# **CALUMET STORMWATER COLLABORATIVE**

# 2017-2018 WORK PLAN

This document provides an overview of the origins and organizing principles of the Calumet Stormwater Collaborative, its progress and accomplishments to-date and outlines planned initiatives for the work plan year. To view the specific initiatives planned for 2017-2018, please see page 6 of this document.



# 1) Who we are

The <u>Calumet Stormwater Collaborative</u> (CSC) was formed in 2014 to pursue the Millennium Reserve priority to "improve stormwater management through investments in and coordination of green infrastructure solutions." The Millennium Reserve has since evolved to become the Calumet Collaborative, which catalyzes innovative partnerships between Illinois and Indiana community, government, business and nonprofit stakeholders to advance a thriving Calumet region. You can read more about the Calumet Collaborative <a href="here">here</a>.

The overarching problem the CSC seeks to alleviate are the negative impacts of precipitation, or "stormwater," in the Calumet region and southeast Chicago lakefront, from flooding to poor water quality, which are a result of historic land use decisions, declining infrastructure sufficiency and increasingly severe storms. Thus the negative impacts are largely an issue of management, rather than the "fault" of the precipitation itself, and these impacts work at a larger scale than the scope or jurisdiction of any one organization or agency. Systemic change necessitates solutions at the scale of the problem.

Coordination among various government units and agencies is a fundamental challenge to managing stormwater in any geography, be it a watershed or manmade sewershed. Government units and agencies have different regulatory and political pressures with varying financial and technical capacities—absent coordination—inconsistent goals, processes and investments will persist. Other non-government actors also manage land, provide financing tools and assist with onthe-ground solutions, all of whom are just as much a piece of the puzzle. In Illinois' portion of the Calumet Region and parts of the Illinois Lake Michigan coast, the CSC serves to provide the appropriate scale, structure and tools necessary to facilitate ongoing coordination among these various units and agencies.

The CSC was convened and is facilitated by the Metropolitan Planning Council (MPC) with funding from The Chicago Community Trust, Grand Victoria Foundation, Joyce Foundation and Prince Charitable Trusts. It is comprised of the key stakeholders controlling land, managing infrastructure, providing financing tools, conducting research, holding regulatory powers and working on solutions in the region related to stormwater. Stakeholders throughout the Calumet Collaborative geography have identified a wide range of different stormwater management goals, strategies and tactics. The one universal and consistent desire has been for better communication and coordination. That is the core purpose of the CSC.

The CSC seeks to address three central problems:

1. Stormwater overwhelms current infrastructure;

- 2. Green infrastructure's role in stormwater management is still taking shape; and
- 3. Coordinated action between government units and other stakeholders controlling land, infrastructure, financing tools and regulatory powers is necessary to solve systemic problems in systemic ways.

The CSC aims to foster awareness of the many ongoing stormwater management initiatives in the Calumet region, forge a shared understanding of terms, establish common goals and identify opportunities to align existing initiatives (or develop new ones) toward those goals. There are many agencies working in the Calumet region, and the purpose of the CSC is to help further support and leverage their projects and activities for maximum beneficial impact, not to impede or interfere with the good work already being done. Following are the guiding principles of the Calumet Stormwater Collaborative.

#### **Mission Statement**

The CSC builds intergovernmental and cross-sector partnerships to increase the effectiveness of stormwater management initiatives for the communities and ecosystems of the Calumet region through knowledge sharing, coordination and deployment of interventions at appropriate scales.

#### **Vision Statement**

The CSC will be a model of coordinated deployment of knowledge, technology and financial resources to minimize the negative impacts of precipitation and maximize the positive impacts to make the Calumet region a better place to live, work and recreate.

### **Organizational Principles**

- Uphold the Calumet Collaborative mission to integrate economy, community and environment.
- The universe of stormwater solutions includes infrastructural and non-infrastructural options, "grey" and "green," and likely things we haven't thought of yet.
- If we are not improving stormwater management first and foremost, we are not doing our job.
- We will work together to understand causes, barriers, opportunities and desired outcomes. We will work to figure what is happening, what is not, why, and what we need to do about it together.
- The CSC should focus on collaborative actions which cannot succeed without participation from multiple parties, including enhancing current activities to have greater impact.

### **Fundamental Challenges**

Through the course of facilitated dialogue, the CSC identified the following fundamental challenges as those that they, collectively, can make an impact on today, and absent the intervention of the CSC, would not get solved:

- Causes and consequences of non-overbank flooding
- Declining performance and sufficiency of grey and green infrastructure over time
- Drain on public and private resources from repeated ineffective and partial interventions

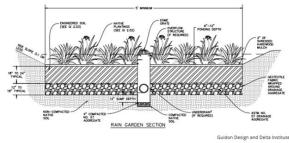
### 2) Where we have been



The CSC created and released its first work plan in June of 2015. This document formalized the organizing principles of the CSC (as outlined above) and featured its intended actions and initiatives during its first full-year of existence. Developing a work plan for the CSC was a core component of the facilitation work led by the Metropolitan Planning Council, with support from Foresight Design Initiative, and all action items were vetted and approved by the members of the CSC.

