



The Civic Innovation Hub

Facilitated by

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April 26th, 2023

Zoom Basics

- Use the chat feature to ask questions or make comments during presentations
- Change your name
- Mute and unmute

Commitments

Basic commitments:

- As facilitators, we will
 - Respectfully listen to you
 - Move at a deliberate pace
 - Ask you to place questions in the chat “parking lot”
 - Keep jargon to a minimum
 - Other requests?
- We expect everyone to
 - Step up, step back
 - Actively listen
 - Mutual Respect
 - Respectfully disagree
 - Other Requests?

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Co- create these with participants.

Agenda

- Civic Innovation Hub Overview
- Introductions
- Stormwater and Urban Flooding
- Key Stakeholders
- Share our stories
- Green Infrastructure
- Urban Flooding Baseline Activity
- Wrap-up

Vision

The Calumet Region is a region in which **infrastructure solutions** are planned and built with **resident and community leadership**.

Vision

Traditional

- Drainage systems
- Reactive
- Engineer-driven



Integrated

- Ecosystems
- Proactive
- **Resident-centered,**
Engineer and
policy-supported

Mission

Organize residents in the Calumet Region, *in partnership* with local governments, to get results on *social, economic, and environmental infrastructure*, such as resilient stormwater management, by providing education, data analysis and tools, community advocacy and knowledge-building resources, and networking opportunities.

The Civic Innovation Hub will prepare municipalities to make use of the RainReady funds, which Cook County has earmarked to implement the 2017 RainReady plans.

Organizations



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Presenter introductions

The time is now!

- Municipalities have opportunities to receive funding from the Infrastructure Investment and Jobs Act, EJ grants, etc.
- But, often difficult to get the money where it's most needed

Municipalities

- Blue Island
- Calumet City
- Calumet Park
- Dolton
- Riverdale
- Robbins

Cohort Experience

The purpose of the cohort experience is to have participants learn how to plan, implement, and sustain stormwater management solutions through facilitated educational workshops and networking sessions.

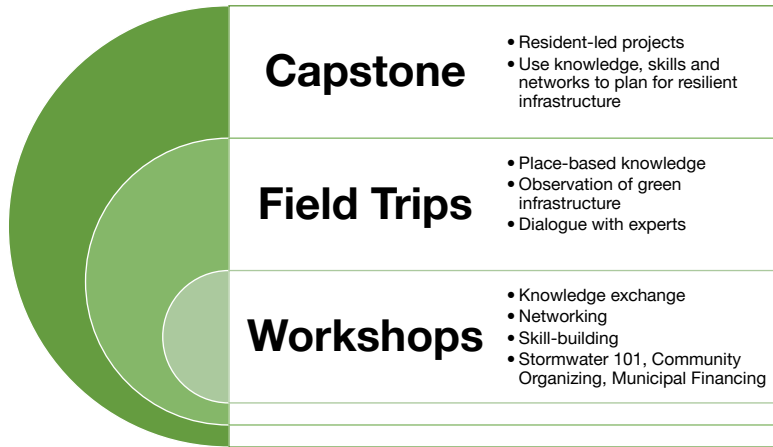
When: April - December, Once per month, 1.5-2.5 hour sessions.

What: Workshop sessions, field trips, networking opportunities, and capstone working sessions

Where: Mix. Workshops offered virtually. In-person field trips in the fall.

Who: 2+ residents and a municipal staff or elected official to join per community.

