



---

# Lussier County Park & Fish Lake Natural Resource Area

## MASTER PLAN

Dane County, Wisconsin

March 2014



## **ACKNOWLEDGEMENTS**

Dane County Park Commission

William Lunney, Chair

Kyle Richmond, County Board Supervisor

Dave Ripp, County Board Supervisor

Christine Haag

Mary Schlaefer

Dan Wisniewski

Tom Thoresen

Town of Roxbury

Jack Lussier

Tom Gresser

Crystal, Fish and Mud Lake District

Wisconsin Department of Natural Resources

Pete Jopke, Dane County Land and Water Resources

Dave Marshall

John Keefe

Kurt Eakle

# Table of Contents

## I. Executive Summary

## II. Introduction and Background

## III. Planning Process and Public Participation Summary

## IV. Site Analysis

## V. Other Planning Considerations

## VI. Planning Purpose

## VII. Vision Statement

## VIII. Master Plan Recommendations

### ***Lussier County Park***

- A. Main Entry Parking Lot Area
- B. Picnic Areas
- C. Trails
- D. Lake Access Facility
- E. Beach
- F. Future Day Use Areas
- G. Vegetative Management
- H. Park Maintenance Building

### ***Fish Lake County Park***

- A. Picnic Area
- B. Lake Access Facility
- C. Trails

### ***Fish Lake Natural Resource Area***

- A. Trails
- B. Natural and Cultural Resource Management
- C. Hunting
- D. Lake Access Facilities
- E. Road Improvements & Wayfinding
- F. Property Management
- G. Future Recommendations

## VIII. Future Boundary Adjustments

## IX. Action Plan

## X. Summary

**Attachments: Graphic Park and Natural Resource Area Master Plans**

## **I. EXECUTIVE SUMMARY**

The Fish Lake Natural Resource Area includes one of the deepest lakes in the state of Wisconsin, exceptional “silent sport” recreation opportunities, an active bald eagle nest, glacial landscape features, Native American history and potential for regional scale grassland prairie restorations within one of the most rural areas of Dane County. Currently, an overall lack of developed park facilities, suitable lake access areas, trails and wayfinding signage to the Fish Lake area has greatly limited public use and appreciation of this natural resource area.

This Master Plan process evaluated existing conditions of the Fish Lake natural resource area and incorporated public, stakeholder and staff input to create recommendations found within this report. The planning process included a series of public information, local unit of government and stakeholder meetings from December of 2012 through December of 2013. The following vision statement was prepared for the Fish Lake Natural Resource Area and Lussier County Park based on Town, stakeholder and neighbor input:

Lussier County Park and Fish Lake Natural Resource Area will become a regular destination for park users seeking solitude and passive recreation activities. Primary public access and developed park facilities will occur at Lussier County Park, with remaining natural resource area lands in public ownership lightly accessible by natural surface trails. Interpretive signage throughout the natural resource area will be related to topics on glacial history, prior Native American inhabitants and wildlife watching opportunities. Restoration efforts will focus on creating additional grassland areas for shoreline water quality buffers, archaeological resource preservation and bird nesting purposes. Improving public water access to all three lakes is a priority.

Major plan recommendations include:

- Expanded grassland restoration to improve habitat and water quality.
- New picnic shelters and target archery area at Lussier County Park.
- Relocating the Fish Lake boat landing facility to Lussier County Park.
- Creating a new Crystal Lake boat landing facility.
- Realignment of Mussen Road.
- Development of approximately 4 miles of natural surface multi-use trails.
- Consideration of restoring a beach at Lussier County Park.

Additional detailed construction drawings and planning will still need to be completed for many of the recommendations found within this plan. As the park and recreation use continue to grow over the next 5-10 years, the plan should be revisited and amended as necessary to reflect current recreation trends and natural resource preservation needs.

## II. INTRODUCTION AND BACKGROUND

Lussier County Park and Fish Lake Natural Resource Area are located in the far northwest corner of Dane County and along the eastern boundary of Wisconsin's Driftless Area; a non-glaciated region characterized by steep wooded hills and wide river valleys. Fish Lake was formed by a melted glacial ice block when the last glaciers retreated from Wisconsin some 12,000 years ago. At 62', Fish Lake is one of the deepest lakes in the state and at one time supported Cisco, a cold water fish species. It is unknown if Cisco are still present in Fish Lake, but a near shore fish survey study is anticipated to be completed in 2014 may be able to confirm. The Fish Lake region is highly utilized by migratory waterfowl, cranes, osprey, loons and in 2012 an eagle with chicks on a nest was photographed off the northeast shoreline. In 1972, the Town Board passed an ordinance prohibiting gas motors on Fish Lake for desired "peace and quiet." In 1979, Fish Lake was considered to have the highest water quality of any lake in Dane County. Historically, swimming, fishing, camping and seasonal resorts were the primary recreation uses of Fish Lake.

Since the 1950's and because of the exceptional natural resource value, there has been significant interest to acquire public property adjacent to Fish Lake. Numerous studies have been conducted by State, County and non-profit conservation organizations pertaining to habitat restoration, water quality and water levels. Beginning in the 1990's, there have been growing concerns regarding the water quality and greatly fluctuating water levels in both Fish and Crystal Lakes. Blue green algae, extremely high phosphorous levels, lack of shoreline emergent vegetation, decline of native aquatic vegetation and rising carp populations all continue to threaten the natural and recreation resources of Fish, Crystal and Mud Lakes.

For decades, the 2.9 acre Fish Lake County Park was the only public park in the Fish Lake region. The park offers an unimproved boat launch facility, vault toilet and picnic shelter. In 2000 through a significant donation from Jack Lussier with assistance from the Dane County Natural Heritage Foundation and the Wisconsin DNR, Dane County Parks purchased 140 acres of land on the east shore of Fish Lake and named it Lussier County Park. Over the next ten years Dane County Parks purchased about 100 more acres of land on the east and south shores of Mud Lake to establish vegetative buffers for water quality purposes.

