## Blackberry Creek Watershed Planning Meeting Tuesday, December 14, 2010; 2:00 p.m. Engineering Enterprises, Inc; Sugar Grove

## 1. Attendance/Introductions

Tim Loftus Hala Ahmed	-CMAP -CMAP
Erin Tuttle	-TCF
Ken Anderson Megan Andrews	-Kane County Environmental Management -KCSWCD
Karen Clementi	-Deuchler Environmental
Jennifer Duncan	-North Aurora River District Alliance
Jerry Elliott	-Sugar Grove Water Authority
Karen Ann Miller	-Kane County Development Department
Marie Moulton	-Orchard Estates, HOA
Dan Nagel	-Sugar Grove Township
Jeff Palmquist	-Fox Valley Park District
Steve Pescitelli	-IDNR
Don Pfeffer	-Sugar Grove Water Authority
Michele Piotrowski	-Engineering Enterprises, Inc.
Martha Price	-Cannonball Trail Civic League
Paul Schuch	-Kane County
Barry Stuedemann	-Cardno ENTRIX
Dale Willerth	-Waubonsee Community College
Lori Wolf	-TCF
Angela Zubko	-Kendall County

 Shallow Groundwater Aquifers in Kane County – Paul Schuch, Water Resource Director for Kane County offered a presentation on the County's work with the Illinois State Water Survey and Illinois State Geological Survey to determine the status of current and future groundwater resources.

The population in Kane County is projected to surge 70 percent from 2000 to the year 2030, undoubtedly boosting water demand. In order to to ensure continued availability of a clean water supply, Kane County Development Department commissioned the study, and ISWS researchers developed regional- and local-scale groundwater flow models to determine the effects of current and future groundwater usage and stressors.

Using computer models and other data and analyses, ISWS researchers predict that groundwater withdrawals will increase significantly in the years between 2003 and 2050. These increased withdrawals will cause water levels to decline, and "drawdown" (declines in water levels in wells) may lead to supply interruptions and increases in concentrations of radium, barium, arsenic, and salinity. In deep wells, drawdown, or declines in water elevation, will be

greatest in the Aurora area. In shallow wells, ISWS researchers identified two large areas of significant drawdown in the Kane County area. The largest included parts of northeastern Kane County and southeastern McHenry County and resulted from pumping from various villages and cities, including Crystal Lake and Algonquin. A second area developed in response to pumping by the City of West Chicago. A third area will likely develop around public-supply wells operated at Batavia and Geneva.

Withdrawals from aquifers (via wells) have also caused the base flow of creeks to drop by 17 percent in 2003 since the 19<sup>th</sup> century, which adversely affects the local ecology. The model predicts that continued development will further this trend and groundwater discharge to Mill Creek (upstream of Batavia) may end completely by 2050.

Paul stressed the fact that surface watershed boundaries (as well as municipal boundaries) do not coincide with groundwater recharge areas. As a watershed stakeholder committee, our concerns about groundwater will transcend our watershed.

## More details on this study can be found at

<u>http://www.isws.illinois.edu/docs/pubs/ISWSCR2009-07</u>. Paul recommended that the Committee invite a representative from the ISWS attend a future meeting and further interpret the study's findings.

3. Groundwater Protection: Should you care?—Tim Loftus introduced this topic, noting that there are two important questions we must consider as we address the issue of groundwater. We must ask questions concerning quality (Is it safe to drink?) and quantity (is the supply being used sustainably?).

Concerning groundwater quality, Tim noted that the EPA has recorded an increase in Leaking Underground Storage Tanks (LUST) sites, as well as Volatile Organic Compounds (VOC's), pathogens, and chlorides. Recommendations in our watershed plan should include urging municipalities to implement a wellhead protection program (WHPP). Under the Safe Drinking Water Act Amendments of 1986, WHPP's are voluntary on the local level, but are a valuable supplement to existing state groundwater protection programs. A WHPP, once implemented, reduces the susceptibility of wells to contaminants.

Tim also pointed stakeholders to CMAP's *Water 2050: Northeaster Illinois Water Supply/Demand Plan* for recommendations on sensible salting, private water softeners (usebased rather then timed), and principles of conservation design (minimization of impervious surfaces and promotion of rainwater infiltration).

Concerning groundwater quantity, Tim noted that most municipalities in the Blackberry Creek watershed are reliant on deep aquifers. He once again pointed to CMAP's *Water 2050*, which provides 240 recommendations for keeping our water supply demands in check. At our current

rate of usage, we will see an increase of 38 percent in the demand for water over the next 40 years. *Water 2050*'s 240 recommendations aim to keep our water supply need to a 7 percent increase.

CMAP also developed an updated *Model Water Use Conservation Ordinance*, to provide assistance to communities that wish to promote water conservation initiatives, which may be of help in this watershed planning process.

A link to both documents can be found at <u>http://www.cmap.illinois.gov/regional-water-supply-planning</u>.

- 4. Continued discussion of the 1999 Blackberry Creek Watershed Plan Hala discussed the implementation status of the 1999 Blackberry Creek Water Management Plan, using the TCF scorecard. A survey was distributed to stakeholders via email prior to the meeting and additional copies were available at the meeting. Attendees were asked to complete the survey which will serve to assess plan implementation status and either email it to Hala at hahmed@cmap.illinois.gov or bring it to the next meeting.
- 5. Code Analyses Part I Hala Ahmed introduced the USEPA's Water Quality Scorecard, which will be a reference guide for our planning process. Released by USEPA's Smart Growth Program, the scorecard aims to help local governments identify opportunities to remove barriers and revise and create codes, ordinances, and incentives to better protect water quality. It guides municipal staff through a review of relevant local codes and ordinances across multiple municipal departments to ensure that these codes work together to support a green infrastructure approach.

Hala reviewed the Alternative Futures Zoning Code Analysis and Ordinance Language Recommendations, completed for the BBC Watershed by Conservation Design Forum in 2004. In doing this, she posed questions for stakeholder regarding whether ordinances analyzed in the above study have been modified/amended since 2004. If no changes have been made, it is important to understand why not so as to ensure that the current planning process effectively addresses that topic.

**6. Meeting Adjournment** – The next meeting will take place on January 18, 2011, at the North Aurora Police Station (200 S. Lincolnway, North Aurora).