# Building Coastal Resilience in the Calumet

Proposal overview to the Calumet Stormwater Collaborative



#### **General grant information**

- \$5 million available
- Will award 5-10 grants of \$500,000-\$1 million each
- Cook County is considered part of the eligible coastal zone
- Requires 50% local match
- Regional organizations are a primary target



# **Goals of funding**

- Identify and address priority data, information, and capacity gaps
- Integrate natural/hard infrastructure approaches to planning and decision-making
- Use regional approach to foster broader geographic impact
- Result in increased access to or understanding of information for reducing risk and increasing resilience



# **Recap of Collaborative Challenges**

- Many Calumet communities lack basic data about their infrastructure systems, which limits their abilities to make investment decisions
- Calumet infrastructure systems are aging and insufficient for current conditions, not to mention future conditions that will be exacerbated by climate change
- Calumet communities often experience repeated, ineffective interventions that drain public and private resources



#### **Proposal elements**

- 1. Infrastructure condition and vulnerability assessments
- 2. Follow-up CIPs
- Regional capacity-building through feedback of local findings into larger initiatives



### **Proposal elements**

- 4-5 communities
- 3-year grant timeline (Jan. 1, 2016- Dec. 31, 2018)
- Local match: \$250,000 MPC, \$150,000 CMAP



#### 1. Infrastructure Assessments

- Collect information and assess condition and vulnerability of 4 infrastructure systems
  - Stormwater and sanitary systems
  - Drinking water systems
  - Road networks
  - Green infrastructure
- Comprehensive consideration of green/gray as related networks



#### 2. Resilient Capital Improvement Planning

- Findings of infrastructure assessments will inform follow-up CIPs
- Use science-based approach to prioritize financial resources and activities that build resilience
- Use results of ISWS updated precipitation projections to prepare for future conditions
- Unlike individual CIPs, coordinated CIPs will ensure strategic coordination of local activities and more effective results



# 3. Regional Capacity Building

- Funds CSC as a forum for peer exchange
- Builds regional capacity by developing basis of a regional H/H model and feeding local data understandings into larger initiatives such as the Chicago Regional Trees Initiative and GIV
- Puts climate science into practice by reducing the lag between climate research and new design standards/policies



#### **Infrastructure Assessment Activities**

- Stormwater and sanitary systems: collection of data on age, diameter, and location of pipes; diagnostic smoke testing and televising, manhole inspections; and flow monitoring to test system capacity.
- Drinking water systems: collection and digitization of data on the age, materials, location, and flushing records of pipes, lift stations, pumping stations, and reservoirs; surveys of main breaks and known pressure problems; review of meters and accounting practices.
- Road networks: documentation of average daily traffic volumes and the level of service class of road networks; pavement condition assessments.
- **Green infrastructure:** inventory of existing trees and installed green stormwater infrastructure projects; analysis of stormwater volume capture from the green infrastructure.

