

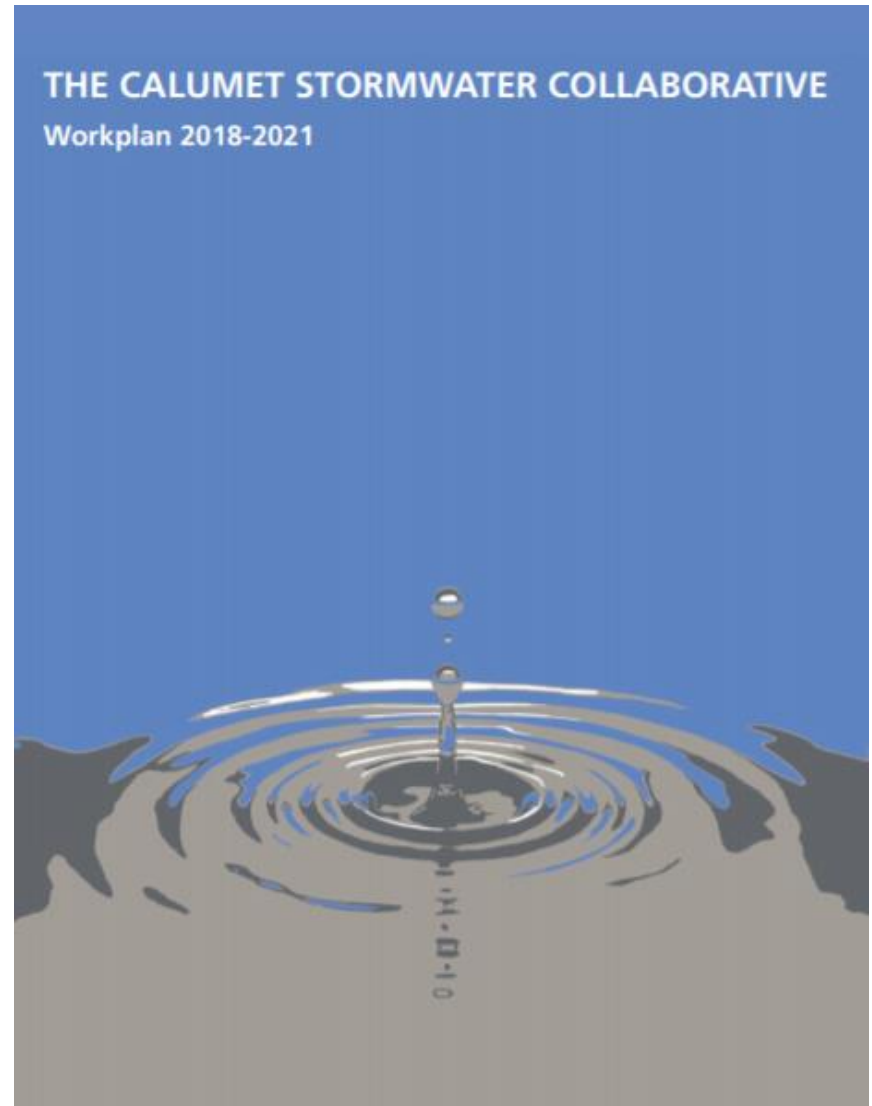


# Urban Flooding Baseline CSC Update – 3/6/2020

# For today

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- Project summary
- Objectives/deliverables
- Timeline
- CSC Touchpoints
- Discussion



# FOUNDATIONAL ACTIVITIES

## **ACTIVITY 2:** **Establish baseline of non-overbank flooding**

**Purpose:** Document the extent of current urban flooding events and the scale in order to strategically pursue future activities, like green infrastructure site selection, where they are needed most.

**Lead:** Planning & Policy Work Group + Data & Modeling Work Group

**GOAL:** Significant reduction in non-overbank flooding

**GOAL:** Data-driven decision-making is more prevalent in stormwater management planning

### PHASE 1

Conduct a needs assessment confirming the need for, desired use and data sources available or needed in order to compile a baseline of non-overbank flooding in the Calumet

### PHASE 2 & 3

Advance establishing baseline and how best to plan future activities upon results



### Objectives Activity Advances:

- Increase grey and green infrastructure implementation to effectively manage stormwater
- Increase distribution of grey and green infrastructure implementation
- Increase stakeholder understanding of Calumet-region non-overbank flooding


