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# CALUMET STORMWATER COLLABORATIVE

MEETING SUMMARY – April 5, 2019  
Metropolitan Planning Council  
140 S. Dearborn, Suite 1400, Chicago, IL 60603



## Attendees

Kim Siemens, CDMSmith  
Nora Beck, CMAP  
Kate Evasic, CMAP  
Drew Williams-Clark, Center for Neighborhood Technology  
Kimberly Nowicki, Cook County Homeland Security and Emergency Management  
Karoline Qasem, Geosyntec  
Katie DeMuro, Greenleaf Advisors  
Patrick Lach, Hey and Associates  
Vidya Balasubramanyam, IDNR/Prairie Research Institute  
Jeff Edstrom, Illinois Coastal Program  
Jim Angel, Illinois State Water Survey  
Momcilo Markus, Illinois State Water Survey  
Jerry McGovern, Independent  
Anjolie Cheema, Jacobs  
Saki Handa, Mott MacDonald  
Sarah Cardona, Metropolitan Planning Council  
Danielle Gallet, Metropolitan Planning Council  
Christina Harris, Metropolitan Planning Council  
Justin Keller, Metropolitan Planning Council  
Adam Slade, Metropolitan Planning Council  
Dean Alonistiotis, Metropolitan Water Reclamation District  
Imani Clayton, Metropolitan Water Reclamation District  
Richard Fisher, Metropolitan Water Reclamation District  
John Fox, Metropolitan Water Reclamation District  
Christian Sorensen, Metropolitan Water Reclamation District  
Bob Newport, OAI Chicago Southland  
Ted Haffner, Openlands  
Cheryl Watson, RainReady Chatham Committee  
Bill Wood, SmithGroup  
Katherine Moore Powell, The Field Museum  
Emily Okallau, The Morton Arboretum  
Dean Massey, University of Illinois at Chicago  
Casey Sebetto, University of Illinois at Chicago

## Member Updates

Bob Newport from OAI, Inc. thanked MWRD for partnering to bring the National Green Infrastructure Certification Program to Chicago for the first time ever! This five-day training will be held April 22-26 at MWRD's Stickney Water Reclamation Plant. The training will culminate with an exam, which will result in the successful test taker being certified in green infrastructure

construction, inspection and maintenance. This has been a major initiative of the CSC's Training & Maintenance Work Group. Think about who would benefit from being there and help spread the word. More information visit [ngicp.org](http://ngicp.org) and register [here](#).

Katie DeMuro from Greenleaf Advisors announced a half-day workshop on April 29, "Stormwater Workshop: Using Technology for Smart Watershed Management". The event will be hosted by Opti at the Microsoft Technology Center (200 E Randolph Drive, Suite 200, Chicago). Participants will hear about the regional drivers of stormwater management, using technology to achieve water quality and quantity objectives, and more. Register [here](#) to attend for free and will include lunch.

Kimberly Nowicki from Cook County Homeland Security and Emergency Management said their office is working to update Cook County's Hazard Mitigation Plan. They will be working with MWRD to involve as many Cook County municipalities as possible. Also, since flooding and stormwater runoff are common hazards, they will be reaching out to many CSC member agencies and look forward to attending future CSC meetings. Rich Fisher from MWRD added that a hazard mitigation plan is necessary in order to qualify for FEMA dollars, so this is a big deal. Sarah Cardona and Danielle Gallet from MPC both said they are happy to have her team represented here and look forward to strategizing how best the CSC can help.

Jeff Edstrom from the IDNR Illinois Coastal Program introduced Vidya Balasubramanyam, who will be taking over many of Annie Turek's duties. Welcome, Vidya!

Justin Keller from MPC announced that, in collaboration with IDNR and NOAA, MPC will be hosting the [Planning and Facilitating Collaborative Meetings](#) two-day training on May 28-29. Participants will learn how to plan meetings that enhance problem-solving and minimize conflict. Danielle Gallet, Sarah Cardona and Jeff Edstrom all have completed the training and reported that it was very worthwhile. If you're interested in attending, email Justin Keller ([JKeller@metroplanning.org](mailto:JKeller@metroplanning.org)).

