## Water-Demand Study Meeting for DeWitt, Logan, Macon, and Piatt Counties

The following is a brief synopsis of the August 23, 2007 water supply planning meeting held in Clinton, Illinois targeting DeWitt, Logan, Macon, and Piatt counties.

Meeting Location: Clinton, Illinois

**Meeting Date:** August 23, 2007

**Targeted Areas:** DeWitt, Logan, Macon, and Piatt counties

## **Main Concerns:**

1. Water availability

- 2. Implications for future regulations
- 3. Water quality

4. Study methods

## **Meeting Attendees**

<b>Group Represented</b>	<b>Number of Attendees</b>
Public	26
East Central Illinois Regional Water Supply Planning Committee	3
Mahomet Aquifer Consortium Board	2
Illinois State Water Survey	2
Illinois State Geological Survey	1
Wittman Hydro Planning Associates (Water-Demand Study Team)	2
Total	36

## **Meeting Summary**

Susan Licher of Wittman Hydro Planning Associates, Inc. (WHPA) gave a presentation on the scope and time line for the water supply planning project. This project involves a fifteen county region in East-Central Illinois and was initiated in response to Governor Blagojevich's Executive Order 2006-1. WHPA, in cooperation with Dr. Ben Dziegielewski from Southern Illinois University, was hired to conduct the demand study. Susan Licher's presentation focused on the background of the water supply planning initiative, the methods associated with assessing water-demand, and the historical data being used in the water-demand study.

After Susan Licher's presentation, she asked for volunteers to introduce themselves, explain why they were at the meeting, and to voice any questions or concerns they had regarding the study.

Robert Lieb from Piatt County stated that there are five or six wells located in the Mahomet aquifer that are being used to export water to areas outside of the Mahomet Aquifer. He asked if water-demands beyond the 15-county areas were being considered if they received their water from the Mahomet aquifer.

Susan Licher responded by stating that the water-demands will be considered for any well located

within the Mahomet Aquifer even if the water was being exported outside the study boundaries. The study looks at the water-demand on the aquifers and surface waters within the 15-county region even if the users are outside of that 15-county boundary.

Dave Joswiak, the city manager of Farmer City, said that he was there to gather information and to figure out the impacts of water use on Farmer City. While there has not been a lot of growth in Farmer City in the last few years, he is concerned about the city being restricted in water-use and that this could affect their growth. In particular, he is concerned about the impacts of ethanol plants on water availability.

Susan Licher followed by saying that WHPA will try to get at that with the different scenarios, in terms of how ethanol plants will impact the aquifer. Also, part of the study is looking at the cumulative effects of individual users and individual industries.

Ed Glatfelter of the Illinois State Water Survey added that the study is to be done within existing rules and regulations. The study itself will be within those bounds. However, there may be changes in regulations later on as an indirect result of the studies taking place in relation to planning.

Matt Ringenburg of the Logan County Health Department said his main concern regarded domestic well users. He asked what type of recommendations would be made - regulatory, educational, or other?

Susan Licher responded by saying that there will likely be a variety of types of recommendations including educational, conservation, and regulatory but these would be just recommendations. It is the expectation that the local entities will take the recommendations and begin implementing. There will be different approaches in different areas, because this is a bottom-up process. What recommendations are appropriate for some areas may not be appropriate for others.

Shane Balding of S&J Well Drilling wanted to know if the study dealt with water quality issues related to abandoned wells. He wanted to know if the study dealt with water contamination from abandoned wells that had been capped. He was also concerned about geothermal intrusion.

Ed Glatfelter said that well abandonment will not be addressed in the study. Geothermal intrusion by smaller private or commercial users will not be considered in this study either because it is a water quality issue.

Charles Jolly from the Reynolds Drilling Coop asked how a firm from Indiana (WHPA) was selected and the amount of the contract awarded.

Susan Licher responded by saying that a request for proposal was sent out and WHPA sent a proposal. After all of the proposals were reviewed and companies were interviewed, WHPA was selected for the project. In terms of the exact price for the study, Susan Licher was unsure, but she said that she could retrieve that information.

Mel Pleines of the Mahomet Aquifer Consortium said that WHPA's proposal will be on the committee's website in the near future.

Stephen Parker of the DeWitt Soil and Water Conservation District asked if there had been comparisons done between the regression models used in other water-demand studies and the actual water-demand. He also asked that if yearly averages and seasonal averages are being extrapolated how well will this

work if we do not have seasonal data.

