State of Wisconsin
Department of Natural Resources

Lake Management Grant Application

Form 8700-283 (R 12/11)

Notice: Use of this form is required by the DNR for any application filed pursuant to ch. NR 190 or 191, Wis. Adm. Code. Personal information (PI data) collected on this form, including such data as your name, address, phone number, etc., will be used for management and enforcement of DNR programs, and is not intended to be used for any other purpose. Information will be made accessible to requesters under Wisconsin's Open Records laws (s. 19.32-19.39, Wis. Stats.) and requirements.

Section I: Application Type

☒ **Lake Management Planning Grant**

Check one:

☒ Large-scale planning grant

☐ Small-scale planning grant

Check one:

☐ Lake education

☐ Organizational development

☐ Other study or assessment, or multiple-purpose project

☐ **Lake Management Protection Grant**

Check one:

☐ Wetland restoration

☐ Ordinance development

☐ Lake improvement

☐ Lake classification

☐ Land or easement acquisition

Legislative District Numbers	
Senate	Assembly
10	28

To determine your legislative district, go to http://165.189.139.210/WAML//
Type in complete address, next screen shows information.

Section II: Applicant Information

Applicant: Church Pine, Round, and Big Lake P&R District

Lake Name: Big, Round, and Church Pine Lakes

Size in Acres: 259.00

Project County/Township/Section/Range: Polk County/T33N/R18W and T32N/R18W

Type of Eligible Applicant

☐ County ☐ Tribe ☐ Other Governmental Unit
☐ City ☐ Sanitary District ☐ Non Profit Conservation Organization
☐ Village ☒ Lake District
☐ Town ☐ Lake Association ☐ School Districts (Planning)

Authorized Representative Named by Resolution: David Zanick	Project Contact Name: Jeremy Williamson
Authorized Representative Title: Chair, Water Quality Committee	Project Contact Title: Water Quality Specialist
Address: 1885 63rd Street East	Address: 100 Polk Plaza - Ste 120
City: Inver Grove Heights; State: ; ZIP Code: 55077	City: Balsam Lake; State: WI; ZIP Code: 54810
Daytime Phone (area code): (954) 237-4374; Evening Phone (area code): (954) 237-4374	Daytime Phone (area code): (715) 485-8639; Evening Phone (area code):
E-mail Address: davidzanick@ymail.com	E-Mail Address: jeremyw@polk.wi.us

Mail Check to: (if different from applicant)

Name and Title	Address
Organization	City; State; ZIP Code

For DNR Use Only

Application Type	Date Received	Date Reviewed (LC)	Lake Coordinator Approval / Date
Waterbody ID#	Adequate Public Access ☐ Yes ☐ No	Environmental Grants Specialist Approval / Date	
Eligible Project ☐ Yes ☐ No	Eligible Applicant ☐ Yes ☐ No	Project Priority Rank	
Prior Grant Award(s) ☐ Yes ☐ No	Fiscal Year(s)	Amount Received To Date $	Project Awarded ☐ Yes ☐ No

Section III: Project Information

Project Title	Proposed Ending Date
Lake Management Plan Implementation	12/31/15

Other Management Units Around Lake	Letter of Support	Other Management Units Around Lake	Letter of Support
1. Polk County LWRD	☒	4.	☐
2. Town of Alden	☒	5.	☐
3.	☐	6.	☐

Section IV: Lake Access

Number of Public Vehicle Trailer Parking Spaces Available at Public Access Sites: 15

Number of Public Access Sites on Lake Including Boat Launches and Walk-ins: 2

Section V: Cost Estimate and Grant Request

Section V must be completed or application will be returned. Details in support of Section V are welcome.	**Project Costs** Column 1 Cash Costs	Column 2 Donated Value	*DNR Use Only*
1. Salaries, wages and employee benefits	0.00	936.00	
2. Consulting services	13,489.88		
3. Purchased services--printing and mailing	192.50		
4. Other purchased services (specify):			
5. Plant material			
6. Supplies (specify)			
7. Depreciation on equipment			
8. Hourly equipment use charges			
9. State Lab of Hygiene (SLOH) Costs			
10. Non-SLOH Lab Costs	2,050.00		
11. Land or easement acquisition value			
12. Associated acquisition costs			
13. Other (specify)			
14. **Subtotals** (sum each column)	15,732.38	936.00	
15. **Total Project Cost Estimate** (sum of **column 1 plus** sum of **column 2**)	16,668.38		
16. **State Share Requested** (calculate based on State share listed below)	11,167.81		

Subject to the following maximum grant amounts:

- Large-scale lake planning projects--up to $25, 000 - 67% State share
- Small-scale lake planning projects--up to $3,000 - 67% State share
- Lake classification and regulation or ordinance development projects--up to $50,000 - 75% State share
- Lake protection projects (other than lake classification and regulation or ordinance development projects)--up to $200,000 - 75% State share

Use of Federal funding as match: (check box below if applicable)

☐ We are using or planning to apply for Federal funds to be used as match.

