Meeting Notes

1.0 Welcome & Attendee Introductions
Holly Hudson, Chicago Metropolitan Agency for Planning (CMAP), welcomed and thanked everyone for coming. Holly thanked Kelly Kepes and the Village of Ringwood for hosting and providing refreshments. Self-introductions were made (attendee list attached).

2.0 Agenda Changes
Holly noted that copies of today’s agenda were on the sign-in table. There were no changes to the agenda.

3.0 December Meeting: brief recap, questions, etc.
Holly recapped the December 4 Boone-Dutch meeting and shared copies of the meeting notes, which were available in hard copy on the sign-in table or via the project website. No one present had any comments or changes at this time. Holly asked that any corrections, additions, or comments be emailed to her, after which she’ll finalize the notes and have them reposted to the project webpage.

4.0 Local Watershed Activities, News
Nancy Schietzelt of the Environmental Defenders of McHenry County shared information about upcoming workdays for the Silver Creek-Sleepy Hollow Creek watershed. A workshop will be held for the four communities that received a Local Technical Assistance grant from CMAP to review their comp plans and ordinances [completed in December 2013]. The workshops will focus on best practices to protect water quality. There will be two sessions – one for employees and one for elected officials. Holly noted that similar technical assistance grants could be an outcome of the Boone-Dutch Creek plan.

Ders Anderson of Openlands told the group that the aquatic biologists who conducted the fish surveys in the Boone-Dutch Creek watershed last fall would be interested in coming back this spring to monitor how the streams are being used for spawning. They would likely not be able to study as many sites, but would be able to check some of the same locations they previously monitored, such as Whispering Oaks Park in McHenry and a site south of Johnsburg. Holly posed the question to Bobbi Lammers whether any Loyola students might be interested in and able to help with some sampling.

5.0 Draft Plan / Watershed Resource Inventory: update
Holly presented an update on the Watershed Resource Inventory and a response to some of the comments received after the first draft. She led a discussion of the land use inventory CMAP is now using, including the complications caused by its agricultural and “vacant and
under construction” land classifications. Dennis Dreher of the Boone Creek Watershed Alliance noted that the current development situation might not be reflected by models, because there are many lots that have been platted for development but not built. These parcels are probably not generating many pollutants because they are not in active construction. Holly also explained how the land use inventory deals with large-lot residential by splitting it into two components: a one acre residential property and the remainder as open space. Dennis agreed this approach would be helpful in the watershed, where areas such as Bull Valley have a great deal of estate residential but models often do not distinguish between different residential densities.

Holly showed the group several maps that CMAP has updated since the initial draft WRI. The floodplain map was shown first, with the caveat that the finding that the entire watershed is in a 500-year floodplain is probably incorrect. Dennis agreed that the floodplain would not cover the whole watershed and recommended leaving out that data layer, which is probably not helpful anyway. Ralph Stark of HR Green noted that the FEMA data layer has shaded and non-shaded Zone X features and that only the shaded features are actually in the 500-year floodplain. Holly said she’d have her coworker who made the map look into that.

The group also discussed the open space map. Dennis noted that the McHenry County Green Infrastructure Plan and map have a private open space category that includes homeowner associations, and asked whether the Watershed Resource Inventory includes those areas. Holly replied that she believed it did, pointing to the blue-green polygons on the map, which came from CMAP’s 2010 land use inventory under recreational park, golf course, and other (non-public) park open space categories. Dennis stated that the county’s Green Infrastructure Plan is the best source for such information because of its local focus. Ed Ellinghausen expressed concern that some nature preserves are not showing up. Holly will check into that but believed CMAP had the most recent data layer available from Illinois DNR [May 2014].

