

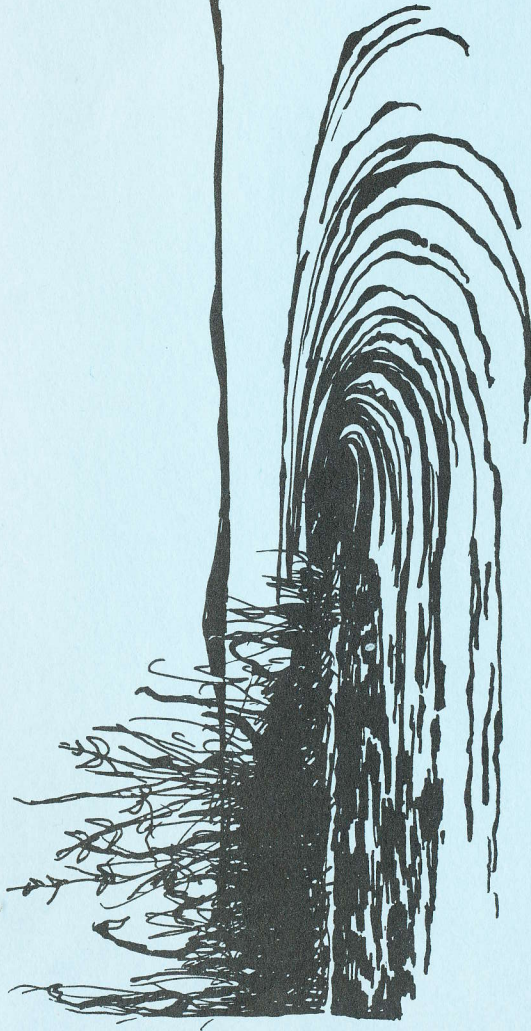
BULK THIRD CLASS



POSTAGE PAID  
U. S. DEPARTMENT OF  
AGRICULTURE  
AGR 101

COOPERATIVE EXTENSION PROGRAMS  
UNITED STATES DEPARTMENT OF AGRICULTURE  
UNIVERSITY OF WISCONSIN—EXTENSION  
432 NORTH LAKE STREET  
MADISON, WISCONSIN 53706  
-----  
OFFICIAL BUSINESS  
-----  
PENALTY FOR PRIVATE USE, \$300

**WEX** COOPERATIVE EXTENSION PROGRAMS  
UNIVERSITY OF WISCONSIN—EXTENSION



*A Newsletter for People  
Interested in Wisconsin's  
Inland Lakes*

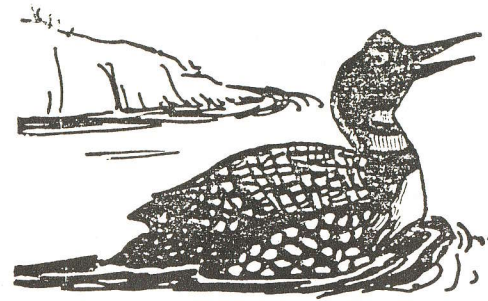
*Lake*

*Tides*

**JAN. 1983**  
**VOL. 8 NO. 1**

Published Occasionally as a Public Service by the Environmental Resources Unit of the University of Wisconsin—Extension, 1815 University Avenue, Madison, Wisconsin 53706.





IN THE WAKE OF A LOON:  
AN EDITORIAL

This issue marks the eighth year of the newsletter. Given the life history of most newsletters, eight years and twenty issues is a considerable accomplishment. We hope Lake Tides has achieved more than simple survival and that it provides an important educational service to people who care about Wisconsin's inland lakes.

However, we need new ideas in the newsletter. We are open to any suggestions except those which would increase the costs of the publication. We can't afford color photographs or multi-color ink.

We would like to have you tell us what you want to see in the newsletter and also ideas for format changes. We would also like to receive more descriptions of your activities. Just send us a short (1-3 pages) description, we'll edit it, and then share it with 2,000 others interested in lakes.