If known, indicate source of funding:

Section VI: Attachments (check all that are included)

A. For all applicants:

- [x] 1. Authorizing resolution
- [x] 2. Letters of support
- [x] 3. Map of project location and boundaries
- [x] 4. Lake map with public access sites identified (per Section IV of this application and page 33 of the guidelines)
- [x] 5. Itemized breakdown of expenses
- [ ] 6. For projects that entail sending samples to the State Laboratory of Hygiene (SLOH) only: a completed SLOH Projected Cost Form
- [x] 7. Project scope/description:
  - [x] a. Description of project area
  - [x] b. Description of problem to be addressed by project
  - [x] c. Discussion of project goals and objectives
  - [x] d. Description of methods and activities
  - [x] e. Description of project products or deliverables
  - [x] f. Description of data to be collected, if applicable
  - [x] g. Description of existing and proposed partnerships
  - [x] h. Discussion of role of project in planning and/or management of lake
  - [x] i. Timetable for implementation of key activities
  - [x] j. Plan for sharing project results
  - [x] k. Other information in support of project not described above

B. For applicants that are Lake Management Organizations (LMOs) or Non-profit Conservation Organizations (NCOs):

- [ ] 1. For first time applicant LMOs only: A completed Form 8700-226 (Lake Association Organizational Application)
- [ ] 2. For first time applicant NCOs only: Copy of IRS 501(c)(3) determination letter and copies of your Articles of Incorporation and Bylaws
- [ ] 3. List of national and/or statewide organizations with which you are affiliated
- [ ] 4. List of board members' names, including municipality and county of residence. Designate officers
- [ ] 5. Documentation of current financial status
- [ ] 6. For land or easement acquisition projects: Detailed description of your organization's land management experience
- [ ] 7. Brochures, newsletters, annual reports or other information about your organization

C. Wetland Restoration Projects:

- [ ] 1. Deed, easement, or land control agreement
- [ ] 2. Preliminary engineering plans
- [ ] 3. Water regulatory permits
- [ ] 4. Map of project location and boundaries

D. Ordinance Development Projects:

- [ ] 1. Inventory of applicable existing ordinances
- [ ] 2. Description of resources each jurisdiction allocates to enforcement
- [ ] 3. Preliminary surveys

E. Lake Improvement Projects:

- [ ] 1. Engineering and design plans
- [ ] 2. Water regulatory permits
- [ ] 3. Map of project location and boundaries

Section VI: Attachments, continued

F. Land or easement acquisition projects:

- ☐ 1. DNR Form 1800-1 (Environmental Hazards Assessment Form)
- ☐ 2. Legal description of the property
- ☐ 3. Project location boundary map
- ☐ 4. Property or easement appraisal (if not previously submitted to the Department)
- ☐ 5. If escrow closing, the title insurance commitment
- ☐ 6. Evidence of compliance with Uniform Relocation Act requirements, if applicable
- ☐ 7. Agricultural Impact Statement, if applicable
- ☐ 8. Status of acquisition negotiations, including expected time frame for closing
- ☐ 9. A land management plan
  - ☐ a. Full description of property and conditions
  - ☐ b. Description of current and proposed uses of property and adjoining properties
  - ☐ c. Management requirements for property
  - ☐ d. If roads, piers or grading are proposed, a topographic survey with feature locations, and design cross sections

Section VII: Certification

I certify that information in this application and all its attachments are true and correct and in conformity with applicable Wis. Statutes.

Print/Type Name of Authorized Representative	Title of Authorized Representative
David Zanick	Chair, Water Quality Committee
Signature of Authorized Representative	Date Signed
David Zanick	1-14-14

Church Pine, Round and Big Lake Protection and Rehabilitation District

County of Polk, Wisconsin

WHEREAS Church Pine, Round and Big Lake are important resources used by the public for recreation and enjoyment of natural beauty; and

WHEREAS a study and examination of the lake will lead to better understanding and will promote the public health, comfort, convenience, necessity and public welfare; and

WHEREAS we recognize the need for responsible and holistic long-range planning to better manage the lake, its watershed, and its use; and

WHEREAS we are qualified to carry out the responsibilities of the planning project.

IT IS THEREFORE, RESOLVED THAT:

The Church Pine, Round and Big Lake Protection and Rehabilitation District requests the funds and assistance available from the Wisconsin Department of Natural Resources under the "Lake Management Planning Grant Program" and

HEREBY AUTHORIZES, the Chair of the Water Quality Committee, to act on behalf of the Church Pine, Round and Big Lake Protection and Rehabilitation District to: submit an application to the State of Wisconsin for financial aid for lake planning purposes; sign documents; and take necessary action to undertake, direct, and complete an approved planning grant.

BE IT FURTHER RESOLVED that the Church Pine, Round and Big Lake Protection and Rehabilitation District will meet the obligations of the planning project including timely publication of the results and meet the financial obligations under this grant including the prompt payment of our 33% of lake planning project costs.

We understand the importance of a continuing management program for Church Pine, Round and Big Lake and intend to proceed on that course.

