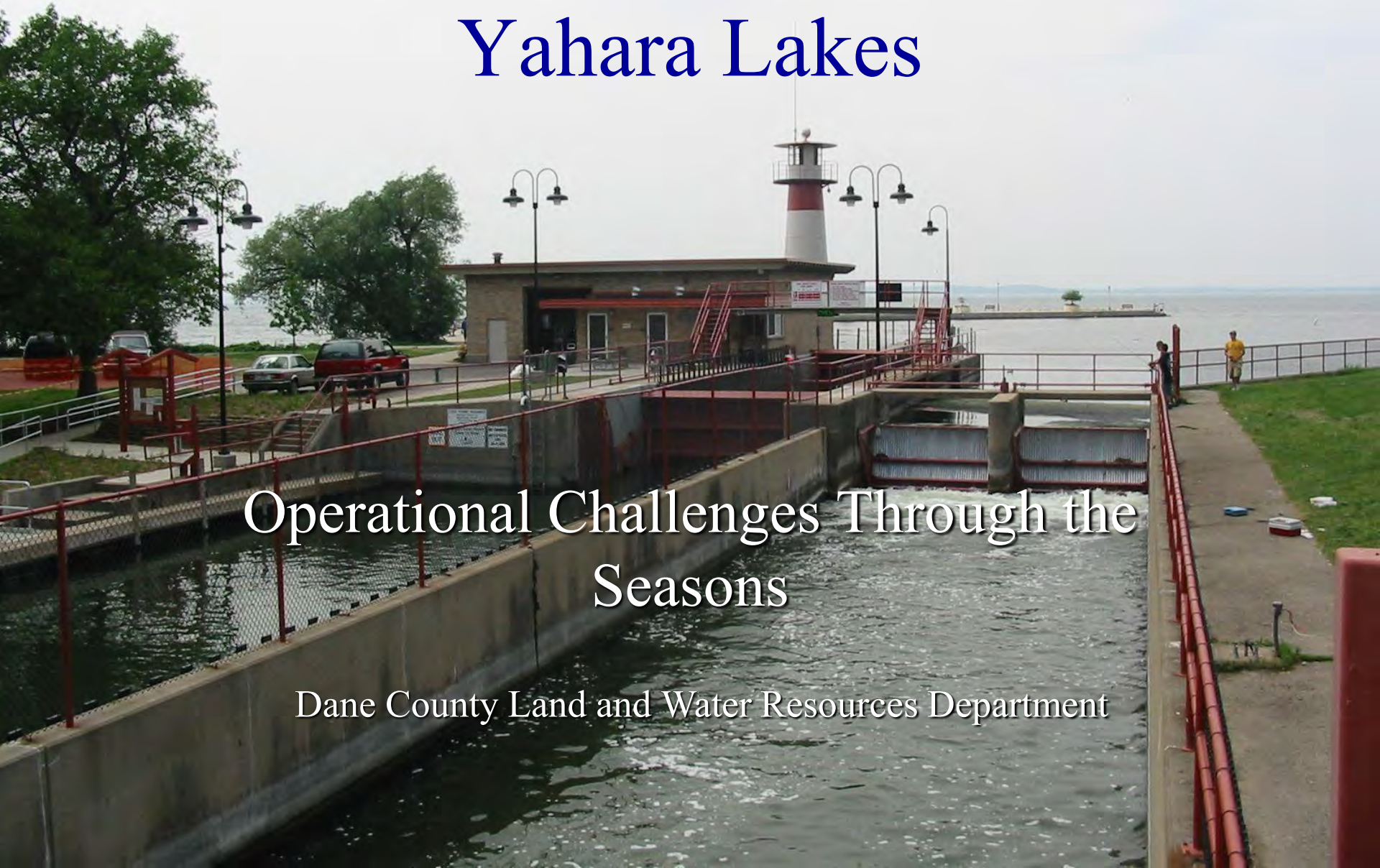


Managing Water Levels in the Yahara Lakes

Operational Challenges Through the Seasons

Dane County Land and Water Resources Department



- 
- A photograph of a boat on a river, viewed from the front. The boat has a blue seat and a white light fixture. The river is surrounded by dense green trees and bushes. The sky is overcast with grey clouds. The text is overlaid in the center of the image.
- Water Level Management in Practice
 - Management Challenges

