who both died of a degenerative neurological disease by the age of 4. The purpose of this parkland is to provide an accessible space in which visitors, especially those living with disabilities, may learn about and enjoy nature. In 1988, Dane County Parks used a portion of the donation to help purchase the original 160 acres of land in the Nine Springs E-Way. In 2002, Dane County Parks closed on a key parcel that provided road access to the preserve. With the help of WDNR Stewardship dollars and multiple private donations, Dane County Parks has since developed a shelter, parking area, paths, and fishing piers, all of which are fully accessible to all user groups. At present, recreational and educational activities center around two spring fed ponds near the shelter/parking area. Fishing, outdoor education, and wildlife observation occur mostly on the northern upland fringe of the property. In the future, additional outdoor recreation/education opportunities may be expanded further into this unit as part of the planning process.

#### Land Management Classification

The Jenni and Kyle Preserve Unit is classified as a NR 44 Recreation Management Area. The objective of this area designation is to: "provide and maintain land and water areas and facilities for outdoor public recreation or education."<sup>9</sup> This unit would have a recreational use setting sub-classification of Type 3. The management objective of this sub-classification is to: "provide readily accessible areas with modest recreational facilities offering opportunities at different times and places for a variety of dispersed recreational uses and experiences."<sup>10</sup>

#### **Property Boundary**

The total acreage of the Jenni and Kyle Preserve Unit is about 170 acres. Map 2.4 illustrates the unit boundary and shows the location in context of the entire recreation area boundary.

#### Land Management

Although Dane County Parks has never completed or adopted a Master Plan specifically for this property, several plans have been completed over the last decade by staff and University of Wisconsin Landscape Architecture students. These plans have provided vision for the management of this property. Future development and management should be consistent with goals and objectives set forth in all prior Nine Springs E-Way planning efforts.

The majority of lands in this unit are wetlands. The central interior wetlands near Nine Springs Creek contain some high quality sedge meadows. Lands along the north and south boundaries are also wetlands, but have been invaded by destructive woody species. The eastern third of the unit is primarily dominated by reed canary grass. The extreme northern and southern lands adjacent to the unit boundary are upland and are dominated by boxelder, cottonwood, honeysuckle, buckthorn, and red twig dogwood.

Until recently, almost all land management activities in this unit have focused on the removal of invasive species to encourage native vegetative diversity. Removal activities have primarily been cutting and herbicide stump treatments. Trees with root systems breaching the integrity of the berms around the spring fed ponds have also been removed.

The Madison Area Rehabilitation Center (MARC) is adjacent to this unit and strives to incorporate persons with disabilities into the Dane County work force. Dane County Parks will work with MARC to explore possibilities whereby MARC clients could help manage lands around the shelter/parking lot area.

#### **Future Land Management**

Dane County Parks is planning to restore the shallow marsh hydrology of the wetland areas south and west of the spring fed ponds. This restoration is expected to increase the wildlife viewing opportunities from the accessible pier and proposed accessible observation blind. Additional future vegetation management will include removal of woody vegetation on the berms surrounding the southern wetland impoundment areas and removal of woody vegetation from the wetland restoration areas to the east and west of the ponds.

#### **Existing Facilities and Recreation Uses**

#### **Existing Facilities**

Existing facilities within the Jenni and Kyle Preserve Unit are mostly located off the Post Road access at the north end of the property. Two paved parking areas accommodate 16 vehicles and one bus parking space. A 40' x 50' open shelter was finished in 2004 that includes two unisex restrooms. Approximately 1,500' of paved 8' wide paths run around the ponds and shelter area. Two wheelchair accessible swings are located along the paths. Three accessible decks were built at the ponds to provide fishing access and wildlife viewing opportunities. Approximately .50 miles of the Capital City Trail traverse east to west through this unit.

#### **Existing Recreation Uses**

Recreation opportunities in the Jenni and Kyle Preserve Unit include fishing, walking/hiking, wildlife observation and deer archery hunting by permit. The Capital City State Trail running through the unit offers hiking, jogging, bicycling, rollerblading, and roller-skiing opportunities.

<sup>9</sup> DNR, "Master Planning for Department Properties," NR44.06, paragraph (8a).
<sup>10</sup> DNR, "Master Planning for Department Properties," NR44.07, paragraph (6a).

#### Capital Springs State Recreation Area – Jenni and Kyle Preserve Unit (170 acres)

#### **Future Recreation Uses**

Future recreation uses within this unit include accessible wildlife observation blinds, hunting, and additional hiking trails and observation decks. All hunting access into this unit will be from the Syene Road parking lot.

#### **Future Facility Development and Management**

#### Signage and Kiosks

Directional and informational signage (design to be determined) will be located along the Capital City Trail at the Waterfowlers Walk intersection to provide trail users with information about this facility. A threesided kiosk to be constructed north of the shelter parking lot on Post Road would include a panel devoted solely to donor recognition. The Syene Road parking area would also include a three-sided interpretive/ general information kiosk with attached self-registration station.

#### Trails

#### Wetland Walk Trail

Approximately 1,200' of 8'-wide crushed limestone trail will be constructed on the existing berms south and west of the ponds. Trail access will occur from the Post Road Jenni and Kyle Preserve Unit parking lot area. Trail construction will require repair/reconstruction of the berms that could potentially be incorporated into a wetland enhancement project. Bicycle traffic will not be allowed on this trail. A bench overlooking Nine Springs Creek will be located where the current mow trail ends. An accessible waterfowl observation blind will be located near the intersection of the near western drainage ditch and Six Mile Creek.

#### Waterfowlers Walk

An approximately 600'-long, 5'-wide floating boardwalk trail will spur off the Capital City Trail west of the Syene Road parking lot. This boardwalk will provide for disabled waterfowl hunting with access to a hunting blind located near one of the existing potholes south of Nine Springs Creek as shown in Map 2.17. During the waterfowl hunting season, this trail and a 100-yard buffer surrounding it will be limited to persons carrying a Class A disabled hunter's permit. During the nonhunting season, this blind would serve as an accessible bird watching station for all trail users.

#### **Environmental Education and Development**

Environmental education will occur at several locations within this unit. Interpretive information about rain gardens and the importance of proper stormwater management will be presented along the patio adjacent to the Jenni and Kyle shelter. Educational signage about the aquatic ecosystems of the ponds will be developed along the accessible paths surrounding them. Additional signage identifying waterfowl, birds, and animals seen in the unit will be located on the southern accessible observation platform. Bird and animal tracks could be paint stamped onto the hard surface trail. Accompanying brochures will allow park users to find and identify which animals these tracks belonged to. An internet site for the Jenni and Kyle Preserve Unit could be developed to provide park information and a tour of parklands.

The three-sided kiosk at the Syene Road parking lot will include a panel devoted to the wetland hydrology of the E-Way. This kiosk will also provide space for recognition of the City of Fitchburg's participation in helping to protect the McCoy Road springs area. Map 2.5 and Table 2-3 presents a summary of existing and future facilities in the Jenni and Kyle Preserve Unit.

Table 2-3: Summary of Existing and Future Recreation Facilities, Jenni and Ryle Preserve Unit					
FACILITY	EXISTING	FUTURE	TOTAL		
Trail Miles					
8' Paved Walking	0.30	0.00	0.30		
8' Limestone Walking	0.00	0.20	0.20		
Road Bike	0.50	0.00	0.50		
Total	.80	.20	1.00		
Open Shelter with Restrooms	1	0	1		
Parking	16 cars/1 bus	10-15 cars	26-31 cars/1 bus		
ADA Fishing Access Piers	3	0	3		
Wheelchair Swings	2	0	2		
Accessible Waterfowl Observation Blind	0	2	2		
5'-wide ADA Floating Boardwalk	0	0.10 miles	0.10 miles		
Three-sided Interpretive Kiosks	0	1	1		

#### Table 2-3: Summary of Existing and Future Recreation Facilities, Jenni and Kyle Preserve Unit

#### Capital Springs State Recreation Area – Jenni and Kyle Preserve Unit (170 acres)

#### **Boundary Adjustment**

Boundary expansion to consider in the Jenni and Kyle Preserve Unit will include the 3.6-acre commercial property immediately south of the Syene Road parking lot, should the current business located on this site cease to exist.

Table 2-4 summarizes boundary adjustment recommendations.

Table 2-4: Jenni and Kyle Preserve Benchmark	oundary Adjustment Summary
Existing Boundary Acreage Total	170.0 acres
Total Future Adjustment Through Fee Simple Land Acquisition	3.6 acres
Future Boundary Reconfiguration Through Agreement/Easement	0.0 acres
Plan Recommended Boundary Acreage	173.6 acres



#### Capital Springs State Recreation Area – MMSD Wildlife Observation Unit (265 acres)

#### **Unit / Property Designation**

#### Primary Ownership: Madison Metropolitan Sewerage District

The Madison Metropolitan Sewerage District (MMSD) has been located at Moorland Road since 1925. During World War II, a 56-acre lagoon was constructed on the east side of Raywood Road (now South Towne Drive) for storage of biosolids generated during the sewage treatment process. The lagoon eventually reached capacity and a second lagoon was constructed in the mid 1960s. In the mid 1970s, a recycling program was initiated that sought to periodically extract the biosolids from the lagoons for use as fertilizer. In 1982, routine sample testing of these biosolids found PCB's at a level that exceeded regulatory criteria in isolated sections of the lagoon system. MMSD and the U.S. Environmental Protection Agency undertook remedial actions and restoration activities on the lagoons. These activities were completed in the winter of 2000-2001. In the late 1990s, SmithGroup JJR, together with MMSD, a Citizens Advisory Committee, and RMT, Inc. developed a plan for restoration and management of the 140-acre lagoon site as a wildlife refuge with an emphasis on creating and maintaining shorebird habitat.11

#### Land Management Classification

The MMSD Wildlife Observation Unit is classified as an NR 44 Habitat Management Area. This will better allow the county and Department of Natural Resources to assist MMSD with the management of recreation and restoration activities on their properties, including potential fish rearing projects.

#### **Property Boundary**

The total acreage of the MMSD Wildlife Observation Unit is about 265 acres. Map 2.6 illustrates the unit boundary and shows the location context of the unit within the entire recreation area boundary.

#### Land Management

MMSD has been an active partner with Dane County Parks on many projects throughout the recreation area. The Lagoon Restoration Project report recommends that MMSD conservancy areas "function as an extension of the E-Way and Lake Farm County Park. Users of the MMSD conservancy area will likely enter from adjoining county lands."<sup>12</sup>

The report also states that "the MMSD lagoons will be managed as a regional multipurpose natural resource for passive recreation, emphasizing the enhancement of shorebird habitat."<sup>13</sup> Wetlands within this unit are generally shifting from diverse sedge meadows to monocultures of reed canary grass and cattails. Vegetation management within the unit will therefore be similar to that of the E-Way Unit. Vegetation management within the lagoon conservancy areas is largely accomplished through water level management to provide shorebird habitat.

#### **Future Land Management**

A detailed discussion of land management strategies and recommendations for this unit is found within the Lagoon Restoration Project report. It is anticipated that MMSD will continue to plan and implement all land management measures for this unit.

#### **Existing Facilities and Recreation Uses**

#### **Existing Facilities**

To minimize human disturbance to shorebirds, existing facilities within the MMSD Wildlife Observation Unit are limited. Gravel maintenance roads around the perimeter of the mudflat ponds serve as the unit's only hiking trails for bird watchers.

#### **Existing Recreation Uses**

The primary recreation opportunity in the MMSD Wildlife Observation Unit is bird watching. There is also limited canoe/kayak use of Nine Springs Creek and ditches when water levels allow.

#### **Future Recreation Uses**

There are no new recreation uses recommended for this unit.

#### **Future Facility Development and Management**

Although MMSD has agreed to be included within the Capital Springs State Recreation Area boundary, they will continue to make all of their own facility development and management decisions. These decisions will be based on their own best interests for operating and maintaining a sewerage treatment plant. The Lagoon Restoration Project report does recommend some shared management and development activities with Dane County Parks as noted below and as presented within the E-Way and Capital Springs Unit Management Recommendations in this document.

#### Signage

Informational signage recommendations are the same as those outlined in the Lagoon Restoration Project report.<sup>14</sup> Dane County Parks and the Department of Natural Resources will work with MMSD to install boundary and regulatory signs along borders as necessary.

<sup>11</sup> Smith Group JJR, "Lagoon Restoration Project," (March 2000), p.1.

12 Smith Group JJR, p. 21.

<sup>13</sup> Smith Group JJR, p. 1.

<sup>14</sup> Smith Group JJR, p. 20.

#### Capital Springs State Recreation Area – MMSD Wildlife Observation Unit (265 acres)

#### Trails

#### E-Way Waterway Trail

Approximately 1.2 miles of water trail could be cleared and maintained along the Nine Springs Creek from the E-Way boardwalk overlook to the creek's confluence with the Yahara River.

Table 2-5 and Map 2.7 present existing and future facilities.

#### **Environmental Education and Development**

Educational opportunities for the MMSD Unit are the same as those outlined in the Lagoon Restoration Project report. This report does recommend that Dane County work together with other organizations to have environmental education programs coordinated through the Lussier Family Heritage Center. Educational materials may include displays and signs describing the history of the MMSD site and its transformation from biosolid storage lagoons to a conservancy area. Interpretive signage regarding the MMSD site may be better implemented at a trailhead kiosk near the Heritage Center parking lot that would provide access to the future boardwalk/observation deck into the marsh to the north. Brochures or handouts may also be available at this kiosk or inside the Heritage Center.

#### **Boundary Adjustments**

MMSD will continue to make all of their own acquisitions as necessary. For the purposes of this planning report, the MMSD Wildlife Observation Unit boundary area would only include lands south of the railroad tracks and west of Nine Springs Creek. Ownership of these lands would remain the same. In 2005, the Department of Natural Resources purchased an approximate 66-acre easement along Nine Springs Creek that will be included within the Capital Springs State Park Boundary. This easement allows the public to fish, canoe, hike, and observe wildlife, but does not allow hunting. Land access will be by foot, snowshoe, or ski.

Table 2.6 summarizes boundary adjustment recommendations.

