

PLEASE COMPLETE BOTH PAGES 1 & 2 OF THIS APPLICATION. PRINT OR TYPE. The Department requires use of this form for any application filed pursuant to Chapter 30, Wis. Stats. The Department will not consider your application unless you complete and submit this application form. Personally identifiable information on this form will not be used for any other purpose, but it must be made available to requesters under Wisconsin's open records law [s. 19.31-19.39, Wis. Stats.].

<b>1. Applicant (Individual or corporate name)</b> Rock Koshkonong Lake District - Brian Christianson <hr/> <b>Address</b> 374 E. Samuelsen Drive <hr/> <b>City, State, Zip Code</b> Edgerton, WI 53534 <hr/> <b>Telephone No. (Include area code)</b> 608-884-9444		<b>2. Agent/Contractor (firm name)</b> Wisconsin Department of Natural Resources <hr/> <b>Address</b> 3911 Fish Hatchery Road <hr/> <b>City, State, Zip Code</b> Fitchburg, WI 53711 <hr/> <b>Telephone No. (Include area code)</b> 608-275-3282	
<b>Fire Number</b>		<b>Tax Parcel Number</b>	

**3. If applicant is not owner of the property where the proposed activity will be conducted, provide name and address of owner and include letter of authorization from owner. Owner must be the applicant or co-applicant for structure, diversion and stream realignment activities.**

<b>Owner's Name</b>	<b>Address</b>	<b>City, State, Zip Code</b>
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**4. Is the applicant a business?**  Yes  No

If YES, is the permit or approval you are applying for necessary for you to conduct this business in the State of Wisconsin?  
 Yes  No

If YES, please explain why (attach additional sheets if necessary):

**5. Project Location**

**Address** \_\_\_\_\_

**Village/City/Town** \_\_\_\_\_

**Fire Number** \_\_\_\_\_ **Tax Parcel Number** \_\_\_\_\_

**Waterway** Lake Koshkonong

**County** \_\_\_\_\_

**Govt. Lot** \_\_\_\_\_ **OR** \_\_\_\_\_ 1/4, \_\_\_\_\_ 1/4, of Section \_\_\_\_\_,

**Township** \_\_\_\_\_ **North, Range** \_\_\_\_\_ **(East) (West)**

**6. Adjoining Riparian (Neighboring Waterfront Property Owner) Information**

<b>Name of Riparian #1</b>	<b>Address</b>	<b>City, State, Zip Code</b>
See Attached		
<b>Name of Riparian #2</b>	<b>Address</b>	<b>City, State, Zip Code</b>

**7. Project Information (Attach additional sheets if necessary)**

(a) Describe proposed activity (include how this project will be constructed)

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(b) Purpose, need and intended use of project

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(c) I have applied for or received permits from the following agencies: (Check all that apply)

Municipal  County  Wis. DNR  Corps of Engineers

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(d) Date activity will begin if permit is issued \_\_\_\_\_; be completed: \_\_\_\_\_

(e) Is any portion of the requested project now complete?  Yes  No

If yes, identify the completed portion on the enclosed drawings and indicate here the date activity was completed:

I hereby certify that the information contained herein is true and accurate. I also certify that I am entitled to apply for a permit, or that I am the duly authorized representative or agent of an applicant who is entitled to apply for a permit. Any inaccurate information submitted may result in permit revocation, the imposition of a forfeiture(s) and requirement of restoration.

<b>Signature of Applicant(s) or Duly Authorized Agent</b> <u>Brian Christianson</u>	<b>Date Signed</b> 3-18-11
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<b>LEAVE BLANK - FOR RECEIVING AGENCY USE ONLY</b>		
<b>Corps of Engineers Process No.</b>	<b>Wisconsin DNR File No.</b>	
<b>Received By</b>	<b>Date Received</b>	<b>Date Application Was Complete</b>

# State / Federal Application for Water Regulatory Permits and Approvals

Form 3500-053 (R 4/01)

Page 2 of 2

Drawings of proposed activity should be prepared in accordance with the sample drawing.

Proposed materials

Location Sketch (indicate scale)

Show route to project site include nearest main road and crossroad.

N 100 00000 ft.

Fire Number

Project Plans (include top view and typical cross sections. Clearly identify features and dimensions or indicate scale.) Use additional sheets if necessary.

N 100 00000 ft.

Top View

Cross Section

## INFORMATIONAL REQUIREMENTS FOR PRACTICABLE ALTERNATIVES ANALYSIS

All of the questions must be answered in detail and supported with documentation (attach additional sheets if needed).