Adopted this 3rd day of December, 2013
By a vote of (5) in favor, (0) against, (0) abstain.

By: _____
Steve Oswald, Secretary
Church Pine, Round and Big Lake Protection and Rehabilitation District

POLK COUNTY LAND & WATER RESOURCES DEPARTMENT
100 POLK COUNTY PLAZA—SUITE 120 BALSAM LAKE, WI 54810
PHONE: 715-485-8699 FAX: 715-485-8601
TIM RITTEN, DIRECTOR: 715-485-8631

December 6th, 2013

Alex Smith
WDNR
810 W. Maple St.
Spooner, WI 54801

Dear Mr. Smith,

The Polk County Land and Water Resources Department fully supports the Church Pine, Round, and Big Lake Protection and Rehabilitation District in their application for a Lake Planning Grant. The receipt of this grant will allow the Church Pine, Round, and Big Lake Protection and Rehabilitation District to complete fish stick/habitat analysis for each lake, nutrient and habitat monitoring on North Creek, crop field runoff analysis, refined internal loading calculations and nutrient budget for Big Lake, and waterfront designs.

Polk County staff will conduct data gathering and reporting for this project including groundwater sample collection, crop field analysis, tributary monitoring, in-lake phosphorus loading, and lake modeling.

The support of this grant application allows LWRD to advance the following goals of the Polk County Land and Water Resource Management Plan, adopted by the County Board and approved by the state:

- Goal 1. Protect the water quality of our groundwater, lakes, streams, rivers, creeks, and associated ecosystems
    - Objective 1B. Limit the amount of non-point phosphorus reaching our waterbodies to prevent degradation from agricultural land uses
- Goal 2. Protect shorelines, undeveloped riparian land, wetlands, grasslands, forests, farmland, and agricultural resources to perpetuate the benefits they provide: habitat and associated native wildlife communities, clean water, clean air, carbon sequestration, aesthetic beauty, and recreational opportunities
- Goal 3. Support and develop the human resources in Polk County that manage our natural resources—both LWRD and volunteer management groups

LWRD has worked with the Church Pine, Round, and Big Lake Protection and Rehabilitation District in the past and looks forward to working with them in the future.

Sincerely,

Tim Ritten

Mission Statement: To preserve, protect and enhance our natural resources

Town of Alden
183 155th Street
Star Prairie, WI 54026
715-248-7859 email: alden@townofalden.com

December 9, 2013

Alex Smith
WDNR
810 W. Maple Street
Spooner, WI 54801

Mr. Smith,
I am the chairman of the Town of Alden and am writing this letter to you to show the support of our Board for the Church Pine, Round, and Big Lake District's application for a lake planning grant.

We understand this grant will assist the Lake District identify the sources of phosphorus to Big Lake and to help begin the implementation of the Lake Management Plan with project designs.

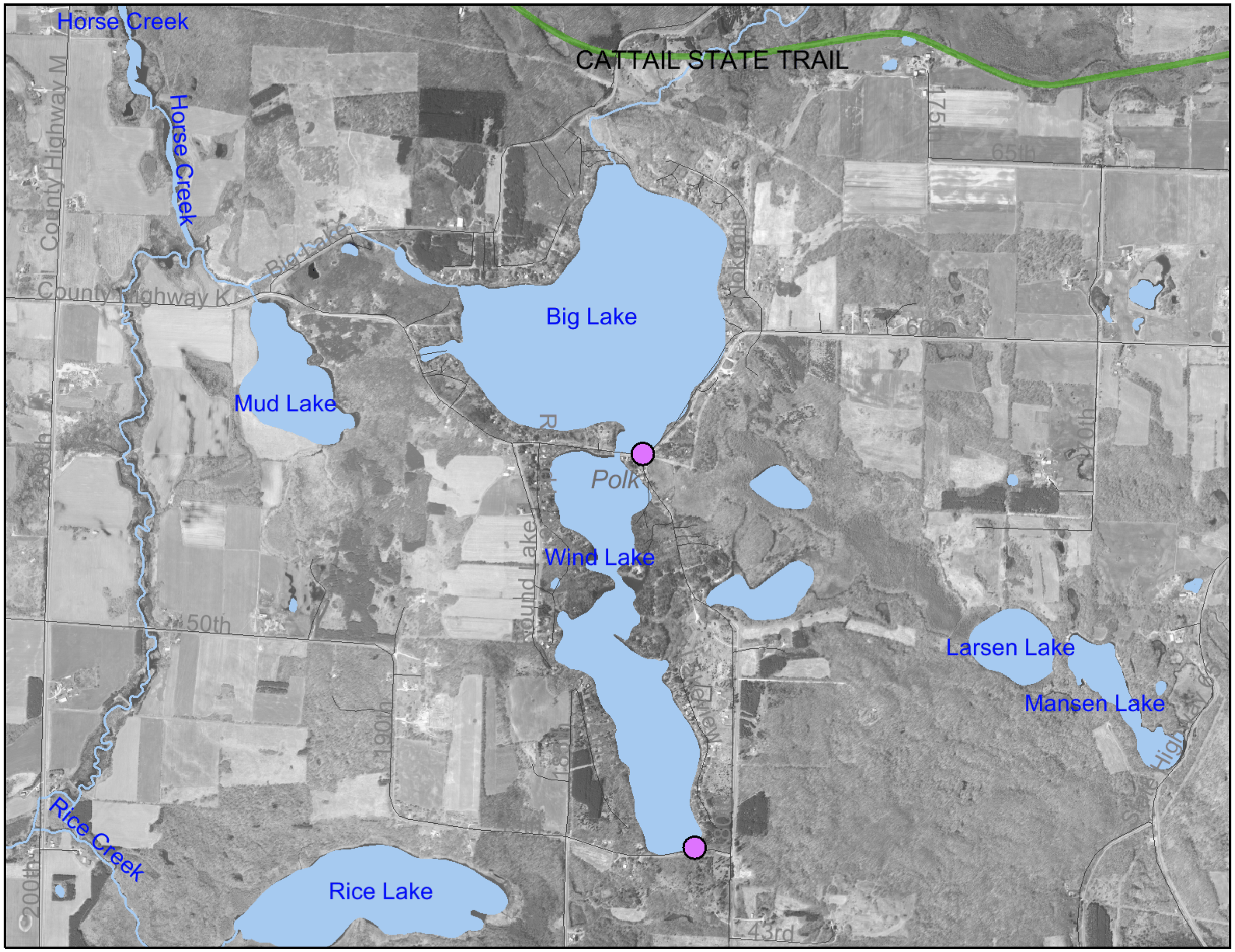
The Town of Alden is willing to consider design options to stabilize the town road right of way directly adjacent to the Church Pine boat landing.