Currently public use of the Fish Lake area has primarily been fishing, boating, wildlife observation and some limited archery hunting for deer and turkey. There have also been some efforts to restore portions of the original 140 acre Lussier County Park acquisition area to prairie. An overall lack of developed park facilities, suitable lake access areas, trails and wayfinding signage to the Fish Lake area has greatly limited public use and appreciation of this natural resource area.

### **III. PLANNING PROCESS AND PUBLIC PARTICIPATION SUMMARY**

The master planning process began with a public kick off meeting held at the Town of Roxbury in December of 2012. Following the kick off meeting, Dane County Parks planning staff met with the Town of Roxbury, the Dane County Park Commission, area landowners and other Fish Lake stakeholders to gather input and ideas for the master plan. A follow up public information meeting was held at the Town of Roxbury in August of 2013 to present draft recommendations being considered for inclusion in the plan.

Notifications of public information meetings were sent to all landowners adjacent to the planning area boundary and press releases were printed in both Madison and Sauk Prairie Newspapers. Dane County Parks also created a website for the master planning process that included all project information and an online feedback form.

The following hope/concern/comment themes were heard throughout the public input process:

- Keep Fish Lake County Park as a carry in water access and small picnic area.
- Improve lake access facilities on Fish, Crystal and Mud Lakes.
- Expand water quality grassland buffer areas to all shoreline areas.
- Maintain agriculture and natural landscape environments.
- Expand hunting opportunities to include shotgun only around Mud Lake, but no gun deer hunting.
- Support proposed beach but some maintenance concerns.
- Support proposed picnic areas.
- Maintain buffers/provide barriers between private lands and public parcels east of Fish Lake Road and north of existing boat landing.
- Avoid park development near active eagle nest.

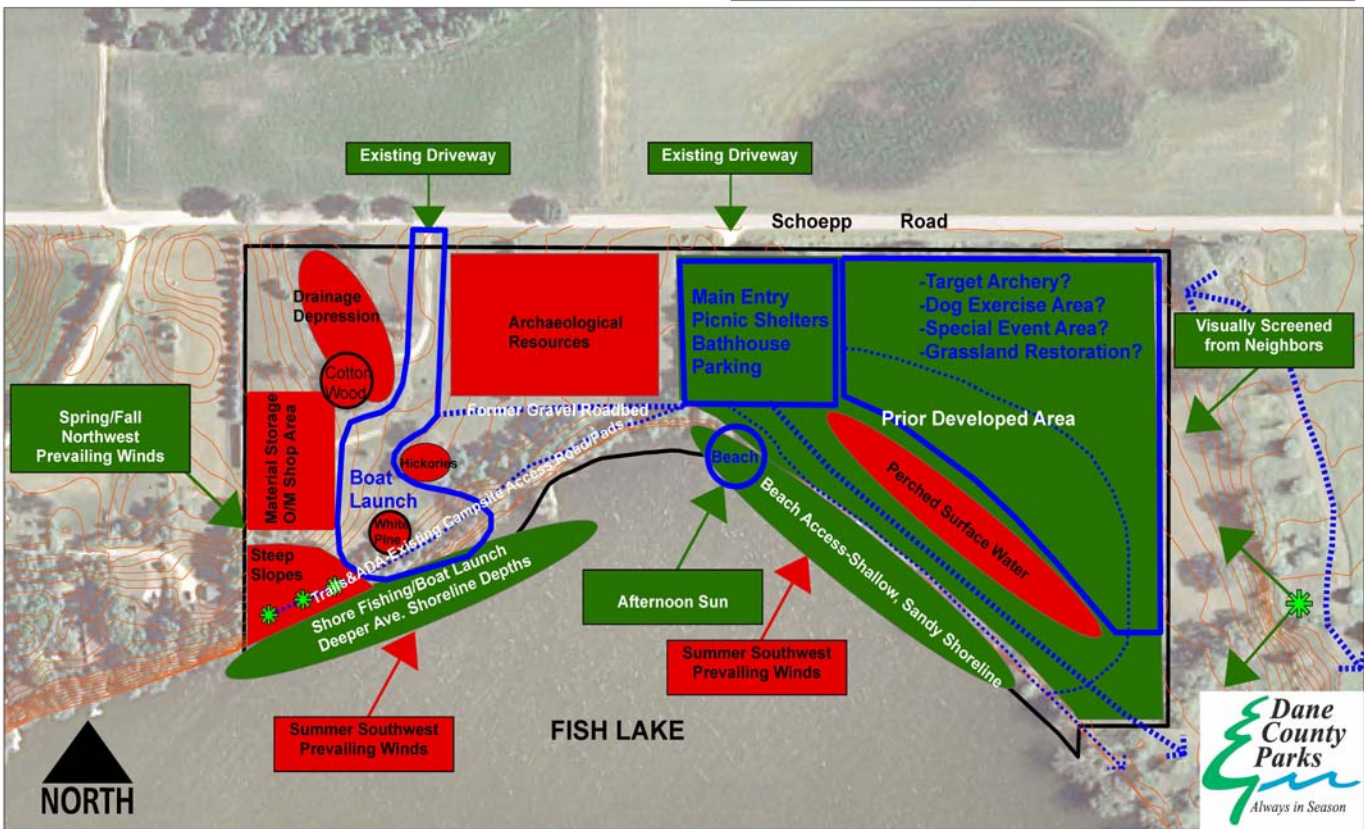
### **IV. SITE ANALYSIS**

Site analysis is another planning consideration for preparing a park master plan that supplements staff and stakeholder ideas and input. Opportunities and constraints are generated from a suitability analysis of various planning criteria and are deciding factors for what recommendations are included within a master plan and where they are proposed in the project area. Staff conducted several site analysis visits to the park property to gather field information related to archaeological resources, existing vegetation, hydrology, topography, viewsheds and shoreline lake depths. The following maps present an overview of site analysis considerations for Lussier County Park and the Fish Lake Natural Resource Area.