Table 2-6:         MMSD Boundary Adjustment Summary				
Existing Boundary Acreage Total 265 acres				
Total Future Adjustment Through Fee Simple Land Acquisition 0 acres				
Future Boundary Reconfiguration Through Agreement/Easement	0 acres			
Plan Recommended Boundary Acreage	265 acres			

Table 2-5: Summary of Existing and Future Recreation Facilities, MMSD Wildlife Observation Unit				
FACILITY	EXISTING	FUTURE	TOTAL	
Trail Miles				
Nature	1.40	0.00	1.40	
Water	0.00	1.20	1.20	
Total	1.40	1.20	2.60	
Hunting	1 (to be removed)	0	0	



#### Capital Springs State Recreation Area – Monona Wetland Conservancy Unit (260 acres)

#### **Unit / Property Designation**

#### Primary Ownership: City of Monona

In the early 1970s, the Kaukauna-Gisholt Machine Company gifted the City of Monona with a 226-acre wetland area extending from West Broadway Street to Madison city limits and east to the Yahara River and City of Monona.15 City management plans for this area have included a boardwalk trail system, which may provide linkages north under the U.S. Hwy 12/18 Beltline and south to the Capital City Trail. Wetland restoration and environmental education efforts have also been implemented throughout the property. Historically, high development costs and difficulties accessing the area through the wetland have prevented the implementation of the early 1990s planning recommendations. The City of Monona has also investigated the possibility of a small park and pond creation project south of the Beltline and immediately east of existing industrial development. Most recently, the City has considered turning over ownership or management of the site to the state and/or county, who may be better suited to undertake resource management of the site. This planning effort will suggest the development of an agreement between the state, county, and city, which would address long term recreation, vegetation, and stormwater management concerns of the site, and identify stakeholder roles and responsibilities.

#### Land Management Classification

The Monona Wetland Conservancy Unit would be classified as an NR-44 Habitat Management Area. Inclusion of this property into the Capital Springs State Recreation Area boundary may allow the city to better realize some of their long term goals for the management of the wetland area.

#### **Property Boundary**

The total area of the Monona Wetland Conservancy Unit is about 260 acres. Map 2.8 illustrates the unit boundary and shows the location context of the unit within the entire recreation area boundary. The property is bisected by the U.S. Hwy 12/18 Beltline immediately west of the Yahara River.

#### Land Management

A land management plan was created for the Monona Wetlands Conservancy in 1990. The plan was adopted by the Monona City Council in December of 1991. The primary goal of the plan was to improve the environmental qualities of the wetlands, with secondary goals of enhancing the educational, recreational, and visual values of the marsh. In the early 1990s, the Conservancy was inventoried and analyzed by a group of graduate students, consultants, and city staff.

As with most other areas of the Nine Springs E-Way, the wetland complex is transitioning from diverse sedge meadow to monocultures of cattails and reed canary grass. It is difficult to know if this transition is a result of urbanization or simply the result of invasive species outcompeting native species. Most likely it is a combination of both, with invasive species tolerating and even thriving under the increased sediment depositions and altered hydrologic conditions associated with development. Despite the invasion of these species, this unit also contains two of the nine "Significant Plant Communities" identified in the Ecological Overview for the Capital Springs State Recreation Area. These communities contain floating sedge and cattail mats, sedge meadows, and emergent aquatic vegetation.<sup>16</sup> A more detailed discussion of these plant communities is found in Chapter Three of this plan.

#### **Future Land Management**

There have been some attempts to conduct small-scale controlled burns and remove invasive species in the Conservancy.<sup>17</sup>

One of the primary goals of previous Conservancy planning efforts has been to improve the quality of wetlands in the unit. This goal remains important today and planning efforts will attempt to preserve and protect wetlands within the unit. The western upland transition areas adjacent to the cattail marsh should receive special attention as they have the highest water quality and therefore provide the best wildlife habitat. A specific vegetation management plan for the area should be completed and incorporated into the Dane County Natural Areas Master Plan. Management may also include the creation of a series of habitat scrapes (ponds) to capture stormwater runoff and provide more diverse waterfowl habitat.

Because interior wetland areas are difficult to access, management efforts in these areas have been passive. Proactive management and monitoring of stormwater discharge into the Conservancy by the City of Madison may be one of the best and most tangible actions that could be undertaken to preserve the quality of existing ecosystems. Removal of woody species is recommended along ditches and railroad grades to eliminate hawk perching opportunities in these grassland bird nesting areas.

#### **Existing Facilities and Recreation Uses**

Existing facilities within the Monona Conservancy Unit are limited. In 1990 a Monona Wetland Conservancy sign was fabricated and erected along the south side of the U.S. Hwy 12/18 Beltline to increase public awareness of the property.

#### **Existing Recreation Uses**

The primary recreation opportunities in the Monona Conservancy Unit are fishing (along the Yahara River shoreline) and wildlife observation.

<sup>&</sup>lt;sup>15</sup> Grunow, Pedretti, Kachelmeier, "City of Monona Park and Open Space Plan," (2001), p. 26.

<sup>&</sup>lt;sup>16</sup> Clark Forestry, "Biotic Inventory of the Capital Springs Centennial Park and Recreation Area," (2002).

<sup>&</sup>lt;sup>17</sup> Catherine Owen, "Monona Wetlands Conservancy," (Graduate Student Study, 1991).

#### Capital Springs State Recreation Area – Monona Wetland Conservancy Unit (260 acres)

#### **Future Facility Development and Management**

Past planning efforts have made a variety of long term trail development recommendations for the Monona Conservancy Unit including pedestrian underpasses at U.S. Hwy 12/18, boardwalks extending into the wetland areas east of the industrial park, and linkages to the Nine Springs E-Way trail systems.

To date, none of the recommendations have been pursued due to a variety of limiting constraints. Cost has been one of the largest deterrents. Boardwalks can easily cost as much as \$50 per square foot to construct. Any substantial system through the wetland could therefore cost several hundred thousand dollars to construct. A high water table and flat topography near the Beltline severely limit the ability to construct a pedestrian underpass between the Yahara River and existing developments.

Nevertheless, the original goals of enhancing the quality of wetlands and recreational/aesthetic value of the unit still have merit. This planning effort will seek to provide updated facility development and management strategies that will help fulfill original project goals.

#### Signage

Currently, a Nine Springs E-Way and Monona Conservancy sign both exist on spoil pile berms on the south side of the Beltline. This plan recommends the installation of a new master sign identifying the area as the Capital Springs State Recreation Area–Monona Wetland Conservancy Unit. The E-Way logo would appear at the top of this sign. The existing Monona Wetland Conservancy Area sign could be relocated to the city outlot on Gisholt Drive in the industrial park.

#### Trails

City of Monona (and Madison) residents are currently separated from the Capital Springs State Recreation Area by the Beltline, urban development, and large areas of wetland. This plan does not recommend a boardwalk system in the management unit for the following reasons (excluding cost constraints):

- Management of the wetland could include prescribed burns; a boardwalk may impair the ability to implement this strategy.
- The vast open views from the Beltline highway across the southern wetland area would be interrupted and appear less natural with a boardwalk/overlook system bisecting it.
- The proximity of a potential boardwalk to Beltline traffic and noise would not provide a quality natural experience or learning environment for boardwalk users.
- A boardwalk constructed along the fringe between upland and wetland area may act as a barrier to wildlife routes and as a conduit for predators.

Table 2-7 and Map 2.9 present existing and future facilities.

Table 2-7: Summary of Existing and Future Recreation Facilities, Monona Wetland Conservancy Unit			
FACILITY	EXISTING	FUTURE	TOTAL
Trail Miles			
8' Paved Trail	0.30	0.00	0.30
Water	0.00	1.00	1.00
Total	0.30	1.00	1.30
Master Signs	0	1	1
Three-sided Kiosk	0	1	1

#### Capital Springs State Recreation Area – Monona Wetland Conservancy Unit (260 acres)

#### **Environmental Education and Development**

Another goal of past Conservancy planning efforts has been to educate school children and the general public on the importance and benefits of wetland areas.<sup>18</sup> In large part, this education can and should be achieved at nearby educational facilities found within the Nine Springs E-Way Unit, along the Capital City Trail, Lake Farm County Park and Capital Springs State Park. The off-road trail connector along the west side of South Towne Drive greatly increases access to these facilities.

Another excellent educational opportunity exists at the city outlot in the industrial park located along Gisholt Drive. This site is a perfect location for educational facilities detailing the effects of development on wetlands, and discussing the benefits of wetlands for treating stormwater and reducing runoff. A three-sided kiosk could be constructed here with information about the history of the Monona Wetland Conservancy as well as wetland educational materials. A short hard surface path with benches could lead visitors to several low, weatherproof wetland educational signs throughout the outlot. Hiking/bicycle access to the site could occur via a spur trail from the proposed South Towne Drive connector trail. Wetland awareness could be realized by area employees who could walk to the site on breaks and at lunch.

#### **Boundary Adjustments**

There are no boundary adjustment recommendations for this unit.



<sup>18</sup> Monona City Staff Memo, "Re: Monona Wetlands Area," (July 2, 1990), p. 2.

#### Capital Springs State Recreation Area – Nevin Springs Unit (285 acres)

#### **Unit / Property Designation**

#### Primary Ownership: State of Wisconsin

The Nevin Fish Hatchery property was acquired by the state in 1876 for use as a fish hatchery. This unit is the oldest of all managed DNR lands. Adjacent to the fish hatchery is the Nevin Springs Fish and Wildlife Area. For the purposes of this planning effort, the Nevin Springs Unit includes both properties—the fish hatchery as well as the wildlife area—excluding the administrative offices and service building. This unit is managed for fish and wildlife habitat, with hunting being the main recreational activity. Other secondary compatible recreation may occur on the site, provided it does not detract from the fish and wildlife focus of the property. A segment of the Capital City Trail extends through this unit.

#### Land Management Classification

The majority of the Nevin Springs Unit is classified as an NR 44 Habitat Management Zone. There is also a 150'-wide area designated as a Recreation Management Zone that runs through the property. This area will be used for the Capital City Trail (see Map 2.10).

#### **Property Boundary**

The total acreage of the Nevin Springs Unit is about 285 acres. Map 2.11 illustrates the unit boundary and shows the location context of the unit within the entire recreation area boundary.

#### Land Management

#### Habitat Management Zone

A Master Plan and Environmental Assessment was completed for the Nevin Springs Fish and Wildlife Area by the Wisconsin Department of Natural Resources in the fall of 2000.

The management objective for the Habitat Management Areas is to "provide for the restoration, management, protection, and enhancement of representative native plant and animal habitats at Nevin while respecting the hydrologic constraints of Nevin's fish hatchery operations." <sup>19</sup> This objective would be achieved through a variety of aquatic, upland, general, and wildlife habitat management recommendations outlined in the plan.

The Nevin Springs Unit generally includes two types of vegetative cover. Lands north and west of the Capital City State Trail consist of approximately 220 acres of wetlands, of which 90 acres are classified as sedge meadow/calcareous fen. Remaining lands to the south and east of the trail include about 278 acres of upland area. This area consists of a 143-acre agricultural field that is proposed to be converted to native prairie/grassland habitat. The remaining 135 acres is a mix of pine and hardwood forested area that will ultimately be restored to open savanna and grassland communities. Generally, management of these vegetative communities "would entail control of exotic, aggressive and invasive plants through the use of prescribed fire. Pulling, cutting, and/or limited, non-persistent herbicide applications would also be used to eliminate these species."<sup>20</sup>

#### **Recreation Management Zone**

The objective of the recreation management area is to "provide a 75'wide corridor off each side of the centerline of the Capital City Trail that passes through the Nevin property per the intergovernmental Memorandum of Agreement. [This corridor] is intended to provide primary access for wildlife viewing and internal access to the Nevin Springs Fish and Wildlife Area." 21 Dane County and the Wisconsin Department of Natural Resources agreed hunting was to take precedence over recreational use of the trail corridor should user conflict occur.

#### **Proposed Land Management**

Specific recommendations pertaining to educational, fisheries and wildlife, recreational, and vegetative management strategies can be found in detail in the Nevin Springs Fish and Wildlife Area Master Plan.<sup>22</sup>

#### **Existing Facilities and Recreation Uses**

#### **Existing Facilities**

Existing facilities within the Nevin Springs Unit are limited. Recently the WDNR constructed a small gravel parking lot and informational kiosk for hunting access off Syene Road. Approximately 0.5 miles of the Capital City State Trail bisects this recreation area unit.

#### **Trails**

#### **Capital City State Trail**

This 0.5 mile segment of trail is classified as a fully developed trail. The Capital City State Trail is a paved multi-use path that offers hiking, jogging, bicycling, rollerblading, and roller-skiing opportunities. This state trail was developed through a partnership with Dane County Parks, the WDNR, Wisconsin DOT, and the cities of Fitchburg and Madison.

<sup>19</sup> "Nevin Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, p. 15. 2001.

- <sup>20</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 3.2.14, p. 54. 2001.
- <sup>21</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 3.2.14, p. 54. 2001.
- <sup>22</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 3.2.14, p. 54. 2001.

#### Capital Springs State Recreation Area – Nevin Springs Unit (285 acres)

#### **Existing Recreation Uses**

The primary recreation opportunities in the Nevin Springs Unit are hunting, fishing, trapping, and wildlife observation. Hunting is permitted for pheasant, squirrel, rabbit, and waterfowl and is allowed by shotgun only. Deer hunting is also permitted, but is restricted to muzzleloader and archery only. A 150' buffer zone of "no discharge of firearms" is in place adjacent to residential development as shown in Map 2.17.

Trapping is also allowed within this unit for species such as raccoon and beaver.

Fishing has not traditionally been a recreational activity in this unit due to the channelized nature of the Nevin streams. Fishing, however, is accommodated where feasible and where it does not interfere with protection of the sensitive springs.

Secondary recreational activities include hiking, jogging, bicycling, rollerblading, and roller-skiing.

#### **Future Recreation Uses**

Future recreation uses that would complement existing unit activities are as identified within the Nevin Springs Fish and Wildlife Area Master Plan. These include environmental education, wildlife observation, and additional hiking/biking trails.<sup>23</sup>

#### **Future Facility Development and Management**

The majority of the future facility development and management recommendations for this unit can be found in the Nevin Springs Fish and Wildlife Area Master Plan.<sup>24</sup> This plan recommends the following additional facility developments:

#### Trails

#### **Glacier Valley Bypass Trail**

An additional approximate 0.5-mile trail will be developed to bypass the existing Capital City Trail located near the Glacial Valley Trail. The proposed trail would begin in the vicinity of Eagle School and extend north to a proposed parking lot on the recently acquired Sebastian parcel. The majority of this trail traverses through wetland areas and will require about 2,300' of 10'-wide boardwalk. Approximately 300' of upland portions of trail will be paved 10' wide, and will be built to the same standards as the existing Capital City Trail.