Watershed Awareness



The state of the watershed is a critical factor in rainfall-lake level response



Monitoring Weather Forecasts

weather.gov

National Weather Service Weather Forecast Office

Milwaukee/Sullivan, WI

Home Site Map News Organization Search for: NWS All NOAA Go

Local forecast by "City, St" or Zip Code

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Current Hazards
Watches/Warnings
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Fire Weather
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Winter Weather

Hydrology
Rivers & Lakes


Climate
Local

Top News of the Day **Recently Issued:** Public Information

- Today Is The Last Day Of Tornado And Severe Weather Awareness Week
- Wisconsin Broadcasters Association PSAs on Tornado Myths
- What do you know about storm-resistant buildings?

Watches & Warnings Observations Forecast Graphics Rivers & Lakes Climate Marine

Click on the map below for the latest forecast.



Read watches, warnings & advisories

Hazardous Weather Outlook

Short Term Forecast

Last map update: Fri, Apr. 23, 2010 at 4:59:48 pm CDT

Aquatic Plant Scouting & Harvesting



Control Structure Operation



Limitations & Challenges


- Flow and water level are driven by weather
- Adjustments made at controls are limited
- The river system has natural and constructed flow restrictions
- Urbanization in the Watershed

Explanation


 Stormsewer Outfall

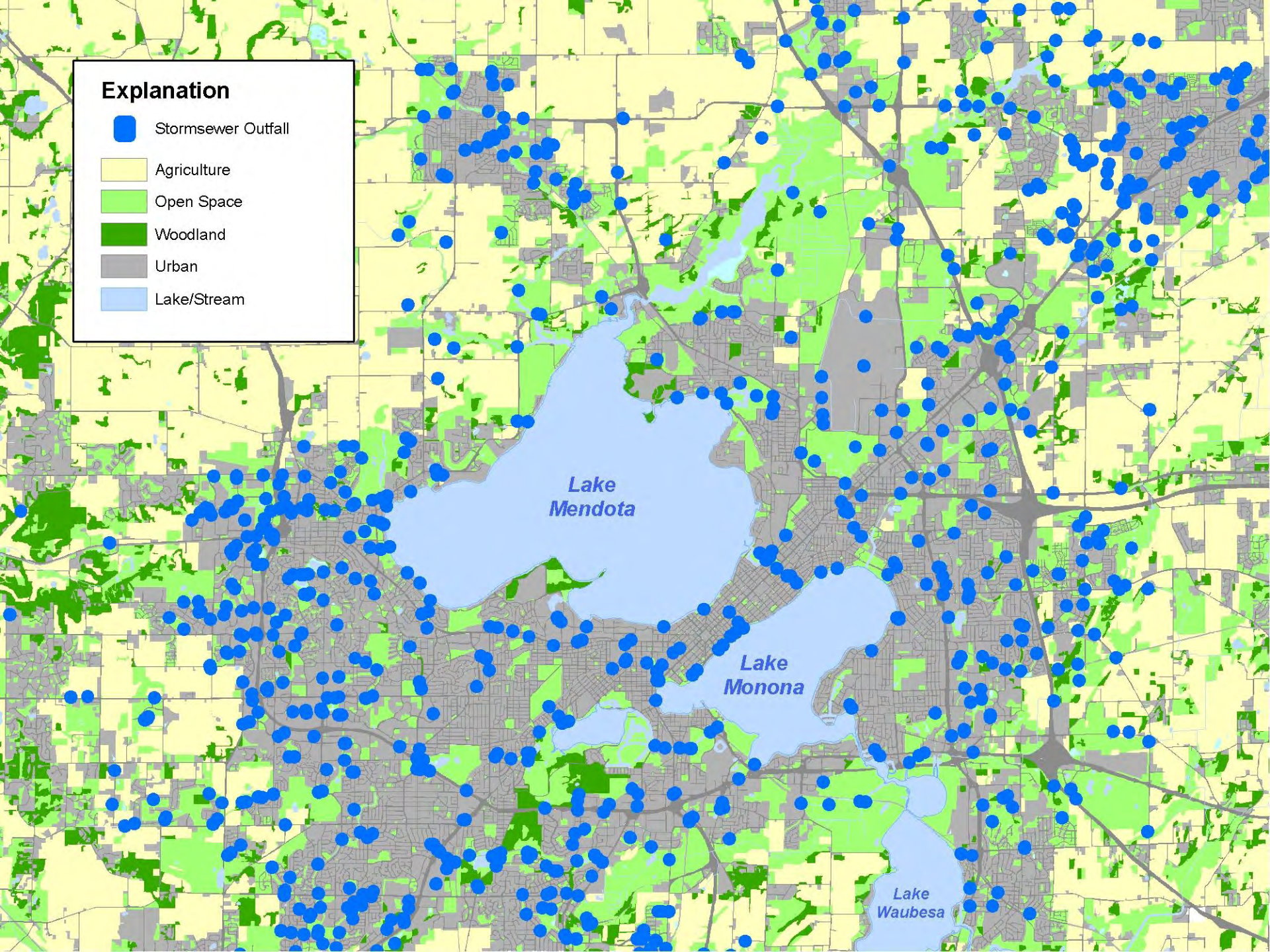
 Agriculture

 Open Space

 Woodland






 Urban

 Lake/Stream



Uncertainty...



5-Day Forecast for ZIP Code 53703 Customize Your Icons!				
Friday	Saturday	Sunday	Monday	Tuesday
				
63° F 49° F	59° F 45° F	52° F 40° F	58° F 38° F	59° F 38° F
Chance of Rain 40% chance of precipitation	Rain Showers 80% chance of precipitation	Rain 80% chance of precipitation	Partly Cloudy	Partly Cloudy



