April Meeting: Recap, Questions
Local Watershed Activities, News
Draft Plan / Watershed Resource Inventory *Update*

- Maps...
New Figure

Wetlands being farmed (2005*)

11 polygons
2.7-23.6 ac
Total 101.5 ac
New Figure

Equestrian Facilities (2005)
8 polygons
4.6 - 40.2 ac
Tot. 142.6 ac
(suspect incomplete)

Other: incl.
high-density animal prod.
operations, dairy facilities
(2005)
6 polygons
3.2 - 9.9 ac
35.4 ac

Orchards/Tree Farms (2005*)
9 polygons
4.6 – 103.9 ac
210.0 ac
Next Steps in Plan Development

• **Complete Watershed Resource Inventory**
  - Boone Creek main stem: riparian condition, confirm bank erosion, est. pollutant load
  - Dutch Creek main stem: riparian condition, channelization, bank erosion, est. pollutant load
  - Other tribs: >1\textsuperscript{st} order, perhaps >2\textsuperscript{nd} order
  - McCullom Lake: shoreline erosion, est. pollutant load
  - Detention basins: finish field assessment – *almost there*
  - Openlands’ fish inventory: additional surveys/sites?
  - Local ordinances: summarize responses
  - Local stream/fen water quality data: Cl$^-$
Next Steps *cont.*

- **Watershed Protection Measures**
  - **BMP Implementation Projects**
    - Your input:
      - BMP type
      - Location
      - Dimensions / Size / Number (as applicable)
      - Landowner(s) / Responsible party
      - Potential partners
      - **May 31 due date**
    - In Plan: map, table, poll. load reduction & cost estimates

- **Planning and Policy Recommendations**
- **Information and Education Component**
  - Your input: projects, programs
    - June 30 due date
• Watershed Protection Measures
  – BMP Implementation Projects

Site Specific BMPs:

• **Stakeholder submittals**
  • LUREC
  • HRG for City of McHenry

• **CMAP-identified**
  • detention basin retrofits
  • wetlands being farmed (based on CMAP 2005 LU)

• **Other critical areas?**
  • *mark on aerial photo map today*
## Site-Specific BMPs — info needed

<table>
<thead>
<tr>
<th><strong>BMP Type / Description</strong></th>
<th><strong>Location (description, lat/long, dot on map)</strong></th>
<th><strong>Dimensions / Size / #</strong></th>
<th><strong>Landowner(s) / Lead party</strong></th>
<th><strong>Potential Partners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry detention basin retrofit: bioswale</td>
<td>Windy Ridge subdiv., corner Windy &amp; Ridge Streets, Bull Valley</td>
<td>50 ft long x 15 ft wide</td>
<td>Windy Ridge HOA</td>
<td>Vlg Bull Valley</td>
</tr>
<tr>
<td>Wetland restoration</td>
<td>42.328303-88.370805</td>
<td>17 ac</td>
<td>McHenry Co. Cons. Dist.</td>
<td>USDA-NRCS, USFWS, USACE</td>
</tr>
<tr>
<td>Parking lot retrofits: porous pavement, infiltration trenches</td>
<td>Top Spot Shopping Center, 222 N Rt. 31, McHenry</td>
<td>5 ac lot, 3 trenches 5 ft x 10 ft</td>
<td>Private</td>
<td>City McHenry, McHenry Co.</td>
</tr>
<tr>
<td>Streambank stabilization, native buffer establishment</td>
<td>tributary to Fox River w/in McHenry CC</td>
<td>960 ft strmbank, 10 ft buffer each side</td>
<td>McHenry Country Club</td>
<td>USDA-NRCS, MLSWCD, BSWA</td>
</tr>
<tr>
<td>Rain gardens, rain barrels, education</td>
<td>Creekside subdiv., Johnsburg</td>
<td>25 rain gardens &amp; barrels; 100 door hangars</td>
<td>Private (multiple), Creekside HOA</td>
<td>Vlg Johnsburg, MLSWCD, EDMC, TLCMC</td>
</tr>
<tr>
<td>Grassed waterway, exclusion fencing, manure management</td>
<td>Happy Horse Stables, 7000 Miller Rd in McHenry Twp.</td>
<td>200 ft waterway, fencing both sides, 20 horses</td>
<td>Private</td>
<td>USDA-NRCS, MLSWCD, U of I Extension</td>
</tr>
</tbody>
</table>
• Watershed Protection Measures
  – BMP Implementation Projects

Watershed-wide BMP scenarios:

• Urban Stormwater Infrastructure Retrofits
• Stream Channel & Riparian Corridor Restoration
• Agricultural
• Livestock & Equestrian
• Other strategies?
Watershed-wide BMP Scenarios (cont.)

