Chicago Metropolitan Agency for Planning

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Lower Salt Creek Watershed-based Planning ◆ Meeting #1

Thursday, April 6, 2017 ◆ 1:00 – 3:00 p.m.
City of Elmhurst City Hall - Council Chambers, 209 N. York Street, Elmhurst, IL

Meeting Notes

1. Welcome and Attendee Introductions

- *Holly Hudson – CMAP*
  Holly Hudson welcomed the attendees and thanked everyone for coming. She introduced herself, provided a brief overview of CMAP, and reviewed the meeting agenda.

- *Deanna Doohaluk – DuPage River Salt Creek Workgroup*
  Deanna gave a brief introduction on the DuPage River Salt Creek Workgroup (DRSCW). She explained that DRSCW has collected data that will contribute to the Lower Salt Creek Watershed-based Plan, which she will discuss in her presentation on stream conditions later in the agenda.

- *Anthony Charlton – Director, DuPage Co. Stormwater Management*
  Anthony Charlton gave a brief introduction on the DuPage County Stormwater Management Department, which addresses flooding and water quality issues in the County. He explained that Salt Creek has both quantity and quality challenges. He emphasized the positive impact of the County's efforts in flood modeling, floodplain mapping, and constructing of stormwater detention facilities but noted there is still much work to do.

- *Howard Killian – Director of Public Works, City of Elmhurst*
  Howard Killian described the City of Elmhurst's efforts to develop a stormwater plan as a result of heaving flooding in residential areas in 2010. The plan was updated in 2014 after a second heavy flooding event. The plan looks at the neighborhoods that experienced flooding and proposes how the flooding can be addressed. The City has utilized school district and park district land to put in detention facilities. It has also acquired and torn down houses for detention purposes. Howard also noted that the City has developed a website (http://elmhurststormwaterplan.org/) to inform people of the City's stormwater projects. Further, he noted that the City requires new homes to provide individual stormwater detention on property and requires stormwater detention if any new impervious material is installed on-site. The City also provides residential stormwater incentives and has a rain garden demonstration site at the police station.

2. **Agenda changes**
   No agenda changes were noted.

3. **Project Purpose, Requirements, Timeline, and Key Dates**
   Prior to her presentation, Holly asked all attendees to introduce themselves. She then proceeded to present on the background of the plan. Her presentation explained the following elements:
   - What is a watershed
   - Why watershed-based planning
   - Role of CMAP
   - Why Lower Salt Creek
     - DRSCW Adaptive Management Plan
   - Lead partners
   - Key stakeholders
   - Plan focus
     - Watershed-based plans focus on water quality
   - USEPA's minimum nine elements of a watershed-based plan
   - Planning steps
   - Plan outline
   - Key dates

4. **Resource Inventory**

   4.1. Natural features, land use/cover, land management

   CMAP's Kelsey Pudlock initiated the overview of the Watershed Resource Inventory by addressing natural features, land cover, and land management inventory. She presented on the following elements:
   - Regional context
     - The Lower Salt Creek watershed planning area is 100.7 square miles and is located in the Des Plaines River Basin.
   - Major HUC 12 watersheds
     - Middle Salt Creek, Lower Salt Creek, and Addison Creek.
   - 14 subwatersheds/study units
     - The planning area is broken up into these smaller study units to develop a better understanding of local conditions and help stakeholders make more informed decisions about prioritizing best management practices within the watershed.
   - Local governments and jurisdictions
     - Portions of 2 counties, 34 municipalities, and 11 townships are in the watershed.
     - There are also numerous districts within the planning area including library, school, college, park, forest preserve, and sanitary districts.
   - Topography and elevation
     - The elevation ranges from 490 ft. above mean sea level (MSL) to 828 ft. above MSL.
   - Soils
     - Soils in the watershed have a relatively high runoff potential. Based on USDA's Hydrologic Soil Group (HSG) Index, most soils fall under Group C/D (moderately high runoff potential) or Group D (high runoff potential).

- Based on USDA's Hydric Soils Rating, all-hydric soils are present in 9.5% of the watershed. The presence of hydric soils is one indicator for identifying historic or current wetlands.