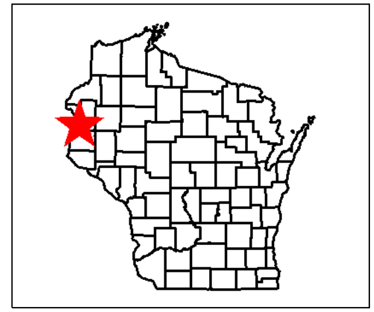
The Town of Alden has enjoyed being a working partner with the Lake District and we wish to continue this great working relationship. The Lake District has a very capable and active board and is very deserving of this grant and will put it to good use.

Sincerely,

Brad Johnson
Chairman

Public Boat Access Sites





Legend

Verified Boat Access Sites

- RAMP
- CARRY-IN
- UNKNOWN

Un-Verified Boat Access Sites

- Not Verified
- Local Roads
- Rivers and Streams
- County Boundary
- 24K Open Water

Municipalities

- Village
- City

DNR Managed Lands

- Fee
- Easement
- Lease

0 3000 6000 9000 ft.

Scale: 1:30,159

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

CPBRPRD 2/01/14

Lake Management Plan Implementation

	Contract hours	Contracted cost	Printing and mailing	Equipment	Lab Costs	IK hours	IK Value		Notes	
Fish Stick/Habitat Analysis	6	$ 186.72				20	$ 240.00			
Crop/Barnyard Analysis	80	$ 3,327.20	$ 100.00		$ 480.00					
Groundwater										
GW P Monitoring				$ 300.00	$ 480.00				6 sample locations/5X	
Owner contacts						8	$ 96.00			
Tributary Monitoring										
Tributary monitoring					$ 570.00					
WAV Monitoring	6	$ 186.72				20	$ 240.00			
Precipitation Logging						20	$ 240.00			
In-lake P loading										
Sampling/profiles			$ 110.00		$ 520.00					
Lake modeling	20	$ 622.40								
POLK LWRD sampling	80	$ 2,490.00								
POLK LWRD install monitoring	32	$ 995.84								
POLK LWRD mileage			$ 82.50							
POLK LWRD data entry/reporting	50	$ 1,556.00								
Waterfront designs		$ 3,000.00								
homeowner										
church pine landing										
Implementation strategy	15	$ 1,125.00				10	$ 120.00			
		$ 13,489.88	**$ 192.50**		**$ 2,050.00**		**$ 936.00**		**$ 16,668.38**	
								grant	$ 11,167.81	
								match	$ 5,500.57	
							vol hours	**in kind**	$ (936.00)	
								cash match	$ 4,564.57	

Polk County LWRD Estimates

Church Pine, Round, and Big Lakes Lake Planning Grant 2014

In-lake top/bottom

- Sample 5 times biweekly July 15-Sept 15
- Probe (DO, cond, spec cond, pH, temp, ORP, salinity) = no sampling costs

Top samples

- TP - = $22/sample
- Top sample add chlorophyll at $28/sample
  Subtotal 5@ $50 = $250

Bottom samples

- Bottom sample add iron at $16/sample
- Bottom sample add sulfur at $16/sample
- TP - = $22/sample
  Subtotal – 5@ $54 = $270
- TOTAL sampling costs $520 + 110 Shipping ($22/event) = $945