Sessions

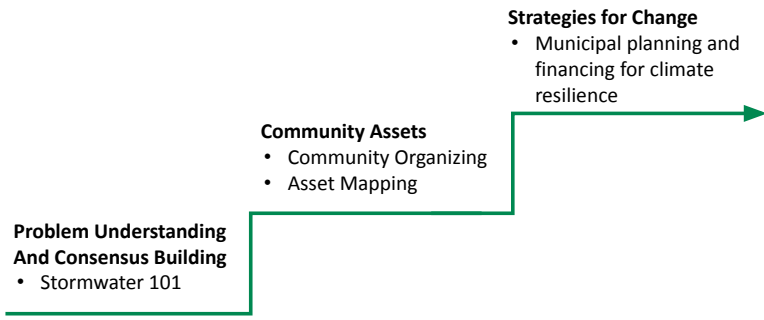


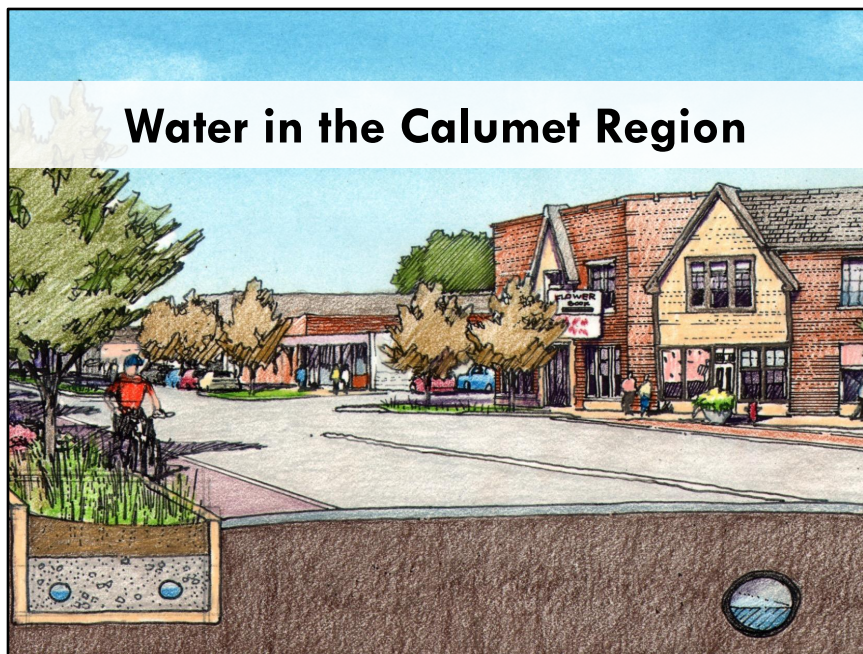
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Workshops, field trips, and capstones (3 panels)

Iterative and adaptable: incorporating survey and eval throughout the process

Workshop Flow





Originally the region was all part of Lake Michigan, that's why Blue Island has its name. It was an island! As the lake retreated to its present borders, our region - the Calumet Region, which spans the far south side of Chicago, the South Suburbs, and communities in NW Indiana - was formed. The region used to all be part of the Lake Michigan, and the larger Great Lakes watershed - that means all the rain that fell drained into marshes, streams, and rivers that drained into Lake Michigan - and then eventually all the way to Niagara Falls and on to the St. Lawrence river and out into the Atlantic Ocean!

At some point people started making modifications. For example, before colonization, native people made a channel between Wolf Lake and the Calumet River. As time has gone on, the modifications have become more profound. For example, the Cal Sag channel was created to support industrial barge transport. This was a really big change - it took parts of Blue Island and Robbins out of the Lake Michigan watershed and put them into the Mississippi River watershed, so now water that falls in parts of Robbins ends up flowing into the Gulf of Mexico! A lot of the smaller scale changes have been to drain what was once a really marshy landscape and make it a place where communities and industry could be built.

The consequences of some of these decisions about water, whether at a small or

really big scale, haven't always been great for local people. Often the negative impacts of these decisions - homes that sit in flood plains, wetlands that were filled in with byproducts of steel manufacture to make way for homes that were built on top of these cancerous materials - these negative impacts compound with other uneven impacts - racism in mortgage lending, disinvestment in our commercial areas, these things add up and make these impacts around water even worse.

Everyone here lives in a community within this broader region that has their own story. Every individual has their own story. We're here to try to center those stories in decision making so that local people are benefiting, so that our communities are improving.

Briefly, do a few people want to share about the challenges and opportunities that brought them to the Civic Innovation Hub?



Briefly share about the challenges and opportunities that brought you to the Civic Innovation Hub.



Place 3 photos here of stormwater- 1) flowing through pipes, 2) over the surface, urban flood, 3) flowing into river