#### **Parking Access**

#### **Stone Building Parking Area**

The recent acquisition of the 4-acre Sebastian parcel would accommodate construction of an asphalt paved 20-30 car parking lot approximately 60'-wide by 150'-long. This lot would provide trailhead access to the Capital City Trail and facilitate picnicking and tour group staging. The lot is also expected to accommodate parking for Nevin Service Center employees and for visitors to the DNR History and Environmental Education Center that has been proposed to be established in the historic stone building. This parking lot area would also include development of a small open air shelter approximately 15' x 20' in size. This shelter would provide drinking water and an accessible unisex restroom security lighted for trail users. A three-sided kiosk will be located at the stone building parking area to provide historical information about the fish hatchery and stone building, as well as wildlife management and water resource education. This kiosk would also provide general trail and contact information and a map showing local and regional information. A two-sided, minimum 4'-tall by 10'-long Styrofoam master sign would identify the Capital Springs State Recreation Area and will be located on the Nevin grounds at the future Sebastian parking lot area.

Wayfinding signage (design to be determined) will be located along the Capital City Trail at the Glacier Valley Bypass intersection to direct trail users onto alternate routes.

Table 2-8 on the following page and Map 2.12 present a summary of existing and future facilities in this unit.

<sup>&</sup>lt;sup>23</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 2.5. 2001.

<sup>&</sup>lt;sup>24</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 2.5. p. 29-40. 2001.

#### Capital Springs State Recreation Area – Nevin Springs Unit (285 acres)

Table 2-8: Summary of Existin	g and Future Recreation	Facilities, Nevin Springs Unit
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FACILITY	EXISTING	FUTURE	TOTAL
Trail Miles			
10' Paved Bike	1.30	0.10	1.40
10' Bicycle Boardwalk	0.00	0.45	0.45
Total	1.30	0.55	1.85
Small Open Shelter w/ Restrooms	0	1	1
Three-sided Informational Kiosk	0	1	1
Master Signs	0	1	1

#### **Environmental Education and Development**

The primary focus of environmental education within the Nevin Springs Unit will be on water resources. Secondary topics may include "site illustrated topics of ecological stewardship, ecological restoration and native ecosystem health."<sup>25</sup> The Nevin Springs Fish and Wildlife Area Master Plan also calls for rehabilitation of the stone building at the Office/Service Area to serve "as a DNR History and Environmental Education Center. The building would have classrooms and interactive exhibits on water resource topics as well as a Hall of DNR History."<sup>26</sup>

Interpretive signage for this recreation area unit will be designed and developed by the DNR. The DNR and Dane County Parks should work to coordinate a uniform interpretive signage design to be used throughout the entire recreation area.

#### **Boundary Adjustment**

Boundary adjustment of the Nevin Springs Unit should follow land protection recommendations set forth in the Nevin Springs Fish and Wildlife Area Master Plan. Some of the recommended acquisition projects in the Master Plan have already been completed. See Map 2.12 for the current project boundary and future expansion areas.

All of the future boundary expansion projects will be classified as Habitat Management Area, the same classification as Nevin Springs Fish and Wildlife Area. Specific real estate management recommendations can be found within the Nevin Springs Fish and Wildlife Area Master Plan.

<sup>25</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 2.6. p. 40. 2001.

<sup>26</sup> "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 2.6. p. 40. 2001.

27 "Neven Springs Fish and Wildlife Area, Master Plan and Environmental Assessment," Wisconsin Department of Natural Resources, Section 2.7. 2001.

#### Capital Springs State Recreation Area – Upper Mud Lake Unit (260 acres)

#### **Unit / Property Designation**

#### Primary Ownership: State of Wisconsin

The Upper Mud Lake Unit is owned by multiple landowners including the Wisconsin Department of Transportation (DOT), Wisconsin Department of Natural Resources (WDNR), Madison Metropolitan Sewerage District (MMSD), and the City of Madison. Upper Mud Lake is primarily used for boating, fishing, and waterfowl hunting. The unit is bound by Nine Springs Creek on the west, a railroad grade to the south, a private oil tank storage facility to the east, and U.S. Hwy 12/18 (the Beltline) to the north. These natural and manmade barriers make access to the area available mainly by boat.

#### Land Management Classification

The Upper Mud Lake Unit lands owned by the DNR are classified as NR 44 Habitat Management Area. This plan proposes that the DNR manage all remaining lands within the unit (except DOT lands necessary for roadway expansion) as Habitat Management Area. This transfer of management duties could be achieved through a Memorandum of Agreement between the DNR and other landowners.

#### **Property Boundary**

The total acreage of the Upper Mud Lake Unit is about 260 acres. Map 2.13 illustrates the unit boundary and shows the location context of the unit within the entire recreation area boundary.

#### Land Management

This unit has primarily been managed as a public hunting and fishing area. There appears to be some confusion by the public as to which lands within this area are open to public hunting and what types of hunting are allowed.

The Upper Mud Lake Unit contains greater wetland species diversity than most of the other recreation area units. Of particular interest is the eastern shoreline area of Upper Mud Lake that includes a state special concern sedge, *Carex suberecta*.<sup>28</sup> Because of the extreme inaccessibility of wetland areas, however, vegetation management activities within this unit have been very limited.

#### **Existing Facilities and Recreation Uses**

Currently, there are no developed facilities within this recreation area unit.

#### **Existing Recreation Uses**

The primary recreation opportunities within the Upper Mud Lake Unit are waterfowl hunting, fishing, and wildlife observation. Upper Mud Lake is also used extensively by boaters, canoeists, and kayakers.

#### **Future Land Management**

The DNR currently has a vegetation management plan in place for this unit. Future management efforts will follow this plan.

#### **Future Facility Development and Management**

#### **Upper Mud Lake Shoreline Access**

This plan recommends acquisition of a parcel off of Terminal Drive that would accommodate construction of a 30-car gravel parking lot approximately 60' wide by 150' long. This parking lot would provide trailhead access to Upper Mud Lake. There is considerable interest in the creation of a parking area such as this one that will allow winter access to Upper Mud Lake for ice fishing.

#### **Signage and Kiosks**

A 4' x 6' sign denoting the Upper Mud Lake Unit of the Capital Springs State Recreation Area will be installed at the parking lot entrance. Shoreline boundary signs will be placed to clearly define public hunting areas. A master sign will be installed outside of the road right of way south of the Stoughton Road off-ramp. The parking lot would include a two-sided informational kiosk.

#### **Parking Access**

There is one new parking lot planned within the Upper Mud Lake Unit.

#### **Phase One Lower Yahara River Trail**

There is considerable interest among the Village of McFarland, City of Stoughton, Town of Dunn, City of Monona, Dane County, and the WDNR to explore the possibilities of creating a bicycle/pedestrian path along the railroad grade between Upper Mud Lake and the north end of Lake Waubesa. The trail would extend from McDaniel Park in the Village of McFarland to Lake Farm County Park. The trail could be constructed along the south face of the embankment to eliminate the need for trail users to cross the railroad tracks. The trail would provide a much-needed connection to the Capital City Trail for Dane County residents living east of Lake Waubesa. The trail would need to be designed with barriers prohibiting users from leaving the trail and crossing the railroad tracks. Development associated with these barriers would be similar to pedestrian barriers at roadway overpasses.

This trail could further be coordinated with a number of other beneficial projects. There has been discussion of expanding the span of the existing railroad bridge to facilitate better water flows between Upper Mud Lake and Lake Waubesa that may help alleviate flooding problems for shoreline residents upstream of the Beltline and improve boating navigation. The trail would be constructed along the shoreline, thereby providing additional fish habitat and expanded shore fishing opportunities.

<sup>&</sup>lt;sup>28</sup> Clark Forestry, "Ecological Overview for the Capital Springs Centennial State Park and Recreation Area," (June 2002), p. 26.

#### Capital Springs State Recreation Area - Upper Mud Lake Unit (260 acres)

#### **Upper Mud Lake Boardwalk**

Approximately 1,350' of 6'-wide floating boardwalk would be constructed from the proposed gravel parking lot off Terminal Drive to an accessible waterfowl hunting/observation blind on the east shore of Upper Mud Lake. Access to this blind would be restricted to persons with a Class A disabled hunter's permit. The blind could also serve as an accessible wildlife observation area, canoe carry-in, and ice fishing access point during non-hunting months.

#### Hunting

This plan recommends expanding waterfowl and deer hunting if agreements can be reached with the Village of McFarland.

Table 2-9 and Map 2.14 present existing and future facilities.

#### **Environmental Education and Development**

Interpretive signage at this site may include weather/vandal-proof panels along the boardwalk that discuss wetland vegetation and the tamarack swamp that previously existed along the eastern shoreline of Upper Mud Lake.

#### **Boundary Adjustments**

In an effort to more clearly define hunting area boundaries, the recreation area boundary will be expanded by about 100 acres on the west side of Upper Mud Lake to include all lands east of Nine Springs Creek and north of the railroad grade. This change in designation is included within the Memorandum of Agreement between Dane County, MMSD, and the WDNR, and will not change land ownership.

Table 2.10 summarizes boundary adjustment recommendations.

Table 2-9: Summary of Existing and Future Recreation Facilities, Upper Mud Lake Unit			
FACILITY	EXISTING	FUTURE	TOTAL
Trail Miles			
10' Bike/Pedestrian Boardwalk	0	1.00	1.00
Total	0	1.00	1.00
Parking	None	30 cars	30 cars
Accessible Waterfowl Observation Blind	None	1	1
6'-wide ADA Floating Boardwalk	0 miles	0.25 miles	0.25 miles
Two-sided Kiosk	0	1	1
Master Signs	0	1	1
Bicycle/Pedestrian Bridge	0	1	1

Table 2-10:         MMSD Boundary Adjustment Summary		
Existing Boundary Acreage Total	265 acres	
Total Future Adjustment Through Fee Simple Land Acquisition	0 acres	
Future Boundary Reconfiguration Through Agreement/Easement	100 acres	
Plan Recommended Boundary Acreage	365 acres	

#### **Unit / Property Designation**

#### Primary Ownership: State of Wisconsin

Currently there are 290 acres south of Libby Road and east of Lake Farm Road that are designated as State Park. In addition a 66 acre easement located next to Nine Springs Creek was designated as part of the state park in 2005. In total, 356 acres of fee title and easement lands currently comprise the state park unit. This state park unit will become part of the overall Capital Springs State Recreation Area.

#### Land Management Classification

It is proposed that the Capital Springs State Park Unit be classified as an NR 44 Recreation Area Type IV. In addition, it is proposed that the Lake Farms Archaeological District, which is on the National Register of Historic Places, be extended to encompass the eastern lakeshore portion of the park, and that a 100' scenic shoreline buffer be established along the lakeshore. (See Map 2.16).

#### Land Management

#### **Existing Vegetative Cover and Features**

The current land coverage within this unit is a mix of uplands, and agricultural lands. All agricultural/croplands are currently located south of Libby Road. In addition, over approximately 0.65 miles of undeveloped shoreline exists along the shore of Lake Waubesa. Table 2-11 describes the current mix of vegetation and shoreline length within this unit.

Table 2-11: Existing Vegetative Cover and Features,           Capital Springs State Park Unit		
Agricultural Lands	194 acres	
Upland Grass/Mixed Brush	39 acres	
Wetlands	76 acres	
Upland Woods/Oak Savanna Remnants	47 acres	
Lake Waubesa Shoreline	3,500 feet	

#### Soils / Geology

Three soil types are associated with this area. The first are soils formed by outwash material along the Lake Waubesa shoreline. These soils are identified as the Batavia-Houghton-Dresden soil type. They have mixed drainage with silt loams and mucks that are underlain by silt, sand, and gravel. Further west, the soils shift to sand loam glacial till with associations to Dodge-St. Charles-McHenry and Plano-Ringwood-Griswold soil types. The WARF Drumlin was formed by glacial deposits.

#### **Future Vegetative Management / Coverage**

The vegetation on all land within the unit boundary would be managed using prescriptions and techniques intended to produce specific results or conditions in fulfillment of the Master Plan vision statement and goals. The main goal related to vegetative management is to "provide and maintain a variety of high quality native communities within the ecological capabilities of the site." The phrase "within the ecological capabilities of the site." The phrase "within the ecological capabilities of the site" is critical to understanding this proposed management strategy. The number and diversity of communities and forest types established in this area would be limited to those which would be likely to occur naturally on the site given existing conditions. All areas of the park would be managed—some actively and some passively—with a general trend toward more mature forest and prairie coverages.

Several areas within this unit would be managed with specific objectives requiring active management. Other areas would be managed passively, using the process of natural succession to influence the structure and composition of vegetative communities. Special vegetation management, including site clearing and replanting, and pesticide use would be required in and around public use areas and facilities. This plan proposes to convert the current agricultural lands within the State Park Unit back to pre-settlement vegetative conditions. Based on U.S. government Land Survey records from 1835, the pre-settlement vegetation of this area consisted of oak openings and marshland. The uplands contained bur and white oaks with about 36-48 trees per hectare. Prairie grasses, prairie forbs, and shrubby black oaks made up the ground cover. It is recommended that oak savanna and tallgrass prairie be restored within the State Park Unit. The tallgrass prairie ecosystem is presently one of the most threatened ecosystems in the Midwest. With the relatively flat topography and fertile prairie soils, lands within this unit are ideal for recreating areas of this threatened prairie ecosystem. Two demonstration areas are proposed for this site to re-create pre-settlement conditions. These areas are discussed below.

#### Mesic Prairie Demonstration Area Size: 70 acres

This grassland community occurs on rich, moist, well-drained sites. The dominant plant is the tall grass, big bluestem (Andropogon gerardii). The grasses little bluestem (Andropogon scoparius), Indian grass (Sorghastrum nutans), porcupine grass (Stipa spartea), prairie dropseed (Sporobolus heterolepis), and tall switchgrass (Panicum virgatum) are also abundant. The forb layer in this community is diverse both in the number, size, and physiognomy of its species. Common taxa include the prairie docks (Silphium spp.), lead plant (Amorpha canescens), heath and smooth asters (Aster ericoides and A. laevis), sand coreopsis (Coreopsis palmata), prairie sunflower (Helianthus laetiflorus), rattlesnake master (Eryngium yuccifolium), flowering spurge (Euphorbia corollata), beebalm (Monarda fistulosa), prairie coneflower

(Ratibidapinnata), and spiderwort (Tradescantia ohioensis). It is proposed that 70 acres of mesic prairie be re-created on the eastern half of this unit (see Map 2.16). This demonstration prairie area will serve as a transition area into the Oak Savanna Demonstration Area listed below.

