Boone – Dutch Creek Watershed Planning

Welcome!

Village of Ringwood
February 12, 2015

December Meeting: Recap, Questions ...
Local Watershed Activities, News

Draft Plan / Watershed Resource Inventory *update*

- CMAP 2010 Parcel-Based Land Use Inventory categories & STEPL
  (Spreadsheet Tool to Estimate Pollutant Loads)

- Maps
2000 AGRICULTURE:
Land classed by the county assessor as agricultural, where the parcel is dominated by: row crops, field crops & fallow farms & pasture, horse, dairy, livestock, and mixed, including dairy and other livestock agricultural processing. Also includes land identified by the assessor as having a developed use where, according to corresponding aerial photography, the land is still in agricultural use; in those instances, the land is coded as Agriculture, with the planned land use (Residential, Commercial, Industrial, Other) identified in the PLATTED modifier.

in STEPL:
all “Agriculture“ parcels assigned to “row crop” category; thus, resultant pollutant loads possibly somewhat liberal

4000 VACANT OR UNDER CONSTRUCTION

4100 Vacant / Undeveloped Land:
Land in an undeveloped state, with no agricultural activities nor protection as open space. When land is identified in Assessor data as being Residential, Commercial, or Industrial land, it is coded to the corresponding vacant land use. Includes razed properties in urban settings. Does not include vacant developed properties where buildings and infrastructure are intact.

4200 Under Construction:
Land has been platted for development and construction activities are evident in aerial imagery (i.e., roadway begun, scraped earth, partially completed structures, missing or incomplete landscaping).
in STEPL:
all “Vacant or Under Construction” parcels assigned to “open space” category since much will feature some type of vegetation; thus, resultant pollutant loads could be conservative

<table>
<thead>
<tr>
<th>Category 4000 - Vacant or Under Construction</th>
<th>acres</th>
<th>sq. miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>4100 Vacant / Undeveloped Land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4110 Vacant Residential Land</td>
<td>1596</td>
<td>2.49</td>
</tr>
<tr>
<td>4120 Vacant Commercial Land</td>
<td>133</td>
<td>0.21</td>
</tr>
<tr>
<td>4130 Vacant Industrial Land</td>
<td>40</td>
<td>0.06</td>
</tr>
<tr>
<td>4140 Other Vacant</td>
<td>812</td>
<td>1.27</td>
</tr>
<tr>
<td>4200 Under Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4210 Under Const. Residential</td>
<td>25.5</td>
<td>0.04</td>
</tr>
<tr>
<td>totals</td>
<td>2606.5</td>
<td>4.07</td>
</tr>
</tbody>
</table>

3000 OPEN SPACE

3100 Open Space, Primarily Recreational
3200 Golf Courses*
3300 Open Space, Primarily Conservation
3400 Non-Public Open Space
3500 Trail or Greenway

In STEPL:
* not broken out separately; thus, resultant pollutant loads could be somewhat conservative

all Open Space ~ 3.0 sq mi / 6.5% of planning area
Golf Courses ~ 0.7 sq mi / 1.5% of planning area
1100 RESIDENTIAL

In STEPL:

Phosphorus EMCs not adjusted to account for no P in commercial applications of turf fertilizers to residential parcels

Instead, large residential estates (≥ 2 ac with single residence) evaluated, on parcel basis, as 1 acre of “single-family residential” with remainder assigned to “open space” category

Wetlands

No wetland category in CMAP 2010 parcel-based land use inventory

In STEPL:

not broken out separately from assessor’s parcel classification; thus, resultant pollutant loads from certain parcels possibly liberal
Figure 30.

Boone-Dutch Creek Watershed Planning Area - Sensitive Aquifer Recharge Areas

Legend:
- Boone-Dutch Planning Area
- Euros
- Tensions
- Water bodies
- Minerals
- Major Rivers

Figure 39.