### Establishing a baseline of non-overbank flooding helps advance other activities, such as:

- Strategically planning % increase of new green infrastructure over baseline and in more equitable distribution
- Targeting pilots of developing stormwater master plans with municipalities
- Building stormwater management capacity with municipalities—Chicago Metropolitan Agency for Planning (CMAP), Illinois Department of Natural Resources (IDNR), Metropolitan Planning Council (MPC)
- Engaging residents in planning green infrastructure projects—University of Illinois at Chicago (UIC)

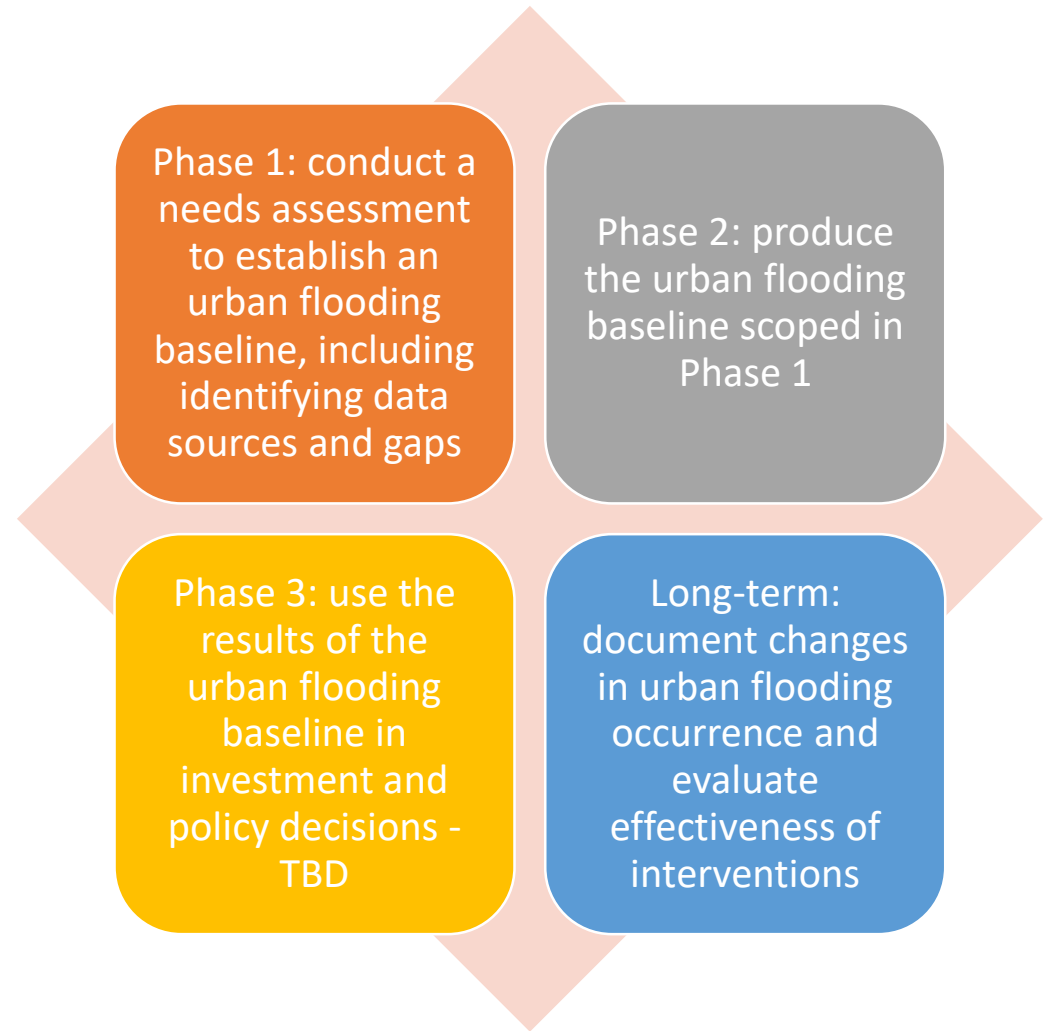
### Near-term measures of success:

- Baseline documented
- CSC Data Mapping Viewer Tool updated

### Long-term measures of success:

- Percent increase in distribution of new green infrastructure built equitably in areas of need
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# Project Phasing



# Phase 1: Process



**Create shared definitions of key elements**



**Inventory previous local efforts to create a baseline of urban flooding.**



**Review other methods used nationally to measure and track urban flooding.**



**Produce an inventory and assessment**

Identifying existing data sources to measure urban flooding and data gaps where desired data is not available.

Propose and research potential predictive methods that could fill these gaps, including surveys of residents and community groups.

Determine need for new primary data to be collected through focus groups.