Prescribed burning is the primary management tool used to establish and maintain prairie ecosystems and would be used within this area. Selective cutting, herbicide application, and planting would also be permitted management activities. Initially, the 70-acre prairie site would be burned repeatedly—about every two to four years—to fully establish the desired mix of species. After the prairie is established, a "maintenance" burn would be performed every three to four years.

#### Oak Savanna Demonstration Area Size: 68 acres

It is recommended that an oak savanna demonstration area be re-created in the western half of the Park Unit south of Libby Road. An oak savanna is a community of scattered oak trees (Quercus spp.) above a layer of prairie grasses and forbs. Trees in this habitat are dispersed so that there is no closed canopy and the grasses and forbs receive plentiful sunlight. The savanna exists as a transition ecosystem between the tallgrass prairie and woodland environments, and therefore is an important habitat for both woodland and prairie animals and insect species. Prescribed burning is the primary means of establishing and maintaining the savanna ecosystem and will be used at this site. Selective cutting, herbicide application, and planting will also be permitted management activities. Initially, the 68-acre savanna site will be burned repeatedly, about every two to four years, to fully establish the desired mix of species. After the savanna is established, a "maintenance" burn will be performed every three to four years.



#### Border Plantings (Southern Dry-Mesic Forest) Size: 30 acres

It is recommended that the wooded buffer along the north and south boundaries of this park unit be expanded with border plantings (see Map 2.16). This vegetative buffer will extend over to the proposed amphitheater. Plantings will consist of typical Southern Dry-Mesic Forest types such as red oak (Quercus rubra), white oak (Q. alba), basswood (Tilia americana), sugar and red maples (Acer saccharum and A. rubrum), and white ash (Fraxinus americana). Typical shrubs will include gray dogwood, hazelnut, gooseberry, and woodbine (a vine) with a prevalent groundlayer of wild geranium, false Solomon's seal, hog peanut, interrupted fern, and tick-trefoil. These border plantings will act as a screening tool for the adjoining private lands. Passive management would predominate here. Active forest management such as tree removal and brushing would be permitted to develop trails and other public use facilities, or to remove hazard trees near them. Where appropriate, tree removal would also occur in response to major catastrophic disturbances. Invasive exotic plants may be removed and appropriate native trees or shrubs may be planted for landscaping and ecosystem enhancement purposes.

#### Wetlands

#### Size: 10 acres

Attempts should be made, when feasible, to restore the two wetland areas within the park unit. Removal of invasive species such as common reed (Phragmites australis) and reed canary grass (Phalaris arundinaceae) should be considered. These restored wetlands will help improve water quality and will provide a food resource for local wildlife.

#### Scenic Shoreland Management Zone Size: 8 acres

This zone will extend 100' from the shoreline edge of Lake Waubesa. Management in this area would be primarily natural, allowing natural succession to gradually create a climax forest. Active forest management such as tree removal and brushing would be used to develop trails and other public use facilities or to remove hazard trees near them. Where appropriate, tree removal would also occur in response to major catastrophic disturbances. Invasive exotic plants may be removed and appropriate native trees or shrubs may be planted for landscaping and ecosystem enhancement purposes.

#### **Future Recreation Uses**

Future recreation uses within this state park unit will be a combination of passive recreation uses. The following recreational uses are recommended for the unit: hiking, biking, cross-country skiing, fishing, snowshoeing, picnicing, group gatherings, nature study, wildlife observation, and boating.

#### Future Recreation Facility Development and Management

The primary facility development will center on day use activities. Location of these recreation facilities and support developments are shown on Map 2.16 and summarized in Table 2.12

Table 2-12:Summary of Future RecreaSupport Developments, CaState Park Unit	
FACILITY	TOTAL
Amphitheater	1
Trail Miles Hike/Cross-country Ski 10' Paved Bike/Pedestrian Trail Nature Total	2.50 0.75 0.90 4.15
Observation Deck	2
Parking Lot	1
Road Miles	0.30 miles
Shop Building	1
Rustic Campground	1

#### Day Use

#### **Outdoor Amphitheater**

An outdoor amphitheater will be developed near the mounds area near Lake Farms Archaeological District. This outdoor amphitheater will have electrical power with minimal lighting and vault toilets. Approximate seating size will be up to 60 persons constructed with native materials. A parking lot will be constructed for up to 45 vehicles. This amphitheater can serve as a trail head that will also allow foot travel access to Lake Waubesa.

#### Vista/Observation Deck and Tower

An observation deck is proposed to be developed on the western edge of the property near Lake Farm Road. This deck will be 20' x 20' in size, wooden, and will provide interpretive plaques for display. In addition, an observation tower will be developed along the eastern edge of the property that will provide vistas of Lake Waubesa and the recreation area.

#### **Additional Parking**

It is proposed that up to a 15-car overflow parking lot be built on State Park lands across from the existing boat ramp parking lot located on county lands. This overflow parking lot will be used for nonmotorized water access activities. This parking lot will be used during seasonal peak times and will be gated closed during non-peak hours.

#### Camping

Up to a 30-unit rustic campground is proposed to be developed along the southern boundary of the Park. This campground will be developed as an NR 44 Type IV rustic camping facility. Development will be limited to fire rings, picnic tables, one set of vault toilets, a hand water pump and 10 sites with boat trailer parking. One site will be electrified for a campground host.

#### Trails

#### **Hiking/Cross-country Skiing**

New hiking/cross-country skiing trails are proposed to be developed with the Park Unit. A trailhead will be established at the outdoor amphitheater. Approximately 2.5 miles of trail will be established in the park that will traverse a variety of landscapes and vegetative communities. Through these trails, visitors will be able to access Lake Waubesa, Hog Island, the drumlin near Hog Island, overlooks south of Libby Road, wetlands, woodlands, and prairie restorations. A county or state trail pass will be required for cross-country skiing. When possible, the trails to the vista points will be ADA accessible.

#### Bike

A new bike/pedestrian trail will be developed from the Waucheeta Trail neighborhood to provide access to the Capital Springs State Recreation Area. This trail will be approximately 0.75 miles in length and may share the road that will also be used by the outdoor amphitheater and will also connect into other trails within the Lake Farm County Park Unit.

#### Nature/Interpretive

*Native American Culture* – An interpretive trail of 0.9 miles will be developed within the archeologically important mound area. This trail will tie into the future extension of the Lake Farms Archaeological District. Interpretive displays will be developed for this area, and a vista point will be established on top of the mound. There will also be a spur trail leading the hog island area for fishing access.

#### **Other Trail Considerations**

Because of the small footprint of this unit, it is recommended that no motorized trails be allowed within this unit. In addition, all pets outside of the pet exercise area will be required to be on a leash per NR 45 requirements.

#### **Future Support Facility Development**

#### **Shop Buildings**

The existing shop buildings on Libby Road are old and in need of repairs. It is recommended that a new shop building be built at the current site. This building will be up to 8,000 square feet and will provide storage for equipment and materials for the recreation area including the Capital City State Trail.

#### Signage

All signage within this unit will comply with the overall signage design as agreed upon by the State and County.

#### Roads

Two existing roads, Lake Farm and Libby, bisect this unit. The following road development / modifications are recommended:

**Lake Farm Road** – Because of the projected increase of traffic on this road, it is recommended that the local unit of government along with State and County assistance develop road improvements that would include providing turn lanes into the pet exercise area, Libby Road and Lake Farm County Park. These changes, along with marked pedestrian crossings will improve pedestrian safety on and near the road right of way.

#### **New Park Roads**

A new 0.6-mile road will extend south from Libby road to the outdoor amphitheater as shown in Map 2.16. This road will be developed with a bike lane that will serve as part the bike trail extending to the south and also connect to the proposed campground.

#### **Boundary Expansion**

The state park has a current approved acreage of about 356 acres through fee title and easements. This Master Plan proposes an expansion of the park project boundary by about 160 acres, and removal of 39 acres to be incorporated into the E-Way unit. The residential inholdings of approximately 15 acres immediately south of the boat launch and Libby Road are also proposed for future park expansion. This would bring the proposed park acreage goal to about 491 acres. The proposed park boundary is shown on Map 2.16. Were these additional lands to be acquired, they would provide permanent protection to important park resources, buffer the park from incompatible uses, provide access control, delineate clearer park boundary lines, and provide space for future recreational facility development. All land for this expansion would be acquired from willing sellers at fair market value. It should also be noted that these lands are currently in agriculture use and it is not the intent of this plan to change this use unless the landowner is agreeable to sale for parkland expansion.

There are two areas of recommended acquisition shown on Map 2.16. Each is described below according to its location and main features. Each area has a specific purpose for its inclusion in the state park boundary. These additions would total about 175 acres.

#### 1. PDR lands and other private inholdings Size: 160 acres

Purpose: These lands south of the park will allow for expanded recreation opportunities within the park. Acquisition of these lands would also allow for a better-defined park boundary ending at Alma Road to the south and Waucheeta Trail on the east.

#### 2. Other private inholdings Size: 15 acres

Purpose: These lands will allow for contiguous block of land that is bordered by existing roads. It will also allow for almost uninterrupted public access to approximately 1.5 miles of Lake Waubesa shoreline.

#### 3. Removal of Park lands west of Lake Farm Road. Size: 39 acres

Purpose: This 39-acre parcel west of Lake Farm Road will be transferred to the E-Way Unit for other recreation purposes.

#### Capital Springs State Recreation Area – Lake Farm County Park Unit (328 acres)

#### **Unit / Property Designation**

#### Primary Ownership: Dane County

Lake Farm County Park was created in 1973 and is designated a recreation park in the Dane County Park and Open Space Plan. This popular park offers modern and rustic camping, three large reserveable shelters, a boat launch, hiking and ski trails along with access and parking for the Capital City State Trail. The entire area is rich with Native American history that prompted in-depth archeological studies in the early 1970s. The park is part of a larger Archaeological District and member of the National Register of Historic Places. In 2001 the Lussier Family Heritage Center was completed. The building is intended to provide interpretation of the human and environmental heritage of the Lake Farm County Park region.

#### Land Management Classification

It is proposed that Lake Farm County Park Unit be classified as an NR 44 Recreation Area Type IV.

#### **Property Boundary**

The total acreage of the Lake Farm County Park Unit is about 328 acres. Map 2.15 illustrates the unit boundary and shows the location in context of the entire recreation area boundary.

#### Land Management

Dane County has established several large scale mesic prairie restorations throughout the park. There has also been some wet prairie restoration surrounding a small pond near Shelter #2 along the Lake Waubesa shore line. Volunteers have been actively removing seed bearing boxelder trees along existing fence rows throughout the park. Much of the interior, undeveloped lands within the park are becoming large monotypic communities of reed canary grass.

#### **Future Land Management**

Dane County will be working on creating a series of shallow scrapes in the wetland areas south of the Lussier Family Heritage Center in an attempt to create waterfowl viewing areas and fragment the large stands of reed canary grass. Parks staff and volunteers will continue working on removing boxelder trees from fence rows.

A shallow depression exists immediately north of the boat launch area that is connected to Lake Waubesa by a drainage swale. Dane County may investigate creation of fish spawning areas at this site with State fishery managers.

#### **Existing Facilities and Recreation Uses**

#### **Existing Facilities**

The existing facilities within this unit have been developed by Dane County over the last 20 years. This park has three shelter facilities, play equipment, a barrier-free boat launch with a fish cleaning facility, group camping area, wildlife pond, over-look tower, hiking and cross-country ski trails, and the Native American Archaeological Trail. A new fully accessible campground with 54 sites including 39 electric hook ups for RVs (50 amp), bathroom and shower facilities, and a sanitary dump station are now open. Table 2-13 lists the existing recreation facilities.

#### **Existing Recreation Uses**

Current recreational uses include camping, hiking, cross-country skiing, fishing, boating, picnicking, hunting, wildlife observation, Deer archery hunting by permit, group gatherings, special events, nature study, and biking.

Table 2-13: Existing Recreation Facilities,Lake Farm County Park Unit
Lussier Family Heritage Center: 10,000 sq. ft. total Upper meeting room: 2,000 sq. ft. Lower meeting room: 2,900 sq. ft.
Modern Campground: — 54 sites, 39 with electric hook-ups — Sanitary dump station — Restrooms and shower facilities
Group Campground
Lighted Boat Landing: – 2 ramps – 50 parking stalls – Fish cleaning station – Restrooms – Picnic area – Accessible fishing pier
Trails Hiking/Cross-country Ski – 4 miles 5' Accessible Floating Boardwalk – 0.20 miles
Shelters: Shelter #1, 30' x 45', 150 person capacity Shelter #2, 30' x 45', 400 person capacity Shelter #3, 30' x 45', 400 person capacity
Overlook Tower, 28' high
Observation Deck
Three-sided Interpretive Kiosk – 1
Master Signs – 1
5 Playgrounds/Play Areas

#### Capital Springs State Recreation Area – Lake Farm County Park Unit (328 acres)

#### **Future Recreation Uses**

Future recreation use of this unit includes expanding accommodations at the group camp to include up to 7 yurts as shown in Map 2.16. These will be developed after the Lower Yahara River Trail is constructed and are anticipated to serve both bikers and canoeists. Additional non-reservable picnic area would also be developed on the west side of the park road between shelter #1 and #2. A toilet facility will be provided to service the picnic area.

## Future Recreation Facility Development and Management

A number of enhancements are proposed for the Lake Farm County Park Unit. These are listed in Table 2-14 and described below.

#### **Lussier Center Educational Expansion**

It is proposed that the Lussier Center become the primary educational hub for the E-way that will provide educational opportunities for outdoor recreation skill development along with study and interpretation of the natural and archaeological resources of the area.

Dane County Parks is currently undertaking a needs assessment study to investigate opportunities for expansion of the building facilities. At the completion of this study, recommendations of improvements will be made to the Dane County Park Commission and County Executive.

It is also recommended that the existing Lussier Center become the main gateway for the E-way visitor interaction along with interpretation. In the future, Dane County would consider adding a part time Naturalist position at this location.

#### **Campground Expansion**

Investigate creation of an additional 10-20 RV campsites along the southern boundary of the existing campground.