We hope you had a pleasant holiday and may you have a Happy New Year!

Sincerely,

*George Gibson*

George Gibson

*Lowell Klessig*

Lowell Klessig

Lake Management Specialists

STATE FISCAL EMERGENCY  
MAY ELIMINATE INLAND LAKE FUNDS

The dire budget forecast for state revenues has caused the new Governor to cut a number of programs. Inland Lakes is one of them. The Department of Administration recommended that all state funds for grants and for staff be cut.

The Governor accepted the recommendation.

The Governor's budget will contain no funds for grants (currently \$1,150,000 per year) and no funds for the Inland Lakes Section in DNR or the lake management specialists in University Extension.

The Governor will present his budget to the Legislature later in January. The Joint Finance Committee will then study the budget and make modifications. Finally, the budget bill will go to the Assembly and Senate for voting. The changes, if any, that result from this process will take effect July 1, 1983.

The members of the Joint Finance Committee are:

*Rep. Mary Lou Munts	*Senator Gerald Klecha
Rep. Desmos Becker	Senator Gary George
Rep. David Helbach	Senator Scott McCallum
Rep. Sharon Metz	Senator John Norquist
Rep. Marlin Schneider	Senator Paul Offner
Rep. Donald Still	
Rep. Wayne Wood	

\*co-chairs

ECO-NOTE

THE DETERGENT PHOSPHATE ISSUE

As many of you may know, last year Wisconsin's ban on phosphates in detergents (Chapter 375 W.S., 1977) expired. The original law passed in 1977 was scheduled to remain in effect until 1981 unless renewed. During the initial four-year ban, the DNR was to attempt to determine the effect of restricting phosphates in laundry detergents. The Legislature would presumably then be able to act more decisively.

In 1981, the sunset provision of the law was delayed to July 1, 1982. Meanwhile a private study of several lakes in Wisconsin was sponsored by detergent industry interests. Both this study and one by the DNR concluded that no effect was evident within the allotted time.

In March of 1982, the Legislature considered a bill to renew the ban which would otherwise expire in July. The vote was 55 to 44 to let the ban lapse. The effort in support of the ban was led by Rep. Mary Lou Munts, Madison. She was later instrumental in having the Legislature reconsider the issue where the ban again failed, this time by only one vote. The issue dealt with two key points. Is no measurable effect during two relatively brief investigations the same as saying detergent phosphates have no adverse effect on the receiving waters? Do the substitute components for phosphates in detergents have adverse effects on household washing machines and laundry or pose an undue risk to the users?

Since the Legislative debate began, response has come from environmental scientists, Canada and the International Joint Commission on the Great Lakes supporting the intrinsic merit of reducing the detergent component of phosphorus loadings to surface



waters (including streams, inland lakes and the Great Lakes) at its product source. Further, it has been proposed that "no recognizable effect" is to be expected for short-term studies given the potential for lake systems to draw upon phosphorus in their bottom sediments for some time after a source is cut off. The study results may be seen as inconclusive rather than indicative of no effect of a detergent phosphorus ban on inland lake quality.

The household effects of non-phosphate detergent components such as sodium carbonate when used in hard water, or the other preparations continues to be a concern. There are alternative detergent formulations. How effective they are and at what cost to the homeowner's appliances or laundry is still subject to as much debate as the environmental issue itself.

This issue is still very much in the public forum and Governor Earl recently was quoted in the press as being in favor of a renewed detergent phosphate ban. Additional public debate of the issue seems likely for the 1983 State Legislature.

LAKE REDSTONE REHABILITATION PROGRAM  
STUDY-FINANCING-IMPLEMENTATION

In 1976, the property owners at Lake Redstone were becoming increasingly aware of lake problems. These included algae, aquatic weeds, siltation, erosion, etc. It was then that they decided to take action by voting at the annual meeting to form a lake management district, the primary purpose of which was designated as improving and maintaining the water quality of the lake.