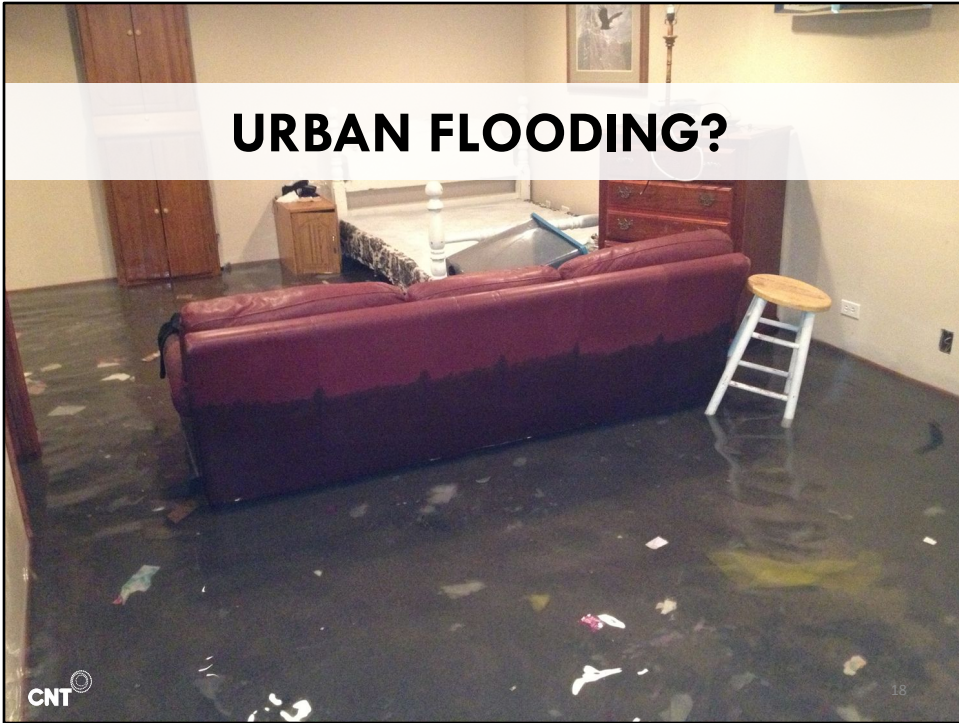


Let's move forward with some definitions. We want everyone to be on the same page with the technical language that you may hear when flooding is discussed.

The Calumet region prior to industry and city development was marked by wetlands, forests, prairies, savannas and dunes. When these areas were less developed, rainfall likely soaked into the ground or sat in depressions like wetlands. When buildings, parking lots, roads and other hard surfaces are added to the landscape, the ground cannot absorb the water. Instead, this rainwater flows overland or runs off streets, lawns and other impermeable surfaces until it flows into a storm drain or water body.

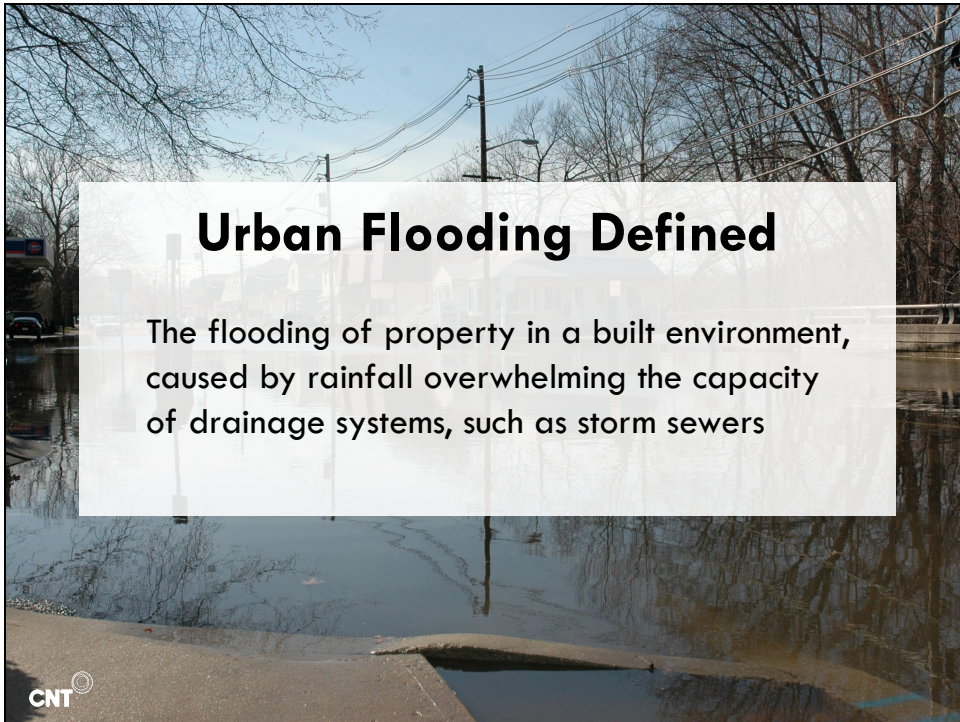
Stormwater picks up pollutants like trash, chemicals, oils, and dirt/sediment that can harm our rivers, streams, lakes, and coastal waters.

