Silver Creek / Sleepy Hollow Creek Watershed Action Planning
Meeting Notes
Tues., January 11, 2011 ♦ 2:30 – 4:30 PM
Nunda Township Meeting Hall, 3510 Bay Rd., Crystal Lake, IL

1. **Welcome & Introductions**
   John Heisler, Nunda Township Supervisor, welcomed participants. Introductions of participants (see attendance list). Lynn Rotunno, Watershed Coordinator, gave a brief overview of the planning process and meeting agenda.

2. **Project Updates**
   Stream Assessment: Holly Hudson of CMAP shared information on stream assessment efforts for both the Silver Creek and Sleepy Hollow Creek Watershed Planning Areas. Weather conditions have slowed down the stream assessment work. Work will continue as weather allows.

   Outreach: Lynn presented a draft of outreach brochure for each watershed planning area. The brochures are designed to communicate information about the watershed planning projects, describe the watersheds, and introduce ways community members can help protect watershed health. Lynn asked attendees to contact her with any feedback on the brochures. The final brochures will be printed by March 1. Participants were asked for assistance in providing opportunities to distribute these brochures within the watersheds by making them available at public locations and events.

   Review & Discussion of Integrated Goals Document: Planning participants reviewed updated draft goals, management objectives, and indicators for the watershed planning areas. Input was provided for additions and revisions. Discussion included participant support for public education on the impact of coal tar sealants on water quality and the creation of separate goals to protect groundwater quality and quantity. Other input included recommendations to development management objectives to support provisions of the Illinois Wildlife Action Plan and chloride reductions to protect both surface water and groundwater quality. Discussion also included information available on phosphorus entering streams from wastewater treatment plants. Participant asked about the meaning of the term "flashiness" in the goals document. These and other recommended revisions will be integrated into an updated goals document and shared with the stakeholders via email, and on the FREP website at http://foxriverecosystem.org/planning.htm .

   Watershed Resources Inventory: Dawn Thompson of CMAP presented information on progress towards developing a comprehensive Watershed Resource Inventory for each watershed planning area. The inventories now include additional information on flood plain boundaries. CMAP is working to collect additional information. The final inventories are scheduled to be completed in May. A PDF version of the watershed map layers will be made available on the FREP website soon.

3. **Groundwater Basics**
   Cassandra McKinney, McHenry County Water Resources Manager, presented an overview of groundwater quality and quantity concepts.

4. **Perspectives on Groundwater Supply, Demand, Quality, & Protection**
   Tim Loftus, Principal Water Resources and Project Director, NE IL Regional Water Supply Planning with CMAP presented information on groundwater quality and quantity issues from a northeastern Illinois regional perspective.

   Tim discussed current groundwater quality concerns across Illinois. There is an overall increasing trend of community wells contaminated with volatile organic contaminants (VOCs). Additionally, EPA has recorded approximately 18,000 Leaking Underground Storage Tanks (LUST) and approximately 2,300 State and Federal Cleanup sites in Illinois. Increasing chloride levels in groundwater is also an important concern.

   Recommendations for the planning participants to consider adopting within the plan could include supporting the development of community groundwater protection programs. Groundwater protection programs will reduce the susceptibility of wells to contaminants. Important priorities would include developing wellhead protection

programs and adopting maximum setback zones to provide a 1,000 ft. radial area of protection around community wells.

Tim presented information on Water 2050: Northeastern Illinois Water Supply/Demand Plan. This plan completed in 2010 is intended to ensure the availability of clean water for the 11 county area of northeastern Illinois through mid-century. The plan includes recommendations to protect groundwater quality through sensible salting practices and promoting conservation design principles that will minimize impervious surfaces and help to recharge groundwater aquifers.

The population of McHenry County is projected to grow by 94% by the year 2050. The Regional Water Demand Scenarios for Northeastern Illinois report predicts water withdrawals following current use trends will increase by 36% and as much as 55% under a more resource intense scenario by the year 2050. The source of all water supply in the Silver Creek and Sleepy Hollow Creek watersheds is withdrawals from both deep and shallow groundwater aquifers. The Illinois State Water Survey has concluded that the deep-bedrock aquifers cannot be meet all water supply needs. Models indicate that current pumping of shallow aquifers is reducing the natural groundwater discharge to streams. Reduced groundwater discharge poses a threat to the ecological integrity of headwater streams and wetlands.

The Water 2050 plan provides recommendations to help keep future increases in water demand relatively flat at 7%. A major component of the plan is a water-use conservation and efficiency strategy. Tim presented information on a Model Water Use Conservation Ordinance developed by CMAP that can be used by communities as a tool to support water conservation efforts.

These documents can be downloaded at http://www.cmap.illinois.gov/regional-water-supply-planning
To view Tim's presentation, visit http://foxriverecosystem.org/planning.htm

Cassandra McKinney presented information on the state of groundwater resources in McHenry County. McHenry County is solely dependent on groundwater for drinking water needs. Groundwater is a limited resource that is vulnerable to pollution.

