
CALUMET STORMWATER COLLABORATIVE

MEETING SUMMARY – January 9, 2015

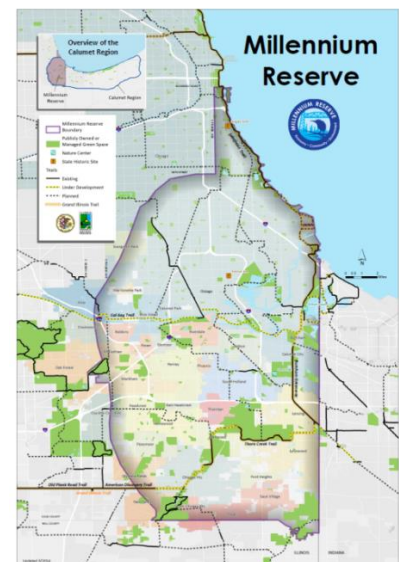
Midlothian Village Hall

14801 Pulaski Road, Midlothian



Attendees

Harriet Festing, Center for Neighborhood Technology
Ryan Wilson, Elevate Energy
Mason Throneburg, CH2M HILL
Nora Beck, Chicago Metropolitan Agency for Planning
Chris Mulvaney, Chicago Wilderness
Thomas Burke, Christopher Burke Engineering
Jodi Prout, City of Blue Island
Michael Berkshire, City of Chicago Department of Planning & Development
Tom Price, Conservation Design Forum
Dominic Tocci, Cook County Department of Planning & Development
Matt Harrison, Delta Institute
Helen Lekavich, Floodlothian Midlothian
Ruben Pesina, Floodlothian Midlothian
Lyndon Valicenti, Foresight Design Initiative
Eric Otto, Forest Preserve District of Cook County
Maddie Mahan, Friends of the Chicago River
Margaret Schneemann, Illinois-Indiana Sea Grant
Edith Makra, Metropolitan Mayors Caucus
Josh Ellis, Metropolitan Planning Council
Danielle Gallet, Metropolitan Planning Council
Daniel Wolf, Metropolitan Planning Council
Kelsey Pudlock, Metropolitan Planning Council
John Watson, Metropolitan Water Reclamation District of Greater Chicago
Brent Shraiberg, Metropolitan Water Reclamation District of Greater Chicago
Mollie Dowling, OAI Chicago Southland
Andrew Szwak, Openlands
Dennis Latto, South Suburban Mayors and Managers Association
David Bucaro, U.S. Army Corps of Engineers
Erin Maloney, U.S. Army Corps of Engineers
Imad Samara, U.S. Army Corps of Engineers
Curtis Witek, University of Illinois Chicago
Mary Pat Mattson, University of Illinois
Karen Kreis, Village of Midlothian
Joe Sparrey, Village of Midlothian
Jerry Gillis, Village of Midlothian
Eric Neagu, Weaver Boos Consultants



Member Updates

On the behalf of Illinois Department of Natural Resources (IDNR), Josh Ellis started the meeting by reporting on IDNR's update on their urban flooding study. IDNR recently finished the study's data collection and analysis, and are anticipating a report documenting their findings by May 2015.

Matt Harrison announced that the Delta Institute's Request For Qualifications (RFQ) for Green Infrastructure Template Design is due in one week—Friday 16 January, 2015. The RFQ is specifically looking for design templates related to site specific stormwater management needs.

John Watson from Metropolitan Water Reclamation District of Greater Chicago (MWRD) touched base on five pilot studies—one for each Council of Governments within MWRD's jurisdiction—that are currently underway. Studies taking place in Chicago's 7th, 8th, and 21st Wards have been contracted out to Geosyntec and those along the Cal Sag Channel have been contracted out to Arcadis. The next meeting to go over the status and progress of these studies will be 23 January, 2015.

Ellis, on the behalf of Metropolitan Planning Council (MPC), announced MPC will be having a roundtable event on Urban Resiliency on 27 January, 2015, followed by a Chicago Southland Green Drinks at Lassen's Tap in Homewood, Ill. later that evening.