The initial work plan contained a number of initiatives, many of which were accomplished, or saw great progress in 2015-2016. Those accomplishments included:

- The development and release of <u>free</u>, <u>engineered design templates for green</u> <u>infrastructure</u> by Delta Institute
- Completion of the nation's first <u>RainReady</u> <u>Plan for the Village of Midlothian</u> by the Center for Neighborhood Technology
- A grant application submittal to the Illinois Environmental Protection Agency (IEPA) for watershed plan improvements for 319 funding



Guidon Design and Detain Institute.

This diagram of a rain garden from the templates explains all the intricate pieces that go into a successful green infrastructure installation.

- The completion of a logic model for the installation, troubleshooting, maintenance and training of green infrastructure by the Illinois Indiana Sea Grant Program and OAI/High Bridge
- A panel session at WEFTEC featuring the CSC and its various members, along with a tour of the Calumet region with more than 40 conference participants to view four different green infrastructure and community engagement sites

Based-off successes from the first CSC work plan, the Metropolitan Planning Council, along with the assistance of Foresight Design, established a work planning process to guide the development of a subsequent year work plan with the CSC. The approach was driven by a desire to provide an improved balance between the value of the CSC to its members, and the impact of this partnership for communities in the Calumet region. Based on this robust work planning process, the CSC set new initiatives (or recommitted to existing initiatives) as well as reconfigured its work groups from seven to four in order to better support the initiatives and improve effectiveness and facilitation. The 2016-2017 CSC work plan was successfully implemented, and provided the framework for additional accomplishments during that time, key among them were:

- The completion and release of a <u>Stormwater Regional Mapping Viewer</u> led by CH2M and the South Suburban Mayors and Managers Association, and a Modeling Extents Data Layer which is one of the layers in the Viewer
- The receipt of an IEPA grant for preparing supplemental materials to existing Cook County watershed plans

TARP Reservoirs

TARP Reservoirs

Reservoi

for the Little Calumet and Cal-Sag Channel watershed, making communities eligible to apply for Section 319 grants for stormwater and green infrastructure projects.

- CSC helped promote the completion of the RainReady Plans by the Center for Neighborhood Technology for six Calumet communities: Blue Island, Calumet City, Calumet Park, Dolton, Riverdale and Robbins, as well as training workshops for decision makers, community groups and residents to increase awareness of flooding issues and solutions.
- The creation of a repository of useful information on stormwater conditions, programs and projects that will be available to Calumet communities and stakeholders in summer 2017.
- Finalized a Needs Assessment report that distills information on the importance of robust training programs and maintenance of green infrastructure.

For a list of all the accomplishments of the CSC during the 2016-2017 work plan year, please see Appendix A of this work plan.

### Value of the CSC as stated by participants

- Better understanding of where there is need in the region;
- Opportunity to learn more about ongoing efforts;
- Increased knowledge of agency roles and available resources;
- Connecting with potential collaborators, clients, and funders;
- Strengthening existing relationships;
- Building a collective knowledge base on issues;
- Inspiring innovation and new ideas;
- Provides platform for increased partnership efforts and approaches;
- Serves as an important model for regional collaboration.

# 3) How we achieve on-the-ground impact

The CSC continues to operate and implement initiatives via its four work groups: Data & Modeling, Education & Engagement, Planning & Policy and Training & Maintenance. Each work group is focused on different aspect of the CSC's vision and goals, but work across the larger CSC to achieve results. These work groups, led by different individuals who represent active member agencies, is where initiatives of the CSC are truly accomplished.

For the 2017-2018 CSC work plan, the work groups have articulated specific initiatives and initiative leads to carry out this work, which reflects the overall goals and produces tangible results. The CSC continues to meet every month, with every other month switching between being a traditional meeting and a work group-led meeting format. This structure ensures continued support for the work groups as well as the opportunity for all CSC participants to be kept informed about the progress of these groups. The 2017-2018 work group initiatives are detailed in the following section (Section 4) of this work plan document.



# 4) 2017-2018 Work Plan Initiatives

Following are the 2017-2018 work plan initiatives for each CSC work group. The beneficial impacts of the CSC are accomplished within these four, active work groups, which focus on initiatives that would not occur but for the existence of this coordinated and collaborative planning effort.

