



Wisconsin DNR
Ken Johnson

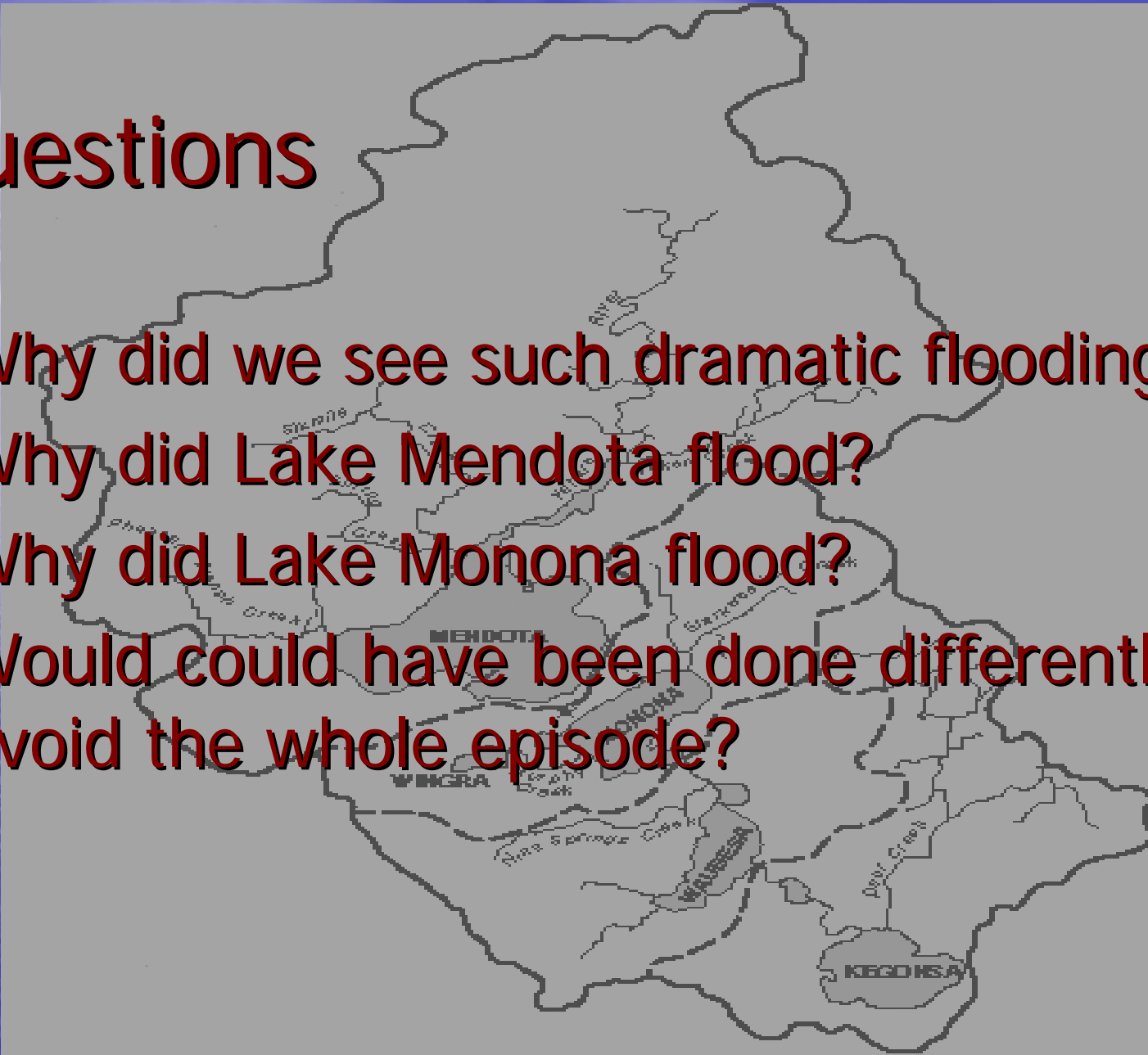
**Yahara Lakes Advisory
Group**

2000 Flood

- Back to back storms in late May
- Lake Mendota rose to its historic high
 - In excess of the 100 year pool
 - Major sandbagging on Middleton beach Road and other places
 - Water running through the boat house of Tenney Park dam
- Lake Monona flooded in excess of the 10 year pool
- Extended period of high water in the entire system.