URBAN FLOODING?



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When there is too much stormwater we can get urban flooding. Which is defined as... This is distinct from “riverine flooding”, which is what our flood control programs have been focused on until recently.



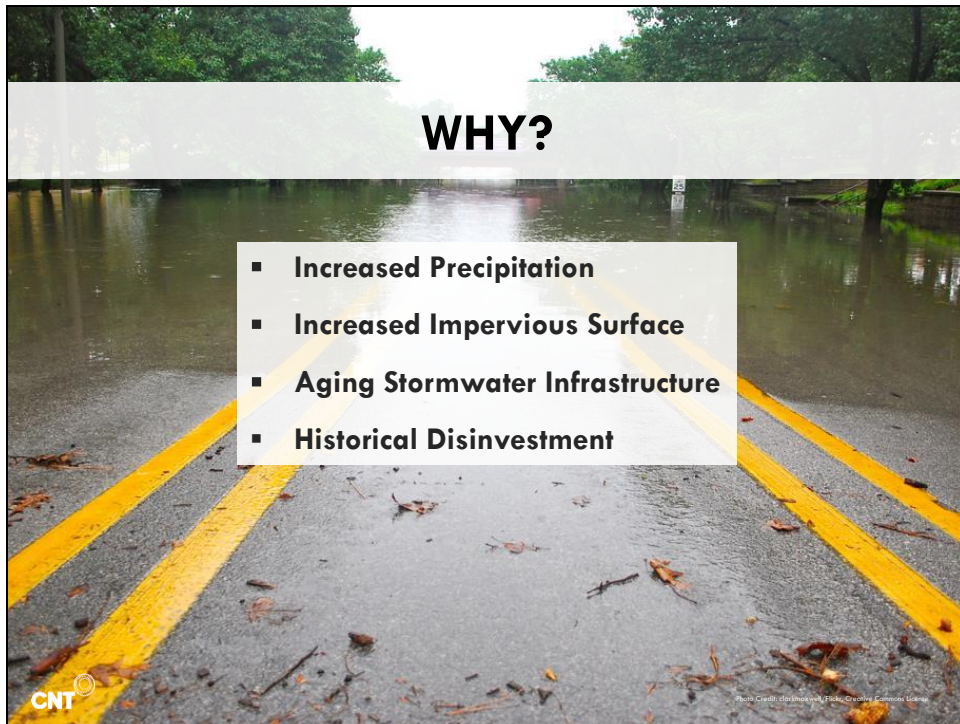
It is not limited to when rivers overflow their banks. As we'll discuss, some property owners experience flooding more than once a year, and many are nowhere near a floodplain.



Urban flooding includes: (clockwise)

- Overbanking of rivers, creeks, coastlines – FLOODPLAIN FLOODING
- **Basement backup**
- **URBAN FLOODING - overland flooding, yards, streets, sidewalks and alleys filling up, which is not from overbank flow**
- **Foundation seepage**

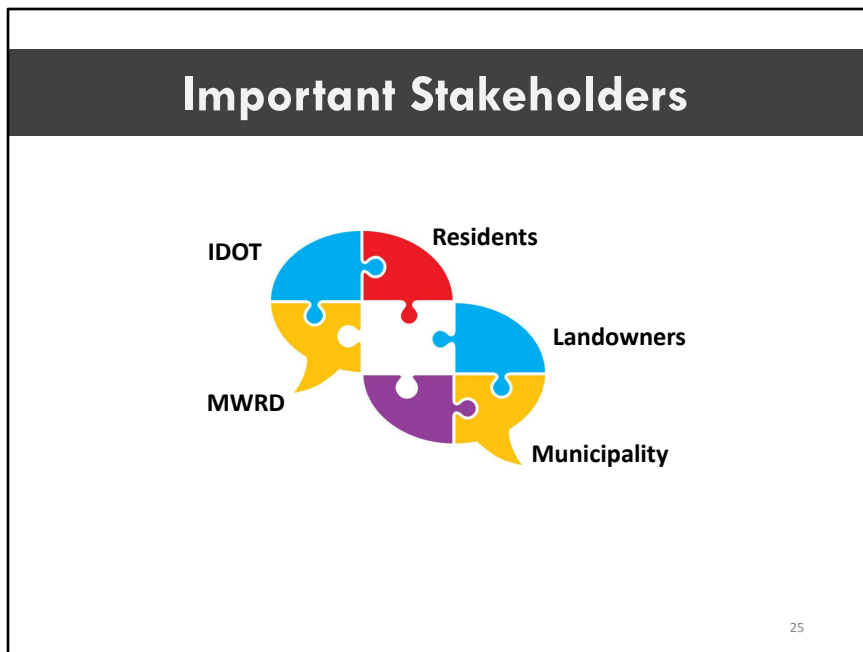
URBAN FLOODING: last 3 types // not in necessarily in the floodplain



