Lake Wapogasset and Bear Trap Lake Comprehensive Lake Management Plan Summary

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Introduction

This comprehensive lake management plan establishes strategic direction for priority issues for Lake Wapogasset and Bear Trap Lake. The Sanitary District initiated the project. Representatives from both the Sanitary District and Lake Association made up the Comprehensive Plan Advisory Committee. Much appreciation is extended to advisory committee members for their attention and dedication through a process that included six evening meetings and review of several draft documents.

Plan Scope

The plan presents information about the lakes historical water quality, fisheries, and the management efforts available and used to date. It presents new information gathered as part of this planning process including watershed mapping and characterization, estimates of pollutant loading, and lake water quality response modeling.

The Comprehensive Plan Advisory Committee identified four priority issues of concern: water quality, aquatic invasive species, fisheries, and environmental impacts of management. The management actions focus on these priority issues. A separate aquatic plant management plan covers this important concern.

Plan Vision

Wapogasset and Bear Trap Lakes and shoreland areas will be recognized as highly desired living environments and valued natural assets for water based sports, recreation, appreciation of wildlife and natural beauty, and general human enjoyment. The Sanitary District and Lake Association will work cooperatively to better understand and manage the lakes to mitigate degradation of our water resource. We will:

- 1. Work together to enhance the overall health and water quality of the lakes given existing constraints of a large watershed, high residential density, potential for extensive watercraft traffic, and significant phosphorus loading from lake sediments.
- 2. Conduct lake management activities in a manner that will limit unintended environmental impacts (Do good Do no harm).
- 3. Foster understanding by lake residents and users as to the ever evolving nature of lake management, the complexity of issues, the status of projects and activities, the costs and benefits of remedial actions, and the opportunity and techniques to reduce or prevent any negative consequences of lake use and lakeside living.
- 4. Seek the support and partnership of lake area residents, visitors to the lakes, the towns of Lincoln and Garfield, Polk County, Wisconsin Department of Natural Resources, Federal Environmental Protection Agency, Wisconsin Association of Lakes, University of Wisconsin Extension, private foundations, and other potential partners.

Lake Management Goals

- 1. Improve¹ Lake Wapogasset and Bear Trap Lake water quality.
- 2. Implement Aquatic Plant Management plan goals.
- 3. Prevent introduction of invasive aquatic organisms and limit the impacts of those introduced to the lakes.
- 4. Protect and improve the Lake Wapogasset and Bear Trap Lake fishery.

How will these goals be carried out?

The implementation section of the plan begins on page 64. Go to Appendix D to find the implementation actions to occur over the next three years.

With approval of the Sanitary District Board and Lake Association Trustees, the plan will be overseen by a steering committee. Hopefully, many of the advisory committee members will serve on this steering committee. Some activities will be led by the Sanitary District, others by the Lake Association. The table in Appendix D identifies these responsibilities.

Water Quality Improvements

Reduction in nutrient loading from external sources (namely Friday Creek, the Balsam Branch and remaining watershed areas) will focus on reducing runoff and nutrient inputs from the biggest contributing sources: identified neighborhood stormwater problem areas, crop fields, and waterfront property. Highest areas of nutrient loading are shown on page 33.

Sources of phosphorus that already exist in the lake contribute significantly to algae blooms in our lakes. We will continue to *investigate* the most promising measures available to reduce this impact including aeration, curly leaf pondweed management, blue green algae influence, and potentially a focused alum treatment.

Aquatic Invasive Species Prevention

One of the major concerns regarding invasive species is the difficulty of controlling their impacts once they are introduced into a lake. The plan focuses on public education and monitoring to prevent invasive species introduction.

Fisheries

The lakes provide an excellent largemouth bass fishery, and improvements are recommended for walleye and muskellunge. The focus for improvement includes stocking and preventing sedimentation of walleye spawning beds.

¹ We will further analyze modeling information and intended actions to assess whether improvement is a realistic goal as management actions are implemented and evaluated.

When can I expect water quality improvements?

Lake improvements take time, and the results of our efforts may not be readily apparent for many years. The lakes are at the base of a very large watershed area, and have received the negative impacts of land use practices over many decades. These nutrients are stored in our lake sediments. Our focus on reducing external loading from the watershed will prevent additional high levels of nutrients from entering our lakes. We will continue to gather more information to better understand the best approach to address the nutrients that are stored on the bottom of the lake. Because of the expense of these methods, they must be approached only after careful analysis.

How will plan implementation be financed?

The Plan Steering Committee and both lake organizations will need to develop specific financing methods as the plan is implemented. Grant sources are described on page 74. Appendix D describes potential sources for each action.

Where to find more information in the plan . . .

Understanding Lake Science —		→ Page 13
Results of the Public Opinion Survey	•	Pages 5, 47 and Appendix A
Water Quality in the Lake —		Page 22
Nutrients from the Tributaries and Water	rshed —	Page 25 and Appendix C
Internal Loading from Lake Sediments		Page 34 and Appendix B
Aquatic Invasive Species —		Page 43
Plan Implementation —————		→ Page 64 and Appendix D

To provide input on this draft plan . . .

Review the plan (or portions of the plan) and provide comment. Comments may be provided in writing (via email is preferred) or by telephone.

Direct comments to plan consultant:

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Or if you prefer, you can comment to any advisory committee member.

There will also be an opportunity to comment on the comprehensive lake management plan and aquatic plant management plan at a public meeting to be held:

Saturday, December 5th., 10:00 a.m. LOCATION?