### I. Background/Description of Project

#### A. Describe the purpose and need for the project.

The project has two parts 1) Experimental Dredging and 2) Shoreline Nourishment at Mud Lake both are a part of the Lake Koshkonong Planning Assistance to States to create a Comprehensive Plan with Integrated Environmental Assessment for Lake Koshkonong. The project team would like to dredge a small area to monitor at what rate and what type of sediment accumulates in the dredged area. Mud Lake is high quality wetland located within a mile of the dredged area. The dredge material would be used to benefit Mud Lake by adding the dredge material behind a breakwall to encourage shoreline rebuilding. Currently there is little shoreline left to keep the Mud Lake Wetland from being absorbed by Lake Koshkonong. Placing the dredged material behind a small (2' - 3') break wall would protect Mud Lake by rebuild the land that has been eroding into the lake. Part of the Shoreline Nourishment experiment is to monitor how long it will take for wetland vegetation to grow on the dredge material and what type of vegetation grows (natural vs. exotic).

#### B. Is your project an expansion of existing work or is it new construction? Explain.

The project is new and experimental in nature, the project team hopes to apply information gained to other project associated with improving Lake Koshkonong.

#### C. When did you start to develop a plan for your project?

Planning as a part of the Planning Assistance to States program. In early 2010 with a series of public workshops were held to identify an array of ideas and projects to help improve Lake Koshkonong. This experimental dredging and shoreline nourishment and protection project will not only help protect Mud Lake but will divulge information necessary to choose which alternatives will be most effective in helping Lake Koshkonong.

#### D. Explain why the project must be located in or adjacent to wetlands.

The project is experimental in nature and must be located in or adjacent to Mud Lake and Lake Koshkonong. Monitoring will help to properly asses the project's success or failure for future planning and projects to enhance Lake Koshkonong which has been losing its fringe wetlands to wave erosion and during flood events.

### II. Alternatives (your analysis should address the following questions).

#### A. How could you redesign or reduce your project to avoid the wetland, and still meet your basic project purpose?

The project could be redesigned to either rip rap the shoreline at mud lake or reduce the footprint of fill into the lake. The rip rap would essentially protect Mud Lake by preventing further encroachment of Lake Koshkonong. However a chance to reclaim some of the littoral zone and study the effects for future projects would be lost.

B. Other sites

1. What geographical area(s) was searched for alternative sites?

Lake Koshkonong is the only geographical area.

2. Were other sites considered?

Other sites considered for beneficial use of the dredged material were wetlands near Pikes Bay and White Crow Bay. Possible placement of the dredge material on an upland site was also considered.

3. Have you sold any lands in recent years that are located within the vicinity of the project? If so, why were they unsuitable for the project?

N/A

- C. For each of the alternatives you identified, explain why you eliminated the alternative from consideration (include cost comparisons, logistical, technological, and any other reasons).

Choosing the Mud Lake location for the placement of the dredged material was based on: 1) Ecologically the planning team would like to see Mud Lake protected from the larger and less diverse Lake Koshkonong. 2) Logistically it is located less than a mile from the area that was selected to be a part of the dredging experiment. 3) Costs associated with securing an upland site or moving material more than a mile either manually or hydraulically would be prohibitive.

- D. What are the consequences of not building the project? (include social and economic consequences):

Wave action from Lake Koshkonong will continue to erode the small spit of land separating Lake Koshkonong from Mud Lake which will result in the possible loss of Mud Lake, a high quality wetland. Results from the experiments will continue to hinder decisions of the best alternatives for the Lake Koshkonong Comprehensive Plan.

If you have chosen an alternative that would result in wetland impacts:

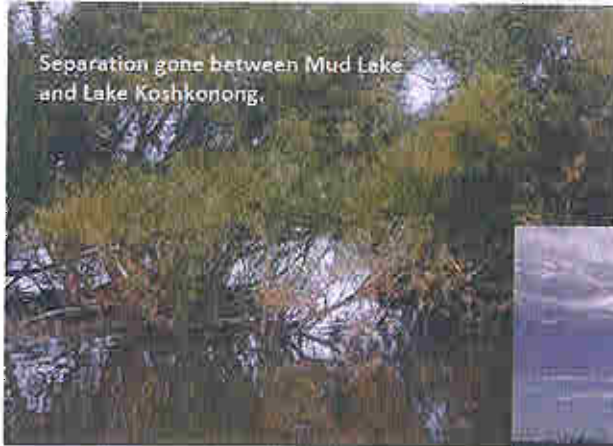
- E. Summarize why your alternative was selected.

Placing the dredged material at the Mud Lake location was chosen to protect the eroding wetland shoreline that could breach in the very near future and provide additional wetland habitat that has been lost in an economically feasible way.

- F. Explain what you plan to do to minimize adverse effects on the wetlands during your project (e.g. erosion control, best management practices, setbacks, etc.).