Research also shows 4 main reasons why urban flooding is becoming an increasing problem nationwide:

1. Over the past 70 years, there's simply been more rain. Heavy rain events has increased nearly 40% in the Great Lakes region.
2. At the same time, communities have also developed more impervious surface, converting greenfields to buildings, streets, and parking lots made from concrete and asphalt, which creates more stormwater runoff to sewers. While an increase in impervious surfaces might not seem an issue in our communities, it is because communities that are upstream from us have been developed on greenfields. For example, there is more overbank flooding in Robbins because of development further southwest.
3. These last 2 problems happened over the last 50 years, but our sewer infrastructure was designed and built more than 50 years ago. Besides being undersized for the amount of stormwater, communities often don't have the funding to keep the pipes well-maintained.
4. All of these problems that many communities face throughout Cook county are worsened by historical disinvestment. Stormwater infrastructure in not the same even across the villages present today. Again, here other forms of targeted disinvestment based on racism compound the issues for the South Suburbs - we

1. have less tax base to fund improvements, or even to hire staff to secure County, State, or Federal funding.



Key stakeholders involved in stormwater management:

Landowners - their properties, e.g. disconnect downspout and capture water in a barrel (rain barrel) before it enters sewer

IDOT - pollution on state roads and GI,

Municipality - local sewers, impact how much land is developed vs conserved for open space, zoning land uses

MWRD - intercepting sewers to WWTP, big tunnel

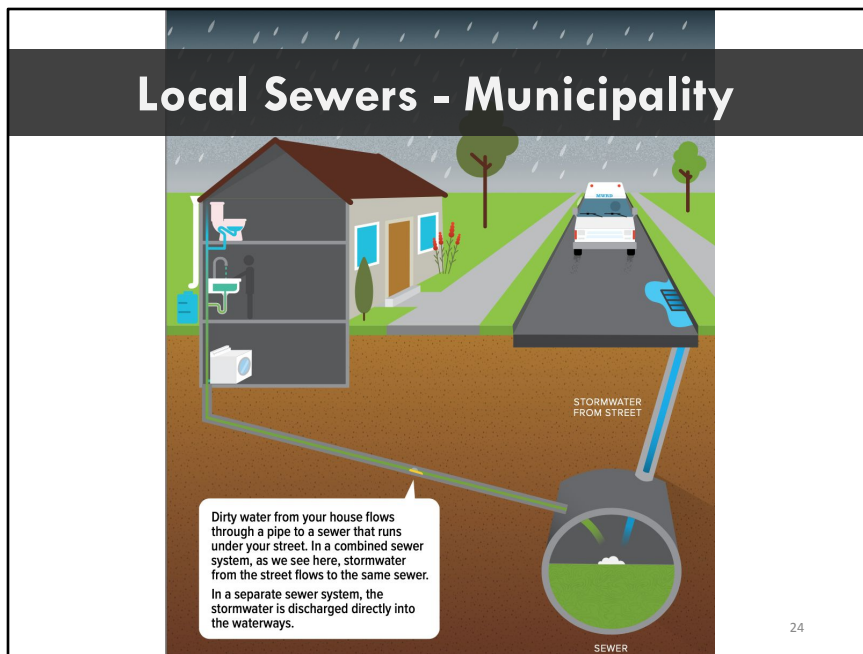
Clear roles, but uneven capacity to fulfill roles -

Some of our municipalities are pretty stretched to fulfill their role of keeping infrastructure up to date and may be more challenged to see improvements on IDOT right of ways

in the South Suburbs we also have uneven burdens compared to other stakeholders within our system. E.G. Skokie and Evanston have a less wet landscape and more

