

*April 5, 2019*

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

# Calumet Stormwater Collaborative



# Phase 1 Foundational Activities

Activity 1: Establish baseline of existing green infrastructure

Activity 2: Establish baseline of non-overbank flooding

Activity 3: Develop and begin to execute systems to provide relevant training and strengthen management systems to bolster green infrastructure implementation & maintenance

**Activity 4: Establish baseline of municipal capacity in stormwater management**

# Baseline of municipal capacity in stormwater management?

- Document current baseline of Calumet municipalities' capacity to manage, plan and invest in stormwater solutions
  - In order for the CSC to strategically prioritize future activities, like shared-services, where they have the greatest impact



# Phase 1 Foundational Activities

Activity 1: Establish baseline of existing green infrastructure

Activity 2: Establish baseline of non-overbank flooding

Activity 3: Develop and begin to execute systems to provide relevant training and strengthen management systems to bolster green infrastructure implementation & maintenance

Activity 4: Establish baseline of municipal capacity in stormwater management

# Baseline of non-overbank flooding?

- Document the extent of current urban flooding events and scale
  - In order for the CSC to strategically prioritize future activities, like green infrastructure investments & maintenance, where they are needed most



# Leverage opportunity – collaborate with MWRD

- MWRD survey to Cook County municipalities
- Questions regarding urban flooding problems
- Questions regarding local capacity to respond



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Partnering for Resilient Communities

April, 2019







# Introduction

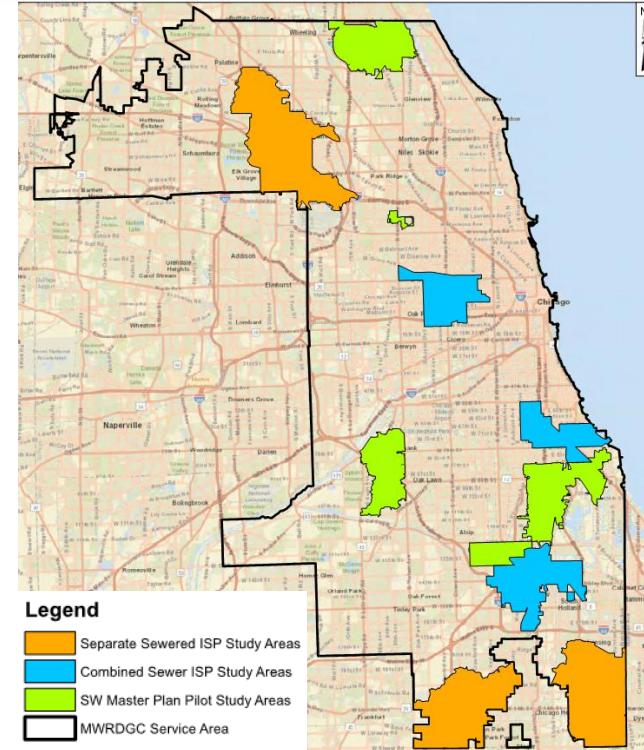
## 2019 Stormwater Master Planning

- Adds six new study areas, selected based on best available data.

## 2020 and 2021 Stormwater Master Plans

- Expected to add twelve new study areas.
- To be selected following prioritization of countywide questionnaire results (distributed March 2019).