# FISH LAKE NATURAL RESOURCE AREA MASTER PLAN LUSSIER COUNTY PARK-SITE ANALYSIS








April 2013

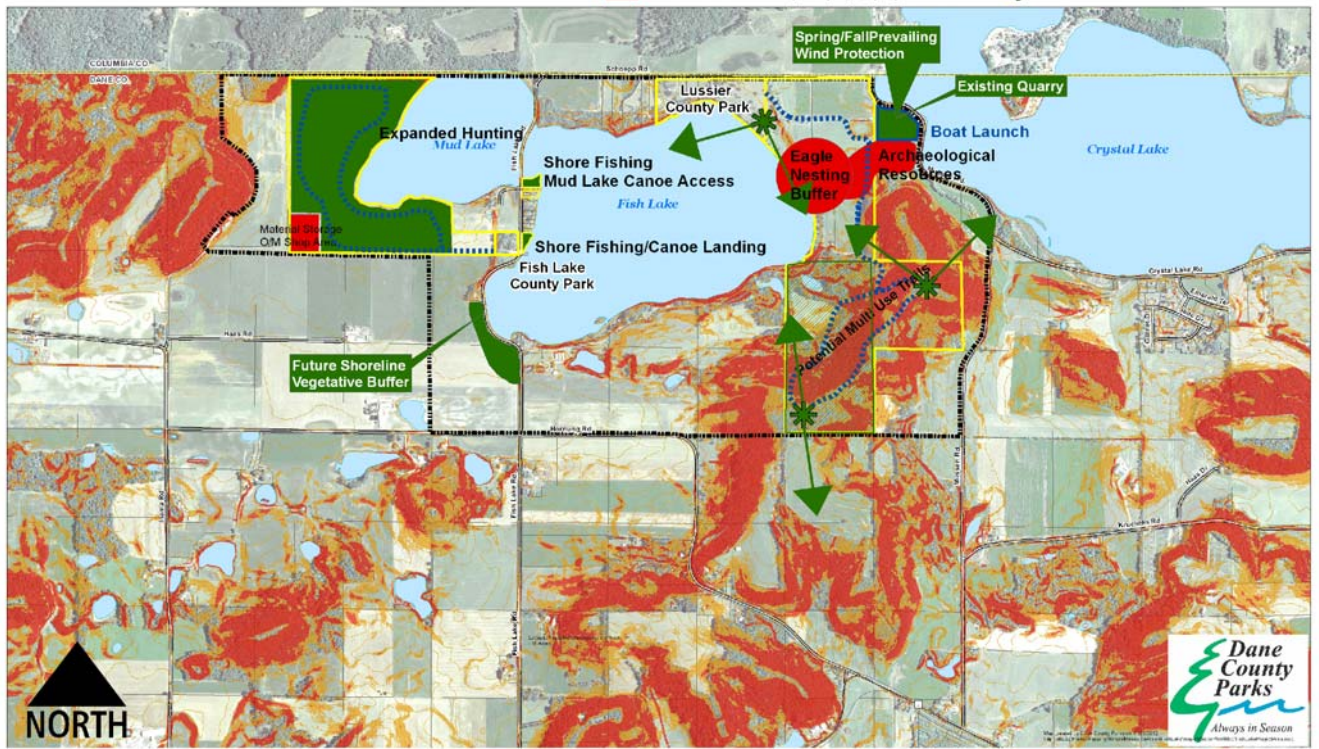
<span style="color: green;">■</span> Opportunities	<span style="border: 1px solid blue; padding: 2px;"> </span> Potential Park Program Areas
<span style="color: red;">■</span> Constraints	<span style="color: blue;">⋯</span> Potential Hiking Trails
	<span style="color: blue;">⋯⋯</span> Potential Multi Use Trails/Service Roads
	<span style="color: green;">✱</span> Trail Overlook Areas





**Fish Lake Natural Resource Area Master Plan**  
**Natural Resource Area-Site Analysis**  
 March 2014

-  Fish Lake Master Plan Project Boundary
-  Dane County Park Lands
-  Opportunities
-  Constraints/Steep Topography
-  Future Park Use Area
-  Potential Multi Use Trails/Service Roads
-  Trail Overlook Areas



## V. OTHER PLANNING CONSIDERATIONS

### DANE COUNTY PARKS AND OPEN SPACE PLAN

The Dane County Parks and Open Space Plan provides the countywide vision for future conservation, land management, recreation and trail needs over a five year period. It is especially useful for helping to determine what types of park and recreation facilities should be considered when developing new park land areas. Overall, the latest adopted plan identifies the following recreation needs over the next 5 years:

- Trails (Particularly Mountain Biking, Snowshoeing, Multi-Use Regional)
- Wildlife Viewing Opportunities
- Water Access Facilities (fishing, kayaking)
- Camping
- Picnicking and Shelters
- Disc Golf
- Dog Exercise Areas
- Hunting & Target Archery



It was also noted that strong public support was heard throughout the park and open space planning process for additional single track mountain bike trails in western Dane County.

In addition to the Parks and Open Space Plan considerations, proposed recreation needs recommended in this plan were also derived from public comment heard during the planning process, site analysis and lands that were available for public use at the time this report was written. As future lands are added within the project area boundary, other listed recreation uses would be considered that are deemed suitable based on future site analysis and public input.

### **EXISTING RECREATION USES & FACILITIES**

Camping has long been a popular recreation use on both Fish and Crystal Lakes. All campgrounds in this area have been privately owned and operated. Fishing and ice fishing are perhaps the most popular recreation uses of this project area. Wildlife observation, hunting, hiking, swimming and canoeing also occur within the project area. This plan recommends future consideration of continuing to provide these existing recreation uses on public lands where appropriate and when suitable lands are available.