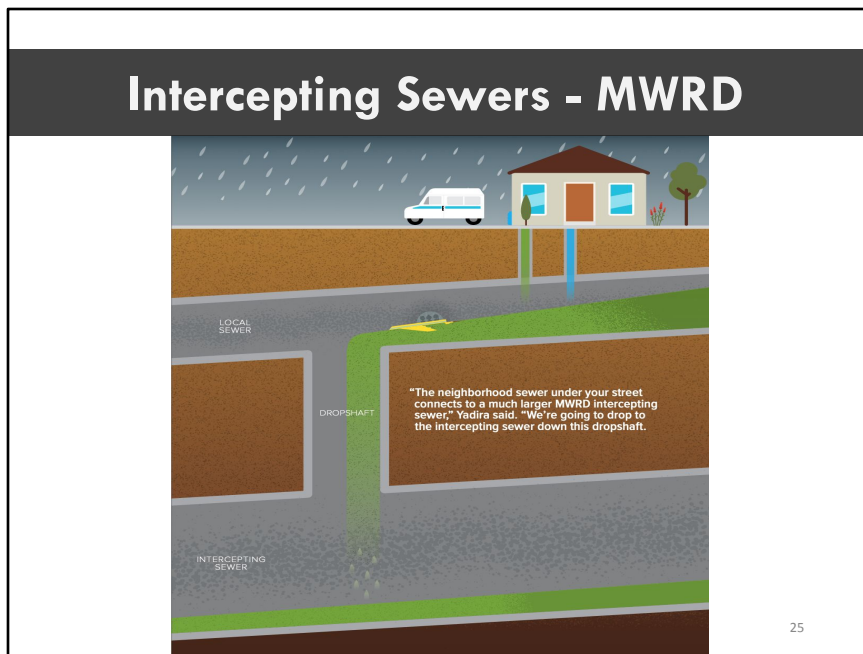
robust municipal budgets. Homeowners in our communities are also dealing with a much more flood prone landscape and infrastructure that has suffered from municipal capacity challenges.

How so we get to equity in the system?



MWRD – role in climate resilience

Domain – collection/tunnel system/treatment/CSOs



Municipality – role in climate resilience

Key departments: Parks, Water, trustees etc

Domain: public land

Clear roles, but uneven capacity to fulfill roles -

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How so we get to equity in the system?

A photograph of a flooded street under a bridge. The water is dark and reflects some lights. A semi-transparent dark grey box is overlaid on the center of the image, containing the text. In the background, a traffic light is visible, showing a green light. The overall scene is dimly lit, suggesting an overcast day or dusk.

Discussion

How do you experience flooding in your home? In your community?



Discussion

How did we get here? Who tends to live in communities with failing stormwater infrastructure?



INLAND RESILIENCE – PRINCIPLES

Hinsdale selected low maintenance plants for these bioswales



Green Infrastructure Defined

Green space that provides a wide range of societal and environmental services to people (e.g., stormwater capture and treatment, cooling effects, improved air quality, etc.)

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INLAND RESILIENCE – PRINCIPLES

Hinsdale selected low maintenance plants for these bioswales

Activity – Stormwater in your Community

Facilitation Note: Walk yourself through this guide using ufb.cnt.org. Take screenshots of the key maps that you'd like to discuss (e.g., church satellite image, community-identified flooding areas, topographic wetness). Use these screen grabs in case the tool does not work live.

1. Go to "Maps and Analysis". Use the "Explore Map" option. Choose community. Wait for map to load.
2. Start with satellite map. "This is a map of your community. Let's take some time to orient ourselves to the map. Here is the Cal-sag channel... Midlothian Creek here." Use a location of a landmark, a public space the cohort members know and visit. Zoom to location. Zoom all the way out the neighborhood, then back in to the landmark.
3. How does water come into conversation at the landmark? Have you experienced any flooding issues here? Or is it something that you talk about at all? Why?

Activity – Stormwater in your Community

4. "Okay, now let's zoom out to the neighborhood around the church." Move to street view. Let's check out what this tool can tell us about how water moves around the church.
5. Go through problem areas map. Has the church been identified as flooding issue in the community? What areas have been identified through community meetings? Through surveys? By the municipality?
6. That data was collected from people in your community. Let's check out a different type of environmental metric that we can look at. The topographic wetness index tells us where water tends to collect and pool. Let's see if the church tends to be in a wet area. Ah yes, it looks like water tends to pool here and flood, which could explain your experiences.
7. There's lots of other things to explore in this tool. Let's share what we've gathered from this to the larger group.

Reflection

Share out from each group to hear themes.