Questions

- Why did we see such dramatic flooding?
- Why did Lake Mendota flood?
- Why did Lake Monona flood?
- Would could have been done differently to avoid the whole episode?



Who's in charge?

- Who decides
 - Owners of the dam?
 - Municipalities?
 - State

Chapter 31 and Section 31.02

Powers and duties of department.

- May regulate and control the level and flow in all navigable waters
- In the interest of public rights in navigable waters or to promote safety and protect life, hearth and property....
- May investigate and determine all reasonable methods of construction, *operation*, maintenance and equipment....

Control documents

- Order: findings, conclusion of law, and order

Who's in charge?

- DNR issues general orders
- Owners need to stay within the bounds of the order
- Historically, operation during flood conditions have not been specified

Dam Owner and DNR or is it the Dam Owner vs. DNR

- Decision to revisit the orders
- Try something else
 - DNR, County, UWEXT
 - Citizen advisory group
 - 26 people
 - Engineers
 - Biologist
 - Politicians
 - General public
 - Business
 - Scientist
 - Friends groups
 - Environmental groups

Birth of YLAG was September 2001

Mission Statement

*The Department of Natural Resources is entrusted with the responsibility to establish levels and flows within the Yahara Lakes Chain. The Yahara Lakes Advisory Group will evaluate the current operating orders for their adequacy and advise the DNR South Central Regional Director as to what modifications need to be made to address **public interest**.*

Yahara Lakes Advisory Group (YLAG) was charged with exploring eight questions:

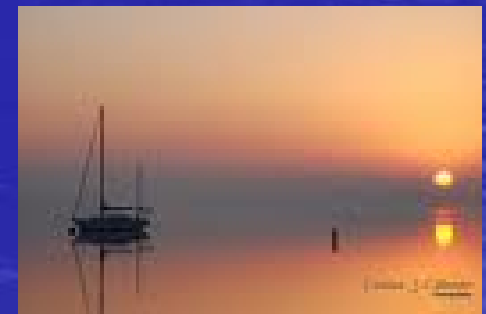
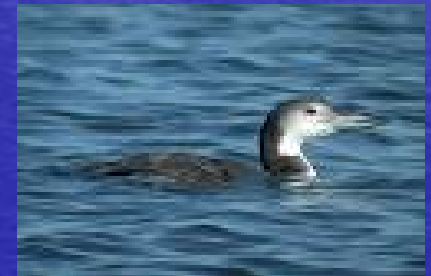
1. Are these orders serving the lakes well
2. Can Fish spawning be enhanced by a different approach
3. Are we protecting flood prone areas
4. Are we encouraging recharge of GW
5. Are we doing a good job managing recreational opportunities
6. Can we improve water quality of the Lakes
7. Are there physical changes to the system that need to be pursued
8. Are we still serving the public interest.

Who is the Public in Public Interest/ Rights?

- Private Riparians
- Local Municipalities
- Citizens of the state of Wisconsin
- Citizens of the United States
- Future Citizens

What Are Public Rights

- Navigation and it's incidents
- Water Quality
- Habitat
- Recreation
- Natural Scenic Beauty



Lots of meetings

- Fourteen meeting from October 2001 to July 2002
- Product
 - 38 ideas
 - Lakes Management and Operation 11
 - Monitoring 6
 - Land Use 15
 - Education and others 6