- Wetlands
  - Based on US Fish and Wildlife Service's 2016 National Wetlands Inventory, wetlands account for only three percent of the watershed.
- Floodplains
  - Based on FEMA's National Flood Hazard Layer (NFHL), the watershed encompasses 7,900 acres of floodplains.
- Oak communities
  - These ecosystems have substantially decreased over time. Based on data published by Morton Arboretum and Chicago Wilderness in 2010, there are 1,724 acres of oak communities remaining within the watershed.
- Open space
  - There are nearly 10,000 acres of open space within the watershed. The core of the reserve are the lands owned or managed by the two county forest preserve districts.
- Land use
  - Lower Salt Creek is a highly developed watershed. Based on CMAP's 2013 Land Use Inventory, 38% of the watershed is residential followed by 24% of the area dedicated to transportation, communication, and/or utilities infrastructure.
- Impervious cover
  - Using the National Land Cover Database (NLCD) impervious cover raster, there 95% of the watershed is impervious to varying degrees; 43% of the watershed is completely impervious.
- Stream health
  - The percentage of impervious cover is a widely used metric for estimating stream health at the watershed scale.
  - Within Lower Salt Creek, 13 of its subwatershed units fall within the "non-supporting" category and one (Addison Creek Central) falls into the "non-supporting / urban drainage" category with 61% of its land being completely impervious.
- Land management planning
  - Comprehensive and local plans adopted by municipalities and counties within the watershed were reviewed to determine extent of previous planning efforts.
- Community water supplies
  - All communities within the watershed, except Western Springs, get their drinking water from Lake Michigan.
- Facility Planning Areas (FPAs) and National Pollution Discharge Elimination System (NPDES) permits
  - There are 12 FPAs that intersect the watershed and 28 NPDES permitted dischargers located within the watershed.

- Stream and lake impairment status
  - Within the Lower Salt Creek Watershed, four of the 100 acres of lakes that were assessed are impaired; and 47 of the 50 miles of streams that were assessed are impaired.

4.2. Lake conditions

Holly presented on the quality of the six lakes in the study area that have been assessed by Illinois EPA. Swan Lake is on the 303(d)/impaired waters list, but it is hoped that water sampling this year under the Volunteer Lake Monitoring Program (VLMP) Tier 3 level will show enough improvement since several water quality improvement projects have been implemented to remove it from the impaired waters list.

4.3. Stream conditions

Deanna Doohaluk, Watershed Project Manager with the DuPage River Salt Creek Workgroup (DRSCW), presented on stream conditions in the study area. Salt Creek is listed as impaired in Illinois EPA's 303(d) list. Poor water quality is a result of legacy pollutants as well as more recent ones (e.g., chloride from road salt). A comprehensive dataset is beneficial to understanding issues in Salt Creek. There are three main aspects of water quality collection:

1. DO monitoring
   - The DRSCW has three monitoring stations in the watershed, which collect hourly data from June to October on DO, temperature, pH, and conductivity.
2. Bioassessment
   - The DRSCW collects data on fish, macroinvertebrates, nutrients, metals, organics, and sediment chemistry at a maximum of 51 sites in the watershed. Samples are taken every three years are used to assess the following:
     i. *Index of Biotic Integrity (IBI)* measures the assemblage of species to assess water quality. In Salt Creek, IBI is high in the lower regions of the main stem and low in the upper regions; however, the lower IBIs are still below Illinois EPA's impairment threshold.
     ii. *Macroinvertebrates* are good indicators of water quality of habitat. Most of Salt Creek is below the impairment threshold.
     iii. *Qualitative Habitat Evaluation Index* (QHEI) is comprised of six variables to assess macrohabitat. Salt Creek's QHEI score plummets at the dams.
3. Watershed Characteristics
   - Water and sediment monitoring
   - There was a huge spike in chloride in November/December from snow removal.