**Ultimately, complete picture of Riverine and Urban flooding problems and reduction opportunities, countywide.**



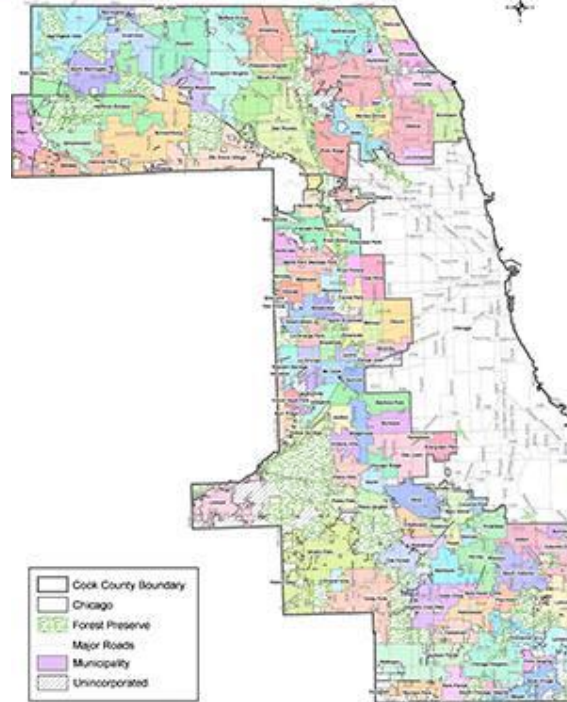
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# Questionnaire for Municipal Staff

- Purpose:
  - Collect data to inform the study area definition and prioritization process across Cook County.
  - In our specific study area, results used to inform the Individual Study Profile and ultimately the SMP.
- Distributed this March
  - Questionnaires sent to Village / City Administrators and Township contacts
  - Distribution via e-mail and U.S. Mail



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# Questionnaire for Municipal Staff

Data sought in the questionnaire includes:

- Location, frequency and severity of flood problems
- Whether flooding and flood solutions are an important need in the community
- Other top community needs
- If planning or engineering efforts have already been made to address stormwater issues



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# Questionnaire for Municipal Staff

## Two-Part Questionnaire:


- Part 1: General Questions
  - Online  
[www.surveymonkey.com/r/MWRD-1](http://www.surveymonkey.com/r/MWRD-1)
  - Hard copy
- Part 2: Show flood locations on map
  - Online (interactive map tool)  
[www.tinyurl.com/MWRD-map](http://www.tinyurl.com/MWRD-map)
  - Hard copy

The cover of the questionnaire, featuring the MWRD logo, the title "STORMWATER MASTER PLANNING", the subtitle "Partnering for Resilient Communities", and the specific survey title "Municipal Staff Survey on Urban Flooding" dated March 2019. A smaller MWRD logo is at the bottom right.

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**Municipal Staff Survey on Urban Flooding**  
March 2019

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# Questionnaire for Municipal Staff Online Tutorial: Part 1

[SurveyMonkey.com/r/MWRD-1](https://www.surveymonkey.com/r/MWRD-1)

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## MWRD Urban Flooding Survey for Municipal Staff

Part 1, Page 3

3. Has your municipality been impacted by urban flooding?

Yes

No

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

https://s3.amazonaws.com/mwrdr/src/index.html



tinyurl.com/MWRD-map redirects to AWS

## Stormwater Master Planning Program: Partnerships for Resilient Communities

### Part 2 of the Municipal Staff Questionnaire: Locations of Urban Flooding

**Directions:** For each location of urban flooding, please (1) answer the questions below, (2) draw a boundary around the corresponding area using the interactive map below, (3) click "Save", and (4) return to this form and repeat the process for each location that experiences urban flooding in your municipality.

This survey is for municipal staff use only and not for the general public.

For tech help, contact developer

**Important!** Once you click "save" you will not see the data that you submitted or have access to edit the data. Please keep track of your submissions so you don't duplicate or omit any locations of flooding.

**If you have questions** about the data you submitted, need to edit the data, or if you have technical difficulties with this application, please contact Urban GIS:

Shaun Langley, GIS Developer, 312-666-7581 ext.5624, sl@urbangis.com or  
Brad Lindgren, GIS Developer, 312-666-7581 ext.5613, bl@urbangis.com

If you have questions about the MWRD's program for Stormwater Master Planning or need other assistance, please contact MWRD:

Richard Fisher, Senior Civil Engineer, 312-751-5479, FisherR@mwrdr.org or  
Brian Wawczak, Senior Civil Engineer, 312-751-5836, WawczakB@mwrdr.org.