### **WATER QUALITY/BIOLOGICAL MONITORING AND WATERSHED ASSESSMENT OF CRYSTAL LAKE, FISH LAKE AND MUD LAKE**

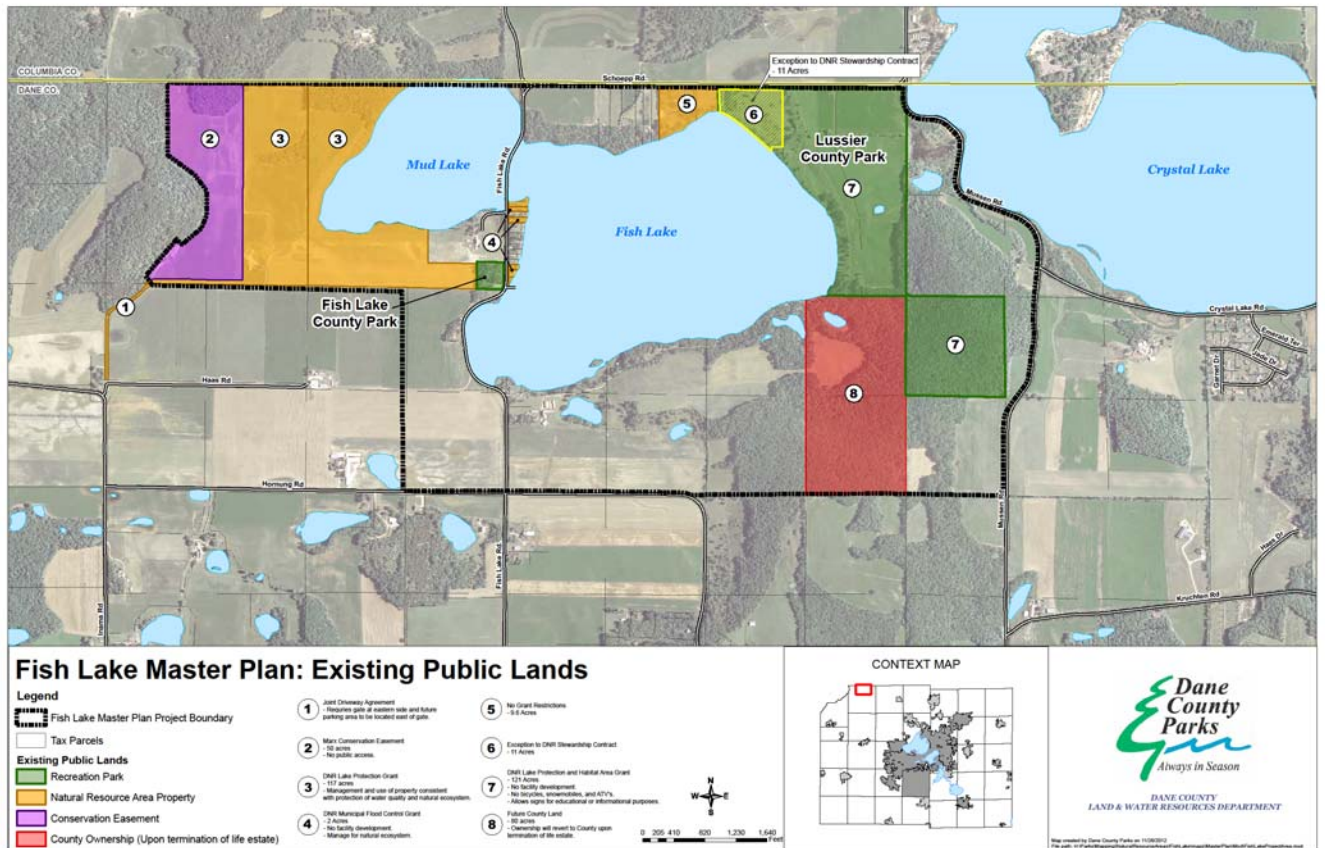
At the time of writing this report, the Dane County Land and Water Resources Department is conducting a study of Fish, Crystal and Mud Lakes that will provide updated information about near shore fish communities including attempting to verify presence of cold water ciscoes, watershed land use analysis, phosphorous loading data, water clarity data and carp management recommendations. Understanding how to sustain water quality and healthy fish populations will be critical to the long term ecosystem health and viability of recreation on these lakes.

The pending Water Quality/Biological Monitoring and Watershed Assessment of Crystal Lake, Fish Lake and Mud Lake Plan being conducted by the Dane County Land and Water Resources Department will provide water resource management recommendations.



## WDNR STEWARDSHIP GRANT RESTRICTIONS

Many of the lands that have been purchased within the Fish Lake Natural Resource Area have been acquired with assistance from WDNR Stewardship funds. Some of the grant dollars utilized were targeted for acquiring lands that would provide wildlife habitat and water quality benefits. Most existing public lands within the project area allow for very little development of recreation facilities beyond the approximate 20 acres of land designated as Lussier County Park. The map below provides a summary of lands acquired and associated grant restrictions.



### **PRIOR DEVELOPED AND DISTURBED LANDS**

A significant portion of the Lussier County Park shoreline zone had previously functioned as a popular private campground/resort and home site. To minimize the possibility of disturbing existing archaeological resources, new park development areas proposed in this plan were primarily located on prior developed lands. Figure 1 presents an aerial photo from the early 1970's.

## Fish Lake Campground-1974



## **LAKE LEVELS**

Widely fluctuating water levels have been of concern to area residents for several years. The United States Geological Survey (USGS) completed a study in 2002 of possible causes for rising lake levels and potential mitigation measures. As of December 2013, both lakes were being pumped to help control water levels. Recommendations within this master plan for most of the new park facilities near shoreline areas have been located at higher elevation areas that should not be impacted by high water levels. Future planning to consider relocation of Mussen Road, restoring the Fish Lake beach and the new Crystal Lake boat landing should take into account the possibility of fluctuating water levels.

## **VI. PLANNING PURPOSE**

Dane County began purchasing additional land in the Fish Lake Natural Resource Area in 2000 for water quality, restoration and recreation purposes and now owns approximately 240 acres. For many years there have been considerable planning efforts by a variety of partners to study water levels, water quality and biological resources.

The purpose of this plan is to create a long term vision through a public consensus building process for how public lands in the Fish Lake Natural Resource Area will be developed and managed that will balance resource protection with public access.

## **VII. PARK & NATURAL RESOURCE AREA VISION STATEMENT**

Lussier County Park and Fish Lake Natural Resource Area will become a regular destination for park users seeking solitude and passive recreation activities. Primary public access and developed park facilities will occur at Lussier County Park, with remaining natural resource area lands in public ownership lightly accessible by natural surface trails. Interpretive signage throughout the natural resource area will be related to topics on glacial history, prior Native American inhabitants and wildlife watching opportunities. Restoration efforts will focus on creating additional grassland areas for shoreline water quality buffers, archaeological resource preservation and bird nesting purposes. Improving public water access to all three lakes is a priority.