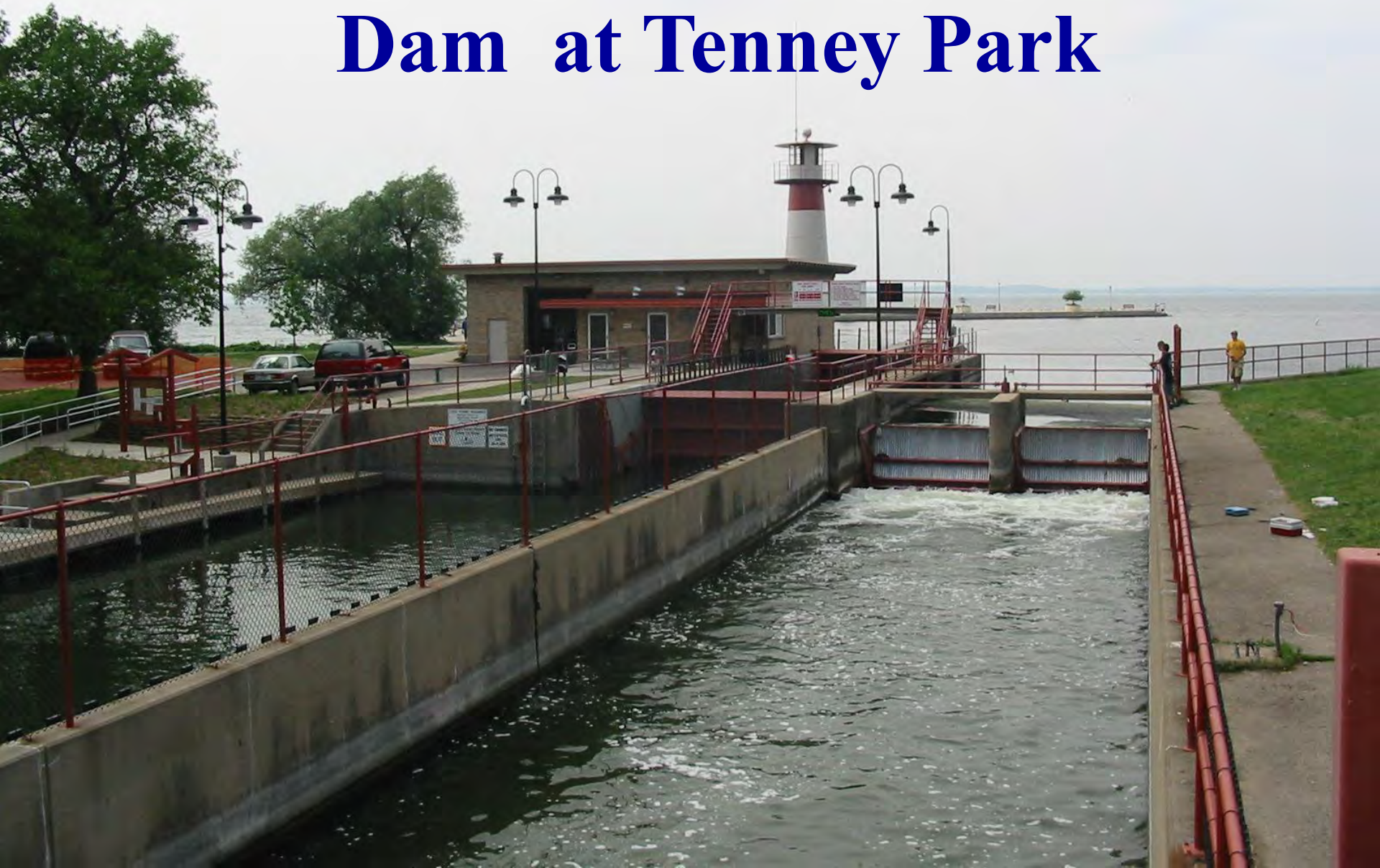
...In weather forecasting

Characteristics and Constraints of the Yahara River System





Lake Mendota – Lock and Dam at Tenney Park









Lake
Mendota

Lake
Monona

Lake
Monona

Upper
Mud Lake

Lake
Waubesa

Lake Monona Outlet







Upper Mud Lake Rail Bridge

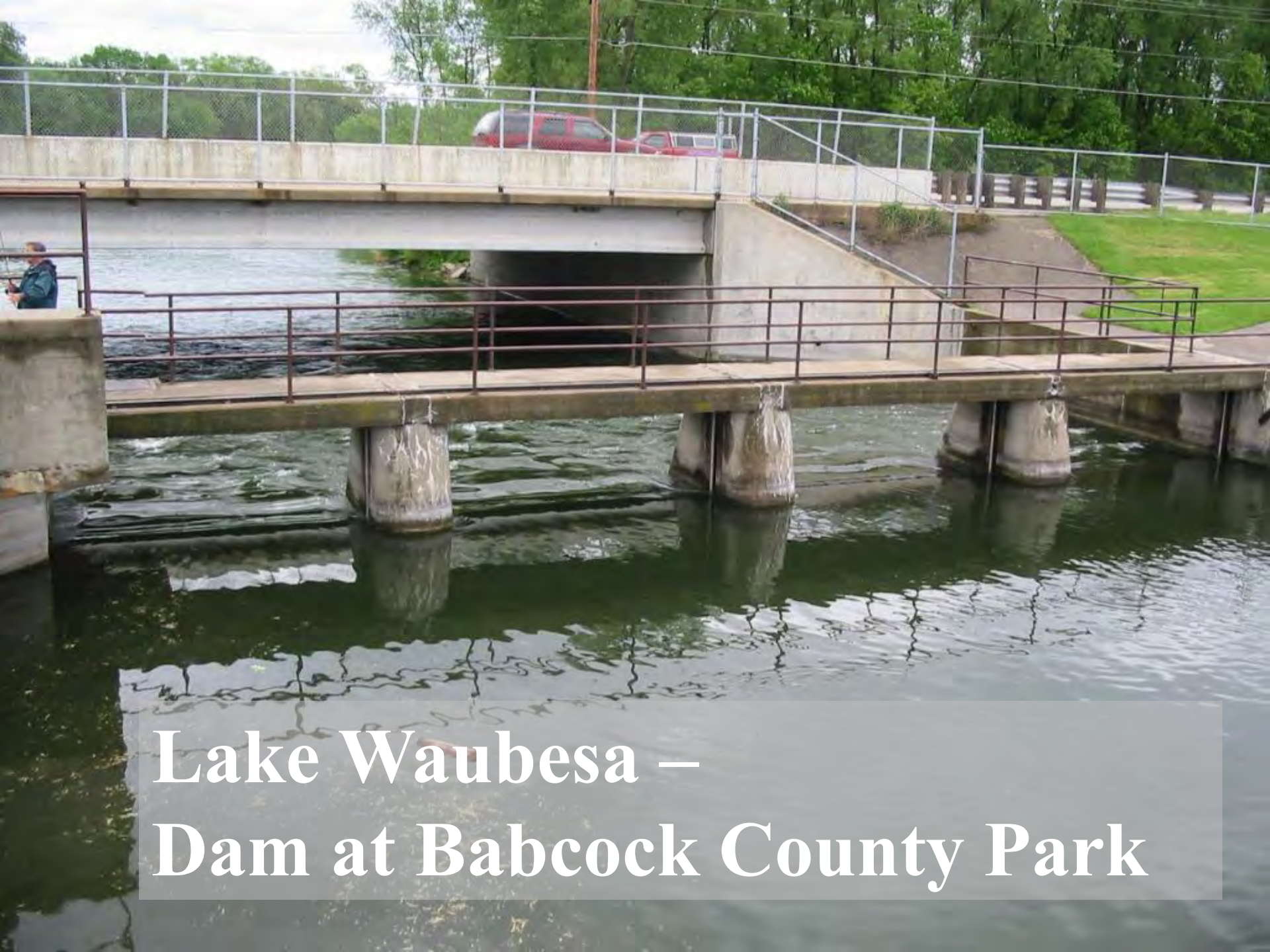




**Lake Monona/
Mud Lake –
Railroad Trestle**







**Lake Waubesa –
Dam at Babcock County Park**



**Lake Waubesa –
Dam at Babcock County Park**

Control Structure Limitations





03/26/2010

Lake
Waubesa

Lower
Mud Lake

Slope between lakes =
0.007%

Lake
Kegonsa

89°18'40"W 89°18'20"W 89°18'0"W 89°17'40"W 89°17'20"W 89°17'0"W 89°16'40"W 89°16'20"W 89°16'0"W 89°15'40"W 89°15'20"W

43°0'30"N
43°0'20"N
43°0'10"N
43°0'0"N
42°59'50"N
42°59'40"N
42°59'30"N
42°59'20"N
42°59'10"N
42°59'0"N
42°58'50"N
42°58'40"N

89°18'40"W 89°18'20"W 89°18'0"W 89°17'40"W 89°17'20"W 89°17'0"W 89°16'40"W 89°16'20"W 89°16'0"W 89°15'40"W 89°15'20"W

Mud Lake

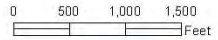
● Elevator Location

● Yahara River Distance (every 0.25 miles)