Tributary Monitoring

- Record flow
- Sample 5 times biweekly July 15-Sept 15 at County K, North Creek and outlet
  - Reactive P = $16/sample
  - TP = $22/sample
- Shipping no cost because will mail with top/bottom samples
- Total Cost = $570

Groundwater

- Sample 5 times biweekly July 15-Sept 15 at 6 sites
  - Reactive P = $16/sample
- Shipping no cost because will mail with top/bottom samples
- Total cost = $480
- Equipment = $300

Staff time sampling = $2490

Staff time installation = $991

Mileage = $82.50

Report, data entry, SWIMS, presentation = $1556.00

Lake modeling = $622.40

Agricultural Analysis

Sample collection/analysis = $3327.20

Soil samples = $480

Mailing - $100

Church Pine, Round, and Big Lakes, Polk County
Lake Management Plan Implementation

Large Scale Lake Planning Grant

February 1, 2014

Project Area

The project includes three lakes in southwestern Polk County: Church Pine (107 acres), Round (38 acres), and Big (259 acres) Lakes. A map of the project area is included as an attachment.

This grant project will begin implementation of the Church Pine, Round (Wind) and Big Lake Management Plan, Polk County, Wisconsin, November 2013. Results of study and planning tasks included in the grant project will result in a more detailed strategy for implementation.

Public Access and Use (Points F1 and F2)

There are two boat landings in the project area. One is at the southern end of Big Lake along County Highway K. The second is at the southern end of Church Pine Lake. Many people use this landing as a swimming area. There is additional parking within a block of the Church Pine boat landing at West Immanuel Lutheran Church. There are 15 spaces for boats and trailers at the 2 public access points.

Needles Resort serves project lakes by renting cabins in a historic resort location.

Access Points

There are two undeveloped access points to the lakes.

The first pictured below (all from Polk County GIS) is an access point off of Big Lake Ct. on Big Lake. It runs to the dam which controls the water level. This is owned by the Town of Garfield. The second picture is an access point on the west side of Church Pine off of 184th St. which is owned by the town of Alden. This second access point is also shown on Polk County's new Recreational Map as an access point.

Big Lake attracts around 250 anglers for an annual fishing tournament. Proceeds go toward fish stocking.

Threatened and Endangered Species
The Natural Heritage Inventory map of Polk County indicates occurrences of aquatic listed species in the sections where project lakes are located. A species list is available to the public only by Town and Range.

T32N R18W included the following aquatic species

Cardamine pratensis	Cuckoo flowers	Special Concern
Fundulus diaphanous	Banded Killifish	Special Concern/N
Senecio congestus	Marsh Ragwort	Special Concern

T 33N R18W also has the Banded Killifish present.

Problems to be Addressed

1) Excessive algae growth in Big Lake

The tributary contributing the most phosphorus to Church Pine, Round, and Big Lake is North Creek (T36N R14W). The total phosphorus concentration in North Creek is approximately two times greater when compared with County Road K. Most of the phosphorus is in a dissolved, reactive form (84%). The annual amount of phosphorus entering Big Lake from North Creek is approximately ninety times greater when compared with County Road K because North Creek is a larger tributary with a consistent flow.

This project seeks to better understand the source of phosphorus in North Creek. There is potential for groundwater in this area to be high in phosphorus (WGNHS and DNR 1990).

The project also analyzes potential agricultural sources of phosphorus to North Creek in more detail. Methods to be used are consistent with those that support the Farmer Led Council in the large Horse Creek Watershed.

Site	Total Phosphorus (mg/L)	Discharge (L/s)	Instantaneous Load Phosphorus (mg/s)	Annual Load Phosphorus (lb/yr)
County Road K	0.043	5.601	0.241	2.75 (2 mo. flow)
North Creek	0.087	41.409	3.603	250.63 (12 mo. flow)
Big Lake Outlet	0.024	44.884	1.077	24.62 (4 mo. flow)

The original water quality study for the lake management plan did not measure phosphorus released from lake sediments. As a result, this portion of the phosphorus load to Big Lake is not well understood.

2) Protecting existing high water quality in Round and Church Pine Lakes.

Project Goals and Objectives

These project goals and objectives are taken directly from the November 2013 Lake Management Plan. *Only those components that are part of this project are listed below.*

Goal 1: Reduce algae and phosphorus in the three lake system by reducing watershed runoff

Church Pine Lake: Reduce watershed runoff by 5% to ensure current water quality is maintained. Reductions on Church Pine Lake will positively impact Round and Big Lakes.
Shoreline property owners contribute the greatest amount of phosphorus to Church Pine Lake.

- Identify shoreline landowners willing to install shoreline buffers, rain gardens, and water diversions on their property *(partially completed with sign-up sheets)*
- Provide technical assistance for implementation of projects
- Partner with landowners to install rain gardens, water diversions, and erosion control practices at or near the Church Pine Lake boat landing *(design to be completed for Church Pine Boat Landing)*

Round Lake: Reduce watershed runoff by 10-16%. Reductions on Round Lake will positively impact Big Lake.
Shoreline property owners contribute the greatest amount of phosphorus to Round Lake.