## **VIII. PLAN RECOMMENDATIONS**

The following plan recommendations are presented graphically on the preferred alternative master plans for the park and natural resource area at the end of the document.

### **LUSSIER COUNTY PARK**

#### **A. MAIN ENTRY PARKING LOT AREA**

Phase one parking area development would begin with removal of all invasive and overgrown vegetation surrounding the existing gravel parking lot. New native trees would be planted to provide future shade to the parking lot and a 3 sided kiosk would be located between the parking area and the lake. As funding allowed, the existing gravel lot would be upgraded to a 36 car paved parking lot. After the first picnic shelter is developed, a second 30 car day use parking lot would be developed adjacent to Schoepp Road. As the second shelter, beach and/or increased day use justified, another 36 car parking lot would be developed.

#### **B. PICNIC AREAS**

Two new picnic shelters are proposed for Lussier County Park. The primary shelter would be approximately 34'x57' timber frame structure and include restroom facilities and a playground. If user demand justified, a second approximate 32'x61' timber shelter would be constructed. Several picnicking areas that were not associated with shelters would be developed between the parking areas, lake and shelters. A separate toilet building would be developed near the parking area as use justified that would serve all park day users.

#### **C. TRAILS**

Two types of trails would be developed throughout Lussier County Park. Mown natural surface trails will traverse through prairies and adjacent to the shoreline on the east half of the park. An accessible 8' wide crushed limestone trail will provide universal access to shoreline and natural areas for users of all mobility levels. Bench and seating areas will be located on former campground concrete pads along the shoreline near the proposed lake access facility. If funding allows, these trails may become paved in the future. They will also serve to provide park operation maintenance vehicle access. All trails proposed within this master plan are conceptual, actual trail alignments will be field located and adjusted as necessary based on existing conditions.

#### **D. LAKE ACCESS FACILITY**

Primary water access to Fish Lake is planned to occur from Lussier County Park through development of a new lake access facility that would be included on the countywide lake access permit program. The entry drive would be located to the greatest extent possible on the existing farmstead driveway. Parking and launch facilities would also occur to the greatest extent possible on prior disturbed and



developed areas. Wisconsin DNR Natural Resource Board Policy NR 1.91 provides guidance for the maximum allowable number of boat trailer parking stalls based on the surface area of a lake. Fish Lake is approximately 200 acres and according to NR 1.91 would allow a maximum of 12 boat trailer parking stalls. It should be noted that NR 1.91 assumes that there will be a certain number of existing property owners on the lake that will add to the overall boat traffic. Fish Lake shoreline is primarily undeveloped and it was suggested throughout the planning process that more boat trailer parking should be considered. Twenty standard and two ADA accessible boat trailer parking stalls are proposed in this master plan. In addition to boat trailer parking, 10 car parking stalls and 4 ADA accessible parking stalls would be developed for park users who want to shore fish. Two ADA accessible fishing piers are also proposed near the boat landing. The boat launch would be included in the Dane County Lake Access Permit program to offset maintenance costs.

### **E. BEACH**

For many years a very popular beach was operated out of a private campground on the north shore of Fish Lake. Some interest was expressed during the planning process to restore the swimming beach and also concerns were heard that it may create too much maintenance for Dane County Parks operations staff. After several years without a beach in place, the site has become somewhat overgrown with aquatic vegetation. Construction of a beach would most likely require excavation of existing lake bed material and placement of a geotextile fabric liner overlain by a pea gravel base and topped with sand. Consideration of developing the beach should be re-visited after all parking and restroom facilities have been completed. The proposed day use restroom near the beach would be designed in a manner that would accommodate future addition of changing rooms. Dane County staffing resources for the Fish Lake work unit, possible partnerships to assist with operation and maintenance and public demand should be re-evaluated in the future to determine feasibility of the beach.

### **F. FUTURE DAY USE AREA**

The large open field area east of the parking and proposed picnic areas was evaluated for several possible day use program areas. There were some comments heard during the public input process in support of target archery. The popularity of target archery has been growing dramatically on a state and national level. Target archery ranges provide cross generational recreation opportunities that families can enjoy for a lifetime. The Wisconsin DNR has been actively pursuing the potential of future partnerships to develop target archery ranges at County parks as well. Target archery is consistent with the future vision for the Fish Lake Natural Resource Area and could be a suitable day use for Lussier County Park. Design and development of the facility would need to be done collaboratively with assistance from the Wisconsin DNR and local conservation groups.

## **G. VEGETATION MANAGEMENT**

Existing vegetative cover at Lussier County Park is primarily fallow field with scattered trees and agricultural fields. Many of the trees are left over plantings from the homestead and private campground that used to exist on this site. There are several extremely large cottonwood, hickory and oaks along the shoreline zone.

In general, this master plan calls for conversion of fallow field areas to a native grassland prairie cover that will provide water quality benefits for stormwater runoff, waterfowl nesting habitat and permanent cover protection over remaining archaeological resources.

In terms of existing trees, the large cottonwoods, hickory, white pines and oaks along the shoreline and proposed boat launch area would remain. Non-native and dead trees would be removed from all areas proposed for future prairie restoration. All of the trees around shelter picnic area parking lots would be removed and replaced with native shade tree species. Exact number and placement of trees around developed areas would be identified on future construction documents.

## **H. PARK MANAGEMENT BUILDING**

An existing metal pole shed is located on the far western boundary of the park. Historically this building has been utilized for storage by Parks, the Town, Lake District and the local snowmobile club. As Lussier County Park continues to develop, this building and area is proposed to continue to provide storage for operation and maintenance of the park.

## **FISH LAKE COUNTY PARK**

### **A. PICNIC AREA**

The existing picnic area is proposed to remain at Fish Lake County Park. The vault toilet is relatively new and would also remain. Improvements proposed include a new timber frame shelter approximately 22'x33' in size that would replace the existing shelter. This master plan also recommends a new park entrance master sign and provision of a bicycle maintenance rest stop area.