Lake Redstone has a water surface area of 660 acres and an average depth of 14 feet. It is approximately 40 feet deep at its deepest point. There are about 17 miles of shoreline and it has an agricultural watershed of 18,000 acres. The lake is man-made and was created in 1965. A dam was constructed at the south-east end of a valley through which Big Creek flowed. The lake is also spring-fed and reached its full depth and area within one year. The 18,000 acres of agricultural watershed contributed strongly to the aquatic problems of the lake.

In seeking to understand the lake's problems, its causes, and how best to reach a solution, three basic steps were taken.

1. Feasibility study
2. Financing
3. Implementation.

STEP 1: A feasibility study was started almost at once, inasmuch as a management district is considered a municipality with taxing status, its actions are governed by Chapter 33 of the Wisconsin State Statutes. Accordingly the district advertised for bids to conduct a feasibility study to be done by a private firm involved in this type of work. It is highly important to carefully review all consultants submitting bids to assure that they have background, knowledge and ability to take on such a project and bring it to a comprehensive conclusion in a reasonable length of time. It is suggested at this point that the district's Board

of Commissioners insist that a performance bond be furnished by the successful bidder.

We found that the University of Wisconsin-Extension was helpful in assisting our Board to present the results of our feasibility study in laymen's terms that all property owners could relate to and understand. Representatives of the DNR were also extremely helpful as coordinators of every step of our program.

The feasibility study was very thorough (as it must be) in order to effectively correct the lake's problems. It is necessary to carefully identify and assess the sources of the problems. In our case, each farm in our watershed was visited by a specialist from the University of Wisconsin-Extension. Improved farm and barnyard practices were recommended. Studies of the septic systems on the lakeshore properties were made. Water quality samples of the lake were taken and analyzed. Species of fish were studied and their potential for reproduction was projected. Shoreline erosion problems were observed, and corrective measures were suggested.

Charts, pictures, aerial photographs and an extensive report was prepared by Water Resources Management students at the University of Wisconsin-Madison detailing the problems and recommended solutions. This lengthy report was reduced to a 16-page comprehensive brochure. The brochure was made available to each property owner prior to an annual meeting which included the agenda item of proceeding further with the "lake rehabilitation program." At the meeting, the property owners voted in favor of the Board's further pursuit of such a program and determining the cost thereof.

STEP 2: Financing. The Board engaged the services of a local consulting engineer familiar with the Lake Redstone area to design the necessary structures to control runoff into our lake and to establish new "wetlands" upstream from the lake to further trap siltation/phosphorus. In some areas, rock chutes were designed for controlling sedimentation. The consulting engineer

worked in conjunction with the Soil Conservation Service offices in Sauk and Juneau Counties (parts of each county are included in the Lake's watershed) to determine the design and costs of farm structures and practices. The consultant then prepared a report outlining all of the component projects and the anticipated cost of each. At the same time, a study was being made by the District Board in conjunction with county and state-level personnel to establish some sort of joint funding to implement the program. Inasmuch as our plan was going to the source of the problem, the State indicated a willingness to participate. The counties, recognizing a soil conservation advantage, were also willing to participate and agreed to work with local farmers on a percentage funding basis.

The bottom line of our program amounted to a \$1.2 million project. Of this, \$550,000 would be locally raised directly by the district and the remaining dollars would be State, county, and watershed-farmer funded.

At a special meeting of the district, the financing program was presented to the membership for approval. The interest in the program and its ultimate impact on the lake, its preservation, and the effect on property values resulted in the largest turnout of property owners that the district ever experienced. The vote taken was overwhelmingly in favor of authorizing the Board to arrange financing of the \$550,000 district's share. We, at this point, turned to our legal counsel for additional direction. We were put in touch with a highly respected nationally-known money management firm who recommended that we finance our program by means of a \$550,000 general obligation note and that a special assessment be levied against each parcel of land in the district to repay the loan.