[Post meeting note: The dedicated nature preserves within the Boone-Dutch planning area fall within Illinois Natural Areas Inventory (INAI) areas. The INAI areas are not mapped on the dedicated open space map but will be taken into account in the green infrastructure vision map in a later section of the plan.] Ed also asked whether the maps include areas under Illinois Forest Management Plans, which require a ten-year commitment. Holly replied that forest management plans are discussed in the text but not mapped as dedicated open space because they are not permanent. Lisa Rhoades said it would be nice to identify the areas under forest management plans. Holly asked whether a separate map would be helpful, but Lisa said people with those lands often prefer not to be identified. Dennis noted that people with forest management plans often are not managing the lands ecologically, but are rather seeking financial benefits. Lisa added that some landowners are managing them well and some aren’t – it varies case-by-case.

Holly presented the map of groundwater resources in the watershed. The group discussed the size of the Class III Groundwater areas; some attendees thought they were too big on the map, while others thought they were too small. Holly noted that the information comes directly from the Illinois EPA. Dennis pointed out the fens in the southwest part of the watershed, which are a single area on the current map but were two different fens in the Green Infrastructure Plan. Several attendees pointed out groundwater areas that the map
identifies but of which they were previously unaware, such as the area on the border of Richmond and McHenry Townships. Nancy Schietzelt said that the large number of questions the group had about these areas makes her question the data’s accuracy. Dennis said Illinois EPA may be merging Class III with another designation, which is similar but slightly more inclusive. Holly said CMAP would look into it.

Holly then discussed next steps for the Watershed Resource Inventory. Ders Anderson noted that Gregg Good and Howard Essig with IEPA may help and asked Holly whether there would be additional water quality data. Holly said IEPA sent her the 2007 stream data and will send the 2012 data once they receive it from ISWS. Howard said he’d revisit the 2007 pH data, where he noticed a big spike late at night for unclear reasons. Ed asked how big the spike was. Holly responded that she will have the data for discussion at the next meeting. Dennis asked whether there were similar fluctuations in dissolved oxygen, which could indicate the influence of phytoplankton. Ders relayed information from a presentation by Steve Pescitelli that IDNR had not investigated Boone Creek. Holly believed that the Kishwaukee River Basin was the focus of this year’s stream monitoring by IEPA and IDNR. Ders offered to advocate for getting IDNR to monitor Boone Creek if that still has not occurred.

In response to discussion of the May 31 due date for input on BMP implementation projects, Dennis asked whether habitat-focused BMPs would be eligible or whether the plan would follow the traditional emphasis on pollutant reduction. Holly responded that all BMPs are eligible for inclusion, including those related to habitat, although pollutant reduction needs to be the primary focus. Ders noted that in another project, he was told IEPA did not care about habitat under Section 319 – it can be included, but should not be the focus. Holly agreed regarding 319, but reminded the group that the plan could be used to apply for other types of grants as well, such as habitat related grants. Lisa asked whether the overall pristine nature of the watershed means that its areas of pollution seem “diluted” when the whole watershed’s data is aggregated. Holly said the plan will show the full range of the watershed’s characteristics, and would like input on particular problem spots to highlight.

### 6.0 Draft Plan / Local Plans and Ordinances

Holly began by stating that of all the tools for protecting watersheds (land use planning, land conservation, aquatic buffers, better site design, erosion and sediment control, stormwater management, non-stormwater discharges, watershed stewardship), land use planning is the single most important tool since it sets the big picture at the start, addressing the degree and location of future expected development. Future development includes not only new, greenfield development but also infill and redevelopment. A challenge has been integrating land use planning into local watershed plans and vice-versa.

Brian Daly, Associate Planner at CMAP, introduced himself and described CMAP’s Local Technical Assistance Program. In an effort to bring planning expertise together with watershed expertise through a robust consideration of local plans and ordinances, we’re looking to see how these tools can be better utilized going forward. He reviewed several county, township, and municipal plans, as well as ordinance questionnaires filled out by county and municipal personnel. Holly and Brian again thanked everyone who had filled out
the questionnaire. His review focused on the degree to which principles for protecting water quality were integrated and on gaps and opportunities for improvement. Recommendations to consider in future plans and ordinances will be included in the Boone-Dutch Watershed plan.