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

## Respondent's Information:

Name:

Title:

Municipality/Gov Entity:

Email:

Phone (10 digit number):

Enter your information as respondent, in case we have questions about the data

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

## 1. Enter New Urban Flood Location Information

1. Describe this location (eg, address, intersection, neighborhood, street, etc):

2. What type of flooding occurs at this location? Check all that apply:

- Basement flooding of homes or businesses
- First floor/main floor flooding of homes or businesses
- Roadway flooding that prevents access by emergency vehicles (i.e. hospitals, fire stations, police departments, pump houses, etc)
- Other:

3. How often does this area flood?

4. How would you classify the severity of flooding in this area?

5. If known, how many buildings suffer interior flood damage at this location during the worst storm?

Single Family Homes

Multi-Family Homes

Answer brief questions about each area of urban flooding within your community.

Fill out this form for one area of flooding at a time.





# Questionnaire for Municipal Staff

## Online Tutorial: Part 2, Mapping Tool

### 2. Draw Location of Urban Flooding

Select the Draw tool (icon furthest to the left). Click once to start drawing, and continue clicking to draw a polygon (shape) on the map that defines the approximate limits of the urban flood problem area. Double click to conclude drawing. If you make a mistake while drawing, click the Draw tool again to re-start your drawing..

**MWRD Flood Reporting Map**

Find address or place

Then, draw on the map to show the area for which you just answered questions.

Legend:  
Green lines: subbasins  
Pink lines: municipal boundaries



# Questionnaire for Municipal Staff

## Online Tutorial: Part 2, Mapping Tool

### 2. Draw Location of Urban Flooding

Select the Draw tool (icon furthest to the left). Click once to start drawing, and continue clicking to draw a polygon (shape) on the map that defines the approximate limits of the urban flood problem area. Double click to conclude drawing. If you make a mistake while drawing, click the Draw tool again to re-start your drawing..

MWRD Flood Reporting Map

Find address or place

Click these tools to search or zoom

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

**MWRD Flood Reporting Map**

Find address or place

Icons to change display settings, and to draw the location of flood problem areas.

W 92nd Pl  
W 93rd St  
W 94th St  
W 95th St  
W 97th St  
W 99th St

S 83rd Ct  
S 82nd Ct  
S 81st Ct  
S 80th Ct  
S 79th St  
S 78th St

TCF Jewel Osco

12

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

**MWRD Flood Reporting Map**

Find address or place

Legend

- Subbasin
- MunicipalBoundary

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

The screenshot shows the "MWRD Flood Reporting Map" interface. At the top, there is a blue header with the title and five navigation icons: a home icon, a document icon, a green layer icon, a grid icon, and a menu icon. Below the header is a search bar with the placeholder text "Find address or place". To the left of the map are three vertical icons: a plus sign for zoom in, a minus sign for zoom out, and a house icon for home. A yellow line outlines a subbasin on the map, and a red line outlines a municipal boundary. A layer control panel is open on the right side of the map, showing two layers: "Subbasin" and "MunicipalBoundary", both with eye icons. A yellow callout box with a green border points to the "Subbasin" layer, containing the text "Turn Layers On / Off".

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

MWRD Flood Reporting Map

Find address or place

Subbasin

MunicipalBo

Click layer name to turn that layer on or off

Map navigation controls: Home, Zoom In (+), Zoom Out (-)



# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

MWRD Flood Reporting Map

Draw Polygon

Find address or place

The screenshot shows the MWRD Flood Reporting Map interface. At the top, there is a blue header with the title "MWRD Flood Reporting Map" and five icons: a green map icon, a white map icon, a white layers icon, a white grid icon, and a white menu icon. Below the header is a search bar with the placeholder text "Find address or place" and a magnifying glass icon. To the left of the map are three icons: a plus sign for zoom in, a minus sign for zoom out, and a house icon for home. The main map area displays a satellite view of a residential neighborhood with a red polygon drawn over a portion of the area. A yellow callout box with the text "Draw Polygon" points to the red line. The bottom of the map shows a green bar.