Boone-Dutch Creek Watershed Planning Area - DRAFT - CWS Wells, Ph 2 Wellhead Protection & Class III Spec Res GW areas

Legend:
- Boone-Dutch Planning Area
- Euros
- Tensions
- Water bodies
- Minerals
- Major Rivers

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: >1st order, perhaps >2nd order
  – McCullom Lake: shoreline erosion, est. pollutant load
  – Detention basins: finish field assessment
  – Openlands’ fish inventory: additional sites?
  – *Local stream water quality data: Cl*
  – *Local Ordinances: summarize responses*

Next Steps *cont.*

• Watershed Protection Measures
  – *Planning and Policy Recommendations*
  – BMP Implementation Projects
    • Your input: BMP type, location
      – May 31 due date
    • Pollutant load reduction and cost estimates
  – *Information and Education Component*
    • Your input: projects, programs
      – June 30 due date

• Monitoring Success
  – schedule, milestones, criteria, pollutant load reduction targets, monitoring component
# Key Dates

<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</em></td>
<td>April 9</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>July 31</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>

---

# Ordinances, Codes, & Planning

## Activities to Protect Our Watersheds — Part 2: Local Planning

Brian Daly  
Boone-Dutch Creek Watershed Planning  
February 12, 2015
Tools for Protecting Watersheds

1. Land Use Planning

Plan and Ordinance Review

- Review of existing plans and ordinances in watershed
- County, township, and municipal level
- Identify gaps and opportunities
- Create recommendations for future plans and ordinances
Plan and Ordinance Review

- Comprehensive Plans
- Open Space Plans
- Green Infrastructure Plans
- Greenways and Trails Plans
- Bike/Active Transportation Plans
- Zoning Ordinances
- Subdivision Ordinances
- Stormwater Ordinances
- Parking Ordinances
- Water Conservation Ordinances

Plan and Ordinance Review

- CMAP Review of Plans
- Community Survey of Ordinances
Plan and Ordinance Review

Comprehensive Plans:
- Natural Resources – identifying and mapping resource areas
- Water Resources – identifying, mapping, and protecting
- Open Space – for preservation and stormwater management
- Trees – preservation and planting
- Development and Land Use – compact development, infill, design
- Transportation/Parking – Alternative modes and imperviousness

Comprehensive Plan Findings:
- Each municipality has a comprehensive plan
- Many plans require update
- Concern with orderly development patterns
- Most emphasize natural resources and water resources
- Open space acquisition is dominant strategy
- Few policies on limiting impact within development
- Little attention to transportation and parking
- County plans offer excellent guide for water resource planning
Plan and Ordinance Review

McHenry County 2030 Comprehensive Plan:
- Guidance for municipalities
- Strong emphasis on compact development, TOD, open space, and water resources
- Recommendations for coordinated planning and ordinances for groundwater, watersheds, surface water, and sensitive areas
- Green Infrastructure Plan builds on Comp Plan’s vision

Plan and Ordinance Review

Ordinances:
- Stormwater Drainage & Detention
- Soil Erosion & Sediment Control
- Floodplain Management
- Stream & Wetland Protection
- Natural Area & Open Space
- Conservation Design & Infill
- Landscaping
- Transportation & Parking
- Water Efficiency & Conservation
- Pollution Prevention
Plan and Ordinance Review

Ordinance Review Findings:
- McHenry County Stormwater Ordinance widely adopted
- Consistent coverage of stormwater, erosion, and floodplains
- Little coverage of land use, conservation design, transportation, and parking
- Stream and wetland protections could be strengthened
- Natural areas and open space ordinances could be strengthened
- Ordinances could better reflect land use and design goals of municipal plans

Plan and Ordinance Review

Opportunities
- County plans provide excellent framework
- County ordinance offers avenue for coordinated updates
- Municipal plans reflect conservation goals
- Land use and zoning ordinances can influence water quality
Planning, policy, and programming
- opportunities
- strategies

Next Meeting

- Thursday, April 9, 2015, 1:00 p.m.
- Location TBD
- Topics:
  - WRI update
  - Boone Creek chloride measurements
  - Audubon Cooperative Sanctuary Program for Golf Courses
  - NPS BMPs: scenarios, site-specific
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)

• Illinois Lake Management Association 30th Annual Conference, Feb. 19-21, 2015 @ NIU, DeKalb (http://ilma-lakes.org/ilma-annual-conference)

• 3rd Annual Fox River Summit, March 20, 2015, Burlington, WI (http://www.sewfrc.org/summit/)

• Others?

Questions and Comments

Holly Hudson
Aquatic Biologist
BDC Project Manager
(312) 386-8700
hhudson@cmap.illinois.gov

Tim Loftus
Water Resource Planner
(312) 386-8666
tloftus@cmap.illinois.gov

Dawn Thompson
Water Resource Planner
(312) 386-8676
dthompson@cmap.illinois.gov

Brian Daly
Associate Planner
(312) 386-8810
bdaly@cmap.illinois.gov