— Yahara River - Approximate Centerline

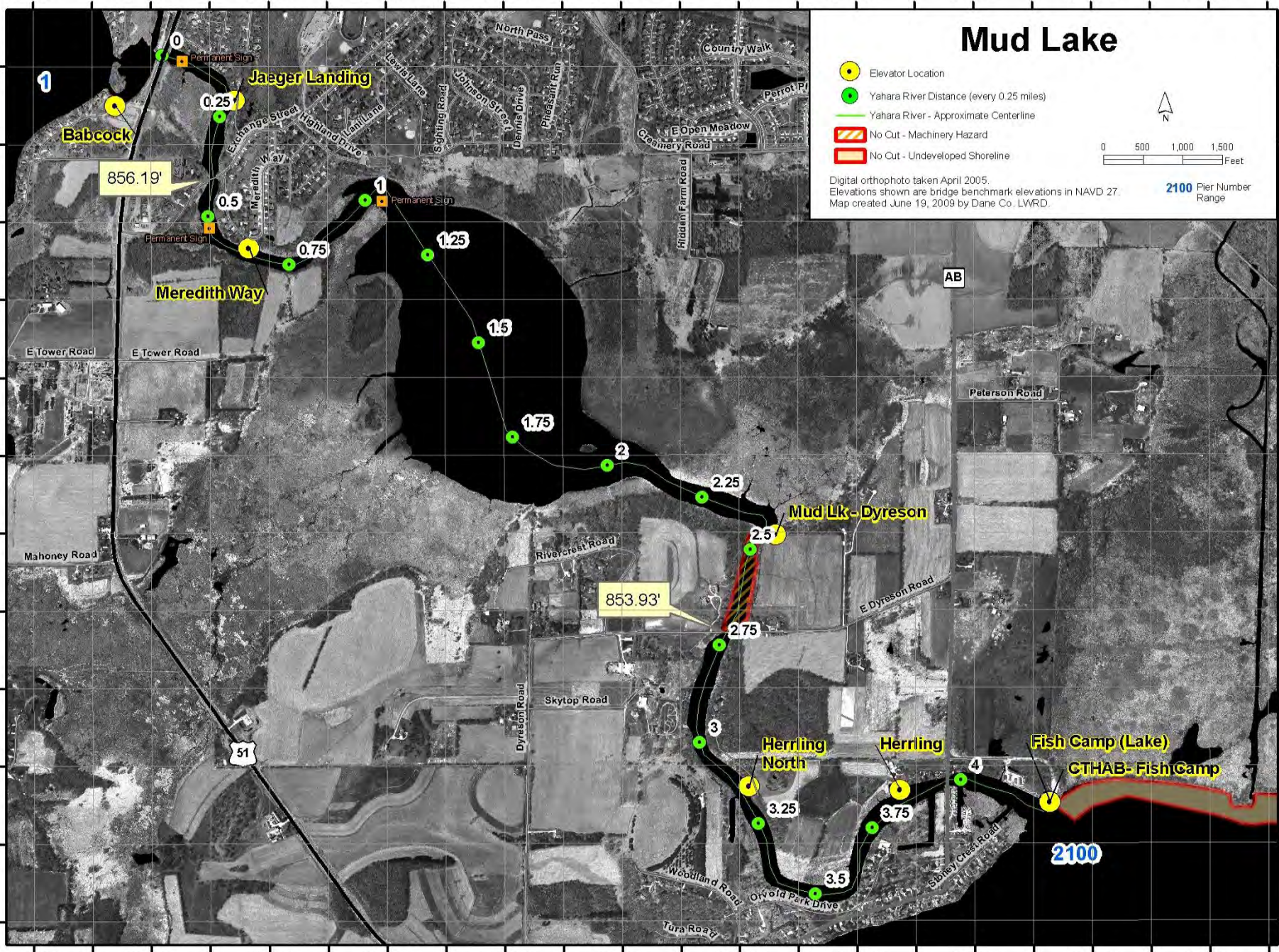
▨ No Cut - Machinery Hazard

▨ No Cut - Undeveloped Shoreline



Digital orthophoto taken April 2005.
Elevations shown are bridge benchmark elevations in NAVD 27.
Map created June 19, 2009 by Dane Co. LWRD.