Introduction to RainReady

Harriet Festing gave an overview of Center for Neighborhood Technology's (CNT) RainReady program including the program's goals for 2015:

1. Education and outreach to priority communities: the city of Chicago, Cook County, select US cities
2. Expand RainReady Home service in the context of the community
3. Continue design of the RainReady Community prototype
4. Design and test the RainReady alert system prototype
5. Advocate for supportive state and federal policies

Festing acknowledged that flooding is often perceived as a private problem; however, in reality, it is a much larger issue. In attempt to challenge this perception, CNT analyzed two sets of claims data—flood claims payouts from Cook County, IL and private insurance payouts from the Federal Emergency Management Association's (FEMA) National Flood Insurance Program (NFIP)—from 2007-2011, aggregated by zip code. Based on this research, urban flooding claims were made in 97% of Cook County zip codes with an average payout of approximately \$4,000 dollars. In other words, urban flooding affects one in six properties in Cook County. The analysis also concluded there is no correlation between damages and a home's proximity to designated floodplain areas; however, there is a correlation between flood damage and income. After CNT surveyed Cook County flood victims, 70% claimed they experience flooding three to five times over the course of five years. Surveying also showed that urban flooding has led to 84% of flood victims had suffered from stress, 13% of flood victims experienced ill health and 41% of flood victims lost use of part of their property. Festing concluded that flood is problem that major cities across the country are experiencing. For example, between the years 2007-2011, Chicago received 198 flood warnings, while Boston received 133 flood warnings, and Memphis received 227 warnings.

CNT is responding to the greater problem of urban through their RainReady Homes principles:

- Solutions that are affordable/quick to install
- Reduce Damage (versus volume stormwater captured)
- Community-based: Residents are advocates & participants
- No negative downstream impacts
- Add economic, social and environmental value to the community
- Approach that is easily replicated—"tool box of solutions"
- Leverages multiple investment sources: homeowners, banks, insurance sector, real estate
- Leverage public investment in infrastructure with actions on private property
- Cumulative risk assessments & holistic risk reduction

Elevate Energy's Ryan Wilson went into more detail about the RainReady services, articulating how CNT will come to a participant's home and perform an on-ground diagnostic assessment of the property through the RainReady Homes program. Assessment reports include detail of risk a property has and the type of improvements can be made to the home to lower flooding risks. RainReady services also provide bid solicitation/construction oversight, and a pool of qualified contractors that homeowners can choose to implement improvements. Outcomes of the assessment process are to identify areas of concern, educate homeowners and help them determine the most affordable and effective stormwater solutions for their property. Solutions could include backwater valves, re-grading/French drains, downspout disconnections, and/or rain gardens and bioswales. More broadly, the program is quantifying the impacts of stormwater improvements, and reducing the risk of flooding.

Currently there are 60 homes throughout the greater Chicago area waiting for RainReady services. Starting in 2015, RainReady services will focus on pilot communities. 'RainReady Home Plus,' will emphasize education and outreach in the Calumet and East side regions, and 'RainReady Community' will be piloted in Chatham, IL and the Village of Midlothian (see section below).

The Midlothian Flooding Context

The U.S. Army Corporation of Engineers (and Harriet Festing):

The U.S. Army Corporation of Engineers (USACE) spoke about the pilot project they are implementing with CNT/Elevate Energy called 'RainReady Communities.' The project's current scope is Midlothian and the Chicago neighborhood of Chatham. Three components of the project include:

1. An alert plan as a way to eventually collaborate with state and county agencies for a more a problem that is often tied to a more local scale
2. USGS gauge that will help with alerts for flooding and inundation
3. RainReady Community Plan

When a CSC member asked how the Rain Ready Community Plan fits with, or works alongside other planning documents (e.g. comprehensive plans), responses from CNT personnel indicated that the plan will portray a strong correlation between the problem and solutions; it will offer an ease of understanding, laying out the solutions, community members who are affected could take, and how to get the right people/agencies involved to help solve flooding issues. Non-CNT affiliated members said they would like see the document to be a component of a comprehensive plan, or be able to integrate it with planning-related documents, such as a capital improvement plan. According to Harriet, the plan would ultimately help get funding for interventions, as well as help establish policy recommendations (including those at the level of building codes).

John Watson (Metropolitan Water Reclamation District)

Watson started out by publicizing MWRD's Stormwater Inundation Mapping Application (gispub.mwrdd.org)—an online interactive mapping platform that allows users to report location-based flooding complaints and view regulatory floodplain boundaries with an interactive 2D base map. Joe Sparrey also began pointing out [on the map] where the Village of Midlothian has recently put in new bridges, and some of the existing culverts cannot accommodate current water flows—a common case for many of Midlothian's culverts. Watson continued to explain the difference between hydrological and hydraulic analysis (i.e., overland flow vs. water movement through a river) and how stormwater modelling varies based on what is being modelled. A noteworthy comment by Josh Ellis was that these maps had a significant impact on agencies' policies and actions. A primary example are FEMA maps which are stormwater inundation maps that are institutional mandated in FEMA's procedures for assessing flood prone areas. In Midlothian's case, inundation maps do not accurately show where the Village's urban flooding is actually occurring.

