

Municipal Advisory Committee - MEETING MINUTES

April 10, 2019, 9:00-11:00 AM
Lake County Central Permit Facility
500 W. Winchester Rd., 2nd Floor, Libertyville, IL



STORMWATER MANAGEMENT COMMISSION

Erika Frable, MAC Chair called the meeting to order at 9:00 a.m.

- I. **Introductions from attendees**
- II. **Approval of Minutes -December 5, 2018.** Minutes approved by consensus.
- III. **NPDES Municipal Stormwater Program**
 - a. **MAC updates, Ernesto Huaracha, SMC**
 - i. The MAC meeting by-laws have been amended. At the last meeting a change was proposed to decrease the four annual meetings to a minimum of two annual meetings. Ideally these meetings would occur in the first and third quarters, and if need additional meetings can still be called. On January 17, 2019 these changes were ratified by the SMC Board. The 2019 schedule has been amended to reflect this change and is available at: <https://www.lakecountyil.gov/DocumentCenter/View/27131/2019-MAC-Meeting-Schedule-PDF?bidid=> .
 - ii. The reporting template is complete and will be emailed out April 15, 2019. The template is also available on SMC's website: **YR16 Annual Facilities Reporting Template**. There were not significant changes made to the YR16 template from the previous year. It was also mentioned that the two Illicit Discharge videos presented at the December 5, 2018 meeting have been posted on the SMC website:
<https://lakecountyil.swagit.com/play/11012018-930/>
<https://lakecountyil.swagit.com/play/11012018-929/>
The Integrated Water Report is still in draft form and is likely not to be updated until year 17.
 - iii. A MS4 survey questionnaire is being developed. The questionnaire will be about 10-15 questions in length and will be used to summarize information previously requested by audits as well as information about the types of projects being pursued by Lake County communities. The survey results will help create consistency in countywide MS4 programs.
 - iv. The MS4 Community Tool has been updated to include the Illinois EPA environmental justice area layers as well as watershed-based plan layers. It can be found at: <https://lakecountyil.maps.arcgis.com/apps/webappviewer/index.html?id=0d60824433734de3bb7905c1113a8539>. There is a PDF tutorial that can be downloaded for further assistance.
 - v. The USA EPA climate change link is defunct, please refer to NASA's website as a resource: <https://climate.nasa.gov/>
 - b. **Brigitte Ann Berger, Director of Engineering and Public Works Village of Wilmette and Mike Young, Senior Vice President of RJN Group, West Park Project.**
 - i. Brigitte Ann Berger contextualized the project: the Village of Wilmette has areas of combined sewers and separate sewers. During rain events the Village would experience severe sanitary backups. After several major flooding events, the community felt it was time to act. They started by gathering flood data from surveys sent to village residents as well as data from flow meters. RJN Group was hired to do an in-depth review of the sewer system, monitor flow, and create a model of the system. During the April 18th, 2013 storm it was discovered that flow from Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) system was backflowing upstream and preventing water from leaving the Village. Since flooding was so prevalent in the community there was widespread support for the proposed project. The project design consisted of a pump over lift station,

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a 5.5 million gallon belowground storage tank, and a control center. A park district field near the site of the MWRDGC connection was selected for the storage tank. Since the field was relatively isolated it made it an ideal project location. The Village used their flow data to convince MWRDGC to issue a permit for the project. Aside, from the permit this was the only assistance provided by MWRDGC. The permit only allowed for 150 gallons per capita per day to be pumped over the lift station, which influenced the design of the project.

- ii. Mike Young discussed how using a 'design build' approach allowed for the project to be completed within the one-year timeframe stipulated by the park district. When using a design build approach, the project should be at least 30-40 percent complete before it is presented to a contractor. Mike selected subcontractors he was familiar with, which also helped to expedite the process.
- iii. Mike discussed some of the technical elements involved in designing a functional project and presented a slideshow of construction pictures.
- iv. It took approximately three months to excavate and complete the storage tank itself. Once this was complete the park district could begin doing their construction to ensure the field was in playable condition. Meanwhile the control center was tested to make sure it was fully operational. The final cost of the project was \$14.5 million.
- v. Brigitte concluded the presentation. In March 2016 the project became operational, and two months later the system was tested by a 100-year storm event. There were significantly fewer backups with the new system in place. Overall the tank has been very low maintenance. Brigitte restated the importance of having good data before beginning a project of this magnitude.

