



# Scaling-up Green Stormwater Infrastructure in Underserved Communities Across the Greater Chicago Region

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# Flooding in Chicago

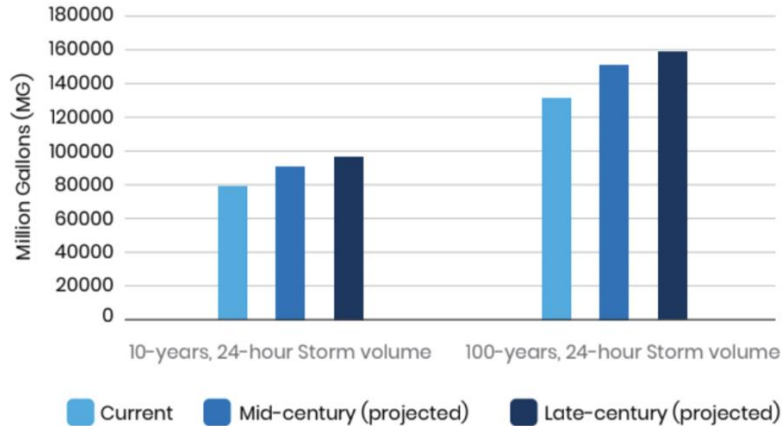


Figure 3-1 Chicago 10-yr and 100-yr Future Precipitation Estimates

- ➔ In the past 60 years, intense rainfall has increased by 30%
- ➔ There was a Presidential Emergency Declaration in Cook County in summer 2023 for flooding
- ➔ Rainfall expected to increase another 15% by 2050

# Underserved Communities Are the Most Impacted

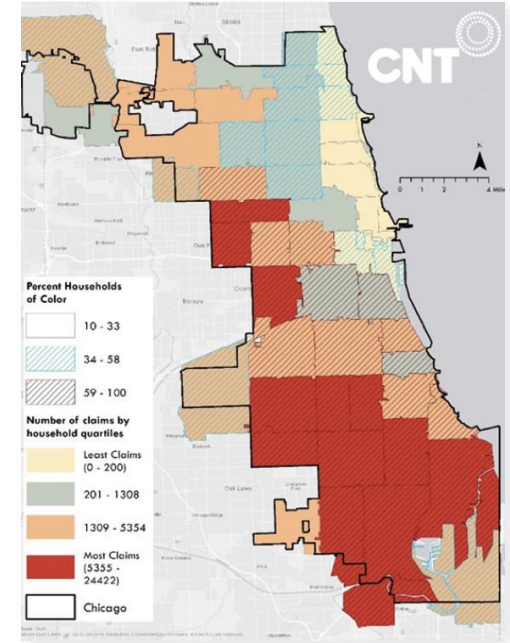
Low-income households and communities of color are disproportionately impacted by flooding.

From 2007-2016,  
\$400 million paid  
to residents for  
flood damage

87% of claims  
were paid in  
communities of  
color

Only 6% of  
residents with  
flood insurance

Green stormwater infrastructure (GSI) can simultaneously mitigate flooding and drive environmental justice (EJ)



# Chicago is Making Progress on Scaling-up GSI



## Calumet Park Stormwater System

- ➔ \$2.4 Million investment
- ➔ Separate and increase size of stormwater system



## Green Infrastructure Partnership Program

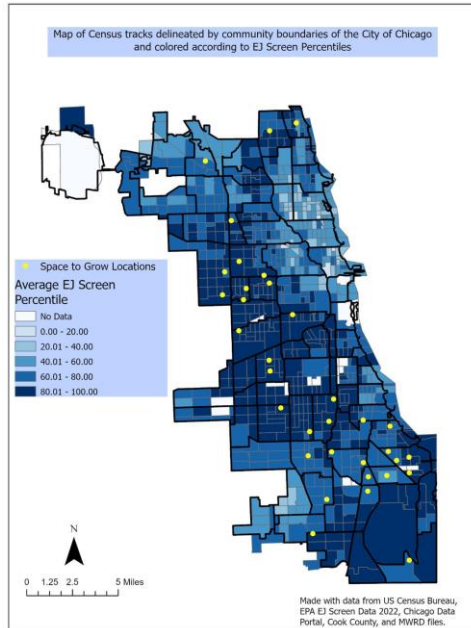
- ➔ Saves an average of 6 million gallons of stormwater runoff per rain event



