

# Silver Creek / Sleepy Hollow Creek Watershed Action Planning

## Meeting Notes

Wednesday, April 13, 2011 • 1:30 – 3:30 PM

Cary Park District Community Center, 255 Briargate Road, Cary, IL

### 1. **Welcome & Introductions**

Dave Raica, Cary Park District Director of Planning & Development, welcomed participants and shared information on some of the green initiatives at the park district. The attendance list can be downloaded at <http://foxriverecosystem.org/silver-sleepy.htm>. Lynn Rotunno reviewed the meeting agenda. Feedback was provided on a possible formal name for the stakeholder planning group. She will send out an additional request for input from participants via e-mail.

### 2. **Draft “Introduction” chapter review**

Dawn Thompson of CMAP introduced a revised draft watershed action plan Introduction chapter. Additional information on the Fox River has been included. She asked stakeholders for input on historical information about the watersheds. Stakeholders made suggestions for contacts and resources. Lynn asked for participants to contact her with additional input at [watershedinfo@mcddefenders.net](mailto:watershedinfo@mcddefenders.net) or 630-674-5900. A draft of the introduction chapter can be downloaded from <http://foxriverecosystem.org/silver-sleepy.htm> under “Resources & Documents.”

### 3. **Watershed Resource Inventories**

Dawn presented an updated watershed resource inventory list and presented several maps detailing the current inventory information. Her presentation is available at <http://foxriverecosystem.org/WatershedPlanning/Silver-Sleepy/Presentations/ResourceInventory-Thompson4-13-11.pdf>. A recommendation was given to include Nunda Township Open Space Plan sites. There was a concern that some information may need to be reviewed and updated including a Leaking Underground Storage Tank location and an ADID wetland area identified on the map. Resources were offered by stakeholders to help provide new information. Dawn will follow up on this concern. maps on the website and follow up. The watershed action plan Resource and Inventory Chapter will be available for stakeholder comment next month.

### 4. **Opportunities for Open Space, Natural Areas, and Green Infrastructure Map Results**

Holly Hudson presented information on some benefits of green infrastructure including naturally managing stormwater, reducing flood risk, and improving water quality and waterway health. Her presentation is available at <http://foxriverecosystem.org/WatershedPlanning/Silver-Sleepy/Presentations/GreenInfrastructure-Hudson4-13-11.pdf>. She reviewed some of the principles of green infrastructure planning and how these principles can be integrated into the watershed planning efforts. Maps detailing watershed resources relevant to green infrastructure planning were presented. One map identified most of the watershed as moderate or high potential for groundwater aquifer contamination. Holly gave an overview of planning participant input from the March meeting including priority green infrastructure planning principles to integrate into the plan and important natural resources to identify and preserve. Holly presented a draft [green infrastructure framework](#) developed with community input. The framework included three categories of land to consider with associated management measures: Open Space Reserves, Developable Land, and Developed Land. Stakeholders expressed support for the framework. There was a suggestion to add a restoration protection measure, reference the county conservation design ordinance as a model conservation measure, and include actions homeowners can take as retrofit measures. There was a recommendation to include TLC sites, Illinois Nature Preserves, and private and public easements in the framework. Additional suggestions included support for conservation reserve programs in agricultural areas and ways to integrate golf courses recommendations (e.g. Audubon certification). Several stakeholders emphasized the importance of outreach and education to homeowners. There was a discussion about why it is important to preserve oak woodlands. Planning participants shared information on how oak woodlands are extremely rare ecosystems and stands should be protected.

## 5. **Watershed Planning and Water Quality Modeling**

Megan Elberts, Water Resources Engineer with CMAP, presented information on current water quality modeling efforts. Her presentation is available at <http://foxriverecosystem.org/WatershedPlanning/Silver-Sleepy/Presentations/WatQualMod-Elberts-4-13-11.pdf>. Water quality in Silver Creek and Sleepy Hollow Creek watershed streams has not been assessed by the IEPA. The watershed streams drain to the Fox River which is impaired from several causes. For the purpose of this plan, we will attempt to address these pollutants. Computer models will be utilized to estimate the amounts of nitrogen, phosphorus, total suspended sediment/solids, and fecal coliform in watershed planning area streams. The amount of total stormwater runoff will also be calculated. These estimates will help determine water quality conditions in watershed streams to support the development of effective project recommendations to protect and improve water quality. Megan reviewed one of the 9 minimum elements that are required in USEPA approved watershed action plans. Projects identified in these EPA approved plans can become eligible for nonpoint source pollution grant funding to help local groups and individuals implement those projects. This requirement is to estimate the amount of pollutant reduction expected in streams from implementation of plan recommendations. One of the optional regional criteria for watershed plans is to set target pollutant-load reductions taking into account both [point and nonpoint source pollution](#). Three computer modeling tools are being utilized to evaluate current water quality conditions: Hydrological Simulation Program - Fortran (HSPF), Spreadsheet Tool for Estimating Pollutant Load (STEPL), Long Term Hydrologic Impact Assessment Tool (L-THIA). Megan presented an overview and purpose for each of these tools. HSPF is calibrated for the Fox River Basin. STEPL is a spreadsheet tool previously utilized by CMAP to estimate pollutant loads (the amount of pollutants entering streams). L-THIA will estimate the amount of fecal coliform entering streams.

