Civic Innovation Hub

Session 1: Stormwater Management 101

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Civic Innovation Hub 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.

Civic Innovation Overview:

What is Urban Flooding?

The flooding of property in a built environment, caused by rainfall overwhelming the capacity of drainage systems.

Flooding is caused by:

- Increased Precipitation (because of increased rainstorm intensity due to Climate Change)
- Increased Impervious Surface (less area for water to be absorbed)
- Aging Stormwater Infrastructure (cannot handle the amount of water coming in)
- Historical Disinvestment (not maintaining stormwater infrastructure due to lack of funds)
- Topography (how high and low the physical features on the land are due to nature or how humans built on top of the land)

Traditional Water Management

- Drainage systems
- Reactive – about moving water out (conveyance)
- Engineer-driven

Integrated Water Management

- Informed by Earth's ecosystems
- Proactive – considering water storage options to slow down water
- Resident-centered, Engineering and policies-support

Green Infrastructure

Structures or installations that filter and absorb stormwater where it falls as they copy natural systems like forests, wetlands, and soils. This type of infrastructure provides additional benefits for human well-beings, for example- management of extreme heat by cooling down surrounding locations or better air quality.

Resources

Use the urban flooding baseline tool to explore flooding impacts in your community and the resources page on how to take action.

To learn about storm water mitigation projects, you can do at home visit the MWRD Green Neighbor Guide .