The DRSCW conducted supplemental work within both DuPage and Cook Counties for the purposes of the plan. They determined that 64% of the main stem has moderate erosion and 46% of main stem has a heavy riparian buffer. So much of the main stem is enclosed in forest preserve which explains why the stream has experienced only moderate erosion and has a heavy buffer. DRSCW also determined that Salt Creek was channelized at some point, but 84% is recovering. Lastly, Deanna also noted that there are six debris jams, mainly all at culverts.

4.4. Detention basin assessments

Mary Beth Falsey presented on detention basin assessments. She presented on the following elements:

- Basin basics
  - What is a stormwater basin?
  - Types of basins
  - Benefits of basins
- Why assess detention basins?
  - There are potential grant funding opportunities for retrofits
- Assessment process
  - Rapid Assessment Sheet
  - ArcGIS Collector app allows users to collect location data
- Location of basins in the study area
  - Some areas have more detention basins than others. Those that were built out prior to county detention requirements tend to have less basins.

DCSM is currently in the process of going through the assessments and standardizing them. The detention basins were assessed by various groups and there is variation in what people considered good, fair, or poor for water quality. Not quite all of the basins in the study area have been assessed yet, but so far, 39% were scored poor. Based on this preliminary assessment, there is room for improvement.

4.5. NPS pollutant load modeling

Mary Beth Falsey overviewed the nonpoint source pollutant load modeling they are conducting. She presented on the following:

- Difference between point source and nonpoint source pollution
- Types of urban pollutants
- Sources of pollutants
- STEPL (Spreadsheet Tool for Estimating Pollutant Loads) functionality for modeling pollutants from land use and streambank erosion:
  - STEPL only measures total suspended solids, nitrogen, phosphorus, and biological oxygen demand
  - STEPL can also estimate potential reductions
- DCSM's use of STEPL in the Lower Salt Creek Watershed and conclusions derived:
  - Pollutant loads were modeled for the entire watershed and the 14 subwatershed units.
  - Data shows that higher concentration of pollutants are primarily in more dense areas. Higher concentrations indicate more critical areas.

5. Issues Identification - Citizen Reporter

Mary Beth Falsey presented on DuPage County's "Citizen Reporter" for waterway issues (https://gis.dupageco.org/CitizenReporter/) which allows anyone to identify problem areas (e.g., severe erosion, blockages, water quality issues). Issues can be reported for both DuPage and Cook Counties within the planning area. Input will be considered for the plan.

An attendee suggested looking at the MWRD reporting app.

6. **319(h) Grants**

Holly Hudson presented on 319(h) grant-fundable projects. The Nonpoint Source Pollution Control Financial Assistance Program released a new application process within the last couple years that can be completed online but requires more information than in the past (especially regarding project budget details). Applications must be submitted by August 1. The application and guidance documents are on the grant webpage (http://www.epa.illinois.gov/topics/water-quality/watershed-management/nonpoint-sources/grants/index). For ideas on the types of projects that have been funded in the past, see the Section 319 Biannual Report (http://www.epa.illinois.gov/topics/water-quality/watershed-management/reports/biannual-319/index). Holly suggested that potential applicants begin the process now if planning to apply this year. At least a 40% local match is required in cash and/or in-kind services. Illinois EPA staff will help with questions and provide feedback on drafts. Finally, Holly noted that potential applicants must pre-qualify by registering with the State of Illinois at www.grants.illinois.gov.

7. **Next Meetings:**

Holly Hudson proposed meeting dates for the rest of the year, requested offers to host the meetings, and outlined the topics expected to be covered:

- June 8th
  - BMPs, MetroQuest
  - Problem statement, goals
- August 10th
  - Planning and policies recommendations
  - Information and education component
- October 5th
  - Implementation schedule, interim measurable milestone, criteria for determining success, monitoring component
- December 7th
  - Final draft plan review

Input for the plan can be submitted through the MetroQuest survey (to be created) or at any time by reaching out in person to CMAP, DCSM, or DRSCW.