**Research “use cases” for urban flooding baseline.**

Identify likely users, such as municipalities, MWRD, individual property owners, insurance companies, real estate developers and investors, and any other members of the CSC.

Conduct interviews or focus groups and determine what information and method of presentation would be most valuable for them.

# Deliverables Due June 2020



Work plan for Phase 2



technical documentation of the findings of Phase 1



results of focus groups and workshops



materials to guide discussions at CSC work group meetings



communication materials to support findings.

# CSC Touchpoints

Today	June	Ongoing
Shared Definitions Data Sources	Review draft assessment	Stakeholder focus group Share data via email/dropbox





# Working Group Discussion

# Discussion questions

What is urban flooding?

Who needs an urban flooding baseline?

What would be useful to you?

What is the geographic scope?

What timeframe does it cover?



# What is Urban Flooding?

“Urban flooding occurs when rain overwhelms drainage systems and waterways and makes its way into the basements, backyards, and streets of homes, businesses, and other properties.” *Cost and Prevalence of Urban Flooding, CNT, May 2014*

“The inundation of property in a built environment, particularly in more densely populated areas, caused by rainfall overwhelming the capacity of drainage systems, such as storm sewers. ‘Urban flooding’ does not include flooding in undeveloped or agricultural areas.” *Illinois Urban Flooding Awareness Act, August 2014*

# Who needs an urban flooding baseline?



What is your role?



How do you contribute to ending urban flooding?



What challenges do you face in that work?



What kinds of data could help you overcome those challenges?

