

Lake Winnebago 2010 Winter Drawdown Conference Call Minutes

Introduction: The U.S. Army Corps of Engineers (USACE), Detroit District held its annual Lake Winnebago drawdown conference call on January 7, 2010. Mr. John Allis, Chief of the Watershed Hydrology Branch for the Detroit District USACE, opened the call at approximately 9:00am (C.S.T.), with a roll-call of attendees. Approximately 10 agencies/users and 20 interested parties participated.

Presentation of Agenda: Mr. Allis began the call by presenting the agenda. This included a discussion on the basin's current and expected winter conditions, drawdown timing and extent, and an open discussion.

Basin Conditions and Significant Events: Mr. Allis stated that the USACE lowered the lake to 2.2 ft. (OD) as agreed to at the September 2009 fall water level strategy. He outlined the meteorological events that had occurred since the October 2009 regulation meeting. Mr. Allis reported that we experienced an usually "wet" second half of October. Numerous rain events during the last few weeks of the month dropped between 2"-5" of rain over the basin. In spite of this precipitation, there were no significant increases in supplies and lake levels during this time. USACE openings of tainter gates at the Menasha dam both prior to and after the rain events prevented a major increase in lake level and allowed the lake level to start falling by the beginning of November. Mr. Allis stated that the month of November was dry with about .48% of average precipitation. During the month, temperatures were warmer and no snowfall was recorded. The outflows from the lake measured at Appleton typically were about average ranging between 2,700 cfs and 5,000 cfs. which allowed the lake level to drop at a slow consistent pace and keep on track towards the Dec 1 target? Mr. Allis reported that the month of December was warm at the beginning and ended with more normal colder temperatures. He stated that the USACE met the Dec 1 target of 2.2 ft on time and noted that it was prior to any ice forming on Lake Winnebago. The lake hovered between 2.2 and 2.12 ft until the first snow event of the year hit the region on Dec 9. The blizzard dropped 14.6 inches of snow in Green Bay which was the 6th biggest snowstorm in Green Bay history. Other areas around the basin received between 10 and 14 inches of snow from this event. After the snowstorm, the temperatures dropped below freezing and ice began developing on Lake Winnebago. The plan is to hold the lake level stable until a stable ice cover develops and then make plans for the winter drawdown conference call. Mr. Art Techlow of the Wisconsin Department of Natural Resources (WDNR) reported that the upriver lakes started to freeze up by Dec 4 and Lake Winnebago started freezing over by Dec 10. He cautioned the USACE that this was just the beginning of ice build up and that he would inform us when a stable ice cover forms to allow lowering of the lake. On Dec 21, the WDNR confirmed a stable ice cover on the lake and adjustments were made to start lowering the lake. Accordingly, Mr. Allis noted that just prior to Christmas; the basin received almost an inch of a rain/sleet mix of precipitation. This increased outflows as well as bringing the lake level up to 2.24 ft by December 26, requiring further gate opening at Menasha to keep lowering the lake level.

Current Conditions: Mr. Techlow reported that the first ice cover on the upriver lakes and Lake Winnebago started by mid-December. By Christmas, both Lake Winnebago and the upriver lakes achieved an ice-cover. Today, he informed the participants that Lake Winnebago and the upstream areas were covered with between 8"-12" inches of ice with most areas at the higher end of the thicknesses.

Expected Conditions: Mr. Brian Hahn from the National Weather Service stated that it was currently snowing with expected accumulations of between 3"- 6" inches with temperatures between 20 and 25 expected through tomorrow. He also reported that snow depths in the immediate vicinity of the lake are between 6"- 9" and 6"-12" of snow in the headwaters of the Wolf River. The snow water equivalent for these areas range from 1.2" – 1.5". He mentioned that the snow is a relatively dry snow with a snow/water ratio ranging from 15:1 to 20:1, with frost depths between 4"-7". Mr. Hahn indicated that once this system passes through, a cold weather pattern with temperatures in the teens was expected this weekend and warming to the mid-20's by early next week.

Mr. Hahn reported that the 8-14 Day forecast for the region called for both temperatures and precipitation to be above average. Accordingly, the 3-month forecast (January-February-March) forecast temperatures above average and the associated precipitation estimates not quantifiable at this time. .

