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# CALUMET STORMWATER COLLABORATIVE

MEETING SUMMARY – January 4, 2019  
Metropolitan Planning Council  
140 S. Dearborn, Suite 1400, Chicago, IL 60603



## Attendees

Angela Larsen, Alliance for the Great Lakes  
Brad Kasberg, Audubon Great Lakes  
John Mick II, Baxter & Woodman, Inc.  
Matt Moffitt, Baxter & Woodman, Inc.  
Kim Siemens, CDMSmith  
Thomas Burke, Christopher Burke Engineering  
Nora Beck, CMAP  
Kate Evasic, CMAP  
Jack Eskin, Delta Institute  
Eric Otto, Forest Preserves of Cook County  
Joanne So Young Dill, Friends of the Chicago River  
Celine Cua, Geosyntec  
Karoline Qasem, Geosyntec  
Annie Turek, IDNR  
Jerry McGovern, Independent  
Saki Handa, Mott MacDonald  
Sarah Cardona, MPC  
Josh Ellis, MPC  
Danielle Gallet, MPC  
Christina Harris, MPC  
Justin Keller, MPC  
Bob Newport, MPC  
Adam Slade, MPC  
Richard Fisher, MWRD  
Edward Jankun, MWRD  
Bill Wood, SmithGroup  
Emy Brawley, The Conservation Fund  
Katherine Moore Powell, The Field Museum  
Emily Okallau, The Morton Arboretum  
John Legge, The Nature Conservancy  
Eric Boria, UIC

## Member Updates

John Mick from Baxter & Woodman announced that the American Public Works Association is hosting two tours for a delegation from China on January 19-22. One of the tours will focus on emergency preparedness, resilience and stormwater management, and they are seeking academics and representatives from college programs to meet with the group. For more information, contact John directly or email Sarah Cardona ([SCardona@metroplanning.org](mailto:SCardona@metroplanning.org)).

Rich Fisher from MWRD said there is currently an RFP open for professional services to conduct preliminary engineering for flood control projects in six south Cook County communities. As part of Phase II of the District's Stormwater Management Program, they are working with communities on projects that address local drainage problems. Proposals are due January 18, and more information is available [here](#).

Angela Larsen from Alliance for the Great Lakes shared that they are developing a green infrastructure maintenance model for Chicago and other cities. Over the next few months, they will form and start conversations with steering committees, and they hope to hold a workshop in the spring. As this project develops, check in for updates on the Alliance's website: <https://greatlakes.org/>.

Danielle Gallet gave a reminder that [WEFTEC](#) is coming to Chicago in 2019. The event, held at McCormick Place and other venues around the city, will attract nationwide and international experts in water and stormwater management. WEF is seeking suggestions for local service projects in conjunction with the conference, which typically focus on green infrastructure. Email Danielle Gallet at [dgallet@metroplanning.org](mailto:dgallet@metroplanning.org) if you have suggested sites or for more information.

## **Presentation**

### **Update on MWRD Stormwater Master Planning Process**

**Richard Fisher, Senior Civil Engineer, Metropolitan Water Reclamation District**

**Edward Jankun, Assistant Civil Engineer, Metropolitan Water Reclamation District**

*Theme: advancing the CSC's Goal 1: Significant reduction in non-overbank flooding.*

In 2011, MWRD completed a Detailed Watershed Plan (DWP) for each of the six major watersheds of Cook County, i.e., Cal-Sag Channel, Little Calumet River, Lower Des Plaines, North Branch of the Chicago River, Poplar Creek, and Upper Salt Creek. As several flooding-related reports about the Chicago region have indicated, however, the majority of flood damages occur outside of designated floodplains. Accordingly, MWRD's authority was amended in 2014 to allow them to address localized flooding, and they undertook the Stormwater Master Plan (SMP) process the following year.

DWPs cover riverine flooding, and SMPs are intended to address urban flooding. MWRD assembled two teams of engineers, planners, landscape architects, and a diverse array of partners; one team will focus on combined sewer systems and the other on separated sewer systems. Due to the geographical size and complexity of issues in Cook County and the limited resources of the MWRD, the project teams were required to divide and prioritize the County into study areas. To ensure transparency and replicability, the prioritization process is built on a data-driven approach utilizing GIS software to identify flood risk and socio-economic conditions of potential study areas. In addition to pulling in existing datasets produced by CMAP et al., MWRD will send a questionnaire to municipalities in early 2019 to identify flood problems on a local level. Since municipal officials and staff are the ones receiving calls from their community, they know best where the problem areas are. The results of the survey will be fed into the GIS as part of the evaluation process.

The two teams will develop six individual study profiles (ISPs) in the first half of 2019. Following their completion, MWRD will release request for proposals (RFP) for firms to develop the actual

SMPs. The goal of the SMPs is to empower communities to address stormwater issues and achieve co-benefits and resilience that will benefit the community.

