



Dane County Office

Cooperative Extension

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Yahara Lake Level Advisory Group 2 (YLAG2) Minutes

July 28, 2011

3 - 5 pm with Public Comment beginning at 5:00 pm

**Location: Lyman F. Anderson Agriculture and Conservation Center
1 Fen Oak Court, Madison**

Participants in attendance:

Jack Von Rutenberg	Kevin Connors	Melissa Sargent
Rob Phillips	Anita Weier	Allan Coville
Tom McGinnis	Ken Potter	Chin-Hsien Wu
Bill Fitzpatrick	Mike Amstadt	Kurt Welke
Sue Josheff	Lloyd Eagan	Mindy Habecker

Participants absent:

Scott Reiersen	Bill Mazanet	Chuck Rolfsmeyer
Sue Jones	Kyle Richmond	Mike Kakuska
Melissa Malott	Rick Kurz	Daniel Stepahny
John Van Dinter	Richard Gullickson	Ed Minihan
Richard Lathrop	Dean Hein	Susan Tesarik

1. Introductions - all

2. **Approval of Minutes** – Due to the late posting of the minutes for the May 26, 2011 and June 23, 2011 minutes, approval was delayed to the next meeting.

3. **Check-in** - Website is at: <http://www.countyofdane.com/lwrd/landconservation/ylag.aspx>

4. **Consideration of additional questions concerning hydraulics, dams and constrictions**
John Reimer and Professor Chin Wu reviewed last month’s INFOS model presentation. The example that John and Chin Wu showed at the last meeting was for Lakes Monona and Waubesa. For July’s meeting, they added to last month’s presentation for Lakes Monona and Waubesa, the results of their effect on Lakes Mendota and Kegonsa. We can use the model to determine the relationships of the lakes with each other based on higher and lower flows. For example - how high Lake Mendota will rise if we decrease inflow into Lake Monona.

To make the model more accurate, we need a better distribution of rainfall gages to better determine the runoff into the lakes. A map was passed out showing the existing gages and possible locations associated with towns. Currently, the Yahara watershed has three US Geological Survey (USGS) precipitation gages. The USGS precipitation gages are located in Windsor north of the airport, in Middleton near the Parmenter roundabout and in McFarland at Highway 51. Their data is fed directly into INFOS.

Each additional gage would be about \$4500 - \$5000 added to a location with electricity and internet service. The town hall locations were suggested because they already have those services.

John and Chin Wu were asked if there were any counter intuitive discoveries that they have found in their modeling and data gathering. They didn't find any. They also commented that, though not counter intuitive, dredging is often thought to be more effective than it actually is.

Can the INFOS model be used to find where we can get the biggest bang? Alternatives can be modeled to determine the impact on up and downstream conditions. Each alternative must be clearly defined and then takes time to program and evaluated.

Data is being gathered this year that should allow the INFOS model to be used to evaluate alternatives from Lake Mendota to Lake Kegonsa. As additional, more accurate or more current data becomes available in the future, it can be added to the model to get better, more accurate results.

This year, there are about 25 – 30 lake levels gages and 3 acoustic flow gages in the lower Yahara River below Waubesa (Babcock) Dam in McFarland. Significant resources are being used to evaluate the results of vegetation cutting at different locations and at different times. This should assist the County in directing the weed harvesters to get the biggest benefit.

The group was reminded:

- We need to look at both drought and flood conditions; and
- Besides the river hydraulics, we need to be aware of the changes in the watershed and precipitation.

John and Chin Wu confirmed that the river between Waubesa to Kegonsa is most critical to evaluate and their highest priority now.

5. PUBLIC SAFETY AND HEALTH; NAVIGATION AND RECREATION

Presenters:

Kevin Connors – Land and Water Resource Department Director

Water Level Fluctuation – Impacts on Yahara Lakes Navigation and Recreation

connors.kevin@countyofdane.com

The PowerPoint is posted on the website.

The Land and Water Resource Department (LWRD) maintains a log of phone call concerning water level issues by date and location (pier number when possible). There is a direct correlation between the precipitation amount for the year-to-date to the types of phone calls that are received relative to high, low or good lake levels. The dots on the maps in Kevin Connors' PowerPoint don't represent the number of callers, just the locations that have calls. The dot groupings can be explained by low lying land areas affected by flooding and shallow shorelines lacking depth during normal or low water levels

In 2009 and 2010, DNR ordered water levels be drawn down at Kegonsa and Stoughton to help move more water out of the system. The ordered drawdown also stimulated complaints. While Mendota, Monona and Waubesa were being used for recreation and navigation, users couldn't access Kegonsa and Stoughton because water levels were too low.

As of this meeting, precipitation this year is about 9" below the normal year-to-date and consequently complaints about low water levels have started.

The LWRD contracts with USGS for lake levels and flows. USGS checks the gages to assure that they are working correctly and also maintains the website with data going back to the start of the gage at that site.

A question was raised on whether there is a better location for the Lake Monona gage than on the Bay.

Jack Von Rutenburg pointed out that there is perception versus fact. Many think that Lake Mendota can be drawn down a little or is fine in the current ordered range (849.6 – 850.1 NGVD) but the fact is that the level for navigation is better at 0.5' over the allowable range.

It was pointed out the callers represented in Kevin Connors' maps in his PowerPoint live on the lake but the vast users live off the lake.

A farm owner on a tributary to Lake Mendota explained he was losing tillable land and wondered if the water level orders had changed. Kevin Connors explained that due to the higher than normal precipitation over the last four years, lots of areas have been experiencing higher groundwater levels.