To minimize adverse effects best management practices used by both the Department of Natural Resources and the Corps of Engineers will be used.

**Photos:**



## 6. EXPERIMENTAL PROJECTS

### 6.1. DREDGING FOR NAVIGATIONAL ACCESS AND WETLAND ENHANCEMENT AND SHORELINE PROTECTION

Figure 24: Locations- Stinkers Bay



#### 6.1.1. OBJECTIVES

- Protect eroding wetland shoreline that could breach
- Provide additional wetland habitat that has been lost in historic time
- Dredge large enough area adjacent to boat launch ramp so that monitoring of sediment transport is representative of potential large-scale projects

#### 6.1.2. CONSTRUCTION ELEMENTS

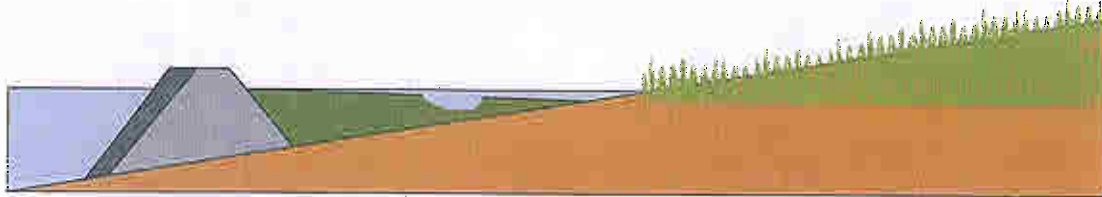
Figure 25: Breakwater Containment (left) and Dredge Area (right)





- Construct containment breakwater– possibly late fall/ winter. Note: the construction program could be enhanced considerably if he could be accomplished during the winter during a time of Lake drawdown by opening the need for decades -- see section 1 above.
- Dredge North Shore Road boat landing, with spoils placement behind breakwater (again, could be enhanced by a winter drawdown)
- Restoration vegetation and maintenance

**Figure 26: Example Cross Section of Breakwater**



#### **6.1.3. MONITORING**

- Type: vegetation, sediment stabilization and ecological monitoring
- Frequency: twice annually for five years
- Public Education -- could be a valuable education effort for Lake residents and for other organizations interested in enhancing and protecting wetland shorelines

#### **6.1.4. REGULATORY ISSUES**

- Permits: chapter 30, possibly manual code approach if implemented through DNR

January 24, 2011

# Lake Koshkonong Dredging for Navigational Access and Wetland Enhancement and Shoreline Protection | Dane, Rock and Jefferson Counties, WI





**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT**  
(33 CFR 325)

**OMB APPROVAL NO. 0710-0003**  
**EXPIRES: 31 August 2012**

Public reporting burden for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please **DO NOT RETURN** your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

**PRIVACY ACT STATEMENT**

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

**(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)**

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
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**(ITEMS BELOW TO BE FILLED BY APPLICANT)**

5. APPLICANT'S NAME: First - Brian Middle - Last - Christensen Company - Rock Koshkonong Lake District E-mail Address - bkc@epgmidwest.com				8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) First - Pam Middle - Last - Baresch Company - Wisconsin Department of Natural Resources E-mail Address - pamela.baresch@wisconsin.gov			
6. APPLICANT'S ADDRESS: Address - 274 E. Saratoga Dr. City - State - Zip - Country -				9. AGENT'S ADDRESS: Address - City - State - Zip - Country -			
7. APPLICANT'S PHONE NOS. W/AREA CODE: a. Residence b. Business c. Fax				10. AGENT'S PHONE NOS. W/AREA CODE: a. Residence b. Business c. Fax			

**STATEMENT OF AUTHORIZATION**

11. I hereby authorize L-DNR to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

  
APPLICANT'S SIGNATURE

  
AGENT'S SIGNATURE

3-10-11  
DATE

**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**

12. PROJECT NAME OR TITLE (see instructions)  
Lake Koshkonong PAS - Experimental Dredging and Mud Lake Protection Measures

13. NAME OF WATERBODY, IF KNOWN (if applicable)  
Lake Koshkonong

14. PROJECT STREET ADDRESS (if applicable)  
Address

15. LOCATION OF PROJECT  
Latitude: °N 42.275216  
Longitude: °W 42.084592

City - State - Zip -

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)  
State Tax Parcel ID Municipality  
Section - Township - Range -

17. DIRECTIONS TO THE SITE  
Take Hwy 106 out of Fort Atkinson, turn left at North Shore Road, turn left at Lamp Road.

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

**USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED**

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
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22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres  
Or  
Liner Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes  No  IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Address -

City - State - Zip -

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
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\* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

\_\_\_\_\_  
SIGNATURE OF APPLICANT

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE OF AGENT

\_\_\_\_\_  
DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguise a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.