- Identify shoreline landowners willing to install shoreline buffers, rain gardens, and water diversions on their property *(partially completed with sign-up sheets)*
- Provide technical assistance for implementation of projects

Big Lake: Reduce watershed runoff by 16-25%.
North Creek contributes the greatest amount of phosphorus to Big Lake (63%) followed by shoreline property owners (31%).

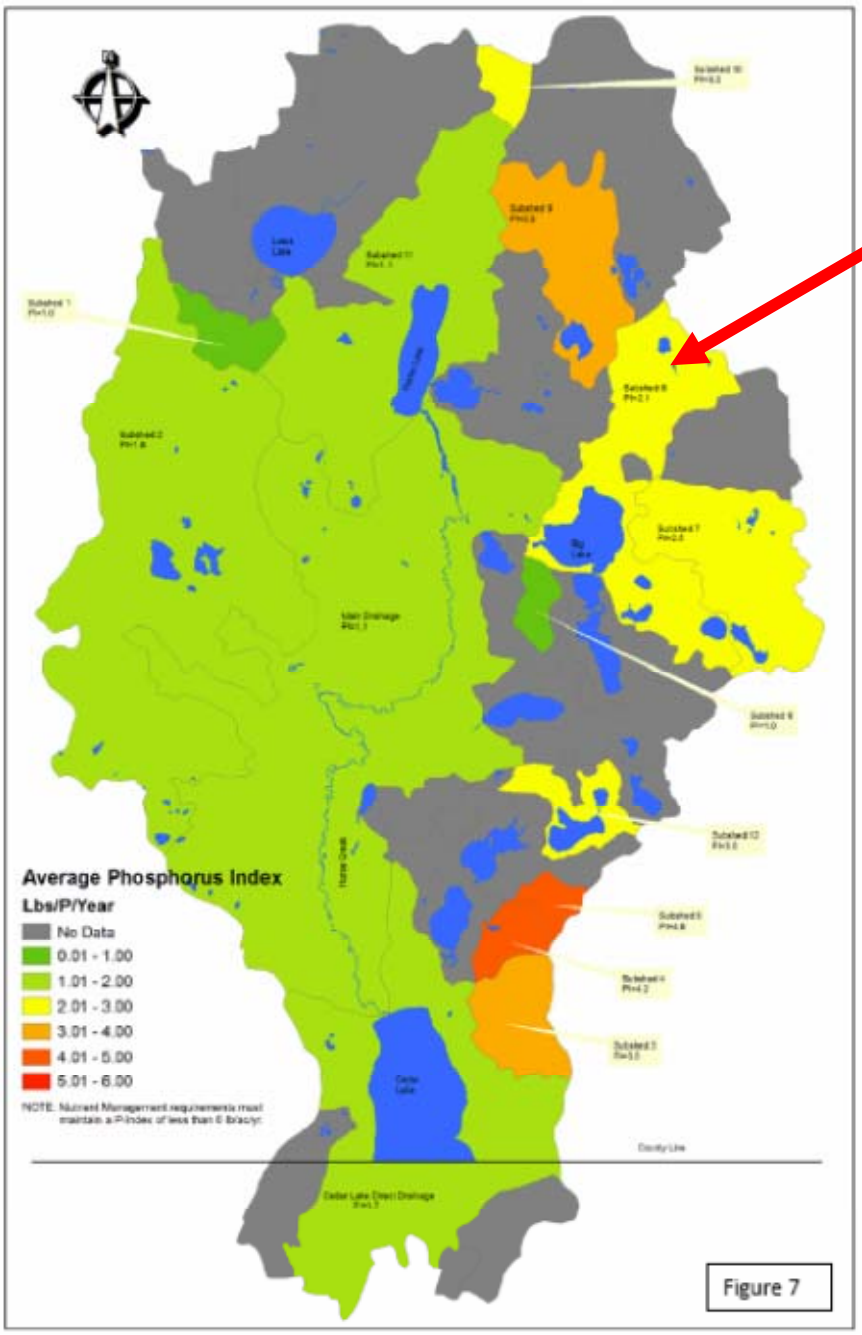
- Support the work of the Horse Creek Watershed Farmer Led Council
- Work with Polk County LWRD/consultant to identify agricultural best management practices to reduce the phosphorus load from North Creek
- Identify shoreline landowners willing to install shoreline buffers, rain gardens, and water diversions on their property
- Provide technical assistance for implementation of projects

Further considerations

- Consider further studies to quantify groundwater phosphorus inputs within the watershed
- Consider further studies to quantify internal loading, or the nutrients released back into the water column through sediment disturbance or plant die back

Goal 3: Protect, maintain, and enhance fish habitat

- Work with fish biologist to determine locations for fish sticks and other habitat improvements



The watershed of Big Lake has a phosphorus index between 2.01 and 3.0. A phosphorus index above 6 is considered excessive. Results are based on about 50 acres of crop field analyzed in the watershed.