2100 Pier Number Range





03/25/2010 10:18



03/25/2010 10:14

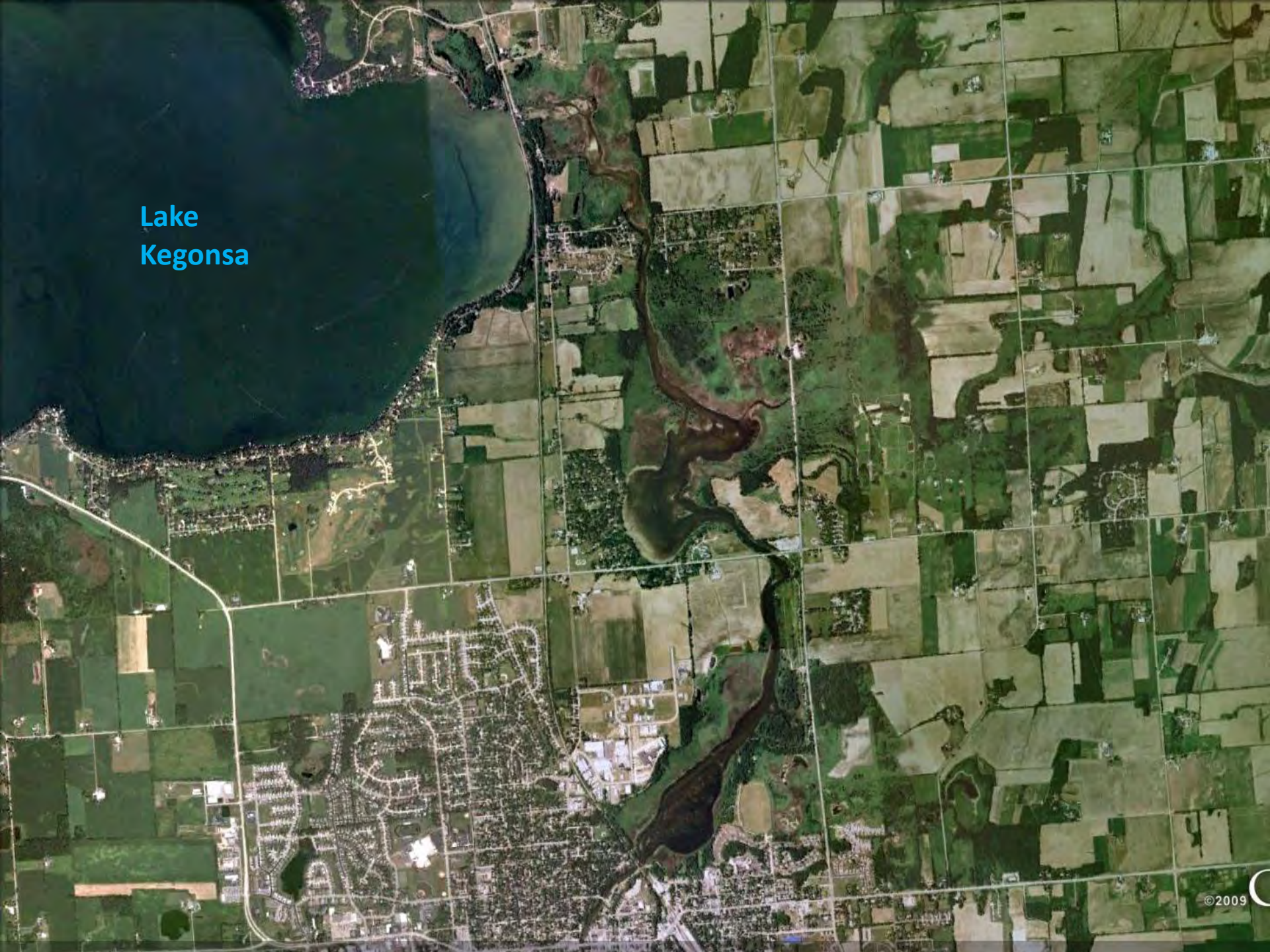


03/25/2010 10:23



**Lake Kegonsa –
Dam at LaFollette County Park**

Lake
Kegonsa







05/01/2009



05/01/2009