As a result of an open hearing held for district property owners, it was agreed that the only equitable way to assess each lot was to base the assessment on the unimproved assessed value of each lot as it appeared on the county tax roll.



We then worked with the county tax office to establish a dollar figure per \$1,000 assessed valuation and assessed each lot accordingly. The loan was then processed with a 10-year payback period established. The property owners were given the option of prepaying their assessment interest-free within 60 days, or extending the assessment over a 10-year period on their tax bill with interest applied. In our case, about 23% of the owners prepaid.

STEP 3: Implementation. The counties have already signed contracts with watershed farmers. The consulting engineers have taken soil borings in preparation for spring, 1983 construction. The State has prepared an environmental impact study which has been favorably received by concerned agencies. Permits have been applied for and approved, and at this point in time all items have fallen into place. The study was made, costs and financing has been established and approved and the Lake Redstone Rehabilitation Program is underway.

This commentary cannot be concluded without acknowledging the total and complete cooperation and guidance of the Department of Natural Resources personnel and the University of Wisconsin-Extension.

Further information can be had by contacting any present member of the Lake Redstone Management District Board:

Tom Meronek, Chairman  
Route 2  
LaValle, WI 53941 (608) 985-7274

Art Mangelsdorf, Secretary  
Route 2  
LaValle, WI 53941 (608) 985-7244

Robert Zietlow, Treasurer  
Route 2  
LaValle, WI 53941 (608) 985-7705

#### LAND CONSERVATION COMMITTEES

One of the more controversial bills last session was Senate Bill 72. It focused on the institutional arrangements for Soil and Water Conservation programs. Under the legislation, certain administrative functions were moved from the University System to the Department of Agriculture, Trade, and Consumer Protection. At the local level, Soil and Water Conservation Districts were abolished and were replaced by Land Conservation Committees of the county boards.

Since the Inland Lake Program is not a part of the formal Soil and Water Conservation program, the inland lake program was not affected. The only significant change is the title of the county board representative on the lake district commission. The representative is now a member of the Land Conservation Committee or its designee.

The other change for lake districts related to review of management plans. Instead of having those plans reviewed by the County Soil and Water Conservation District and the regional planning commission, those plans should now be sent to the County Land Conservation Committee and the regional planning commission.

Land Conservation Committees often have their own professional staff and also can utilize the U.S. Soil Conservation Service staff. We encourage you to involve the committee and its staff in your discussions. They can be especially helpful regarding watershed studies or watershed work.

A model "Memorandum of Understanding" is available through our offices to formalize a regular working arrangement with the new committee.

COMMISSIONERS' CONVENTION

MARK YOUR CALENDAR

MARCH 25-26

To avoid the April blizzard, we have moved the convention dates back into the March blizzard.

The schedule will be similar to previous years. Registration will begin at the University Center, UW-Stevens Point (same place as 1981 and 1979) at noon on Friday. The program begins at 1:00 p.m. at the University Center and a banquet will be held at the Holiday Inn that evening. The program on Saturday will be back at the University Center.

Details of the convention are still being worked out with the Wisconsin Association of Lake Districts, Dept. of Natural Resources, and individual speakers. The discussion on Friday afternoon will focus on new directions for the Inland Lakes Program and the updated policy for feasibility studies and management grants (the program is subject to modification as Legislative developments affecting Inland Lakes unfold).

For the first time, the presentations and discussion will be complemented with entertainment at the banquet--a little fun to help digest the serious business of the convention.

Saturday's program will consist of workshops on lake topics and on operation of a lake district.

A complete brochure on the program will be sent in February.

We have reserved a block of rooms at the Holiday Inn (715/341-1340). If you want to stay at the Holiday Inn, we suggest an early reservation. Less-expensive rooms are available at the Point Best Western (344-8312) and the Road Star Inn (341-9090).