Brian noted that a comprehensive plan sets a strategic vision, goals and objectives, and implementation steps. Other plans – such as open space, green infrastructure, and bike/greenway plans – help to flesh out specific pieces of the comprehensive plan. Ordinances – including zoning, subdivision, stormwater, parking, and water conservation – are enacted to implement the comprehensive plan’s vision. County and township level plans and ordinances have a direct impact on unincorporated areas and are also advisory to municipalities.

In each plan, which included primarily comprehensive plans and a few larger-scale open space plans, Brian looked for whether it identified natural and water resource areas and steps to prioritize preventing or minimizing impacts of development. Topics assessed were natural resources (identifying, mapping), water resources (identifying, mapping, protecting), open space (for preservation and stormwater management), trees (preservation, planting), development and land use (compact development, infill, design), and transportation/parking (alternative modes, imperviousness). Brian summarized his comprehensive (comp) plan findings, noting that each of the seven municipalities within the Boone-Dutch planning area had a comp plan but that many were a bit old and required an update. The plans generally stressed the importance of preventing sprawl by pursuing future land use patterns that direct growth into an orderly pattern that preserves community character and open space. Municipalities recommended a variety of policies to direct future land use, from emphasizing low density, large lot residential development (e.g., Bull Valley) to encouraging density and mixed use development near transit stations and historic downtowns (e.g., McHenry and Woodstock). Most of the comp plans emphasized natural resources and water resources, and open space acquisition was a dominant strategy. For the most part, the plans emphasize restricting development on identified areas of significant resources but have relatively few policies to limit the impact of development that does take place in the rest of the community. In other words, the plans seek to limit impacts by setting aside land for conservation and pay little attention to mitigating the impacts of transportation and parking in developed and developing areas. The McHenry County 2030 Comprehensive Plan offers an excellent guide to municipalities for water resource planning and protection. Brian noted its strong emphasis on compact development, TOD (transit oriented development), open space, and water resources. It also provides recommendations for coordinated planning as well as recommendations municipalities can adopt into their ordinances for groundwater, watersheds, surface water, and sensitive areas. The McHenry County Green Infrastructure Plan builds on the comp plan’s vision.

Brian described the ordinance review elements:

- **Stormwater Drainage & Detention**: Stormwater runoff can cause flooding, erosion, non-point pollution. Codes should encourage use of native vegetation, landscaping, natural detention, reduced imperviousness, and proper maintenance.
• **Soil Erosion & Sediment Control:** Development can cause erosion that can impair rivers and streams. Stormwater ordinances can help. Want to limit time and extent of construction disturbance, follow natural contours, avoid sensitive areas.

• **Floodplain Management:** Floodplains provide many benefits for flood control, filtration, recreation, habitat. Vulnerable; should be protected by codes.

• **Stream & Wetland Protection:** Buffers/buffer strips filter stormwater runoff, stabilize banks.

• **Natural Areas & Open Space:** Buffer aquatic features, connect/link natural areas. Green infrastructure plan identifies natural areas. Includes open space w/in subdivisions. Codes can require set-a-sides, maintenance, management plans, etc.

• **Conservation Design & Infill:** Infill is best solution – limits conversion of open space and farmland, as well as need for new infrastructure. Not just for historic downtowns – infill applies to anywhere with existing infrastructure and previously developed parcels.
  - TOD (transit oriented development) and density around existing assets, such as historic downtowns, civic facilities, and employment centers.
  - Where greenfield development is happening, cluster design can preserve open space, reduce imperviousness, minimize erosion and disturbance of soils and vegetation.

• **Landscaping:** Native plants reduce need for pesticides, watering; filter runoff.

• **Transportation and Parking:** Reduce runoff – narrower streets, thru streets, integration of green stormwater infrastructure into transportation projects. Smaller parking spaces, shared parking facilities, functional landscaping (stormwater management).

• **Water Efficiency & Conservation and Pollution Prevention:** Reduce direct impacts.