Table 2-14:Summary of Future Recreation Facilities and Support Developments, Lake Farm County Park Unit	
Camping 20 RV camp sites 7 Yurts	
Lussier Center Educational Expansion	
Trails 1.75 miles of paved bike trail 0.30 mile of bike/pedestrian boardwalk 0.10 miles of hike/cross-country ski trail 0.30 miles of 5'-wide accessible floating boardwalk Total 2.25 miles	

#### Trails

#### Lower Yahara River Connector Trail

Approximately 1.75 miles of paved bike trail will be built that will connect the existing campground to the rail corridor for possible future expansion of a bike trail system that will connect surrounding communities to the E-way and Capital City State Trail. This trail will also allow connections to other regional state and local trails.

#### **Nine Springs Boardwalk**

A boardwalk approximately 1600'-long and 5'-wide is proposed from the existing observation deck near the MMSD settling ponds to a second overlook platform south of the Lussier Family Heritage Center and connecting back to the Capital City State Trail.

#### **State Park Spur Trail**

Approximately 300' of natural surface hiking/cross country ski trail would be created to connect the existing hiking trail near shelter 1 south to the future hiking/cross country ski trail networks in the state park area.

#### Signage

All signage within this unit will comply with the overall signage design as agreed upon by the State and County.

#### Roads

Traffic calming devices are proposed at the point where the Capital City State Trail crosses Lake Farm Road at the park entrance. It is further recommended that a 25 mph speed limit be designated for the park portions of Moorland and Lake Farm Roads.

#### **Capital Springs State Recreation Area**

#### **General Vegetation Management**

The entire Capital Springs State Recreation Area is included within the Dane County E-Way boundary. Ongoing vegetation management efforts carried out on these lands have attempted to re-establish presettlement vegetation conditions in the area. The Dane County naturalist has been working on a vegetation management plan for all lands within the county park system. The following section outlines vegetation management recommendations for the E-Way found within this plan. For the purposes of these recommendations, the E-Way and Capital Springs State Recreation Area should be considered the same unit.

#### **Dane County Naturalist Vegetation Recommendations**

The remnant grassland, wetland, and open oak woodland communities in the E-Way will respond to an aggressive management plan. Failure to enact management, however, will result in a total loss of any remaining historic plant communities and associated animals.

The invasion of dense, shade-producing trees and shrubs has converted the last remnants of sedge meadows from habitats with 50 or more plant species per acre to areas with fewer than 5 species per acre. These trees and shrubs will not produce a forest community. This site did not support a forest community prior to settlement and the existing mix of wetland and forest vegetation does not create the seed mix necessary to create a naturally occurring forest environment. Existing remnants of original grassland/wetland flora however, could, under proper management, contribute to the re-establishment of pre-settlement vegetative communities.

As a wildlife refuge, the property provides habitat for grassland species, especially birds. These species require large continuous tracts of grassland habitat and are adversely affected by edge. Many of these species were abundant during pre-settlement times when native grassland covered much of Southern Wisconsin. As grassland habitats have decreased due to fragmentation and changes in farming practices, these species have declined drastically. The E-Way represents one of the few areas close to Madison where these species have the potential to reproduce and maintain a viable population.

There is no doubt that the edge habitat of trees and brush supports many different wildlife species. It is also true that large grassland tracts will support a smaller number of species than edge habitat. The presence of more species in an edge habitat, however, does not necessarily indicate a more healthy ecological community. This is because (1) the species composition of the area will be dominated by typical edge specialists already abundant in the landscape surrounding urban and rural areas, and (2) the E-Way is uniquely situated to be managed for species which are rare or declining by managing for large, unbroken tracts of grassland.

#### **Restoration and Community Management**

The open aspect of the current E-Way captures much of the feel and character of a prairie landscape. Restoration efforts will open the site even further, restoring the structural openness of the pre-settlement grassland, wetland, and oak woods communities.

The concept of community management should be applied to all aspects of management and development in the E-Way. Restoration actions within the E-Way should be done on a park-wide scale, rather than in isolated patches. The objectives of community management should also be applied to non-vegetational improvements—everything from the location of parking areas, trail layout, and tree planting.

#### Major Vegetation Associations and Management Recommendations

#### Solid Stand of Reed Canary Grass

Because it is difficult to eradicate, existing stands of reed canary grass will likely remain monotypic. Ongoing research should investigate methods of increasing species diversity within these areas.

Although negative in many respects, areas of reed canary grass do provide open space adjacent to the remnant sedge meadows and restored prairies of the E-Way. This open space is valuable for attracting grassland species, particularly birds. Some species such as sedge wrens, yellowthroats, and swamp sparrows will even nest in the dense reed canary grass. These species use the adjacent upland prairie restorations to search for food for their young, food that is not provided by the stands of box elder, buckthorn, and honeysuckle found elsewhere in the park.

Bobolinks, meadowlarks, and savannah sparrows are also fairly common in reed canary grass, especially when it is mixed with sedges in drier areas. These areas, however, are the most likely to be invaded by shrubs and tree species like box elders.

#### Fair Quality Sedge Meadows

These stands provide the best potential nesting areas for some of the grassland birds such as sedge wrens, yellowthroats, swamp sparrows, and bobolinks. The sedge meadows present on this site have survived the last 200 years of human settlement, farming, grazing, drainage, and silting but are now being lost to invading buckthorn and honey-suckle.

In his article, "Birds of Wisconsin Sedge Meadows," Mike Mossman writes, "many species are affected by shrubby invasion of southern sedge meadows. Sedge wrens decline, although they will tolerate some low shrubs (less than 2% total cover) and will persist in local, open areas, even in some meadows that have succeeded to the shrub carr stage."
In his article, "Birds in Wet Mesic and Wet Prairies in Wisconsin," Randy Hoffman writes, "The fact that many prairie fragments are adjacent to or being invaded by woods may also be contributing to the decline of some prairie birds. Johnson and Temple (1986) found the grassland birds (including 4 species found in wet-mesic or wet prairies) nesting within 45 meters of a forest edge on Minnesota tallgrass prairie fragments had significantly lower nest productivity than did those nesting far from a forest edge."

The above statements emphasize the importance of removing box elder, honeysuckle, and buckthorn stands to preserve the several thousand year-old sedge meadows. Prairie restorations in the Capital Springs State Recreation Area Region will not support successful nesting by grassland birds when bordered by tall stands of box elder.

In addition to crowding out native sedge vegetation, box elders also provide surveillance perches for cowbirds, a pest species that lay their eggs in the nests of other birds. The trees also provide protective cover for skunks, opossums, and raccoons, which destroy the eggs of ground nesting birds. Box elder removal therefore increases the nesting success of uncommon birds and allows the monoculture of box elders (of negligible wildlife value) to be replaced with a diverse food web of over 50 species of native wildflowers and grasses.

Prior to European settlement in the Madison area, natural fires and large animals kept the prairie areas open and treeless. Today, volunteers and park staff must help restore this balance through prescribed fires, wildflower seed collecting, tree removal, seed broadcasting, and bird surveys.

#### Shrub Carr (Stands of Native Shrubs)

These areas of the E-Way are characterized by red-osier dogwood, slender willow, meadow sweet, beaked willow, pussy willow, and bog birch. Since berry eating birds are attracted to these areas, there is a constant influx of buckthorn and honeysuckle berries. The dense shade of these European/Asian species destroy the forb species of a shrub carr such as swamp milkweed, spotted joepye weed, late goldenrod, purple meadow rue, and panicled aster.

In addition, the shade of the shrubs weakens the sod, making areas more prone to invasion by trees such as box elder, Chinese elm, black cherry, poplar, and cottonwood. As tree species increase, birds such as robins, catbirds, grackles, and cowbirds also increase and compete with the birds that call the shrub carr home.

Management of these shrub carr areas should include removal of all trees over 12' tall, occasional fires if there is enough fuel, and winter mowing once every five to ten years to keep the shrubs from forming a completely closed canopy.

#### **Box Elder Stands**

All seed producing trees should be removed from the E-Way so as to prevent their spread. Preferably all box elder stands will be completely removed and replaced with prairie restorations of 100 species or more. Since many of the box elder stands follow old fencerows, they break up large tracts of grassland and provide cover for birds and mammals that prey on ground nesting grassland birds. As fires have ceased and disturbance has increased, the prevalence of box elders has increased within wetland/marsh areas. These trees are destroying an inter-related community of plants and animals that has persisted for thousands of years in the E-Way region. Areas that previously supported 30–50 plant species per acre are now supporting only 3–5 species per acre, mainly box elders, buckthorn, and honeysuckle.

#### Aspen Stands

Because of their short life span and soft wood, aspen are valuable for cavity nesting birds and should be encouraged in certain select areas. The light shade provided by aspen does, however, weaken sedge meadow sod, thereby facilitating the invasion of buckthorn and honeysuckle. Seeds of these shrubs are frequently introduced by birds that carry the seeds from nearby residential lawns and drop them while perching in the aspen trees. Removal of the aspen would therefore eliminate potential perches for these birds and would strengthen the sod to prevent foreign invasion.

#### **Upland Oak Woods**

The ultimate goal in oak woods portions of the E-Way is to create an environment typical of open oak woods; reproducing oaks with an understory of spring, summer, and fall wildflowers. To accomplish this, several actions will need to be taken. The amount of light reaching the ground will need to be increased dramatically. Seeds of the rare summer and fall blooming woodland wildflowers will need to be introduced, and burning will need to be encouraged to slow shrub growth and encourage germination of planted wildflower seeds.

# Vegetation Management Educational Opportunities of the E-Way

A primary objective of the vegetative management of this area is to educate park users about historic communities of native vegetation. Most grassland restorations around urban areas and in state parks are fairly small (less than 100 acres). This restoration, however, will be a large landscape-scale restoration. If citizens are to appreciate and value prairies and other native communities, we will need to show them what the true splendor of a prairie can be. A large-scale restoration like this one could be invaluable in giving visitors a true sense of what an original prairie looked and felt like.

Restoring an area through community management represents a change in the way we view the landscape and the resources within it. Some people will oppose certain management activities. Restoration is a long-term project that takes place over an extended time frame. In the early stages of the restoration, the environment may be visually unappealing but the end result will be a healthy, historic community no longer fragmented by human impact.

#### **Prairie Restoration**

The finest educational and wildlife improvement portion of the E-Way program is occurring in the volunteer-driven prairie restoration projects. Each year over 1000 volunteers help collect, clean, and broadcast the seeds of more than 150 species of native wildflowers and grasses. Were it not for these volunteers, this collection and dispersal would cost the Dane County park system \$15,000 to \$25,000 a year.

The diversity of structure in a prairie of mixed grasses and forbs creates excellent habitat for non-game birds. Such a mix creates bunches and thickets as well as small openings between plant clusters (creating a small "micro-edge" effect). In the grassland monocultures typical of abandoned farm fields, the grass stems are too fine to support perching birds. The rigid stems of the forbs protrude over other leafy growth, providing important singing perches for grassland birds.

The wildflowers of a prairie increase the food base of birds because insects are attracted to the abundant flowers and succulent stems and leaves of the forbs. Forbs also produce some large and abundant seeds that serve as an additional animal food source.

Nearly 100 acres of prairie have been planted in the E-Way over the past 20 years. This easily represents a quarter million dollars in volunteer labor focused on creating high quality natural areas near an intensely urban area. Thousands of people have contributed to this project, in the process learning the value of prairies and open grasslands.

Box elders are a natural part of floodplain woods and southern oak forests, but man-made disturbances have allowed these trees to encroach into areas where they had never been before. This invasion of box elders and other trees and shrubs has destroyed an inter-related community of plants and animals. Allowing these trees and shrubs to persist in this area will eventually result in a completely destroyed prairie community. Box elders, honeysuckle, and buckthorn will therefore need to be removed to create and promote a healthy prairie/grass-land community.<sup>30</sup>

<sup>30</sup> Wayne Pauly, "Vegetation Management Plan for the Nine Springs E-Way," (1998).





# **Background Information**

The Capital Springs State Recreation Area provides nearly 2,500 acres of habitat and recreation areas. Multiple studies and plans completed prior to the start of this master planning process have provided a wealth of information about both the project area and the larger E-Way region.

Between 1976 and 1978, Philip Salkin and Thomas Emerson conducted several in-depth archaeological assessments of the Lake Farm portion of the E-Way. The City of Monona adopted the Monona Wetlands Conservancy Plan in 1991. In 1996, the Nine Springs Watershed and Environmental Corridor: A Water Resources Management Study, was completed by the Water Resources Management Practicum and the University of Wisconsin Institute for Environmental Studies. The Nine Springs E-Way plan was completed by the Fitchburg Citizens E-Way Advisory Committee in 1998. The Madison Metropolitan Sewerage District hired Smithgroup, JJR in 2000 to prepare the Lagoon Restoration Project for future restoration plans of the sewerage settling ponds.

In 2002, the Ecological Overview for the Capital Springs State Recreation Area was completed. This plan provides a comprehensive look at the natural and cultural environment of the CSSRA planning area. In 2003, Jennings and Associates Landscape Architecture consultants compiled a Regional Analysis for the CSSRA. This report drew information from the Ecological Overview report and multiple other prior planning efforts to provide an in-depth site inventory and analysis of the project area.

#### **Population and Land Ownership**

#### Population

From 1990 to 2000 Madison gained more people than any other Wisconsin city, growing at a rate of 9.1%. This was also true for Dane County which gained more people than any other county in the state and is forecast to increase 23.4 % between 2001 and 2020 for a total of 510,155 persons. This type of increase was also mirrored in the Village of Cottage Grove, which grew faster than any other community in the state with a 258.9% increase in population going from 1,131 to 4,059 persons.

#### Land Ownership

CSSRA covers about 2,500 acres in the Nine Springs Creek watershed. The existing ownership of the CSSRA, which includes several municipalities, is not expected to change as a result of this Master Plan. The project boundary designates the area in which all public landowners have agreed to work together toward a common management goal. Governmental units that own land in the corridor generally have management plans in place for their respective properties. It is not the intention of this master plan to alter the private parcels within the boundary in any way. These landowners may, however, find the final land management recommendations outlined in this plan helpful when making management decisions for their own properties.