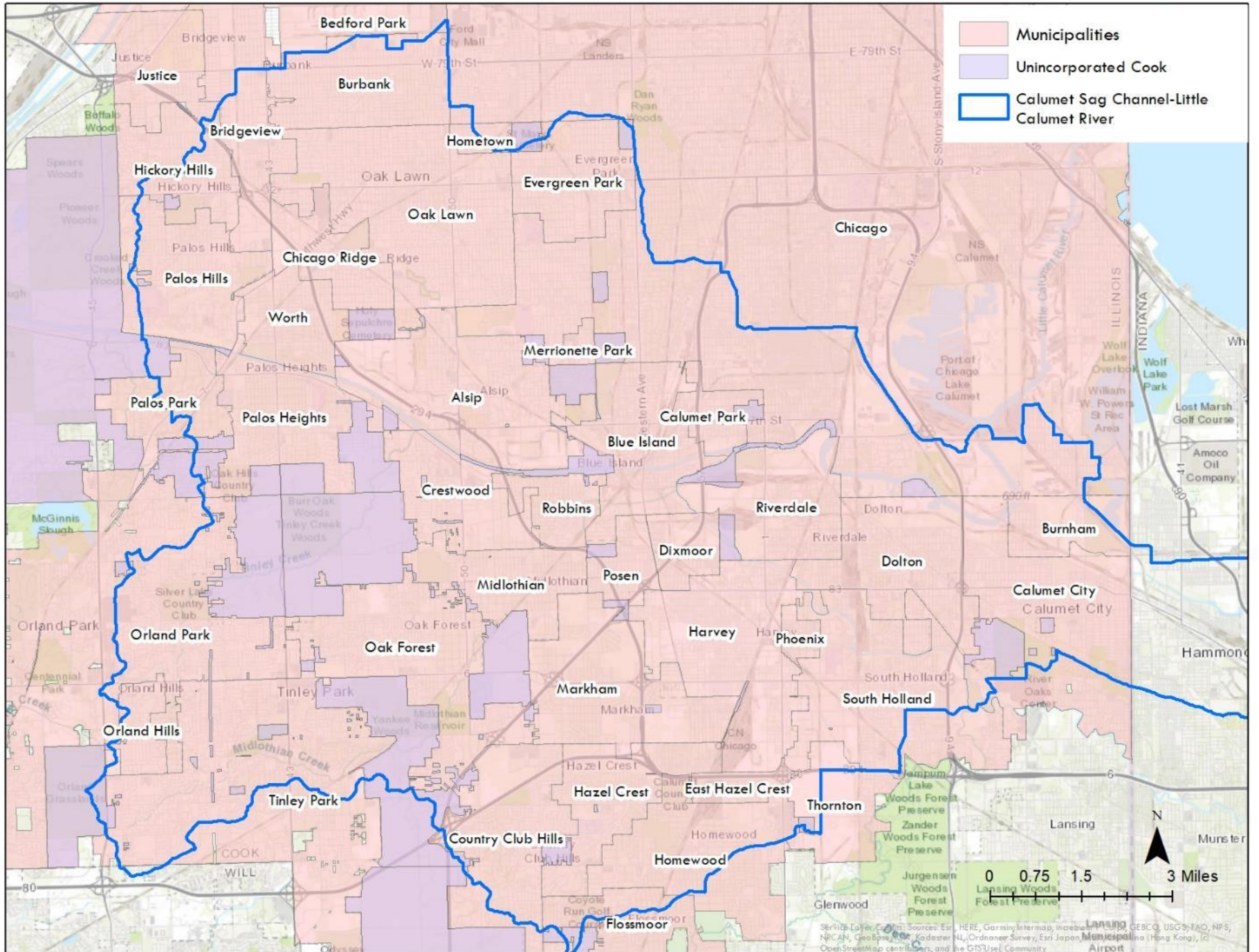


How would a tool need to “look” or “feel” to be most effective?

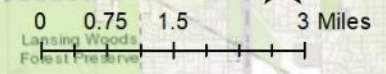


Who else should we talk to?





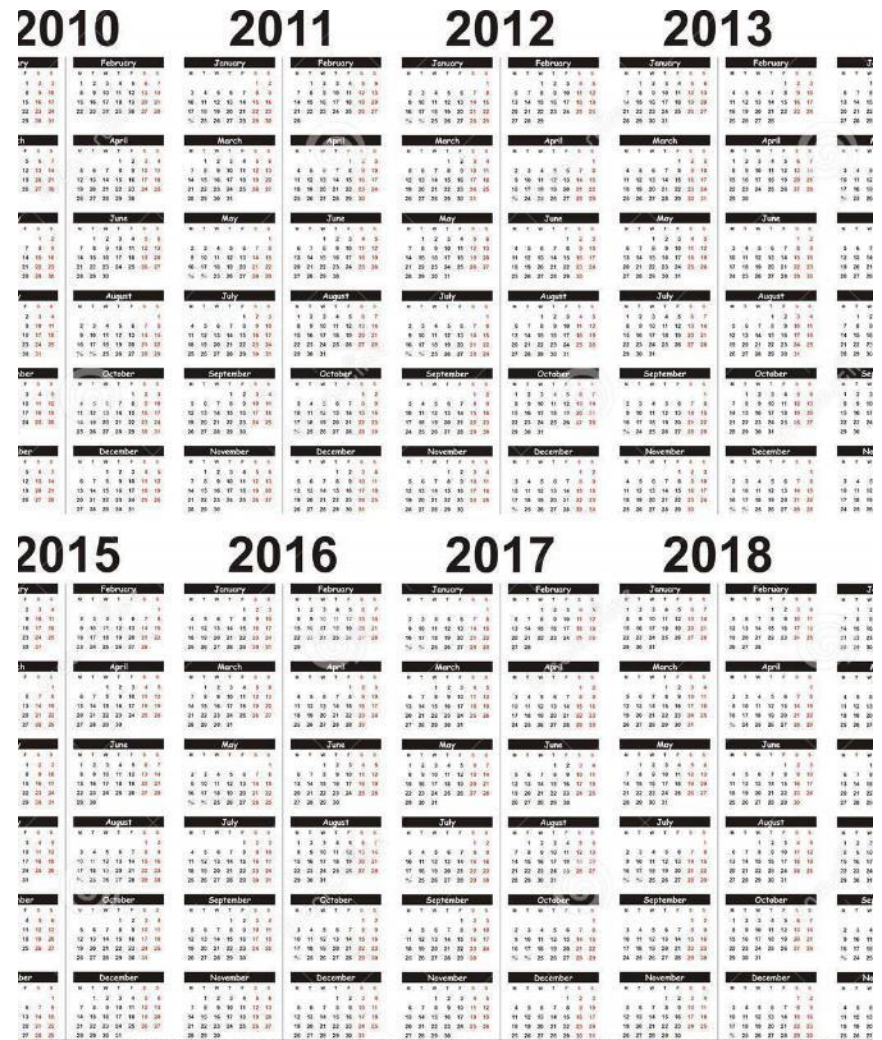
- Municipalities
- Unincorporated Cook
- Calumet Sag Channel-Little Calumet River



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBC, IGN, Kadaster NL, Ordnance Survey, Esri Japan, Swisstopo, (China (Hong Kong)), (C) OpenStreetMap contributors, and the GIS User Community

# What is the timeframe of the baseline?

- 2010-2020
  - Aligns with decennial census
  - Broad enough to capture a wide range of data
  - Recent enough for memory – focus groups/survey
  - Thoughts, concerns, questions?



Questions?



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