## **Presentation**

**StormStore™: Stormwater credit trading in suburban Cook County – project update and reminder of WMO public comment period in January**

**Sarah Cardona, Manager, Metropolitan Planning Council**

**John Legge, Chicago Conservation Director, The Nature Conservancy**

**Bob Newport, Fellow, Metropolitan Planning Council**

*Theme: advancing the CSC's Goal 1: Significant reduction in non-overbank flooding*

MPC and The Nature Conservancy (TNC) are exploring establishing a stormwater credit trading market, called StormStore™, for accelerating the pace of investments in stormwater controls in suburban Cook County. Allowing eligible developers to go offsite with their required stormwater controls and instead purchase credits from controls being provided at another location that is selling stormwater credits into a marketplace may produce optimal results. Stormwater controls can be installed in flood-prone areas where they are sorely needed rather than in some cases installing redundant infrastructure in an area with sufficient sewer capacity and where urban flooding is not an issue. Furthermore, offsite controls can provide a valuable use for vacant or marginal land while making infill development and transit-oriented development (TOD) feasible on constrained sites.

A feasibility study conducted by MPC and TNC in collaboration with MWRD in 2017 found that roughly 17% of all projects permitted by MWRD between 2006 and 2016 on sites under ten acres could have benefited from going offsite. If all permitted sites including those over ten acres were able to make use of an offsite option, approximately 21% of all projects would have benefitted. The team also highlighted recent lessons learned from an information exchange with the market administrator and a credit supplier in the Washington, D.C. Stormwater Retention Credit Trading Program, the only example of stormwater credit trading to date. Washington, D.C.'s Department of Energy and Environment (DOEE) launched a trading program in conjunction with a new stormwater rule to allow for flexibility in compliance; trading only applies to volume control (green infrastructure) not detention. Since the market launched in 2014, approximately 14% of regulated sites have elected to meet retention requirements by purchasing credits offsite. Overall, 43 trades have occurred and 270,685 Stormwater Retention Credits have been purchased.

The Cook County Watershed Management Ordinance (WMO) currently allows developers to pursue offsite detention and volume control, however none have yet elected to do so. In 2018, the StormStore™ team further investigated the potential for offsite controls, gathered feedback during suburban Cook County focus groups with stakeholders and organized test cases in Nilens and Palos Hills. Feedback from developers indicated that the language of the WMO regarding offsite compliance is unclear, and it is time consuming for one developer to identify another mitigation site for offsite controls and broker the transaction, highlighting the opportunity for a market-based approach whereby buyers and sellers of credits can more easily find each other via an online platform.

Based on the research and discussions led by MPC and TNC, the team has identified how the WMO could potentially be updated to accommodate trading while still providing appropriate protections. The following highlight key features of the team's proposed additions and revisions to the WMO:

1. *Assure no adverse impacts* – The applicant for the development project must show there will be no adverse impacts (damages) to neighboring properties or within the local catchment if detention is provided offsite.

2. *Promote positive benefits* – The offsite detention facility would be located and designed to reduce stormwater runoff in flooding catchment that currently has inadequate capacity, which has resulted in street flooding, yard flooding, or basement back-ups.

3. *Flow attenuation* – The WMO should require that at least 50% of the required volume control be provided onsite. A combination of onsite and offsite control provides a greater level of stormwater control in small storms. More than 50% of the required volume control amount may be managed offsite if the applicant demonstrates there are site constraints which prevent the development from managing 50% of the required volume control amount onsite.

4. *Maintenance* – The owner/operator of offsite detention facility or volume control practices must develop, maintain, and implement an operation and maintenance plan for the detention or volume control practices. The owner/operator must maintain documentation of self-inspections and maintenance activities, submitting information to the program/exchange.

5. *Equity in the market* – For development sites, allowing for offsite controls (with appropriate restrictions) for affordable housing developments or TOD on space-limited sites may make these types of developments more feasible. For offsite controls, if the program requires that offsite controls would be located and designed to address an existing flooding problem(s), neighborhoods experiencing flooding will benefit.

The proposed changes to the WMO are now posted on [MWRD's website](#). The public comment period is open from January 7, 2019 until February 5, 2019. Please submit comments to [WMOComments@mwrld.org](mailto:WMOComments@mwrld.org).

If you have any questions regarding StormStore™, please reach out to Sarah ([scardona@metroplanning.org](mailto:scardona@metroplanning.org)) or John ([john.legge@tnc.org](mailto:john.legge@tnc.org)).

Visit the [CSC website](#) to review the full presentation materials.

## Next Meeting

*\*Work group-focused meeting\**

Friday, February 1, 2019

10:00 AM to 12:00 PM

Metropolitan Planning Council

140 S. Dearborn, Suite 1400, Chicago

**For more information contact:**

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