Much of the land within the CSSRA boundary is publicly owned by Dane County or the DNR. The Dane County Parks Department is also the management agency for the Capital City State Trail. Other governmental and quasi-governmental agencies that own land within the project area include the City of Madison, City of Monona, City of Fitchburg, Town of Blooming Grove, Madison Metropolitan Sewerage District, Wisconsin Department of Transportation, and individual private landowners.

#### **Transportation**

A number of major roadways including Interstate 90-94, U.S. Hwy 12/18/151, and U.S. Hwy 14 provide easy access to the park for users outside of Dane County. In addition, Fish Hatchery, Lake Farm, Syene, Meadowview, Moorland, and McCoy roads are also frequently used thoroughfares adjacent to the project area. Currently there is only one automobile parking lot off Moorland Road at the east end of the recreation area. This master plan recommends four additional lots, an addi-

tion that would provide better access to facilities throughout the entire corridor. In terms of water access, Nine Springs Creek, the Yahara River, and Lake Waubesa are all expected to provide watercraft access to the Capital Springs State Recreation Area.

Access to the recreation area will also be available by foot or bike. The location of Capital Springs is well positioned to link the project area to a number of regional bicycle trail systems. The Military Ridge, Badger, and Glacial Drumlin State Trails will connect into the Capital Springs State Recreation Area. Currently, most of the walk-in/hike-in access to the CSSRA occurs via the Capital City Trail. A number of spur trails and bridges are recommended to improve pedestrian and bicycle connectivity to the CSSRA from adjacent residential areas. An existing railroad grade owned by Wisconsin and Southern Railroad is proposed to provide future bicycle/pedestrian access to the Village of McFarland and beyond.

#### **Recreational Resources**

The project area offers a variety of recreation resources. These are discussed below.

#### **Boating and Fishing**

An existing four-lane boat launch and accessible fishing pier is available in Lake Farm County Park located on Lake Waubesa. From this landing, Upper Mud Lake, Nine Springs Creek, and the Yahara River can also be accessed and offer excellent canoe and kayaking opportunities. This boat landing is a popular winter access site for ice fishing.

#### Trails

A number of trails already exist within the recreation area. The Capital City Trail, for example, offers hiking, biking, rollerblading, and roller skiing opportunities. The other trails also provide a number of natural surface trails for hiking and cross-country skiing.

#### Hunting

Hunting is currently a designated use in parts of the Upper Mud Lake, E-Way, Lake Farm and Nevin Springs Units. This plan proposes expanding limited hunting opportunities within the Recreation Area as means of controlling urban deer and waterfowl populations.

#### **Outdoor Education**

One of the primary objectives of this plan is to educate park visitors about the natural, historical, and cultural environment they are visiting. To this end, a number of interpretive/educational kiosks have been proposed to be built along the Capital City Trail to educate visitors on a number of topics. The Lussier Family Heritage Center is also expected to play a vital role in education as it will provide a comprehensive exhibit educating park users about the history of the place they are visiting and a social history of the area's original inhabitants.

#### Picnicking

Existing picnic areas are used extensively during the summer months. There have been requests to create more picnic areas that are not associated with shelter facilities.

#### **Biological and Ecological Resources**

The Capital Springs State Recreation Area can generally be described as a vast east/west oriented wetland complex with Nine Springs Creek traveling down the center. Gentle, rolling hills composed of ground moraine (soil deposits left by melting glaciers) are located primarily to the north and south of this wetland complex. The hydrology of the recreation area is perhaps one of its most notable attributes, with a number of springs and associated recharge areas supplying a high quality base flow to the Nine Springs Creek.

A comprehensive inventory of the vegetative communities in the area was completed under the Ecological Overview. This report identifies nine sites with potential for developing high quality plant communities. The Natural Heritage Inventory lists four high quality, rare, or otherwise significant natural communities within the recreation area including southern sedge meadow, shrub-carr and a shallow hard drainage lake emergent aquatic community. Two rare, threatened, or endangered plant species—white lady's slipper and yellow giant hyssop—have been documented within the CSSRA.

The most common wildlife species seen throughout the recreation area are deer, turkey, sandhill cranes, hawks, pheasant, fox, and a variety of waterfowl.

#### **Archaeological Resources**

Native Americans have lived in Wisconsin for about 12,000 years. Evidence of Native American habitation in Dane County dates back to the Paleo-Indian era, a period of time dating roughly 10,000-5,000 B.C. From that period up until the period of European settlement, Dane County was inhabited almost continually by a number of different tribes. In the area now occupied by the Capital Springs State Recreation Area—a peninsula with vast wetland marsh complexes to the north and west, Lake Waubesa to the east, oak woodlands on the upland areas to the south, and an abundance of fish, shellfish, wild game, nuts, and berries-settlement may have been particularly attractive. As a result of this long history of settlement, Dane County in general and the E-Way area in specific have an abundance of archaeological resources. In the Capital Springs State Recreation Area the greatest concentration of archaeological resources is found within the Lake Farm County Park Unit. An environmental impact study of the E-Way Unit conducted by Philip H. Salkin and Thomas E. Emerson between September and November of 1976 identified 10 prehistoric sites at Lake Farm Park. Artifacts discovered included several dating back to the Early Archaic and Late Woodland periods. Salkin and a team of University of Wisconsin students conducted a more intensive study in 1977 and identified 32 prehistoric sites in Lake Farm Park. A Lake Farm Archeological District was designated and placed on the National Register of Historic Places in 1978.

The Lussier Family Heritage Center has been actively planning a comprehensive exhibit area that would educate park users about the extensive Native American history of this area and the history of other peoples that first settled in the region. The Dane County Park Commission also has a pamphlet entitled "Prehistoric Native Americans in Lake Farm Park" that provides an overview of early settlement of the park.

Additional information about the archeological resources of the CSSRA can be found within the CSSRA Regional Analysis and in Phil Salkin's June, 1979 report, "An Intensive Archeological Survey in the Lake Farms Archaeological District of Madison, Wisconsin."

#### **Vegetative Coverage**

The following is an approximate overview of the vegetative communities that occur throughout the Capital Springs State Recreation Area according to the previous report. Generally, vegetation communities of the recreation area are made up of 58% wetland, 14% grassland/prairie, 22% forest, and 5% shrubland. Table 3-1 presents vegetation communities within the unit by total acreage and percentage.

Table 3-1: Vegetation Coverage						
ТҮРЕ	ACRES	% OF TOTAL				
Wetland Emergent/Wet Meadow	1,117.3	58%				
Grassland	272.7	14%				
Broad-leaved Deciduous	214.0	11%				
Forested	213.7	11%				
Lowland Shrub	11.9	5%				
Forest Coniferous	9.5	<1%				
Shrubland	0.7	<1%				

Additional discussion of vegetation communities and management strategies can be found within the CSSRA Regional Analysis.





# Assessment of the Environmental Impacts of the Master Plan

The purpose of this chapter is to explain the potential environmental effects of the proposed management plan. An analysis of the environmental effects or impacts is an important element of the Environmental Assessment (EA) for the Master Plan. The intent of the EA is to disclose the environmental effects of an action (the Master Plan) to decisionmakers and the public. Chapter Two of this Master Plan describes the proposed action or the preferred management alternative. The EA has been prepared to meet the requirements of the Wisconsin Environmental Policy Act (WEPA) and Chapter NR 150 of the Wisconsin Administrative Code.

#### **Impacts on Air Quality**

Madison outdoor air quality currently meets all National Ambient Air Quality Standards; however, ozone levels are just below these standards. Because emissions from transportation sources are important in the generation of ozone, the continuing increase in motor vehicle traffic may eventually result in ozone levels greater than the ozone standard. Development of a paved bicycle trail allowing for both recreational and commuter traffic, will have a positive effect on local ozone levels by reducing the amount of motor vehicle traffic within the Madison area.

During construction periods, dust may be present in the air surrounding project areas. Application of water from tank trucks is a common dust suppression technique that is used during highway construction. This technique may be appropriate for projects within the recreation area. Impacts on air quality, whether from fugitive dust particles or from exhaust emissions from construction equipment engines, would be finite and transitory in nature. When construction is complete, no residual impacts to air quality would be detectable.

The impacts to air quality from motor vehicles drawn to the recreation area would be negligible. The current indirect source air permit thresholds are sources with 1,500 or more parking spaces, or highway projects with peak vehicle traffic volume greater than 1,800 vehicles per hour. The traffic due to projected development in this plan is well below these levels.

#### **Impacts on Groundwater Resources**

In recent studies of water supply issues statewide, Dane County is listed as one of a handful of areas in the state where rapid growth is having a discernible impact on the deep aquifer, and on streams, wetlands, and other surface waters that are also fed by groundwater. Urban areas account for about 80% of groundwater use in the Madison area. The City of Madison pumps more than 30 million gallons of water per day.

In the coming years, the Dane County population is expected to grow by 153,000 people to reach a population of nearly 580,000 in 2030. Many communities have plans to build numerous wells in the next 5–10 years. Fitchburg, for example, anticipates building two wells in the next 10 years to keep up with growth. This growth has implications both because of increasing water use and because of the growth in the number of rooftops, parking lots, and streets that will block the flow of rainwater necessary to recharge the aquifer.

Development of the recreation area will have minor, if any, impacts on the groundwater resources as compared to the surrounding areas. Vault toilets will be sealed from groundwater and pumped regularly.

Springs located within the CSSRA would be identified and protected to protect the water quality, vegetation, and wildlife of these sensitive areas.

#### **Impacts on Surface Water Resources**

The preferred alternative makes great strides for protection of 1,177 acres of wetlands that retain rainwater, buffer spring floods, recharge groundwater, and filter sediment and agricultural runoff from the water supply. These wetlands are an important component of both the recreation area, and also the surrounding lakes and groundwater aquifer.

The preferred alternative also provides protection to the Lake Waubesa shoreline and waters by providing a 100' buffer zone from the shoreline edge. This buffer zone will allow for very limited development.

Any development near the wetlands or lake will be have proper nonpoint source control measures in place such as silt fences, rip rap, etc. These developments will have also have a stormwater plan on file as needed. In addition, restoring and maintaining as much of the hydraulic regime as possible will include removing drainage tiles and filling drainage ditches using their associated spoil banks and other materials as needed.

#### **Impacts on Geologic Resources**

New drilled potable water wells would penetrate the underlying bedrock in some places, but all wells would be drilled and installed according to state well drilling code, effectively minimizing groundwater contamination. Some rock excavation may be necessary for development of roads, parking lots, and facility foundations. Surface mining of rock is not anticipated.

#### **Impacts on Visual/Scenic Resources**

New structures and facilities would be evident internally. The appearance of new structures such as buildings, roads, and use areas would be a definite change from what currently exists within the Capital Springs State Park Unit and to a lesser extent Lake Farm County Park Unit. Since recreational structures are already commonplace in the current Lake Farm County Park, new recreational structures such as shelters and buildings will be designed to harmonize with the natural surroundings of the park.

Vegetative management will assure that all shoreline zones in the park would remain natural or be restored to a more natural appearance in use areas of the park. The 100' shoreline buffer zone on Lake Waubesa will essentially be a no-cut zone, with certain exceptions for work necessary for development, for the control of invasive species, and in response to catastrophic events.

Change in the visual qualities of the active vegetative management areas would be noticeable over time as areas of current agricultural use are managed for new objectives.

Temporary visual and audible effects would also be a byproduct of the active management of forest vegetation. Audible effects from chainsaws and logging trucks would immediately cease when work finished. Visual effects of cutting would be mitigated by measures such as low stump cutting and slash chipping or reduction. These measures would be included as conditions of any timber sale contracts used to achieve vegetative management goals. The temporary visual and audible effects of forest management are anticipated to be more readily noticeable than the more subtle changes in stand age or composition.

Directional signs placed on nearby public roads directing visitors to the park would also present a new visual element. Most other park features would be internal to the property and would therefore not be visible outside of the park.

#### Impacts on Land Use

Most units within the Capital Springs State Recreation Area are currently used for recreation. Land use in these areas is allotted for trails, hiking, biking, etc. Land within the proposed Capital Springs State Park Unit is predominantly agricultural. This land would convert to a more developed recreational and administrative use with trails, shop building, campground and an outdoor amphitheater..

#### **Impacts on Infrastructure and Transportation**

Most of the traffic increase within the Capital Springs State Recreation Area is expected to occur at Lake Farm County Park and Capital Springs State Park Units. An increase in bicycle traffic is also expected throughout the CSSRA because the park units will connect to the Capital City Trail, a major hub in bike traffic throughout southern Wisconsin. The development of additional bicycle trails may reduce vehicle traffic near the recreation area. In addition, the preferred alternative recommends a reduction in vehicle speed near the state park unit.

#### **Impacts of Noise**

Construction noise resulting from capital improvements such as road building, vegetation management, and building construction could have a moderate, temporary impact on the recreation area's neighbors and wildlife. All of these groups could be sensitive to this disruption, especially during warm weather when windows may be open. This noise would be peak (high level, short duration) during construction periods, rather than continuous.

The presence and activities of recreation area visitors and campers may impact neighbors and other visitors. Regulations on the use of amplified sound devices (radios, stereos, etc.) and loud conduct exist for the purpose of minimizing the imposition of unwanted noise on neighbors, especially in camping areas.

#### **Impacts to Historic and Archaeological Features**

Many archeological artifacts have been found within the region of the Capital Springs State Recreation Area. Thirty-two archeological sites have been found in Lake Farm County Park. This region has been designated as the Lake Farm Archeological District and has been listed on the National Register of Historic Places. In the Nevin Springs Unit, there is one known Indian mound and possible remnants. There are also several other mounds south of the recreation area.

A 1976 study by Phillip Salkin and Thomas Emerson found that proximity to a lake or marsh increases the probability of encountering archeological material. A second study performed in 1979 found significant evidence of long-term prehistoric habitation within the Capital Springs area. It is likely, therefore, that as development in the CSSRA continues, more archeological sites will be found. For these reasons, it is recommended that an archaeologist be on hand for all construction activities. Disruptions should be minimized in known artifact areas and an archaeologist should investigate all sites prior to beginning construction. If sites are found, development plans should be changed accordingly.

#### **Impacts on Recreational Resources**

Most units within the Capital Springs State Recreation Area are not expected to change from their current recreational use. In addition, the recreational area within the CSSRA is not expected to change much from its current natural condition. The Capital Springs State Park Unit is expected to experience the greatest increase in visitors.

The CSSRA has the unique opportunity of being able to provide a large, natural resource-based park within an urban area. Recreation within the area is generally urban in nature. Within the Lake Farm County Park Unit, the Lussier Family Heritage Center educates visitors on the history, culture, and natural resources of the area.