The agricultural analysis in this grant project will gather data on additional crop field acres in the Big Lake subwatershed. The objectives of this analysis are to gather field soil test data, model phosphorus delivery from fields, identify areas of concern, and identify strategies to reduce nutrient runoff. Soil test data is collected to calculate average soil phosphorus levels.

Project Methods and Activities

Fish Stick/Habitat Analysis **(B 1 and 2)**

Complete a volunteer assessment for each lake (in cooperation with DNR Fisheries Biologist):
Identify good sites for fish stick installation: large lots (>150 feet of shoreline), public land, low energy bays, natural upland vegetation
Avoid poor sites: regular ice push, long fetch to opposite shore, areas with good emergent vegetation/weed beds, really shallow (<2 feet within 100 feet of shore)
Seek willing owners with good sites

N Creek Groundwater P Study **(D1)**

Collect groundwater samples from shallow wells (only 2-3 houses in the area available for well samples). Remainder will be collected with piezometers just above the wetland riparian to North Creek. 6 sample locations 5X. Will include area above and below barnyard.

- Sample 5 times biweekly July 15-Sept 15 at 6 sites
    - Reactive P = $16/sample

N Creek WAV Analysis **(B1)**

Complete WAV monitoring with volunteers to characterize habitat conditions. So far, one landowner adjacent to North Creek is interested in participating. Because of the stream character with diffuse flow and riparian wetlands, flow monitoring would be difficult to complete.

North Creek above Big Lake

Creek Phosphorus flow/P loading monitoring **(D1)**

Monitor creek to assess phosphorus compared to groundwater sources at same time as GW sample collection.

- Record flow
- Sample 5 times biweekly July 15-Sept 15
    - Reactive P = $16/sample
    - TP = $22/sample

Internal Load Estimate **(D2)**
Measure top bottom P
Complete temp and O2 profiles
Sampling

- Sample 5 times biweekly July 15-Sept 15
- Probe (DO, cond, spec cond, pH, temp, ORP, salinity) = no sampling costs
- TP
- Top sample add chlorophyll at $28/sample
- Bottom sample add iron at $16/sample
- Bottom sample add sulfur at $16/sample

Remodel lake nutrient budget based upon internal load, groundwater and tributary analysis **(D3 and 4)**

Crop Field Runoff Analysis **(C2)**
Assess connectivity of subwatershed - Look for culverts across road
ID fields characteristics that potentially impact creek (slope, distance, buffering, channelized flow)
Collect soil samples and analyze with SNAP plus model to identify phosphorus index
Develop report

Designs – Church Pine Boat Landing **(E2)**
Develop a design to repair and prevent erosion adjacent to boat ramp. (Designer: Polk LWRD)

Erosion at Church Pine Boat Landing (in Town of Alden right of way)

Designs – General waterfront projects from sign-up sheets **(E2)**
Complete designs for owners interested in waterfront projects. Either Lake Kountry Landscaping or Polk County LWRD will design these projects.

Site Visit Form Results (46 returned)

Shoreline Buffer Zone (+)	16
Tree Falls (+)	2
Others (e.g. Rain Gardens)	5
Invasive Species (only)	6
Site Visit – not sure	12
Not Interested	5

Develop strategy for further implementation **(B2, E1, E3)**

- North Creek actions based on ground and surface water monitoring, agricultural analysis, WAV results
- Waterfront runoff installation given interest and designs completed.

Products or deliverables / data collected

Report of groundwater, tributary, and in lake monitoring results
Report of agricultural phosphorus index and potential impacts
Inventory of potential fish stick locations
Updated lake modeling results
Waterfront designs
Updated implementation strategy

Existing and Proposed Partnerships

Polk County staff will conduct data gathering and reporting for this project including groundwater sample collection, crop field analysis, tributary monitoring, in-lake phosphorus loading, and lake modeling.

Harmony Environmental will assist the Lake District board in developing an implementation strategy following delivery of project results.

DNR Fisheries Biologist, Aaron Cole, provided guidance for fish stick inventory methods.

Lake District volunteers will assess appropriate locations for fish sticks, conduct WAV monitoring, and contact owners for permission to sample groundwater.

The Town of Alden will consider designed improvements for the Church Pine boat landing in the Town right of way.

Existing Plans or Management Efforts **(how is project consist with these)**

Church Pine, Round (Wind), and Big Lake Management Plan. Polk County, Wisconsin November 2013. Polk County Land and Water Resources Department. **(Points A 1-6)**
This plan, approved in November 2013, meets the requirements of section A of the Ranking Questions.

Polk County Land and Water Resources Management Plan
The Polk County Land and Water Resources Management Plan describes the strategy the Land and Water Resources Department (LWRD) will employ from 2010-2018 to address agriculture and non-agriculture runoff management, stormwater discharge, shoreline management, soil conservation, invasive species and other environmental degradation that affects the natural resources of Polk County. The plan specifies how the LWRD will implement NR 151 (Runoff Management). It involves identifying critical sites, offering cost share and other programs, identifying BMP's monitoring and evaluating projects for compliance, conducting enforcement activities, tracking progress, and providing information and education.