### **B. LAKE ACCESS FACILITY**

The existing boat landing facility is proposed to be relocated to Lussier County Park. Fish Lake County Park would become carry-in access only for canoes, kayaks and small boats that didn't require trailers. Ice fishing is also very popular off of Fish Lake County Park, and the parking lot is envisioned to continue to provide the primary access for this activity.

## **C. TRAILS**

This master plan recommends Fish Lake County Park becoming an access point for the future trails proposed to the west within the natural resource area lands. A new 3 sided kiosk would serve as a trailhead and provide park users with wayfinding, park and wildlife area information. Vegetation at the western boundary of the park would be substantially thinned out to allow open views toward the wildlife area.

Trail use is envisioned to include hiking, non-groomed cross country skiing and snowshoeing. As trails are developed and use of the Fish Lake Natural Resource Area continues to increase, a second parking lot (size to be determined) could be considered. All trails proposed within this master plan are conceptual, actual trail alignments will be field located and adjusted as necessary based on existing conditions.

## **FISH LAKE NATURAL RESOURCE AREA**

### **A. TRAILS**

There are no designated trails developed within the Fish Lake Natural Resource Area. Parks operation staff have been mowing some informal trails along the lakeshore at Lussier County Park. This master plan proposes development of multi use natural surface trails at two locations: the proposed wildlife area west of Mud Lake and the natural resource area lands south of Lussier County Park.

Trails are envisioned to be 8' wide cleared corridors and natural surface that would provide for hiking, non-groomed cross country skiing and snowshoeing. Development of mountain bike trails could be considered in the future if suitable lands are able to be acquired. All trails proposed within this master plan are conceptual, actual trail alignments will be field located and adjusted as necessary based on existing conditions.

There are no changes proposed for the existing snowmobile trail that runs through Fish Lake Natural Resource Area.

### **B. NATURAL AND CULTURAL RESOURCE MANAGEMENT**

Throughout the planning process stakeholders expressed interest in improving vegetative buffers for water quality and nesting areas throughout the Fish Lake Natural Resource Area. These areas are identified as future prairie restoration areas on the graphic master plan exhibits. If additional public lands are added in the future, the continuing priority should be establishment of grassland landscapes throughout the watershed, especially within the riparian zones.

Perhaps no other bird in the United States shares similar cultural or historical importance as the bald eagle. An active bald eagle nest has been confirmed off the eastern shoreline of Fish Lake. Eagles are known to nest in the same territory for decades and in the same nest for years if the site is undisturbed.

Bald eagles have been protected by the U.S. Fish and Wildlife Service “Eagle Act” since 1940. Bald eagles have since been removed from the List of Endangered and Threatened Wildlife and Plants by the U.S. Department of Interior, however the Eagle Act that provides Federal protection for taking or disturbing eagles is still in place. The U.S. Fish and Wildlife Service published guidelines for providing buffers to nesting eagles from human activities. The guidelines suggest a minimum of a 660’ buffer for any type of off road vehicle use and 330’ for non-motorized recreation and human entry. The breeding and nesting season for bald eagles in Wisconsin starts in late February/early March and goes through August or September, when the eaglets (by then full grown) usually leave their nest territory. Egg laying occurs February-April while hatching ordinarily occurs during March-May. From March through September when the eaglets leave their territory, the adult eagles are foraging and feeding their eaglets, flying to and from the nest on a frequent basis. During this time, eagles are very territorial and protective of the nest and its environs. This master plan recommends no park facility developments (motorized or non-motorized) within the minimum 660’ buffer recommended by the U.S. Fish and Wildlife eagle nesting buffer guidelines. Related, eagles utilize large living and non-living shoreline zone trees for perching and nesting. For this reason, this master plan recommends leaving these trees in place to the extent possible within the eagle buffer zone with the exception of removing trees that may cause public safety issues.

Also, because it is unknown how well the eagles at the park will tolerate increasing future recreation use, it is recommended that interactions between human activities and the eagles be monitored for as long as the eagles continue to nest in the park. Results from this monitoring activity may warrant future re-routing of trails or other revisions to recreational uses at the park as may be appropriate. Members of the Ferry Bluff Eagle Council have provided valuable input during the planning process for this master plan and have expressed interest in potentially volunteering to assist with this monitoring activity.

The Fish Lake Natural Resource Area region was inhabited originally by several Native American tribes spanning over a timeframe of several thousand years ago. This region was chosen by Native Americans for the abundant food sources available through rich water, wetlands and woodlands created by retreating glaciers. During the 1950’s-1980’s archaeological artifacts left behind from these early inhabitants were commonly found throughout open plowed fields. Prior development of the campground and continued agricultural cultivation has resulted in few to no Native American artifacts still present on the current day land surface within the project boundary. Future park facility development recommendations that require excavation within this master plan are proposed almost entirely on areas that had been previously developed to avoid further disturbance of any remaining archaeological resources. Proposed prairie restoration areas will also help to insure that remaining artifacts are left in place and will not be disturbed in the future.



*Nesting Bald Eagle Fish Lake*  
Photo by: Kurt Eakle

*Private Collection of Fish Lake Artifacts*

### **C. HUNTING**

There is currently limited archery hunting by permit on County owned lands in the fall for deer and turkey in the Fish Lake Natural Resource Area. This master plan recommends creation of a Wildlife Area on County owned lands south and west of Mud Lake. Hunting opportunities would be limited to bow or shotgun only for all legal game bird (including waterfowl) and small game species. Deer hunting would be limited to archery only, but would not require a permit in this area. Properties adjacent to this area that are acquired in the future would also fall under the same Wildlife Area designation. Other lands within the Fish Lake Natural Resource Area that are currently within the limited archery program would remain unchanged.

### **D. LAKE ACCESS FACILITIES**

Two new lake access facilities are proposed for the Fish Lake Natural Resource Area. A small gravel parking lot for up to 10 cars would be constructed on the most northerly owned County lot east of Fish Lake Road and across from Mud Lake. This parking area is envisioned to provide carry in only water craft access to Mud Lake and also provide off-road parking for shore anglers.