8. **Announcements**

Holly noted that a project webpage has been established on CMAP's website where project news; meeting agendas, notes, and presentations; and other project documents are and will be posted (http://www.cmap.illinois.gov/programs-and-resources/lta/lower-salt-creek).
She also noted the following upcoming meetings and events:

- DRSCW monthly meeting: April 26, 9:00 a.m., Lombard Village Hall (http://www.drscw.org)
- MWRD Watershed Planning Council meetings (search "MWRD-WPC meeting schedule"):
  - Upper Salt Creek and Poplar Creek: April 19, 2017, 10:30 a.m., Schaumburg
  - Lower Des Plaines River Tributaries: May 11, 2017, 10:00 a.m., Northlake
- Salt Creek Workshop, April 13, 8:00 a.m., Addison Village Offices, hosted by DCSM & TCF. Register (free) by Apr. 7 with jroehll@theconservationfoundation.org
- 2017 Technical Assistance Symposium, May 16, 8:00 a.m., Roosevelt Univ., Chicago. Register at http://cmap.is/TAsymposium.

Attendees had no other announcements.

9. Adjournment

The meeting ended at about 2:55 p.m.

Attendees

NAME		ORGANIZATION
Jedd	Anderson	Christopher B. Burke Engineering, Ltd. / City of Northlake
Craig	Billington	Forest Preserves of Cook County
Joe	Caracci	Village of Bensenville
Anthony	Charlton	DuPage County Stormwater Management
Rob	Covey	Village of Schaumburg
Dan	Deeter	Village of Hinsdale
Deanna	Doohaluk	The Conservation Foundation /DuPage River Salt Creek Workgroup
Carly	Dutkiewicz	Chicago Metropolitan Agency for Planning
Emily	Egan	Village of Brookfield
Rudy	Espedido	Village of Addison
Mary Beth	Falsey	DuPage County Stormwater Management
Rick	Federighi	Village of Addison
Darlene	Garay	Oakwood Homeowners Association - Lake Management Committee
Ryan	Gillingham	Village of La Grange
Dave	Gorman	Village of Lombard
Holly	Hudson	Chicago Metropolitan Agency for Planning
Sarah	Hunn	DuPage County Stormwater Management
Ron	Hursh	Salt Creek Watershed Network
Eric	Johnson	City of Elmhurst
Howard	Killian	City of Elmhurst
Dave	Koldoff	James J. Benes & Associates, Inc.
Steve	Krych	City of Wood Dale Stormwater Management Cmsn; Salt Creek Watershed Network
Drew	Kustusch	Engineering Resource Associates, Inc.
Patrick	Lach	Hey and Associates, Inc.
Jenny	Loewenstein	Engineering Resource Associates, Inc.
Kai	Lui	Village of Addison
Jeremie	Lukowicz	Village of Villa Park
Fred	Maier	Village of Itasca
Amy	McKenna	Robinson Engineering, Ltd. / Itasca, Wood Dale, Roselle
Mary	Mitros	DuPage County Stormwater Management
Noriel	Noriega	Village of Westmont
Jessica	Ortega	Forest Preserve District of DuPage County
Eric	Otto	Forest Preserves of Cook County
Kevin	Piraino	DuPage County Stormwater Management
Kelsey	Pudlock	Chicago Metropolitan Agency for Planning

NAME		ORGANIZATION
Jerry	Robinson	Christopher B. Burke Engineering, Ltd.
Lynn	Rotunno	Salt Creek Watershed Network
Ken	Rubach	City of Wood Dale
Scott	Saacke	Salt Creek Watershed Network
Dan	Schoenberg	James J. Benes & Associates, Inc.
Laura	Schweizer	DuPage County Stormwater Management
Jon	Stelle	City of Elmhurst
Dennis	Streicher	The Conservation Foundation /DuPage River Salt Creek Workgroup
Mark	Thoman	Downers Grove Township
Bill	Thoms	Salt Creek Watershed Network
Cori	Tiberi	City of Elmhurst
Rick	Valent	Village of Oak Brook
Vasilli	Voskresenski	Village of Villa Park
Seema	Wadia	Metro Strategies, Inc.
Bryan	Wagner	Illinois Tollway
Philip	Wille	Salt Creek Watershed Network