• **Urban Stormwater Infrastructure Retrofits**

  *from Thorn Creek WBP Addendum…*

  3 objectives for urban SW retrofit projects:

  • Manage stormwater at the source
  • Use plants and soil to absorb, slow, filter, & cleanse runoff
  • Recommend stormwater facilities that are simple, cost-effective, & enhance community aesthetics
• **Urban Stormwater Infrastructure Retrofits**

*from Thorn Creek WBP Addendum…*

<table>
<thead>
<tr>
<th>BMP Type</th>
<th>Urban</th>
<th>Non-Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioretention Areas / Rain Gardens</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Filterra</td>
<td>0.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Bacterra</td>
<td>0.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Vegetated Swale Retrofits</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Detention Basin Retrofits</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Green Roof</td>
<td>0.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Permeable Pavement</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5%</strong></td>
<td><strong>20%</strong></td>
</tr>
</tbody>
</table>

**Others?**
e.g., planter boxes, cisterns, oil-grit separator …
Watershed-wide BMPs / Scenarios (cont.)

• **Stream Channel & Riparian Corridor Restoration**

from *Thorn Creek WBP Addendum…*

<table>
<thead>
<tr>
<th>Observed Opportunities</th>
<th>Approximate Quantity Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffer Enhancement <em>(urban)</em></td>
<td>24 miles</td>
</tr>
<tr>
<td>Buffer Enhancement <em>(ag)</em></td>
<td>14 miles</td>
</tr>
<tr>
<td>Streambank Stabilization</td>
<td>1.5 miles</td>
</tr>
<tr>
<td>Stream Restoration</td>
<td>27 miles</td>
</tr>
</tbody>
</table>
Watershed-wide BMPs / Scenarios (cont.)

• **Agricultural Practices?**
  
  e.g. ...

  – Field border
  – Filter strip (a.k.a. riparian buffer)
  – Grassed waterway (SS?)
  – Two stage ditch
  – Denitrifying bioreactor
  – Contour strip cropping
  – ...

Watershed-wide BMPs / Scenarios (cont.)

- Livestock & Equestrian Practices?
  - e.g. ...
  - Access Control / Livestock Exclusion
  - Heavy Use Area Protection
  - Waste Storage Facility
  - ...

[Image of horses grazing in a field]
Watershed-wide BMPs / Scenarios (cont.)

• **Others? e.g.,**
  – Chloride reduction strategies
    • Road de-icing
    • Water softeners
  – Stream maintenance
  – Wetland restoration
  – Wetland enhancement
  – Septic system upgrade
  – Brush management
  – …
• **Watershed Protection Measures**
  – Information and Education Component

• **Information/Education/Outreach objectives / desired outcomes?**
  • *should support the watershed management goals*

• **Target audiences, messages?**
Watershed Management Goals:

• Improve and protect the ecological integrity of surface water resources, including wetlands, to attain or maintain designated uses of aquatic life support and aesthetic quality.

• Build on local partnerships and expertise to enhance intergovernmental coordination for achieving sustainable development.

• Protect the quality and quantity of groundwater.

• Conserve open space – wetland, prairie, and woodland communities – through a coordinated plan and public-private partnerships.

• Reduce flooding and attendant bank erosion risk through initiatives to improve and protect water quality.
<table>
<thead>
<tr>
<th>Item</th>
<th>Date 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revised draft WRI to IEPA</td>
<td>March 31</td>
</tr>
<tr>
<td><em>Watershed planning meeting - TODAY</em></td>
<td>April 9</td>
</tr>
<tr>
<td>BMP identification tech. assistance</td>
<td>April - May</td>
</tr>
<tr>
<td>BMP implementation projects to CMAP</td>
<td>May 31</td>
</tr>
<tr>
<td><em>Watershed planning meeting</em></td>
<td>June 11</td>
</tr>
<tr>
<td>Education &amp; outreach projects/programs to CMAP</td>
<td>June 30</td>
</tr>
<tr>
<td>Final WRI to IEPA</td>
<td>early July</td>
</tr>
<tr>
<td><em>Watershed planning meeting</em></td>
<td>July 16*</td>
</tr>
<tr>
<td><em>Watershed planning meeting</em></td>
<td>August 20*</td>
</tr>
<tr>
<td>Draft watershed plan to IEPA</td>
<td>September 1</td>
</tr>
<tr>
<td><em>Watershed planning meeting</em></td>
<td>October 8</td>
</tr>
<tr>
<td>Final watershed plan to IEPA</td>
<td>November 1</td>
</tr>
<tr>
<td>Self assessment of plan to IEPA</td>
<td>December 1</td>
</tr>
<tr>
<td>Print plans &amp; exec summaries</td>
<td>December 4</td>
</tr>
<tr>
<td><em>Watershed planning meeting</em></td>
<td>December 10</td>
</tr>
</tbody>
</table>
Next Steps *cont.*

- **Monitoring Success**
  - Schedule for implementing management measures
  - Interim measurable milestones to determine if management measures being implemented
  - Criteria for determining whether load reductions being achieved and progress made in attaining WQ stds
  - Monitoring component for evaluating effectiveness of implementation efforts over time in attaining or maintaining WQ stds
Next Meetings

- **Thursday, July 16, 2015, 1:00 p.m.**
  - Location: TBD
  - Topics:
    - WRI updates – stream riparian corridor and bank erosion, McCullom Lake shoreline erosion, detention basin inventory
    - BMPs: site-specific, scenarios
    - Planning and Policy Recommendations
    - Information, Education & Outreach Component

- **August 20, 2015**

*but may be postponed...*
Announcements

• Boone-Dutch Creek project news & info (http://foxriverecosystem.org/Boone-Dutch.htm)

• FREP bi-monthly meetings & Noon Networks – 3rd Weds. of every month (http://foxriverecosystem.org/news.htm)

• Green Drinks McHenry Co. – 1st Weds. of every month (http://www.greendrinks.org/IL/Crystal%20Lake)


• Others?