### Data and Modeling Work Group

Work Group Lead(s): Anjulie Cheema (CH2M) and Craig Clarkson (Geosyntec)

**Work Group Purpose:** The Data and Modeling work group focuses on how models, tools and data can be developed, shared and applied to support the overall objectives of the CSC. This work group focuses on connections between systems (e.g., surface and sub-surface systems, community systems and regional interceptors and/or tunnel systems) that may exceed the purview of any one agency or community. The work group facilitates stormwater planning informed by its system-wide context, as well as developing a technical basis for the prioritization and selection of stormwater solutions.

**Work Group 2017 Impact Statement:** Facilitate access to stormwater data and feasible monitoring approaches in order to improve knowledge sharing and decision making across the region.

#### **Initiatives:**

- Develop a Data Sharing Portal, which will create a central repository of available data, models and maps within the regions for any community, agency or stakeholder to use for stormwater management planning decisions.
- Organize at least 3 presentations for the work group on topics of interest (i.e. collecting flood data, monitoring GI, rainfall, etc.) to improve local, technical knowledge.
- Support the free Regional Mapping Viewer tool the work group produced by advertising its existence, developing a short user guide, a survey to assess its effectiveness and by participating in a one-day forum to train municipal staff and other interested stakeholders in the Calumet on this interactive tool.

### Education and Engagement Work Group

**Work Group Lead(s):** Lisa Cotner (IDNR) and Melissa Custic (The Morton Arboretum)

**Work Group Purpose:** The Education & Engagement work group focuses on increasing local capacity to address stormwater challenges in the Calumet through practical education of residents, agencies, organizations and landowners.

**Work Group 2017 Impact Statement:** Actively engage the residents, agencies, organizations and land owners of the Calumet Collaborative to identify priority areas and determine effective strategies to meet stormwater and green infrastructure needs with the CSC resources. Raise public awareness of the challenges and opportunities for improved on-site stormwater management.

#### **Initiatives:**

- Organize a one-day, solutions-based forum in the Calumet to provide training for municipalities on existing tools for green infrastructure planning and maintenance.
- Leverage the social media bandwidth of CSC members to share information and funnel announcements to reach municipal contacts not regularly attending the CSC meetings by distributing a periodic email featuring the free resources stemming from the Calumet Stormwater Collaborative available to local communities.
- Expand the CSC "pitch" materials to capture and highlight member feedback and experiences regarding the value of cross-agency collaboration and participation in the CSC.

### Planning and Policy Work Group

**Work Group Lead(s):** Nora Beck (CMAP) and Kate Evasic (CMAP)

**Work Group Purpose:** The Planning and Policy work group focuses on creating and promoting effective planning practices and policies that advance the integration of stormwater best management practices in the region.

**Work Group 2017 Impact Statement:** Develop guidance on the integration of stormwater best management practices into various community planning and project work, and explore policy avenues to advance improved stormwater management.

#### **Initiatives:**

- Develop a distribution strategy for the online stormwater best practices repository the work group created in 2016-2017 on how to implement stormwater management into community planning and capital improvement projects.
- Summarize lessons learned about the application of relevant Urban Flooding and Awareness Act report recommendations for Calumet communities.
- Provide assistance, where possible, to the South Suburban Mayors & Managers
  Association and MWRD on Sewer Atlas program structures and promotion of
  these opportunities for Calumet communities in order for them to update their
  sewer altas' which is a key step in future stormwater-related infrastructure
  decision-making.
- Use work group as a peer review opportunity for individual CSC member agency initiatives in order to provide expert feedback and input on policy and planning practices.

### Training and Maintenance Work Group

Work Group Lead(s): Margaret Schneemann (IISG) and Mollie Dowling (OAI)

**Work Group Purpose:** The Training and Maintenance work group strives to ensure long-term functionality/cost-effectiveness of and commitment to green infrastructure by aligning workforce development, training, installation and maintenance capacity with regional demand drivers.

**Work Group 2017 Impact Statement:** Widely share information on the economic impacts of green infrastructure investments, including the job creation and earned income benefits, and impacts on neighborhood conditions, property values, and tax revenues. Understand and impart information on training and maintenance demand, ability to meet this demand, program ideas and policy barriers in order to identify actions necessary to build capacity for workforce training, volunteer training, and related economic development in the green infrastructure sector of the Calumet regional economy.

### **Initiatives:**

- Widely disseminate information from the Needs Assessment report to help catalyze actions to further implement green infrastructure, promote training and better ensure needed maintenance is achieved.
- Compile, organize and share information on "operationalizing" green infrastructure maintenance to ensure these activities are budgeted, implemented and executed with an appropriately trained workforce.
- Advance efforts to incorporate green infrastructure and maintenance topics into training provided by MS4 communities, and develop a credentialing program for public sector staff, NGOs and/or private contractors doing maintenance work.
   The work group is committed to securing funding to carry out the work of these initiatives.