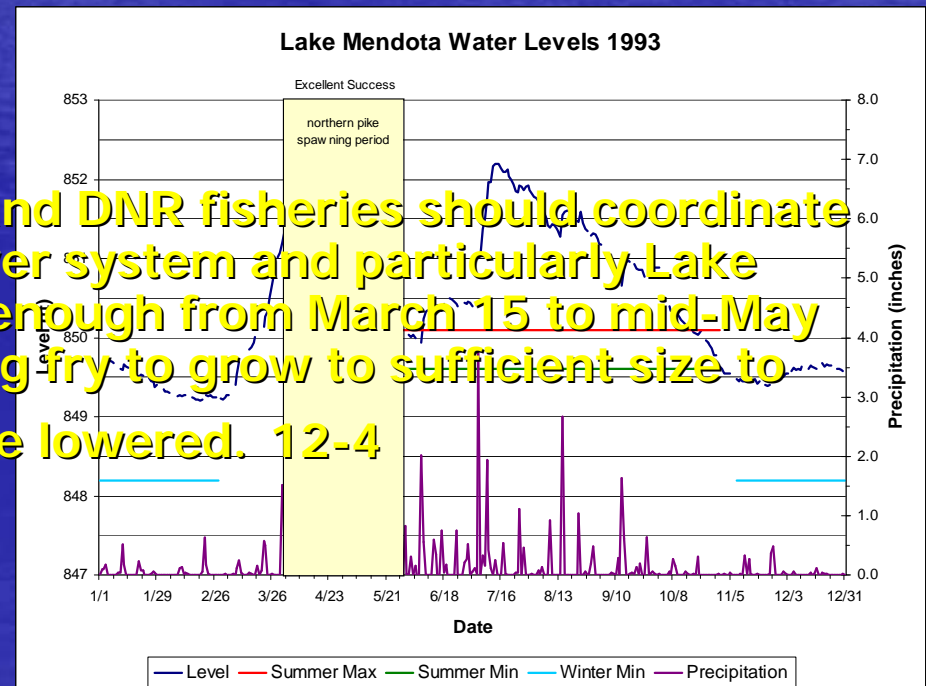
Recommendations: Operations

- Single Management Strategy
 - All control structures from Lake Mendota to below the Stebbinsville Dam be unified under a coordinated and recordable management strategy based on a Yahara River System management plan to be developed which would be able to articulate responses to various scenarios such as development of the basin. 17- 1
- Evaluate Constriction
 - Evaluate methods such as modification of bridge constrictions, aquatic plant modification, dredging, channel modification, etc. to increase flow conveyance 12-5

Recommendations continued

- Operations should provide stable and predicable water levels
 - Operations rules for the lakes must provide for stable and predictable lake levels that are protective of public and private properties, wetland, shorelines, fisheries, water quality and recreational users. 11-7

- Protect fish spawning
 - Dane County Public Works and DNR fisheries should coordinate lake levels in the Yahara River system and particularly Lake Mendota must remain high enough from March 15 to mid-May to allow fish to spawn, young fry to grow to sufficient size to survive once water levels are lowered. 12-4



Recommendations continued

- Renovate Tenney Park
 - Evaluate the need to renovate Tenney, Babcock and LaFollette lock and dams. The evaluation should include the possibility of automating the gates at one or all of the dams 13-4



Recommendations: Monitoring

- Lower River monitoring

- Maintain an active monitoring program on the lower Yahara River to obtain accurate data on channel hydraulics. 16-2

- State of the art modeling

- Promote and continue development of a state-of-the-art hydrologic monitoring network (i.e. rain gages, lake level recorders, river flow gages) for the Yahara River system 16-2



Recommendations: Land Use

- Infiltration
 - Opportunities to significantly increase the infiltration of storm water and snow melt into the groundwater should be identified and emphasized to all areas that significantly impact lake levels. 14-3
- Pollution control
 - Control the inflow of sediment, animal waste, pesticides, fertilizer and other pollutants into the Yahara River system. 14-4

Recommendations: Land Use

- Wetland Drainage
 - Stop the draining of wetlands for either farming or possible future development within the Yahara River System. 14-4
- New development
 - Ensure new developments adhere to current standards of control to prevent sediment and erosion into the Yahara River system 15-3

Recommendations: Education

- New Development

- Encourage the development and real estate industry to go beyond minimum water quality best management. 13-4