Sergeant Dave Ritter, Dane County Sheriff's Dept, (608)284-6808

ritter.dave@co.dane.wi.us

Sergeant Ritter is with the Dane County Sheriff's Marine and Trails Enforcement Bureau. He explained that his authority comes from chapters 30.50 – 30.81 of the State of WI statutes.

Sergeant Ritter provided insights to recreational trends and associated issues:

- Increased bow fishing - leaving carp behind to float into shallow areas
- Paddle boards – complains about boat wakes
- Increased out-of-state boaters (mostly from IL)
- Decrease in Personal Water Craft but they are now being used for skiing and tubing
- Increase in Gilligan's Island, the sand bar at Upper Mud Lake, downstream of the Beltline bridge – increasing Operating While Intoxicated arrests
- Larger ski boats –
- More fishing tournaments

Sergeant Ritter's insights to the recreational constants over the years are:

- Lots of fisherman at rocks and drops off in the lakes
- Boaters congestion and conflict with fishing and paddlers
- Wind surfers – the only sanctioned area is on Lake Mendota near the Tenney Locks which can cause user conflicts.
- Every boat has a different draft and lifts are determine by the boat

Sergeant Ritter's insights to the recreational safety issues are:

- In shallow portions of Lake Kegonsa - lifts are located out into the lake and not associated with a pier
- If water level is low, rock bars are hit more,
- In the Yahara near Mazanet, there are reports of hitting something submerged in the water but he has never located the cause – even when he was given GPS coordinates.
- Obstacles in Squaw Bay – need to move no wake buoys out – more into Lake Monona
- Gilligan's Island area is shallow
- During high flows, navigating through the RR trestle at Upper Mud Lake is like shooting rapids
- Sheriff's power boats can't navigate between Waubesa to Kegonsa
- Can't launch a boat at Fish Camp if water is low
- Fixed-keel sail boats can't access Mendota if the lake level isn't high enough
- During high Lake Monona levels, larger boats cant get under the Williamson St bridge
- Better navigational markings are needed if water levels are lowered
- More calls for needed response when water levels are high - for pier sections, logs, fire rings, bog break-offs, debris at bridges
- Calls during low lake levels are for tow for lower motor units

Sergeant Ritter's observations –

- Have the size of boats gotten bigger? Yes - Used to be a 16' tiller was big.
- Sailboats have always been around and the Yahara River on the North side of Mendota used to be deeper.
- The dredging in Lake Mendota near Mazanet wasn't deep enough or wide enough and filled in quickly.
- All shorelines aren't the same.
- Water depth can be determined by the water level and the bottom level. The lake bed has filled and the water depth has gotten shallower over time in the areas including: Dingles Bay, Marshall Park, Pheasant Branch, Spring Harbor
- Piers sections can be added to lengthen a pier out to deeper water.

Definitions

- A **tiller** describes a boat where the driver sits in the back (stern), steering with the handle (tiller) connected to the outboard motor mounted to the outside rear (transom) of the boat.
- An **outboard** describes the detachable motor with a propeller that's mounted to the outside rear (transom) of the boat. Outboard motors can be operated remotely by a steering wheel as well as a tiller. Outboards have the maximum adjustment to tilt to raise the propeller in shallower water.
- An **inboard** describes a motor mounted in the hull (enclosed inside the boat). An inboard is able to tilt in a narrow range limiting the ability to adjust to shallower conditions. Given the motor's location in the boat, the boat rides more level in the water when accelerating allowing better visibility and smoother ride.
- An Inboard/outboard (I/O)
- A sailboat keel is a protruding structure from the bottom (hull) of the boat to provide ballast (weight low in the boat) and improve maneuverability. Keels come in a variety of shapes, sizes and locations on the hull depending on the type of sailboat. A sailboat can have an **adjustable keel** that can be raised and lowered or a **fixed-keel** that is a permanent length.

Sue Josheff, Lower Rock River Basin Leader, WI Department of Natural Resources, 608-275-3305
susan.josheff@wisconsin.gov

Sue emailed our groups' questions concerning sewer overflows and high water issues to Madison Metropolitan Sewerage District (MMSD). The questions and MMSD's response is attached.



MMSD's
 esponse.doc (24 KB)

Madison-Dane County and State public health departments were contacted and none could identify health concerns directly tied to water levels.

Map Exercise – Four large maps were posted around the room. Each map pictured a portion of the Yahara River system with overlap from one map to another. YLAG2 participants and public members in attendance were asked to place a numbed dot on the location and on the similarly numbered card, explain their high or low level recreation/navigation issue. We ran out of time and may revisit this exercise.

6. Discuss next steps - Mindy Habecker, Dane County UW-Extension

Draft recommendation form – Mindy passed out a form that participants can use to record draft recommendations that come to mind during the presentation phase of this process. The form is also on the website.

Interest in field review – Mindy will put out in an email or Doodle asking participants if they would like a field trip to review all or parts of watershed/river or if they would like additional virtual tour information provided in a video.

Public meeting – Mindy asked the participants when they suggest that we hold a public meeting. Some felt that the public meeting should be before developing recommendations so that additional information/data that might be collected to influence the recommendations. Others felt the meeting should be after the draft recommendations are developed to get the public's reaction.

7. Future meeting dates, location and agenda items - Next meeting is August 25 and the topics are Fish and Wildlife Habitat and Wetlands. Speakers are Kurt Welke (DNR), Russ Hefty (Cherokee Marsh), and to-be-announced.

8. Public Comment – 6 oral and one written comments are posted in the public comment section.