Brian summarized his ordinance observations for McHenry County and the six municipalities that responded to the questionnaire, noting that each consistently covered stormwater, soil erosion and sediment control, and floodplain management (each municipality has adopted the McHenry County Stormwater Ordinance). Because the municipalities have adopted the same ordinance, they have the same core set of regulations on these topics, although they could all be strengthened to better encourage best practices for protecting water quality. Stream and wetland protections as well as natural areas and open space ordinances could be strengthened [an exception is the comprehensive natural areas and open space protections in McHenry County’s Unified Development Ordinance]. There was little coverage of policies to encourage efficient land use and development patterns conservation design, landscaping, water efficiency and conservation, pollution prevention, transportation, and parking. Brian noted that some of the ordinances could better reflect the land use and design goals of municipal plans; a municipality can implement a plan that sets goals of compact, infill development by adopting ordinances that enable and encourage these land uses.

Good discussion ensued. A summary of the topics discussed follows.

• Regarding “consistent coverage of stormwater” in ordinances, Dennis Dreher commented that some strengthening could be done regarding hydrology and water quality.

• Nancy Schietzelt asked whether salt use and coal tar sealants were covered in the ordinances. Holly noted that a question on chloride management and a question regarding coal tar sealants were included in the pollution prevention section of the questionnaire, but no ordinances addressed these topics. Craig Adams with McHenry
Township commented that from a practical aspect, local governments want to use less salt from a financial perspective and are utilizing other products such as super mix and beet juice as practical. He argued that salt storage was a bigger issue. Holly noted that any needed salt storage facilities are a BMP that can be identified in the watershed plan.

Nancy noted that McHenry County was making the banning of coal tar sealants a legislative priority. Ders Anderson suggested that a valuable page in the watershed plan would provide different types of road cross sections, pros and cons for managing, implications of curb and gutter, and managing swales and ditches.

- Lisa Rhoades noted she did not hear anything about protection of clean water and that the ordinances should include such. Brian said that you get of little of that in the comp plans in the goal statements. Holly added that many ordinances, including stormwater, soil erosion and sediment control, stream and wetland protection, and pollution prevention ordinances, include water quality protections, both in the purpose statement and specific codes. Dennis agreed that stormwater ordinances cover water quality and hydrology and that other components of the ordinance checklist cover water quality too. There also are other programs municipalities adopt that include water quality protections, such as deicing practices. Lisa was concerned that the concept of clean water isn’t obvious to most folks and wondered how to promote water quality through an ordinance. Dennis suggested there are educational and programmatic opportunities.

Brian reiterated that the comp plan should set the big picture goals (such as clean water) which then inform specific recommendations that can be incorporated into ordinances (such as the stormwater ordinance) to reflect that. Lisa stated that the ordinance should say you can’t insert x, y, z into the water. Holly noted that federal and state regulations limit or prohibit the discharge of numerous pollutants into our waters. Dennis pointed out that McHenry County’s Water Resource Action Plan (WRAP), which has not been adopted by municipalities, includes a number of water quality recommendations; these should be alluded to in the Boone-Dutch plan. Nancy added that the county’s WRAP is a great plan but it is languishing. She suggested that we encourage McHenry County to again have a dedicated water resources planner. She noted that the Unified Development Ordinance, adopted last fall, still did not include many water quality protections, and she would like to see more exact, direct wording. Paul Siegfried with Baxter & Woodman stated that the reason some of the provisions use “discourage” is because some are very difficult to enforce.

- Randy Schietzelt stated that Elgin uses the Fox River as its main water supply and commented that no one was addressing protection of water quality in the Fox River. He asked if the plan could include “if we do this, we’ll save x amount of money”? Regarding ecosystem services, Brian offered we could look at that and possibly make a general statement using available research. Ders stated that a lot of these municipalities will run out of groundwater so the Fox River will become their drinking water source.