The recreation area already provides numerous recreation opportunities. The preferred alternative will enhance these activities with additional development of recreational facilities and opportunities.

#### **Impacts on Biotic Resources**

**Grassland Communities** – Prairie restoration on the property would attract many songbirds such as bobolinks, henslow's sparrow, grasshopper sparrow, savanna sparrow, and sedge wren. Birds would attract a significant population of birdwatchers.

**Forest Communities** – The uplands on the property are generally oak woodlands with an understory relatively free of saplings and shrubs. Though they once occupied over 5.5 million acres of Wisconsin's original vegetation, oak woodlands now occupy less than .001% of this original acreage. Rare plants in these communities include autumn coral root and yellow ladyslipper orchids. Management in these areas would work to maintain the oak woodland community type, promoting native vegetative coverage. Most uplands around the property are developed as suburban streets and homes, but there are still patches of upland brush, pine, and white cedar plantations. These communities would be protected for visual appeal and as habitat for bird and mammal species.

**Shrub** – Wetland shrub carrs in the Capital Springs region are a natural community. Most of these areas, however, have invaded previous sedge meadows in wetland areas. Shrub carrs would therefore not be maintained under management of the Capital Springs recreation area. Management under this Master Plan would aim to control and eradicate shrubs in these areas, restoring the community back to native sedge meadow. There are a few upland shrub communities which would be maintained in their natural state. **Lakes** – Capital Springs State Recreation Area is on Lake Waubesa and abuts Upper Mud Lake. Impacts to the lake from recreation area developments would be minimal. The only additional development along the lakeshore will be a small pier for launching canoes and kayaks. It is possible that increased use of the recreation area could result in additional fishing pressure upon the area lakes.

**Springs** – Springs and their adjacent areas are or would be protected by management plans. Nevin Springs and the adjacent area has protection in place with a management plan on file. The remainder of the recreation area springs may be threatened by increasing development. This threat is mainly from external developments adjacent to CSSRA and not from recreational development.

**Wetlands** – Capital Springs State Recreation Area has a variety of wetland communities within its boundaries. These include calcareous fens, emergent aquatic communities, shrub carrs (may of which were sedge meadows), southern sedge meadow (reed canary grass is dominant in areas that were grazed/ditched), submergent aquatic communities, and tamarack swamps.

Today many wetland areas within the Capital Springs region have been invaded by reed canary grass and shrub carr. There are still, however, several pockets of high quality, relatively undisturbed sedge meadow in the western segment of the property.

Improved wetlands would affect several other areas on the property because water flows from the Nine Springs Creek to the Yahara River, to Lake Waubesa. A restored wetland is also a highly productive system and would produce food for ducks, cranes, herons, and other waterfowl in the area. This could have a positive effect on area hunting.

Fish species would also benefit from improved wetlands. Northern pike use wetlands to spawn. A restored Nine Springs creek will allow the pike to access the marsh for spawning.

**Exotic Plants** – Exotic plants are prevalent within the CSSRA region. Reed canary grass has invaded most wetland areas, while Eurasian honeysuckle has invaded most woodlands. Shrubs and trees, both native and exotic, have invaded many areas once occupied by sedge meadows. Management under this Master Plan would aim to eradicate exotic species with appropriate measures. Control measures appropriate to the species of invasive would be used. These may include manual harvesting, plowing, use of herbicides or poisonous agents, fire, natural predators, and magnetic pulses spraying. The effect of these measures would be a purifying of the biotic community and protection from future invasions.

Aquatic weeds are harvested by the Dane County Public Works Department. The county's basic policy is to cut or harvest aquatic weeds whenever it will enhance the overall recreational or aesthetic value of the lakes. The priority as to where cutting occurs depends on the timing of weed growth and where the cutting will do the most good.

#### Impacts on Endangered or Threatened Species

Although Capital Springs is the ideal environment for many endangered wetland plants, most endangered species observed within the area were observed long ago (the most recent in 1948). There are, however, nine sites identified by the plan as having the potential to have high quality vegetation within them. These include sites of southern sedge meadow and calcareous fen, some of which have been degraded by reed canary grass and shrub carr. Vegetative management proposed under this Master Plan would greatly improve the health of these wetland communities by removing invasive Reed canary grass and thinning shrubs. As wetland communities are improved, endangered species such as the small white lady's slipper and yellow giant hyssop could be reintroduced. Communities within Capital Springs are ideal for restoring native plants such as the prairie white-fringed orchid and the bush clover, both of which are federally endangered. Though no state or federally listed endangered species have been found within Capital Springs, it is likely that additional systematic plant survey work will reveal listed species. When and if these species are encountered, development will be re-formulated to avoid rare, threatened, or endangered species.

The NHI lists four high quality, rare, or significant natural communities within the recreation area. These include southern sedge meadow; shrub-carr; slow, hard warmwater stream; and shallow, hard drainage lake-emergent aquatic community.



#### **Economic Effects and Their Significance**

Economic benefits are anticipated to result from the influx of users to the Recreation Area. Recent data indicate that, in the southwestern region of Wisconsin, local resident park users contribute an average of \$28.55 per day to the economy, while non-local park visitors contribute an average of \$36.82 per day. It is anticipated that most of the use for this recreation area will occur with local residents. Because of this, the cost bundle typically associated with an average state park visit has been adjusted to reflect a local population as the primary user base. Combining this with limited out of region demand, it is anticipated that at full development the annual recreation area usage will be up to 200,000 visits per year, which will result in an economic impact of approximately \$6.4 million per year.

Benefits during construction and its components would accrue to building trade members, laborers, and suppliers, some of whom may be local. Competitive bidding procedures will be followed. Total development cost for the park is expected to amount to several million dollars at completion, though the actual work may be spread over a considerable span of time. No estimate of dollar amounts to the local area is available, as extent of local contractor involvement is not yet known.

Employees working at the recreation area would probably live in the vicinity of the park. Those employees would participate in the local economy and expend a significant amount on their daily needs as members of the community.

#### Fiscal Effects – State Government

Lands purchased for addition to the recreation area would likely be acquired using State Stewardship funds or a similar bonding fund. Bonding programs fund the development of much of Wisconsin's State Park System. The cost to the state of bonding for land acquisition and project development occurs when the interest or dividends must be paid on the bonds. Several methods of making these payments could be used, the main one being General Program Revenue (GPR).

The Wisconsin State Park program budgets for its capital development needs on a biennial basis, as do all state agencies. Because of the significant development cost of this trail corridor, funding priorities within the capital budget would necessarily be adjusted to accommodate construction. Without an increase in capital spending authority, construction of facilities could cause temporary delay or deferral of implementation of other State Park projects.

#### **Estimated Costs of Development**

Note: Costs for the recreation area are based on 2007 dollar values and assume full completion of all proposed construction. In actuality, work may be phased over several state capital biennial budget cycles. In addition, costs will be divided between the state and Dane County. Exact division of costs will be determined as facilities are developed and agreements are reached.

	FAC		ESTIMATED TOTAL COST
	FUTURE	TOTAL	
Trail Miles			
14' Commuter Boardwalk	1.00	1.00	\$3,500,000
10' Bicycle/Pedestrian Boardwalk	0.45	0.45	\$425,000
8' Limestone Accessible Walking	0.20	0.20	\$19,000
Hike/Cross-country Ski	3.30	9.00	\$5,000
10' Paved Bike	3.50	8.20	\$554,000
10' Limestone Bike	0.70	0.70	\$75,000
Nature Water	0.90 5.20	2.30 5.20	\$6,500 \$3.000
5'-wide Accessible Floating Boardwalks	0.40	0.60	\$3,000 \$416,000
6'-wide Accessible Floating Boardwalks	0.40	0.25	\$410,000
Parking		26 cars/1 bus	\$132,000
Disc Golf Course	175 cars 5	1	\$100,000
Dog Exercise Area	1	1	\$100,000
Non-motorized Water Launch/Access	2	2	\$10,000
Bicycle/Pedestrian Bridges	2	5	\$350,000
Three-sided Interpretive Kiosks	5	6	\$48,000
Two-sided Informational Kiosks	3	4	\$4,500
Master Signs	4	5	\$16,000
Open Shelter with Restrooms	4	8	\$90,000
Accessible Waterfowl Observation Blinds	3	3	\$15,000
Campground Expansion	50	104	\$375,000
Yurts	7	7	\$105,000
Heritage Center Educational Expansion	1	2	\$250,000
New Road Miles	1.38	1.38	\$345,000
Shop Building	1	1	\$350,000
Observation Deck/Tower	2	2	\$120,000
Trailheads	2	5	\$4,000
Amphitheater	1	1	\$300,000
Total estimated cost, all facilities			\$8,076,500

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#### **Estimated Costs of Land Acquisition**

DNR policy is to purchase land only from willing sellers. The purchase price is set by an appraisal prepared in compliance with state and national guidelines, unless the seller chooses to make a gift or partial donation of land.

The proposed Master Plan recommends very little additional land to be acquired for addition to the recreation area. The approximately 630 acres of land that would be added to the CSSRA boundary would be valued at an average of \$7,000 per acre if acquired all at once using present-day values. Individual parcel values would vary depending on the individual qualities of the site, as well as whether any improvements or buildings existed on the site. It is unlikely that all tracts within the proposed boundary would be available for acquisition simultaneously, so expenditures would be spread over a considerable span of time, perhaps many years.

#### Projected Staffing Needs and Estimated Annual Operations Cost

Dane County and the State will review recommendations within this plan to estimate future annual operation costs and identify program areas that may require future staffing needs. Details of future staffing and operation costs will be defined within the State / County Management Agreement.

#### **Revenue Projections**

In 2008, the Capital Springs Recreation Area generated approximately \$167,000 in revenues from trail passes, shelter rentals, camping and boat launch fees. Proposed revenue streams in this plan include a disc golf course, dog exercise area, additional camping and an amphitheater that could be rented. At full build out, the Recreation Area is anticipated to generate approximately \$300,000. Details of how future revenues would be allocated would be further defined within the State / County Management Agreement.

#### Fiscal Effects – Local Government

Because the CSSRA is already in state and county ownership, little, if any fiscal impacts will be felt by local governments. On lands purchased by the DNR since January 1992, the "property value base," used to calculate payment in lieu of taxes (PILT), must be equal to or greater than estimated fair market value on a parcel for the year of purchase (s.s. 70.114). The purchase price is determined by an appraisal which is completed by a certified general private or DNR staff appraiser. The year after the initial PILT payment year and in all future tax years in which the DNR owns the parcel, the parcel's "property value base" is adjusted based on the change in land values in the municipality where the property is located. If the value in the municipality goes up 10%, the value of DNR land is adjusted upward 10%. For example, if, in January 1992, the DNR purchased 1,000 acres located in the Town of Dunn for \$1,000/acre, the DNR would assume the normal tax bill for tax year 1992. Then, in 1993, the 1,000 acres would be listed as tax exempt and would receive a PILT. If the 1993 assessment level of land in the Town of Dunn increased and land was now valued at \$1,500/acre, an increase of 50% (or 1.5 multiplied times the original "property value base"), the DNR would adjust its "property value base" and make the PILT payments based on that figure to the taxing jurisdictions in the Town of Dunn. The DNR would thus realize the same assessment level adjustment as that of other private landowners in the town. Likewise, if the assessment in the township went up in the following year, the Department would adjust the PILT payment accordingly.<sup>31</sup>

Traffic on local roadways near the recreation area may slightly increase road maintenance costs.

#### **Boundary Expansion and Acquisition Impacts**

#### **Increase Park Unit Size**

Boundary expansion would increase the size of the Capital Springs State Park Unit by 245 acres. In addition, 40 acres would be incorporated into a recreation area unit. The state park acreage goal would be 601 acres. State or county funds would be expended to purchase these additional lands unless donations or partial donations of land occur.

#### **Protect Resources**

It is anticipated that the acquisition of the recommended additional lands would provide protection of surface water systems and also provide a buffer to the recreation area.

#### **Significance of Cumulative Effects**

The cumulative effects of the preferred alternative for the CSSRA would have a long-term positive effect on the quality of the human and natural environment of the region. As the region around Capital Springs develops at a rapid pace, the recreation area will provide a unique opportunity for natural resource-based recreation within an urban area. Expansion of the recreation area to include the Capital Springs State Park Unit will provide the both ecological and social benefits for the state.

#### **Significance of Precedent**

Approval of this master plan would not significantly influence future decisions on other DNR property master plans.

#### Significance of Controversy over Environmental Effects

Two recreational uses, dog exercise areas (dog parks), and equestrian use are part of the preferred alternative. These uses were originally proposed for the state park unit. Since state parks have no policy on dog parks, this use was moved to a recreation unit within the CSSRA. The dog park will have its own area that will allow for better operation and maintenance of this use.

Equestrian use was originally considered exclusively on the state park unit. However, size limitations of the park and wetland areas did not provide for enough trail length to achieve minimum standards. By utilizing recreation area units and possible other lands, an increased mileage may be achieved that will meet equestrian trail standards that may allow for equestrian use within the recreation area.

#### **Significance of Risk**

Management and development of the CSSRA poses a low overall risk to the environment.

The presence of motor vehicles and other construction equipment during the construction phase may pose an increased risk from spills and erosion. These risks would be mitigated by plans and procedures put in place in the bid documents and at the preconstruction meeting with contractors.

Risk to the resources of the site resulting from human activity during normal operation of the CSSRA is mitigated by emergency action plans put in place by park management staff. These plans are reviewed annually and are updated as needed or when circumstances change.

Risk of introduction of invasive species may increase due to public entry and use of Capital Springs. Plans and strategies described in the Master Plan Park Operation section are in place to prevent and control outbreaks and infestations.

<sup>31</sup> Legislative Fiscal Bureau report.