The sustainable yield of shallow and deep aquifers in McHenry County is estimated to be approximately 120 million gallons per day (mgd). Baseline forecasts indicate that average annual water use will grow to 51 mgd by 2020. However, if each of the comprehensive plans of all of the municipalities in the county are fulfilled in the future, total water use in McHenry County could grow to as much as 160 to 180 mgd.

According to the 2006 McHenry County Groundwater Resources Management Plan, the portions of southeastern McHenry County where our watershed planning areas are located have either been identified as an area of concern or in need of monitoring for potential groundwater shortages by 2030.

In order to protect and preserve the quantity and quality of groundwater for current and future generations, including the built and natural environment, McHenry County has developed a Water Resource Action Plan (WRAP). To develop this plan, the county utilized an integrated water resources planning process to create a shared vision among the stakeholders involved in water supply planning. Cassandra described the components of the plan and implementation steps including scientific research and outreach and education.

Water Studies. The county is coordinating a comprehensive groundwater research program in order to support water resource planning efforts. A network of observation wells has been installed across the county. One well is installed in the Silver Creek Watershed Planning Area and one in the Sleepy Hollow Creek Watershed Planning area. Real-time aquifer water level data will be available via the Internet soon. In addition to water levels, water quality data is being collected from the observation wells. Preliminary data shows overall pretty good water quality at the observation well sites. Two stream gauges will also record important information about the interactions of groundwater and surface water. Information collected will support a better understanding of potential impacts that aquifer drawdown may have on public health, ecosystems, and water quality.

McHenry County is also coordinating the development of a three-dimensional, hydro-geological map to support sustainable management and protection of groundwater resources. A hydrologic flow model is being developed for the county utilizing the digital 3-D geological map. It will also utilize information gathered from the county's Observation Well Network. The model will provide a tool to examine impacts from current and future groundwater development, determine groundwater flow directions and groundwater interaction between aquifers, and provide insight on the location and relative sensitivity of groundwater recharge areas.

Outreach and Ongoing Planning. The McHenry County Groundwater Task Force meets monthly to discuss implementation of the WRAP and to make any needed plan updates. The County offers public programs such as snow and ice operations training and a medication disposal program. Educational materials are also available. Cassandra discussed ways to conserve water at home.

Final recommendations included encouraging municipal leaders to make water supply planning part of municipal comprehensive plans. The McHenry County WRAP provides recommendations and model policies that can support watershed community efforts to protect groundwater resources.

For more information, visit http://www.mchenryh2o.com
To view Cassandra's presentation, visit http://foxriverecosystem.org/planning.htm

John Heisler presented information on the Nunda Township Open Space Plan. In 2003, the electors of Nunda Township authorized and instructed the Township Supervisor to create an Open Space Committee to explore the benefits of an open space program and, if beneficial, petition the Township Board to prepare an Open Space Plan. The plan was completed in 2004. The purpose of this plan is to preserve landscape diversity, rural character, and quality of life in the township. One of the key planning principles of the open space plan is protecting groundwater resources.
For more information, visit http://www.nundatownship.com/Supervisor/OpenSpace.htm

5. **Open Discussion: Management Strategies to Protect Groundwater: Quality and Quantity**
Dawn and Holly lead a discussion to identify potential management objectives to address groundwater resource protections within the watershed action plans. Participants expressed support for wellhead protection programs, delineating 5-year capture zones for community wells, and promoting conservation design principles. Participant also expressed support for the following recommendations:
water conservation efforts, identify and protect recharge areas associated with groundwater-dependent wetlands and other aquatic ecosystems, reduce salt use (e.g., snow/ice removal), discourage mass grading of development sites, utilize Class III Special Resource Groundwater designation for protecting sensitive ecological systems, rainwater harvesting, study and ongoing monitoring of groundwater dependent aquatic ecosystems for potential impacts from withdrawals, establish protections for aquatic ecosystems threatened by groundwater withdrawals, protect open space (including areas in residential neighborhoods), develop an inventory of all of the detention /retention facilities in the watersheds, support ecological conservation, promote funding for open space acquisition and easements to protect recharge areas, identify water reuse opportunities, establish drop-off locations to safely dispose of pharmaceuticals within the watersheds, land applying treated wastewater, identify recharge areas on currently protected public lands that have not been restored to natural areas (farmlands, etc.) and target for priority restoration, and promote existing and new open space plans. Discussion also included the importance of public outreach and education to support groundwater resource protections. Suggestions included information in water bill mailings and outreach to homeowners associations. These and other recommended revisions will be integrated into an updated goals document and shared with the stakeholders via email, and on the FREP website at http://foxriverecosystem.org/planning.htm .

6. **Next Meeting**
Thursday, February 10, 2:30 p.m. – 4:30 p.m. An evening meeting will also be held for those who cannot attend day meetings from 6:30p.m. – 8:30p.m. 100 W. Woodstock St., City of Crystal Lake. Topics will include ordinances, codes, and planning to protect water resources. For more information, visit http://foxriverecosystem.org/planning.htm .