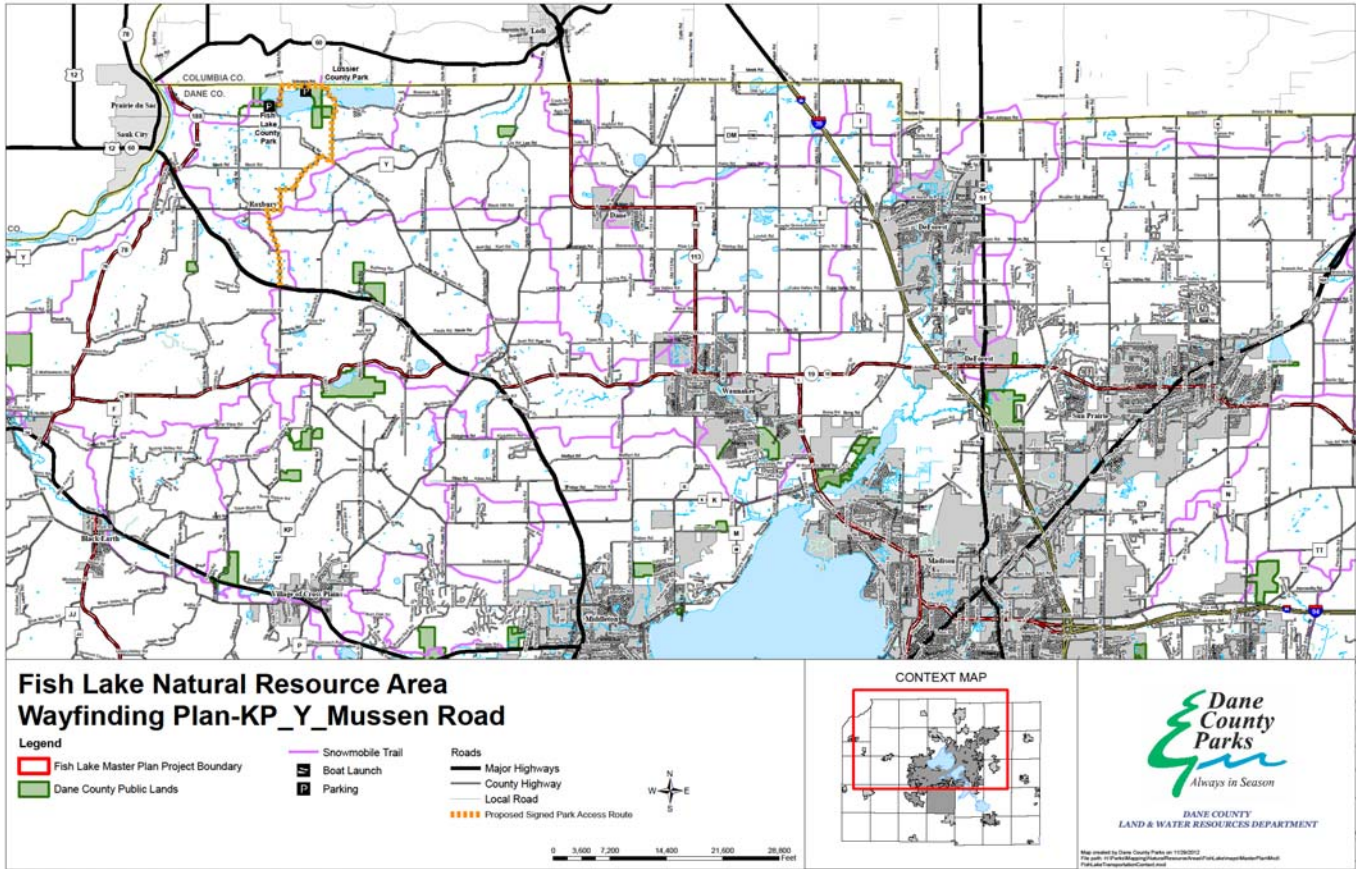
This master plan also proposes creation of a new boat landing facility on the west shore of Crystal Lake. The current WDNR public boat launch is perennially flooded and used very infrequently. A new launch is proposed at the former quarry site on Mussen Road. Wisconsin DNR Natural Resource Board Policy NR 1.91 provides guidance for the maximum allowable number of boat trailer parking stalls based on the surface area of a lake. Crystal Lake is approximately 525 acres and according to NR 1.91 would allow a maximum of 34 boat trailer parking stalls. A 34 trailer, 20 car parking lot is proposed with restrooms, fish cleaning facility and accessible fishing pier. The boat launch would be included in the Dane County Lake Access Permit program to offset maintenance costs.

### **E. ROAD IMPROVEMENTS & WAYFINDING**

Mussen Road along the west shore of Crystal Lake has historically had flooding issues that have caused major ongoing maintenance issues. This master plan recommends investigation of an alternative road alignment away from the shoreline that could be complementary to the proposed Crystal Lake boat launch facility. An engineering study would need to be completed to determine feasibility and estimated project costs.

There are currently no wayfinding signs for any of the park lands in the Fish Lake Natural Resource Area. Based on feedback from the Town of Roxbury, wayfinding signage is recommended at the intersection of USH 12 and CTH KP that would take motorists into Roxbury. From there they would be directed east on CTH Y, north on Mussen Road and finally east on Schoepp Road to Lussier County Park. Additional signage would direct motorists to Fish Lake County Park by continuing west on Schoepp Road and south on Fish Lake Road.





## F. PROPERTY MANAGEMENT

Several comments were heard throughout the planning process related to maintenance concerns and trespassing issues. Dane County Parks should continue to actively work on stabilizing and maintaining shoreline properties north of the Fish Lake boat landing through periodic mowing and fencing if needed. Properties that are acquired between existing and occupied homes would not have improved public access and should have property boundaries clearly staked or fenced.

As public use of Fish Lake Natural Resource Area continues to increase, it will be critical to install and maintain adequate boundary signage. Many adjacent private land owners are avid hunters and are concerned about future trespassing issues that may arise. Boundary signage of the proposed Wildlife Area should be of high priority.