Derek Winstanely talked about how the study done by Ben Dziegielewski was only completed two years ago, so there has been no comparisons available at this time. He also mentioned that some studies have been great at predicting actual usages while others have over estimated water-demands. It is important to recognize that no one can predict the future but depending on the information, the output can be very good.

Susan Licher said that she has only been with WHPA for a year, so she does not know how well some of the water-demand studies completed by WHPA had predicted future water-demands.

Stephen Parker asked how well these Texas regression models worked.

Derek Winstanley said that he wanted to clarify that Texas is just being used as an example. The actual water conditions in Illinois are quite different from those in Texas. Texas's approach to general water supply planning is being used but the water-demand modeling is different and specific to Illinois.

Stephen Parker asked how the data could be broken down seasonally.

Susan Licher said that part of the process of data collection is to talk to the public water supplies and to determine the peak season and peak daily demand. Peak season water demand is reported to the State Water Survey, but peak daily demand is not.

Stephen Parker asked how will the study be completed in time if not all the data are in. Will the data be in in time?

Susan Licher responded by saying that the historical data go back to 1985 and the study will analyze water-demand on a five-year increment. So the data is available for making those relationships.

John Stolfa, a resident of Piatt County, asked about the current water use regulations that users must adhere to.

Ed Glatfelter said that generally there are not a lot of regulations in regard to water use but there are regulations for water quality. As to a person's right to utilize water, there really are few laws to regulate usage. It is primarily common law that governs water usage. He said that this is one reason he feels it is important to have a planning process. It is legal to overuse the resource right now and there are no legal standings for someone to who is impacted by other users.

Shane Balding said that he thought that in Decatur there were laws to deal with this issue because Decatur had replaced or lowered several wells which had been impacted by their water-use.

Ed Glatfelter said that is a situation in which a company was trying to be a good neighbor and help people who had been impacted. However, they are not required by the law to help in any way.

Ed Mehnert of the Illinois State Geological Survey suggested looking at the Mahomet Aquifer Consortium website to read about Illinois water law.

Mel Pleines said that the main focus in this study was to determine what people expect to use in the future, factoring in growth, etc. The State is trying to find out how much water there is in the aquifer

and from there it will be determined if the aquifer can supply the demand. If not, then steps will have to be made to reduce future conflicts.

Dave Joswiak asked if the study is only looking at the Mahomet Aquifer.

Susan Licher responded by saying that other aquifers, such as the Glasford Aquifer, are being considered. The study will include the entire strata from ground level all the way to the base of the Mahomet Aquifer.

Ed Mehnert added that the study incorporates both groundwater as well as surface water so it is a comprehensive planning process.

One gentleman asked if this was strictly a county based study or if we would be looking at HUCs or Hydraulic Units on the surface water side.

Susan Licher said that the water-demand study will be based both on county and city boundaries as discussed in the study area portion of the presentation. For the demand side, the data are generally at the county or city level.

Derek Winstanley said that the supply study is looking at the whole watershed in the statistical hydrological analyses.

The same gentleman asked if these studies are looking at the counties themselves.

Derek Winstanley responded by saying that the water supply study is based upon watershed boundaries.

Then, the gentleman asked if the models generated and the results were going to be accessible to other groups using models.

Derek Winstanley said that absolutely all the data models will be accessible and that they are going to go through external peer reviews.

Dave Joswiak asked where the risk of water contamination will be factored in.

Susan Licher responded by saying that this study deals more with water quantity than quality.

Ed Glatfelter said that the first three (3) years of the study will deal strictly with quantity. Where water quality makes some water unusable, that will be taken into account. In future iterations water quality will be taken into account.

One gentleman asked if the shallow unconsolidated glacial deposits that are not in the main Mahomet Aquifer would be considered in the study.

Susan Licher said that the whole strata in the fifteen county region will be considered not just the Mahomet Aquifer.

A gentleman asked if drainage systems that intersect the groundwater would be considered in the study.

Derek Winstanley said that the State Water Survey will look at recharge and total water budgets to the extent that it can and will draw connections.

The same gentleman asked if there were records for where there are farm fed drainage systems.

Derek Winstanley said that it varies. The data for tile drainage is emerging "slowly but surely" and that as the data becomes available there will be an effort to incorporate this information into the models. Right now there is not enough data to include the farm tile drainage networks.

There were no further comments so the meeting was concluded.