Proposed Strategy: Mr. Allis suggested that, as in previous years, the USACE current plan of action would be to gradually draw down the level of Lake Winnebago to the crest of the Menasha Dam to 1.68 ft. (OD) by March 1, 2010. Presently, he noted that there are 3 tainter gates open at the Menasha dam and 1 tainter gate open at the Neenah dam. Outflows with these gate settings are about 4,100 cfs. He reiterated that the current outflows are too high and are accelerating the pace of the drawdown. He suggested that the USACE will be considering closing at least 1 tainter gate at the Menasha dam as early as next Monday. We will assess conditions to determine whether or not further action would be necessary to achieve the March 1 goal. Mr. Allis added that the outflows from the lake would have to be between 400 cfs - 500 cfs greater than the supplies to meet the target. He informed the audience to expect to see outflows ranging between 2,800 cfs and 3,700 cfs over the next 2 months as the USACE continues the drawdown. Mr. Allis stated that once the target is reached, the level of Lake Winnebago would be held steady at or near 1.68 ft. (OD) until commencement of ice break up in the spring. The USACE and WDNR will closely monitor basin conditions during this time and make appropriate adjustments as needed to meet our target goals. At that time, a spring re-fill conference call will be held to determine the appropriate approach to filling the lake up towards the navigation season level. He stated that the USACE will post a notice on its website next week announcing the drawdown and continue to post notices as conditions warrant. Finally, he provided the participants with the Detroit District web page and invited them to submit emails for future meeting notices.

Open Discussion: Numerous property owners and agency representatives voiced their concerns on the proposed drawdown for this winter. Their various comments and the USACE responses are as follows:

1. Mr. Mike Sula from the city of Appleton inquired about the algae growth during the summer of 2009 relative to that of previous years. Mr. Art Techlow responded by indicating some blue/green algae was observed around the Lake Winnebago shoreline this summer. He noted that this summer was cool and windy with algae accumulations being nothing out of the ordinary and not causing any catastrophic damage along the Lake Winnebago shorelines.
2. Mr. Skip Palermo from the AppletonYC indicated that he also observed some algae this past summer. However, sufficient flows in the river prevented the algae from accumulating and causing damage.
3. Mr. Dan Rudebeck from the Lake Poygan Sportsman's club commented that he is not thrilled with the greenish tint caused by the algae and the impact that it is having on water quality. He believes the USACE is flushing the algae and its problems from Lake Winnebago down to the people living along the Lower Fox River.
4. Mr. John Allis responded by stating the USACE does not flush the algae from Lake Winnebago down the Lower Fox River. The only flushing that occurs is the normal sluicing activities associated with the regulation of Lake Winnebago activities.
5. Ms. Marie Strum added that typically during the dry summer months, most tainter gates at both the Menasha and Neenah dams are closed. The only flow going down the Lower Fox River is that going over the spillways at the dams and does not include any algae.
6. Mr. Gene Schmidt, a property owner from Menasha stated that the drawdown is too little and too late. He stated the south winds push the water and existing ice to the northshore. He also noted that after a recent rain event, the USACE still had 2 gates open at the Menasha and Neenah dams and did not react aggressively enough during the storm. Mr. Allis responded that the USACE is aware of his concerns and does make a reasonable effort to lower the lake levels when precipitation events occur.
7. Mr. Jack Couillard, a property owner on the north shore of Lake Winnebago indicated he has lived on the lake since the 70's. He stated that he has observed almost 100 ft of exposed shoreline where winds have pushed the existing off-shore ice shoreward. He also reiterated that ice shoves damaged his property last year. He concluded with suggesting lower the level of the lake to 1.68 ft before ice begins to form on the lake.
8. Mr. Mike Pedersen of Kaukauna Utilities did not participate in the call due to prior commitments, but earlier in the week complimented the USACE for coordinating gate changes with his operators along the Lower Fox River as well as maintaining sufficient outflows for maximum hydropower generation during the year.
9. Mr. John Allis followed up on the progress of the Lake Winnebago Facts Book that was mentioned at the October 2009 regulation meeting. He stated that the USACE had

received and completed all comments from the public. He indicated he would address the comments this month and have hard copies printed and available by the end of February. A copy of the book would also be posted on our website. Our website is located at www.lre.usace.army.mil/greatlakes/hh/lakewinebago. Finally, he stated that if anyone is interested in receiving a hard copy of the document, please email him at John.T.Allis@usace.army.mil.

After a review of the drawdown objectives, Mr. Allis ended the conference call and thanked participants for their feedback. Participants were encouraged to visit the Corps' website for more information on water levels, flows, and meeting notices. The website address is: www.lre.usace.army.mil/glhh/winnebago.