## G. FUTURE RECOMMENDATIONS

As additional lands are acquired and facilities developed within the natural resource area, Dane County Parks would consider creating a work unit with assigned operation and maintenance staff providing year round services for fee based recreation uses. Planning and development of a future campground area that included tent or rustic sites should be considered as suitable lands come into public ownership.

## VIII. BOUNDARY ADJUSTMENTS

Dane County Parks only acquires land from willing land owners. Additional properties within the project boundary that provide shoreline access, water quality and habitat buffer zones, and/or connectivity to existing public lands should be considered short term goals. Land acquisition is more often based on an opportunity than identified priorities, therefore any lands available within the project area should be considered on a case by case basis.

## IX. ACTION PLAN

The action plan identifies major capital park improvement and planning projects to be carried out over the next 7 years and beyond. Items prioritized as “immediate” should occur within 1-3 years, “pending” within 3-5 years and “future” would occur within 5-7 years or as necessary milestones are realized. All estimated costs are general and should be revised after detailed plans and specifications are completed for each project. Actual implementation schedule will depend on when funding becomes available.

TASK	PRIORITY	RESPONSIBLE FOR IMPLEMENTATION	PROJECT SCOPE	COMMENTS/ COST
Planning, Design, Engineering, Cost Estimates and Permits for Proposed Boat Launch at Lussier County Park	Immediate	Consultant	Site development, grading plans, cost estimates and permits for proposed Lussier Park landing.	Estimated Cost: \$45,000
Construct 36 car parking lot at main entrance at Lussier County Park.	Immediate	DCP	Planning, permits for new parking lot including clearing and grubbing master sign, gate, 3 sided kiosk, tree planting and stormwater facility.	Estimated Cost: \$161,800
Construct Proposed Boat Launch at Lussier County Park	Immediate	Contracted	Construct trailer and car parking areas, pathways, boat ramp, signage, 1 fishing pier.	Estimate Cost: \$372,400
Complete grassland prairie restoration efforts at Lussier County Park.	Immediate	Consultant/Contracted	Woody species removal, site preparation and seeding of approx. 12 acres of prairie.	Estimated Cost: \$20,000

<b>TASK</b>	<b>PRIORITY</b>	<b>RESPONSIBLE FOR IMPLEMENTATION</b>	<b>PROJECT SCOPE</b>	<b>COMMENTS/ COST</b>
Replace Fish Lake County Park Master Sign, Add 3 Sided Kiosk	Immediate	DCP	Includes 16' diameter concrete circle at kiosk.	Estimated Cost: \$7,500
Develop Multi-Use Trails SE of Lussier County Park on NRA property.	Immediate	DCP/Volunteers?	Clearing, seed, mulch, signing approximately 1.5 miles.	Estimated Cost: \$11,000
Develop Multi-Use Trails West of Fish Lake County Park on WA property.	Immediate	DCP/Volunteers?	Clearing, seed, mulch, signing approximately 2 miles, 2 sided wayfinding kiosk.	Estimated Cost: \$9,000 (Mostly grassland)
Install Bike Service Area at Fish Lake County Park	Immediate	Contracted	Needs to be defined through consultation with bicycle advocates.	Estimated Cost: Unknown.
Construct Picnic Area at Lussier County Park	Pending	DCP/Contracted	Construct additional 30 car parking lot, gate, kiosk, signage, grills, accessible pathways, playground, vault toilet.	Estimated Cost: \$229,700
Construct Picnic Shelter Lussier County Park	Pending	DCP/Contracted	Medium Timber Frame Shelter.	Estimated Cost: \$180,000
Develop Target Archery Range Area	Pending	Volunteers/DNR	Will require additional planning/coordination with WDNR.	Estimated Cost: Unknown
Develop second accessible fishing pier at boat landing area.	Pending	Contracted	Floating fishing pier with accessible pathway/ramps.	Estimated Cost: \$20,000
Construct up to 10 car parking area on Fish Lake Road.	Pending	DCP	Shore fishing and carry in access to Upper Mud Lake.	Estimate Cost: \$15,000 (Develop as demand is demonstrated.)
Fish Lake NRA Grassland Prairie Restoration	Pending	Volunteers	Ongoing Prairie Restoration as Ag Lands Cease Production and At Shoreline Zones	Estimated Cost: Unknown Until Restoration Areas are Further Defined.
Design/Engineering Crystal Lake Boat Landing Area	Pending	Contracted	Construction documents, permits for proposed new boat landing.	Estimated Cost: \$55,000

Design/Engineering for Mussen Road Relocation	Pending	Contracted	Design development of plans to relocate Mussen Road away from Crystal Lake shoreline. Integrate Crystal Lake boat landing into design.	Estimated Cost: \$75,000
Construct Small Picnic Shelter/Parking Area at Fish Lake County Park	Future	Contracted	Small Timber Frame Shelter, Playground and 10 Car Parking Lot.	Estimated Cost: \$200,000
Construct Proposed Crystal Lake Boat Landing	Future	Contracted	Construct trailer and car parking areas, pathways, boat ramp, signage, 1 fishing pier, restroom/fish cleaning facility.	Estimated Cost: \$670,000. Additional design development needed.

**X. SUMMARY**

The Fish Lake Natural Resource Area includes one of the deepest lakes in the state of Wisconsin, exceptional “silent sport” recreation opportunities, an active bald eagle nest, glacial landscape features, Native American history and potential for regional scale grassland prairie restorations within one of the most rural areas of Dane County. Stakeholder input heard throughout the planning process consistently emphasized a priority of maintaining existing agricultural lands, natural landscapes and improving access to the lakes.

Recommendations within this master plan have been planned accordingly and strive to balance public access with open space preservation.

This master plan is meant to serve as a guide for future acquisition and orderly improvements to the park and natural resource area. Additional detailed construction drawings and planning will still need to be prepared for many of the recommendations found within this plan. As the park and recreation use continue to grow over the next 5-10 years, the plan should be revisited and amended as necessary to address changing stewardship needs and current recreation trends.