DECISION (This decision is not final until certified by the appropriate authority) n accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s.1.11, Stats., and Ch. NR 150, Wis. Adm. Code.					
omplete either A or B belo					
A.EIS Process Not I	Required	$\boxtimes$			
The attached analys would significantly a to final action by the	ffect the quality of the	pacts of this proposal is of sufficier human environment. In my opinio	it scope and detail to co n, therefore, an environ	nclude that this is not a major action which mental impact statement is not required pri	
B.Major Action Requ	uiring the Full EIS Pro-	cess			
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	ht to challenge this de ods and requirements	ecision made by the Department, y for reviewing Department decisio	ou should know that Wins.	sconsin statutes, administrative codes and g a petition for judicial review. Such a	

# Capital Springs State Recreation Area



# Alternatives and Their Environmental Impacts

A Master Plan alternative is a grouping of a number of compatible options for resource management, recreational development, and public use of a DNR property. The content of an alternative should be compatible with the property designation, the draft vision and goals, the property capabilities, and the regional analysis. The alternatives summarized below are the most recent set of alternatives that were considered as part of the planning effort for the Capital Springs State Recreation Area



#### **Recreation Management Alternatives**

#### Alternative One: Status Quo

Under this alternative the Capital Springs State Recreation Area would remain without additions or changes. The State Park Unit would have no additional development and other potential recreation enhancements would not be built in the remaining units. While limited recreation demands are being met with the current design of the CSSRA, increasing urban development pressures and population increases will put greater demands on the area.

#### **Alternative Two: Passive Human-Based Recreation**

This alternative targeted passive human-based recreation as the primary expansion of recreation activities. The primary focus of this expansion involves an expanded trail network and more camping opportunities. In addition, other non-traditional activities such as dog parks and community gardens were also considered. This alternative, while fitting the niche of the landscape, does not allow for traditional consumptive uses such as hunting and fishing, which are part the existing recreation area.

#### **Alternative Three: Consumptive Recreation**

This alternative explored expansion of traditional consumptive recreation uses such as hunting and fishing. Consumptive recreation activities are traditionally accompanied by other activities such as motorized recreation, horseback riding, and car camping. Physical limitations such as large wetlands, major road crossings, and encroaching urban populations would not allow for these accompanying activities. These activities would also not meet the goal of providing "low impact, nature-based land and water recreation activities." For these reasons, this alternative was not considered further.

#### Alternative Four: A Mix of Appropriate Recreation Uses (PREFERRED ALTERNATIVE)

Alternative Four, the preferred alternative, proposes to blend a number of consumptive and non-consumptive uses within the recreation area. This alternative divides the CSSRA into 7 units and designates primary recreation activities for each unit. By doing this, a natural separation occurs that allows for a blend of recreation opportunities while also minimizing recreation conflict. All uses listed in the other alternatives, except for motorized, are accommodated within this alternative. Implementation of this alternative would allow the recreation area to meet the increasingly diverse recreation needs of an expanding population.

#### **Vegetation Management Alternatives**

#### Alternative One: No Action Except for Safety

This option will only remove hazardous trees within the recreation area. This would allow for limited cutting of trees and would not allow for vegetation improvements within any of the units. Left unchecked, invasive species would eventually overrun the recreation area.

#### *Alternative Two:* Native Vegetation Restoration Plus Wetland and Shoreline Protection (PREFERRED ALTERNATIVE)

This alternative would allow for the removal of invasive species while leaving native coverage where possible. Within the lake Farm and State Park units, native prairie restoration will take place. In addition, a shoreland protection zone has been designated that will allow for limited tree removal along a 100-foot buffer from Lake Waubesa. Five units have limited development because of the sensitive nature of the existing wetlands. Protection strategies for these areas are outlined within the Master Plan. This alternative is preferred as it will allow the user to enjoy the unique landscape that is the Capital Springs State Recreation Area.

#### **Real Estate and Boundary Alternatives**

#### Alternative One: No Additional Land Acquisition

This alternative would allow no land acquisition beyond what is already owned and designated as Capital Springs State Recreation Area. The impact of this alternative would be a cessation of land acquisition. Lands recommended in the Master Plan for acquisition would not be acquired. This would not allow for connections to adjacent communities.

# *Alternative Two:* Acquire More Land as Recommended in the Plan (PREFERRED ALTERNATIVE)

This alternative would allow for limited expansion of the existing property boundary and would allow for small parcels of land to be obtained. These acquisitions would facilitate connections to nearby communities and would provide a buffer for the recreation area. This is the preferred alternative, as it would allow for moderate expansion of the recreation area.





# Summary of Public Involvement

The Department of Natural Resources and Dane County hosted several public and partner meetings as part of the planning process for the Capital Springs State Recreation Area. Public comments were also received via e-mail and mailed letters/comments. Planning for the Capital Springs State Recreation Area also included a number of meetings with partners on the plan. A chronology of public involvement activities and comments generated from these activities are summarized below

#### **Chronology of Public Involvement Activities**

#### July 30, 2002 Intergovernmental Partner Meeting

In this meeting Chris James explained the project map for the CSSRA and asked partners to proof it for correct boundaries and designations. Partners suggested that the map identify parks and protected areas not currently within the CSSRA boundary and also the Capital City Trail.

In reviewing the minutes from the February 26, 2002 Master Plan Meeting, it was suggested that the WDOT be added to the partner list and the Dane County Highway Department be added to the mailing list.

Tom Jennings facilitated a session discussing what the partners saw as a successful plan and how they wanted to be involved in the process. The partners developed a list of ideas regarding partner group involvement and what they thought a successful project would entail.

#### September 30, 2002 Capital Springs Neighbor Meeting

Representatives from Dane County and the DNR met with neighboring landowners of the proposed state park and recreation area. The meeting was held in an effort to listen to neighboring property owners hopes and concerns for the park and recreation area early in the planning process. Fifteen neighbors attended the meeting that was held at the Lussier Family Heritage Center. Input at the meeting was primarily related to concerns over speeding on Lake Farm Road, how future facilities would be planned and what may be included, future development of bicycle and equestrian trails, and maintaining the existing rural atmosphere.

#### March 12, 2003 Intergovernmental Partner Vision and Goals Drafting Meeting

Intergovernmental partners with representation from the Town of Dunn, City of Monona Parks, WDNR, City of Fitchburg Parks, City of Monona, Village of McFarland and Dane County Parks met to begin vision building and formulating draft goals based on site analysis, public and partner comments that had been gathered to date. Seven concepts to be addressed within the draft vision statement and project goals were identified including: cultural heritage, outdoor education, recreation, linkages, natural resources, rural-urban interface, and the E-Way concept. Partners brainstormed similarities and differences between the State Park and Recreation Area and how each of these concepts may apply to them.

#### May 29, 2003 Public Design Workshop

Approximately 50 people attended a design workshop at the Lussier Family Heritage Center to provide suggestions for development of the future park and recreation area. Meeting participants were divided into small groups and provided with base maps of the project area to draft their ideas on. Upon completion a person from each table presented their ideas to the whole group. Frequent suggestions included horse trails, dog exercise areas, water, bike and hiking trails, maintaining natural environments, camping and improving connectivity to the park and Capital City Trail.

#### August 12, 2003 Intergovernmental Partner Meeting

Intergovernmental partners including the Town of Dunn, Fitchburg Parks, DNR Bureau of Facilities and Lands, DNR Parks, Dane County Parks and a member of the Dane County Parks Commission met to discuss draft master plans for the proposed State Park property and Recreation Area. Preliminary recommendations of the Recreation Area plan included interpretive pavilions along the Capital City Trail, interpretive signage and a variety of proposed hiking, biking and cross country ski trails. The primary recommendation of the Intergovernmental Partners was to greatly scale back the proposed interpretive pavilions. Two alternative master plans were presented for the State Park area. Both alternatives had a similar road layout with Libby Road becoming a cul-de-sac and the main park entrance created off Lake Farm Road. Option A was a more developed scenario that included a greater density of internal roads and parking lots. Option B was less developed with a greater emphasis on natural areas and restoration. Both included equestrian trail parking, hike/ski/interpretive trails, RV, drive-in and rustic camping, an outdoor skills center, three additional picnic shelters and open areas for special events. Primary comments on Option A pertained to siting the dog exercise area outside of the State Park, re-examining the feasibility of horse trails within the park and considering Libby Road for the entrance to the park. Primary comments on Option B pertained to moving the proposed outdoor skills center closer to the lake and adding an amphitheater.

#### August 19, 2003 Draft Alternatives Public Input Meeting

A public input meeting was held to present and gather feedback on two draft design options for the proposed State Park, a proposed plan for the Recreation Area and a proposed hunting zone map. The plans were the result of information gathered from previous public input meetings, meetings with neighbors and government partners, and observations by park staff. Plans for the Recreation Area included hiking, cross country skiing, biking and equestrian trails, observation decks, pavilion rest stops along the Capital City Trail, expanded hunting opportunities and an off leash dog exercise area. Recommendations for the State Park included an outdoor skills center, expanded camping opportunities, additional picnic shelters and extensive areas of prairie restoration.

## Dane County Park Commission Meetings 2003-2010

The Dane County Park Commission included the Capital Springs Recreation Area Master Plan as a discussion item throughout the entire planning process. The Commission received updates and provided input at various milestones throughout the planning process including preparation of the joint management plan, formulation of the vision statement, preparation of draft plan concepts, selection of preferred alternatives and adoption of the plan.

#### July 9, 2009 Draft Plan Review Friends of Capital Springs State Park Meeting

The purpose of this meeting was to preview the Draft Master Plan and Environmental Assessment and to solicit comments.

The meeting agenda included an overview presentation on the Draft Master Plan/EA followed by a discussion session, where partners interacted with staff from the State / County master planning team. The meeting was attended by nine governmental partners.

The meeting agenda included an overview presentation on the Draft Master Plan/EA followed by a discussion session, where Friends Members interacted with staff from the State / County master planning team. The meeting was attended by 10 Friends members.

#### July 20, 2009 Draft Plan Review Intergovernmental Partner Meeting

The purpose of this meeting was to preview the Draft Master Plan and Environmental Assessment and to solicit comments.

The meeting agenda included an overview presentation on the Draft Master Plan/EA followed by a discussion session, where partners interacted with staff from the State / County master planning team. The meeting was attended by nine governmental partners.

#### July 29, 2009 Draft Plan Review Public Meeting

The purpose of this meeting was to solicit public comments on the Draft Master Plan and Environmental Assessment.

The State and County held a public informational meeting / listening session in Madison at the "Lussier Family Heritage Center. The meeting was attended by approximately 20 public participants. The agenda included an overview presentation on the Draft Master Plan/EA followed by a discussion / listening session, where guests were invited to visit a number of "discussion stations" focusing on various topics staffed by the State / County master planning team.

Concurrent to the public meeting the State / County held a 30-day public review/comment period on the June 2009 Draft Master Plan and Environmental Assessment (EA) for Capital Springs State Recreation Area. The Draft Master Plan and EA were posted to the DNR web site for public review and comment on July 22nd. A News Release regarding the availability of the Draft Master Plan for public review was issued statewide; and several articles appeared in the local papers. Notification letters and emails were sent to over 180 public participants on our mailing lists. In addition, over 200 copies of the Draft Master Plan were downloaded from the DNR web site. During the 30-day public review period, 27 written comments were submitted.



# Summary of Public Comments and Response to the Draft Master Plan and Environmental Assessment.

#### Trails/Bike Comments:

Respondents generally indicated a strong desire for many trails available for hiking and biking. These areas would provide visitors with natural areas for quiet recreation and would function as corridors for active recreation within Dane County. Many respondents indicated a desire for Capital Springs State Recreation Area to function as a bicycle hub to other park and trail areas. These respondents would like to see trail connections to Goodland Park, Lake Kegonsa State Park, the Glacial Drumlin Trail, the Waucheeta Trail, the Military Ridge Trail, and other local corridors, as well as trail connections to popular neighborhood locations. In order to improve the existing trail system, several facility developments will be required. A raised bike/pedestrian bridge over the Yahara River between Lake Waubesa and Upper Mud Lake would increase accessibility to Capital Springs State Recreation Area, enabling bicycle connectivity between Madison/Monona, McFarland, and Stoughton. Bike rentals within the recreation area may also help generate revenue and promote biking within the recreation area.

#### • Response:

The plan does reflect a number of trail enhancements that taken as a whole will proved for wide range of trail recreational opportunities. The plan does recommend that trailheads be established at both the east and west ends of the recreation area. The plan has also been changed to reflect a connection over the Yahara River to connect McFarland with recreation area that will allow of improved commuter and recreation access.

#### Safety Comments:

Safety concerns in the Recreation Area were primarily related to traffic. Respondents were concerned about bicycle and pedestrian crossings of major roads within the State Recreation Area. There was also concern about traffic speeds and pedestrian safety along Lake Farm Road.

#### • Response:

The plan has been changed that recommends Lake Farm road improvements to improve both vehicle and pedestrian safety.

#### **Camping Comments:**

The June 2009 draft plan recommended additions to the existing county campground along the development of a limited number of yurts. During the draft plan public review there were number comments about offering a rustic camping experience within the recreation area.

#### • Response:

The planning team considered these comments and has sited a campground within the state park unit. This campground fits both the vision of the recreation area and also the state park mission for providing more camping opportunities within the state park system.

#### Dog Exercise Area:

Many respondents indicated a desire for a dog exercise area where dogs could walk off-leash, and a dog beach area with water access. Other users, however, were not supportive of the development of a dog park and listed noise as the biggest concern.

#### • Response:

Design considerations for the current dog park include landscape plantings that will buffer the potential noise that may occur. Since prevailing winds within the area are south – southwest, any sound generated will carry towards the undeveloped recreation area and away from residential development.

The Lake Waubesa shoreline at the Lake Farm County Park Unit and proposed State Park is not well suited for a dog beach for a number of reasons. Much of the shoreline bank profile is very steep and not conducive to easy water access by dogs. Without proper bank reshaping, volunteer trails often result in severe erosion and loss of native shoreline vegetation. Reshaping the bank to accommodate this use is not possible due to the high number of archeological resources that are buried in the shoreline zone area. Regarding noise, the proposed dog exercise area will be laid out in a manner that promotes separation of dogs and reduces pack mentality play that often results in barking. Trails will wind through tall grass prairie with small mown play areas dispersed throughout promoting visual separation of people and dogs within the park. Four foot tall visual barrier fencing at the dog exercise area entrance and a double gate system also helps to discourage dogs from gathering and barking when entering and leaving the park.

#### **Equestrian Use:**

The design alternatives presented to the public proposed equestrian trails and a trailhead upon the state park unit lands. During the summer of 2008 the proposed trailhead area was underwater due to large rains and a high groundwater table causing this site to be impractical for development. Other access points were looked at upon the state park unit lands but user conflicts were possible.

#### • Response:

The plan recommends that if equestrians are able to secure five miles of continuous trail easements from surrounding landowners for public use, creation of a parking area within the E-Way Unit to provide trail access would be explored.