IV. Ordinance Administrative Issues

a. TAC Meeting Schedule for 2019 and Bulletin 70 Update Kurt Woolford, SMC

- i. In March of 2019, at the ISFM conference, the 2019 Bulletin 70 Update was presented: <https://www.ideals.illinois.edu/handle/2142/103172>. Over the last hundred years, in Lake County, rainfall has fluctuated from year to year but has generally increased. Bulletin 70 lists new rainfall values, which will have a profound impact on how stormwater infrastructure is sized. For example, the 100-year 24-hr storm event is used to size detention basins. Currently the rainfall depth for this storm event is 6.5 in., but increased to about 8.58 in. with the 2019 Update. SMC calculated that in the past 100 years there has been a 33% increase in rainfall, which translates to about an 11% increase in stormwater infrastructure sizing. This will require amending existing ordinances. The State of Illinois is recommending the 2019 rainfall values be used for future floodplain studies, but they will not enforce these changes until January 1, 2020.
- ii. There was a brief discussion concerning what communities should be doing in light of this information. Mike Warner said SMC might be able to provide a multiplication factor for infrastructure sizing.
- iii. This topic will be discussed further on April 18th at the 9am TAC meeting. If there are further questions they can be emailed to Kurt Woolford, KWoolford@lakecountyil.gov

V. SMC/Community Working Relationships

a. The RainReady Community Tool: A Tool to Assist Stormwater Management Planning in Northeastern Illinois

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Dawn Walker, CNT Director of RainReady and Peter Haas, CNT Chief Research Scientist

- i. Dawn introduced the Center for Neighborhood and Technology (CNT). CNT is a non-profit organization that addresses urban flooding and encourages sustainability through community development and outreach. CNT collected flood data in Cook County and found 92% of flooding happened outside of the floodplain and a majority of this flooding occurred in low-income communities. This research prompted the State of Illinois to conduct a similar study, which yielded comparable results.
- ii. The program RainReady is the result of data collection and interviews conducted by CNT. The program was launched in 2014 and is designed to complement green infrastructure. CNT conducts outreach, property assessments, and report design to mitigate flooding for private homeowners as well as for entire communities.
- iii. Case study: Village of Oak Park project cost share program.
- iv. Community Tool: <http://myrainready.cnt.org/>
- v. Peter Haas overviewed the management calculator and mentioned an updated calculator will be available later this year. Peter also discussed other models he has built to examine the effectiveness of BMPs, as well as his progress in developing a national calculation tool.

VI. Inter-jurisdictional Programs, Projects and Grants Forum

a. Fremont Township GIS/Asset Inventory Program

Mike O'Kelly, Fremont Township

1. Mike O'Kelly discussed the various ways Fremont Township has implemented GIS. Fremont Township has created maps of their road signs, snow pile locations, and the types and condition of street and road pavement. Using this technology has greatly improved the efficiency of township operations.

VII. Upcoming Training Opportunities, Meetings, Events

- a. Lake County SMC DECI Workshop, April 11, 2019
- b. Snow and Ice Leadership Summit, April 17, 2019, this leadership summit is for decision makers and leaders from both the public and private sectors. The target audience is Public Works Directors, Property Managers, and others who help drive policy and lead winter maintenance operations.

VIII. Other Topics for Discussion

- a. Any MS4/NPDES related projects, awards achievements you wish to highlight and present to the Lake County community, please email ehuaracha@lakecountyil.gov.
- b. If you are not receiving email notifications regarding MAC, please email ehuaracha@lakecountyil.gov to be added to the digital email distribution list.

IX. Next Meeting

- a. December 11, 2019

X. Adjourn

- a. Meeting adjourned at 11:02 a.m.

***PDHs are self-reporting. If you want to apply MAC meetings towards your professional license keep the agenda and minutes w/sign in sheets.

***MS4 Program BMP fulfillment. If you want to apply MAC meetings and education towards your MS4 Program YR17 BMP Measurable Goals, keep the agenda and minutes w/sign in sheet