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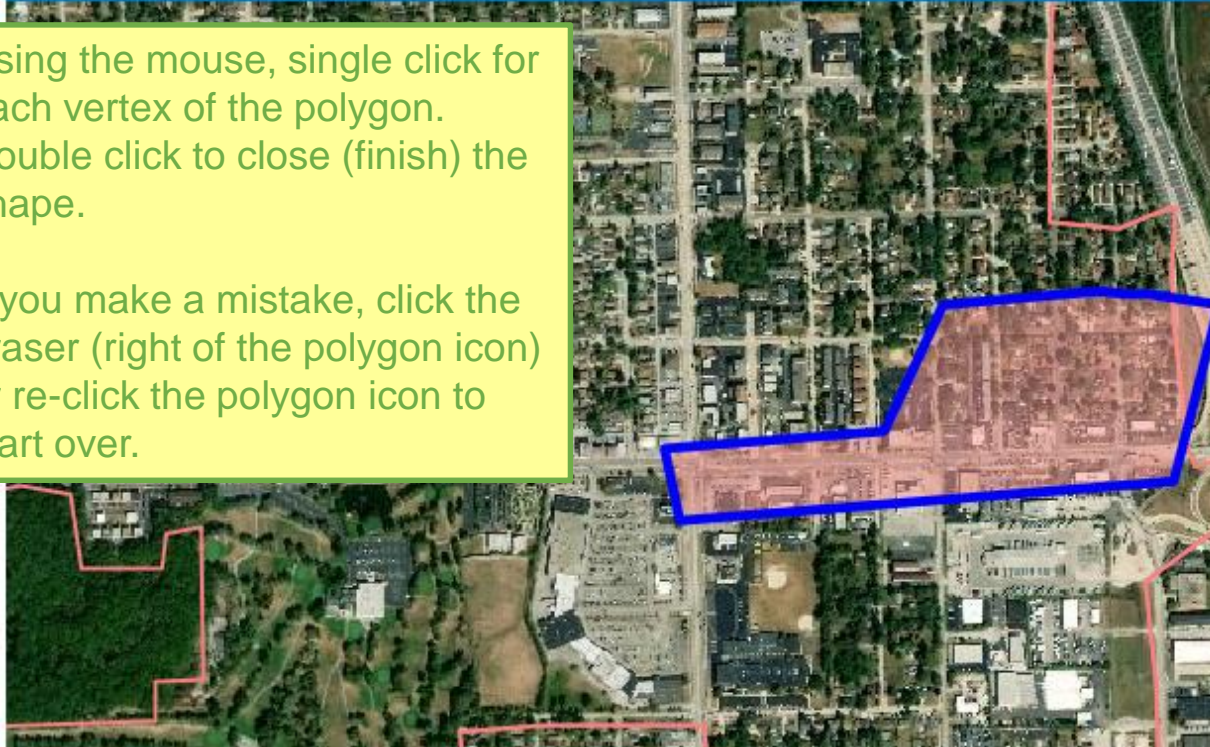
# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

MWRD Flood Reporting Map



Using the mouse, single click for each vertex of the polygon. Double click to close (finish) the shape.

If you make a mistake, click the eraser (right of the polygon icon) or re-click the polygon icon to start over.



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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool



## 3. Complete Form

Add this information to the map.

Save

When finished drawing the problem area, scroll to the bottom of the page.

Click “Save” to submit the problem area.

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# Questionnaire for Municipal Staff Online Tutorial: Part 2, Mapping Tool

**Success** x

Thank you for successfully submitting an urban flood problem area. To enter another location of flooding: click "Close," wait for the application to re-load, and enter your next area. If you are finished, click "Close" and exit the web browser. Thank you for participating!

Close

3. Com  
Add this inform  
Save

After receiving the "Success" message, click "close" and the page will automatically re-load.

To enter another location of urban flooding problems, repeat this process.



# Questions?

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# Ways CSC Member Agencies can drive survey responses from Calumet communities

1. Reach to your contacts in the Calumet
  1. Heads-up about MWRD survey dropping
  2. Do they need help completing?
2. Volunteer to help once we hear from MWRD which communities have not responded to the survey (or request help completing)
3. Attend an upcoming Watershed Planning Council meeting
4. Other???