

Professional

Engineering

Services

# Lake Wingra Watershed Management Plan

## Report

City of

Madison, WI

in Cooperation with Friends of

Lake Wingra

November 2015



Photo Source: David Liebl





In 2009 the Friends of Lake Wingra published *Lake Wingra: A Vision for the Future*. This document listed a series of goals to improve Lake Wingra and the surrounding watershed. The goals included:

1. Clean, clear water.
2. Restored spring flow.
3. Abundant native plants and animals.
4. Stewardship and enjoyment.

The Friends of Lake Wingra then advocated for, and partnered with, the City of Madison Engineering Department to develop a watershed plan that worked toward achieving these goals. This report is a result of their persistent efforts. It is the product of 13 Steering Committee meetings, 3 issue team meetings, and other community engagement activities. It also includes a pilot project focusing on modified leaf collection methods (see Appendix G). The Steering Committee is made up of representatives from the City of Madison Engineering, Friends of Lake Wingra, Wisconsin Department of Natural Resources, UW Arboretum, and the UW Madison campus. Table 1 lists the representatives as of June 2015.

Genesis Steinhorst	City of Madison (Former)
Phil Gaebler	City of Madison
Greg Fries	City of Madison Engineering
Sara Eskrich	City of Madison, District 13 Alderperson
Sue Ellingson	City of Madison, Former District 13 Alderperson
Paul Dearlove	Friends of Lake Wingra & Clean Lakes Alliance
David Liebl	Friends of Lake Wingra
Jim Lorman	Friends of Lake Wingra
Rebecca Power	Friends of Lake Wingra
Jim Baumann	Friends of Lake Wingra
Roger Bannerman	Wisconsin Department of Natural Resources (WDNR)
Mark Wegener	UW-Madison Arboretum
Ben Jordan	UW-Madison
Bret Shaw, Social Marketing Consultant	UW-Madison

**Table 1 Steering Committee Representatives**

This watershed plan targets three critical issues: chlorides, infiltration, and phosphorus. Table 2 lists just some of the critical actions recommended for each.

Focus Area	Some Critical Actions
Chlorides	Commercial applicator training Commercial applicator certification Salt use guidelines Salt use ordinances Pilot use of alternate deicers Expanded use of anti-icing
Infiltration	Infiltration basins Downspout redirection Rain gardens Terrace rain gardens Permeable pavement pilot projects Rain barrels Project-based infiltration facilities (bioswales, infiltration basins)
Phosphorus <sup>1</sup>	Diversion to wet detention basins Modified leaf collection methods Greater erosion control enforcement Wetland harvesting Stream bank restoration Wet detention basins Alum treatment

**Table 2 Critical Actions of Focus Areas**

While this plan provides a solid foundation for measurable water quality improvement, unless the critical actions are implemented, no change will occur. The plan recommends that the Steering Committee continue as a body that provides active guidance to watershed improvement measures. The plan further recommends creating catalyst teams for chlorides, infiltration, and phosphorus. The catalyst teams would focus on the implementation of critical actions for their specific focus area. The use of catalyst teams has several advantages.

1. They are dynamic, allowing the team to capitalize on opportunities as they arise.
2. They are collaborative, partnering with organizations that have similar objectives.
3. They are focused, consistently advocating for the water quality issue they are tasked with.

Finally the plan recommends liberally using pilot projects within the watershed to test management measures. Most changes in legislation, policy, or management require a track record of success, both in implementation and effectiveness. Pilot projects are an excellent way to build this track record. Advantages of using the Lake Wingra Watershed for pilot projects include the following:

1. The watershed is made up of well-organized neighborhoods.
2. Many residents already have an environmental stewardship ethos.
3. The watershed has a dedicated advocacy organization focused on Lake Wingra watershed water quality.
4. The watershed provides a smaller water-body for evaluation.

<sup>1</sup>Recommended phosphorus reduction actions to be determined.

While the challenges in implementing the recommendations listed in this report are numerous, the opportunity for success is great. The watershed is made up of environmentally minded neighborhoods that have a history of effective advocacy. Few other watersheds in Madison, or even the state, have the benefit of such an active constituency. Community leaders, coupled with engaged residents, have the power to both make and influence change. Eventually these changes will provide an environmental legacy within the watershed for generations to enjoy.

Report for  
**City of Madison, Wisconsin**  
in Cooperation with Friends of Lake Wingra

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**Lake Wingra Watershed Management Plan**



Prepared by:

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City of Madison Engineering



Friends of Lake Wingra

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