# CALUMET STORMWATER COLLABORATIVE – APPENDIX A

PAST YEAR (2016-2017) WORK GROUP ACCOMPLISHMENTS

2016 Work Plan Initiatives	Work Group Lead(s)	Initiative Leads	Status			Benefit of Initiative
			On Hola	In Progress	Completed	
Data & Modeling Work Group				,	-	
Purpose: focuses on how models, tools and data can be developed, shared and applied to support the overall objectives of the CSC.	Mason Throneburg (CH2M)					
Produce a stormwater regional mapping viewer		CH2M & SSMMA				Provides a useful, useable and cohesive tool for non-technical users to view stormwater-related data layers and maps in order to make better decisions
Develop a modeling extents data layer		CH2M				Provides GIS shapefiles demonstrating geographies where stormwater modeling has already ocurred and who worked on them. This layer is included within the mapping view tool above.

Create data sharing portal		CBBEL & SSMMA		av m	reates central repository and vailability of data, models and haps within the region for anyone buse
Act as a resource for the CSC		All		te	echnical members provide non- echnical CSC members with ssistance
Expand the systemic gap analysis performed in early 2015 to new CSC members and the other work groups		СМАР			nsure work group initiatives espond to needs of larger CSC
Education & Engagement Work Group					
Purpose: Increase local capacity to address stormwater challenges in the Calumet through practical education of residents, agencies, organizations and landowners	Molly Oshun (CNT), Lisa Cotner (IDNR), Melissa Custic (Morton Arboretum)				
Engage 6 new community groups and/or local government officials regularly in the CSC process		CNT, IDNR, Morton Arboretum, MPC, Openlands		be	ork group identified it needs a etter way to engage communities the Calumet and is exploring that
Leverage the social media bandwidth of CSC E&E members to share success stories from the Calumet region		Need to identify			rovides an avenue to tell success tories happening in the Calumet
Hosted workshops to increase awareness of flooding issues and solutions by engaging decision makers and community groups in meetings and workshops.		CNT			rovides on-the-ground training for ommunity employees on bmps

Leverage CSC expertise to host 2 workshops for residents on stormwater and urban flooding topics		CNT		Provides on-the-ground training for community members on actions they can take to protect themselves from flooding  Provides CSC with a cohesive
Produce CSC "pitch" materials for different audiences to share with other work group and members to help shape future engagement opportunities		MPC, IDNR, Morton Arboretum		message and talking points about its collaboration efforts and the benefit to communities and members
Planning & Policy Work Group				
Purpose: creating and implementing effective planning practices and policies that advance the integration of stormwater best management practices in the region.	Nora Beck + Kate Evasic (CMAP), Danielle Gallet (MPC)			
Develop a repository of resources on best practices and key considerations for communities on how to implement stormwater management into their community planning and capital improvement projects.		CMAP, MPC, CNT		Creates online central repository of bmps for stormwater management for local communities to access and use
Review the Urban Flooding and Awareness Act report and identify possible policy recommendations to pursue.		CMAP, CNT, USACE, IDNR, Env. Design Intl.		Helps identify future policy actions the CSC might want to engage in supporting at the state or local scale
Assist SSMMA in moving forward with a program to assist local communities in the Calumet in updating/creating sewer atlas'		IDNR, MPC, SSMMA, Env. Design Intl.		Assists in rolling out a program that provides low-cost infrastructure assessments, which many communities currently lack in order to make good decisions about stormwater management
Provide input to CMAP on its development of a white paper for communities in how to incorporate stormwater management into land use plans.		All		Provides useful feedback to CMAP on the development of a regional white paper on incorporating

				stormwater management into land use plans
Support the piloting of UIC's participatory planning tool for green infrastructure in communities.		UIC, CMAP, MPC		Supports a first of its kind planning tool that engages multiple stakeholders in stormwater infrastructure levels of service and planning decisions
Weigh-in on the exploration research being done about the use of vacant land as a stormwater management opportunity.		MPC		Allows CSC members to weigh-in on the role of vacant land for stormwater management
Training & Maintenance Work Group				
<b>Purpose:</b> Ensure long-term functionality/cost- effectiveness of and commitment to GI by aligning workforce development, training, installation & maintenance capacity with regional demand drivers.	Margaret Schneemann (IISG), Mollie Dowling (OAI)			
Conduct a needs assessment/market analysis on training and maintenance needs of nature-based (GI) solutions to stormwater.		IISG, OAI		Helps ensure training and workforce development efforts are: a) in alignment with the Calumet coastal zone regions occupational and employment needs, b) effectively leveraging partnerships and trainings, and c) in accordance with demand drivers for green infrastructure, skills gaps, design standards, municipal regulations and the regional policy environment.