An MWRD project that is in the works is a stormwater evaluation surrounding Midlothian's Natalie Creek (153rd & Laverne to 146th & Pulaski). The project is specifically focusing on what kind of infrastructure (green or grey) can be implemented that is cost effective, provide flood mitigation and has an overall significant impact. They will be comparing alternative and developing other to be considered for implementation. Alternative options included culvert improvements, diversion conduits, a concrete lined channel (underground

where there is heavy flow), and floodwalls. A more desirable option is a detention basin modification at Oak Creek Plaza (159th Street & Central Avenue). This would be an “upstream” solution to help with the “downstream” flooding problems. Preliminary engineering is starting now; then MWRD will ID and evaluate alternatives. Once a preferred solution is found, it will be taken to the 30% design stage. From here, MWRD will decide how to move forward.

A couple of noteworthy comments from CSC members included:

1. Midlothian residents stressed that they would like to see “greener” solutions have an aesthetic component that can enhance the neighborhoods/surrounding area they are installed/placed.
2. Midlothian residents would like MWRD to look into underground springs/aquifer flow within their study area and affected community.
3. Midlothian residents who have been affected by the Village’s reoccurring flooding are willing to move out of their homes.
4. Midlothian should start a conversation with Cook County Land Bank Authority (CCLBA). It is possible that CCLBA can begin the buying out people’s flood-prone properties.

Eric Neagu (Chicago Wilderness / SSMMA / Weaver Boos Consultants)

Neagu provided an overview of the green infrastructure opportunity areas (including an 11x17 map handout) within and surrounding the Village of Midlothian. He emphasized that ‘opportunity areas’ on the map are not just flood-related but identify different types of infrastructure connections (e.g. green ways) that could be conducive to flood mitigation, have the potential to provide additional social or economic amenities, and/or could spur new partnerships. One example was the Brownfields Grant that Midlothian recently received (Spring 2014) [?]. Using this grant funding, Midlothian is working toward a permeable parking lot with an adjacent park space and rain garden at their City Hall. The components of this project will not only offer stormwater benefits to the Village, it will also help building a community identity and provide a social gathering space. Partnerships with the Field Museum, Boeing and even the adjacent neighbor to the City Hall—the Veterans of Foreign Wars Hall—transpired from this grant and the availability of the Chicago Wilderness Green Infrastructure mapping efforts to identify areas that could benefit from green infrastructure interventions.

HUD National Disaster Resilience Competition vis-à-vis the Calumet Stormwater Collaborative

Josh Ellis provided an update on the HUD Resilience competition. He announced that there will be ‘topical focus groups’ in the next couple of weeks. Participants are to email him about who they may think would be a good fit for one of the focus group topics.

Following Josh’s update and announcements, the audience had an opportunity to ask any questions. Chris Mulvaney (Chicago Wilderness) asked what would be the end product of the HUD Resiliency competition (if Illinois wins). While the proposal will provide focus areas of need through the City of Chicago, Cook County and DuPage County, the vision is that the project will articulate specific green infrastructure project in focus areas, help identify where they can be represented/implemented elsewhere, what agencies should be involved to move forward programs, how existing policies (e.g. CDOT Sustainable Green Streets Guidelines) can be used, and what new policies need to be made to create a more resilient region. Dominic Tocci from Cook County stated that the proposal will be more competitive if supporting partners, agencies, etc., bring in dollars, and commit to project investment (e.g. matching funds).

Driving Tour of “Floodlothian Midlothian”

Following this meeting, members had the opportunity to go on a tour lead by Midlothian’s Public Works Director, Joes Sparrey to see areas and homes that are not in Midlothian’s designative floodplain, yet have been inflicted with reoccurring urban flooding. Sites visited on the tour along with photos can be found here: <https://www.google.com/maps/d/edit?mid=zEnT71zCjWEE.kkSHSnDIM0jg>

Next Meeting

Friday, February 6, 10:00am to 12:00pm

Metropolitan Planning Council

140 S. Dearborn, Suite 1400, Chicago

For more information contact:

Josh Ellis
Metropolitan Planning Council
312.863.6045
jellis@metroplanning.org