Some preliminary modeling results for the Sleepy Hollow Creek were presented. However, this information will be adjusted once stream assessment information is integrated. Preliminary results show that most of the sediment loading comes from cropland and urban land use. Participant asked if it is possible to calculate total predevelopment runoff as well. Megan said that may be possible. Megan then proposed planning participants consider the regional watershed planning criteria discussed earlier to set target pollutant-load reductions. The IEPA has not yet set standards for nutrients such as phosphorus and nitrogen. As the state works to develop standards for these pollutants, watershed planning provides opportunities for stakeholders to proactively address water quality concerns. Megan proposed that target nutrient load reductions be determined using the [USEPA "Ecoregional Criteria"](#). The recommendation is .08 mg/L for phosphorus and 1.59 mg/L for nitrogen. The IEPA does have a standard for fecal coliform. Megan reviewed the ways fecal coliform is calculated by the IEPA and proposed target load reductions to planning participants. To see the draft recommended load reduction targets, [download the presentation here \(p. 13\)](#). The recommendations include 400 cfu/100 mL for fecal coliform and 116 mg/L for total suspended solids. Stakeholder expressed support for these standards.

Questions were asked about the fecal coliform recommendation and how the current load was estimated. Land use is the underlying factor to determine estimates. A question was raised regarding the separation of pasture land vs. cropland in the model. Questions were raised about how success is measured for projects implemented to reduce pollution. Spreadsheets are utilized to estimate the benefits of each project but actual measurements are not required. Participant asked if benefits from disconnecting downspouts could be measured. The results can be estimated using a model. Several participants emphasized the importance of collecting water quality data from watershed streams in the future. Participants discussed what role volunteers could play in future water quality monitoring. Monitoring data must be collected by the EPA or EPA-approved groups. A participant mentioned it would be appropriate for citizens to help collect some information such as macroinvertebrate data. Support was expressed for the use of modeling as an important tool to help protect water quality in streams. A participant mentioned monitoring can be very expensive and that is why modeling is important to help estimate pollutants in streams.

6. **Announcements, Next Meeting**

Lynn announced that the next meeting would be on Thursday, May 19, 1:30 p.m. – 3:30 p.m. at Algonquin Township, 3702 US Highway 14, Crystal Lake. Topics will include discussion of possible project and planning recommendations to include in the watershed action plan. Projects that are included in the plan can become eligible for federal grant funding such as Clean Water Act, [Section 319 nonpoint](#) source pollution control grant funding. Some examples of other watershed plans with recommendations can be found at <http://foxriverecosystem.org/planning.htm> and the CMAP website. Participants were asked to consider ideas for projects and planning recommendations related to water resource protections.

Attendees were invited to a tour of the City of Crystal Lake Wastewater Treatment Plant #3. Wednesday, April 20, 2011, 12:00p.m. – 1:30p.m. This plant is within the Sleepy Hollow Creek watershed. The tour is sponsored by the Fox River Ecosystem Partnership and hosted by the City of Crystal Lake. Lynn thanked Ken Krueger and Dawn Thompson for coordinating the tour.

Holly gave a brief update on stream assessment activities. Lynn announced there are additional watershed outreach brochures available for distribution. Lynn mentioned she is available to present information on the watershed planning projects to village boards, home owner associations, and other groups. Participants can contact her to schedule a presentation.

Lynn announced the Environmental Defenders of McHenry County is organizing a stream clean up this spring in either the Silver Creek and Sleepy Hollow Creek watersheds. She asked if anyone had a recommendation for a good location along the streams. Cindy Skrukrud will organize a location and date and share information with the participants.