## **Presentation**

### **Insights from the 4<sup>th</sup> National Climate Assessment and updates to Bulletin 70 – what the latest research means for Illinois and stormwater management**

**Jim Angel, Illinois State Water Survey, Prairie Research Institute, University of Illinois**

*Theme: advancing the CSC's Goal 4: Data-driven decision-making is more prevalent in stormwater management planning*

The [Fourth National Climate Assessment](#) (NCA) found rapid warming in the Midwest since the 1960s. The speed is unprecedented from reconstructed climate patterns over earth's history. This has resulted in 10-15% increase in annual precipitation between 1986 and 2015, which equates to an additional month's worth of precipitation each year. Annual rainfall and humidity get a boost from vast Midwestern corn and soy fields which replaced tall grass prairies, meaning the transformation of urban environments is not the only contributing factor. Wetter conditions and more heavy rain events, though, will have impacts on agriculture and human health, and stormwater management infrastructure (as well as transportation networks and other critical infrastructure) needs to adapt. A key message from the NCA is that the annual cost of adapting urban stormwater systems to more frequent and severe storms is projected to exceed \$500 million for the Midwest by the end of the century.

Next, Jim reported findings from research he conducted with Momcilo Markus for the Illinois State Water Survey (ISWS). As an update to ISWS Bulletin 70, which Jim Angel co-authored in 1989, they calculated expected precipitation in Illinois for standard recurrence intervals from 2- to 500-year rain events. New rain tables predict almost **one additional inch of rain** for a 24-hour, 100-year event in northeastern Illinois (from 7.58" to 8.57"). These calculations are based on 1948-2017 precipitation values to better represent the current climate—i.e., they disregarded rain data from the first half of century which was a period of dryness—and they gave more weight to the second half of the data from the post-WWII period to better represent the current, wetter climate.

This increase in expected rainfall will significantly impact the design of grey and green infrastructure projects to provide a new level of protection. During a robust Q&A with Jim, CSC member agencies representing engineering firms agreed that they typically look to use the best available data in their work. From a regulatory standpoint, MWRD staff have recommended a new provision to indicate 2019 Bulletin 70 data be required for permits received on or after January 1, 2020 into an amendment of Cook County's Watershed Management Ordinance currently under consideration with MWRD's Board.

The updated report is available for download here: <http://hdl.handle.net/2142/103172>.

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

### **Work Group Update: Municipal Outreach & Engagement**

Activity 4: Establish baseline of municipal capacity in stormwater management

Activity 2: Establish baseline of non-overbank flooding

The CSC is working to establish a baseline understanding both of municipal capacity in stormwater management and of non-overbank flooding in the Calumet. Simultaneously, MWRD is rolling out a survey to Cook County municipalities as part of their Stormwater Master Planning (SMP) process. Their two-part survey, slated to be distributed in mid-April, will include questions to determine the location and frequency of flooding. It also includes a mapping component where respondents can identify general areas of localized flooding. Members of the Municipal Outreach & Engagement Work Group helped develop additional questions capturing information on municipal capacity that MWRD is also incorporating into their survey.

Because of the synergies between the CSC's baseline activities and MWRD's SMP process, Sarah Cardona proposed that the CSC is uniquely positioned to provide support, including reaching out to contacts in the Calumet about the survey and/or volunteering to help communities complete the survey and thereby improve response rates from the Calumet. All CSC members are encouraged to give this some additional thought and watch for specific requests for help over the coming month. Danielle Gallet added that the CSC can benefit from this process and expressed appreciation to MWRD for the willingness to collaborate, and gratitude to CSC members for taking action.

## Work Group Discussions

Following the presentation and large group discussion, the remaining CSC meeting time was devoted to break-out meetings of the Work Groups, which are formulating and implementing next steps to move forward with their Foundational Activities laid out in Phase 1 of the [CSC's 3-Year Work Plan](#).

## Next Meeting

Friday, May 3, 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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