Goals, objectives and actions related to this grant project follow:

Goal 1. Protect the water quality of our groundwater, lakes, streams, rivers, creeks, and associated ecosystems.

Objective 1B. Limit the amount of non-point phosphorus reaching our waterbodies to prevent degradation from agricultural land uses.
8. Identify and work to improve areas needing specific water quality protection from agricultural runoff

Objective 1C. Limit amount of non point runoff from urban stormwater runoff to prevent anthropogenic eutrophication.
9. Identify and work to improve areas needing specific water quality protection from urban stormwater runoff

Objective 1D. Monitor water quality to ascertain condition and alleviate problems before they impact the resource or human health.
1. Inventory and perform water quality studies of chemical, physical, and biological features to ascertain condition of local water bodies

Goal 3. Support and develop the human resources in Polk County that manage our natural resources – both LWRD and volunteer management groups.

Objective 3B. Provide support for volunteers and residents who are properly managing natural resources by both technical and financial means whenever possible.

Project Timeline

Fish Stick/Habitat Analysis	Summer 2014
Crop Field Analysis	Fall/Winter 2014/15
Groundwater Monitoring	Summer 2014
Tributary Monitoring	Summer 2014
In-Lake Sampling	Summer 2014
Modeling	Winter 2014
Final Study Report	January 1, 2015
Implementation Plan	Winter 2015

Plan for Sharing Project Results

Project results will be shared through deliverables previously described. A final report (in electronic format) will summarize these results. Web reports and presentations at the Lake District's annual meetings will report project results to lake residents.

Itemized Budget (see attached)

Additional Information

Web site home page

Church Pine Lake, Round Lake and Big Lake Protection and Rehabilitation District

Breaking News

Contact Us

Local Heroes

Pictured above (left to right) are local heroes: Front row: RJ Gaffney, Jack Gaffney and Daniel Gaffney. Middle row: Dennis Gaffney, Amanda Drinkman, Carmen Paulson, Heidi and Joel Hazzard. In the Back is the man the aforementioned heroes saved Dan Gaffney.

Download News Article Courtesy of County Ledger by Lynda Berg Olds >

On 12/03/13, The Wisconsin DNR approved our new Lake Management Plan.
This 124 page document presents a comprehensive picture of the quality of our three lake system based upon up to date studies and surveys. It presents the limnology strengths, weakness and opportunities of our lakes using extensive charts and graphics. Based upon historical and current data the plan sets direction for future actions required to maintain and improve our water quality. All lake residents should make the Executive Summary (page 10) required reading.

Download pdf of the Church Pine, Round, and Big Lake Management Plan, November, 2013 >

Heidi doing a CBCW pontoon inspection at Big Lake landing.
Volunteers Wanted
Volunteer hours count towards qualified District expenditures/grants: Print Volunteer Time Sheet and send to your committee chair.

Download time sheet >

Fish Stocking History by lake and species since 1997.
Download pdf file >

Current Committee Chairs and Members list.
Download list >

2014 Annual Operating Plan
Download pdf file >

About Our Lakes

Find out unique information on each of the Lakes such as size, habitat and more...

Swap Meet

See what your neighbors are selling in gently used and new items.

Photo Album

Meet your neighbors, submit photos of District and family events.

District Meetings

Download the latest District Calendar

2013-14 District Calendar (Revised 08/28/13)

Board Meetings

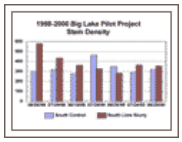
Board Meetings are held monthly (except January, February and November) on the dates noted in the District Calendar. The Board Meetings start at 6 pm at the Alden Town Hall located at 183 155th Street, Star Prairie, WI 54026. All District Members are invited to attend. Minutes and Agendas are posted here.

General Meetings

Spring Informational Meeting: Sat., May 17, 2014
Fall Annual Meeting: Sat., August 23, 2014
Minutes and Agendas are posted here.

The Bulletin Board

Check for meetings, classes, socials events, etc...



Aquatic Plant & Water Quality Mgt.

Current and past Aquatic Plant Management Study Surveys and Plans.

District Business

Shoreline management, invasive species control, good stewardship, District Fun Facts.

Local Flora and Fauna

Have you seen me? Check out the varied local flora, fauna and mammals.

District History Overview

Thought you were done with Geology. History and Geography? The three lakes are steeped in it - read on!

Miss Manners

Pointed tips and broad hints for keeping our lakes clean and safe!

Recreation Page

Places to go, people to see, things to do...

Aerial Photos of the Lakes

View aerial photos of our lakes

Naturallst's Calendar

Average temps, migrations and hibernation patterns, etc.

Links to Websites

Making it easy for you to buy a boating, snowmobile or fishing license, find maps, and navigate Wisconsin laws.

Archives

Can't find something? Maybe it's in our archives

Garden Photos

Scenes from local gardens – your submissions welcome!

Page navigation

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