- Ed Ellinghausen asked, in the review of comp plans and ordinances, if we asked about SARA (sensitive aquifer recharge area) regulations. Holly answered that one question in the ordinance checklist asked “Does the ordinance regulate activities within groundwater protection areas?” McHenry County and Bull Valley answered “yes”; Woodstock answered “yes for municipal well setback zones, no for other areas”; and the three other
municipalities that responded to that question answered “no” (two municipalities did not answer that question).

Brian then offered his observations of opportunities for improvement. We already know what a lot of best practices for watershed management are. Ordinances can be an effective way to implement these best practices. An understanding of the watershed resources can help guide future revisions of the codes to include them. McHenry County’s 2030 and Green Infrastructure Plans provide an excellent framework/roadmap, setting a good vision that’s consistent with best practices. They provide excellent mapping of resource areas and good guidance on land use, transportation, bikeways, and the importance of open space. The 2030 Plan recommends compact development as a way to accommodate growth while maintaining the ability to preserve undeveloped and agricultural land and protect environmentally sensitive areas, groundwater resources, and surface water. It also encourages cluster-based conservation design in new residential areas and stresses the importance of multi-modal transportation, improved transit service, and an expanded bicycle and pedestrian network; all these practices can reduce the need for new roads and impervious surfaces. The Green Infrastructure Plan builds on the open space strategies of the 2030 Plan by providing a detailed inventory of the location and ecosystem service benefits of green infrastructure in the County. They provide a basis for consistency that each municipality can utilize, and provide guidance on the respective roles of different levels of government.

Because all the communities in the watershed have adopted it, the County’s stormwater management ordinance offers an avenue for coordinated updates of municipal codes. Rather than calling for individual updates of each ordinance in each community, stakeholders can advocate for a single set of improvements to the County’s stormwater ordinance that each community can then adopt the McHenry County Unified Development Ordinance offers another route to widespread adoption of best practices for development outside municipal boundaries.

The comprehensive plans CMAP reviewed all express long-term, overarching goals for preserving high-quality natural and water resources. These clear statements by each municipality that preserving water resources is an important community goal offers a good foundation for revising ordinances to implement best practices for watershed protection.

Land use and zoning ordinances can influence water quality. Ordinances can encourage compact development that reduces the development of greenfield land, mitigates the need for new or wider roads, limits the extent and impervious of parking areas, and protects sensitive natural areas from development impacts. Ordinances present an opportunity for municipalities to make the adoption of best practices for watershed protection a routine element of development in their communities.

7.0 Next Meeting

The next meeting will take place Thursday, April 9, 2015, at 1:00 p.m. The location has yet to be determined. Holly is trying to make arrangements with a local golf course to host the meeting, since a colleague is willing to talk about the Audubon Cooperative Sanctuary
Program he has implemented at his golf course in Lake County, a topic that ties into our next watershed planning focus of identifying BMP opportunities. Additionally, Ed Ellinghausen will present his chloride monitoring data.

8.0 Announcements
Nancy Schietzelt informed the group of two upcoming Green Drinks events on behalf of the Environmental Defenders of McHenry County. In March, they will host a presentation on how to be better environmental advocates. In April, Chris Anchor of the Forest Preserves of Cook County will present. Nancy also invited the group to the Environmental Defenders’ annual meeting and brunch on March 8. Dennis Dreher brought up the recently announced effort to explore a National Water Trails designation for the Fox River.

9.0 Adjournment
The meeting ended at approximately 2:50 p.m.
**ATTENDEES**

Boone-Dutch Creek Watershed Planning Meeting #4  
*Date:* February 12, 2015  
*Hosted by:* Village of Ringwood

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<td>Craig Adams</td>
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<td>Brian Daly</td>
<td>Chicago Metropolitan Agency for Planning</td>
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<td>Sue Draffkorn</td>
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<td>Dennis Dreher</td>
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<td>Ed Ellinghausen</td>
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<td>Steve Zehner</td>
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-- DRAFT -- prepared by B. Daly & H. Hudson, CMAP, rev. 3/4/2015