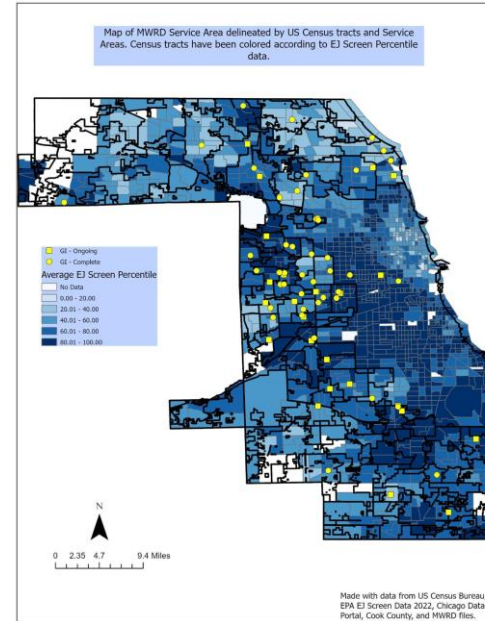
## Space to Grow Program

- ➔ Incorporates GSI into school yards
- ➔ Use to capture rainfall to minimize pressure on sewer system

# Progress on Equitable Scale-up is Mixed



Space to Grow projects tend to be located in neighborhoods with higher environmental justice percentile scores.



There is no apparent relationship between GSI projects in MWRD's service area and environmental justice percentile scores.

# Community-Based Partnerships May Offer a Path Forward

A **Community-Based Partnership (CBP)** is a collaborative project delivery model that brings together local governments, private sector entities, and the community to jointly develop and implement infrastructure projects.



# Benefits of CBPs vs. Traditional Contracting



# Examples from Across the Nation

## Prince George's County, MD Clean Water Partnership

**\$500M+** in green infrastructure retrofits, water quality and pollution reduction targets surrounding the Chesapeake Bay



2013

## Chester, PA Stormwater Authority Partnership

**\$53M** in pollution & volume reduction of both the separate and combined sewer areas



2015

## Los Angeles, CA Green Streets & Alleys

**\$79M+** green streets retrofits for public safety, water conservation and infiltration objectives



2018

## Milwaukee, WI Milwaukee Metropolitan Sewerage District (MMSD)

**\$50M+** in green infrastructure retrofits to achieve 20M gallons of runoff, pollution and flooding reduction targets



2020

## Seattle, WA Seattle Public Utilities Rain City Partnership

**\$15M+** pilot in green infrastructure retrofits to achieve 20M gallons of runoff, pollution and flooding reduction targets



2023



# Prince George's County, MD Clean Water Partnership (CWP)



**\$350M in Total Development Costs - 215 Projects**

Estimated \$615M Total Economic Impact



**300+ Community Listening Events**

30-40 Per Year on Average



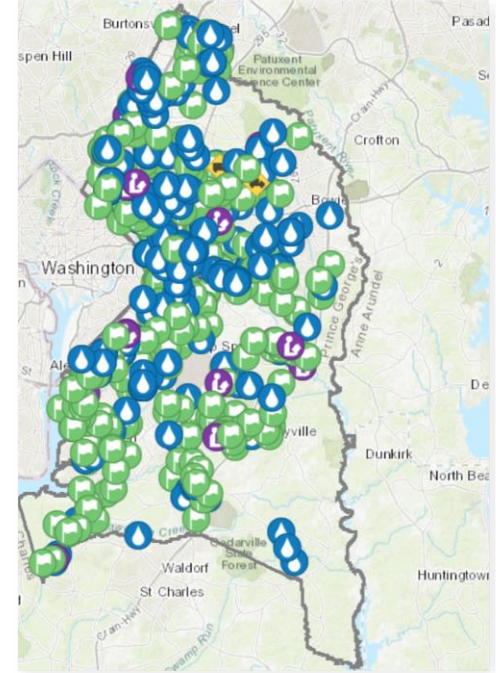
**79% Spending with Local, SWMBE, and Veteran-Owned Businesses**

\$213M in Target Class Business Spending



**54% Hours Worked by County Residents**

Over 500k Workforce Hours Completed



# CWP's Mentor Protégé Program

- **7 Cohorts – 61 Participants**
- **2020 Expansion ELP**
  - Building a local 30-year Maintenance Force
- **1 Year Enrollment**
- **21 Protégés - \$40m in Contract Awards**
  - 100% or greater increases in bonding
  - 50% or greater increases in lines of credit
  - Contract awards across the region
  - New equipment purchases
  - New lines of business established

**\*Exclusive Pilot Project selected each year for Protégés**



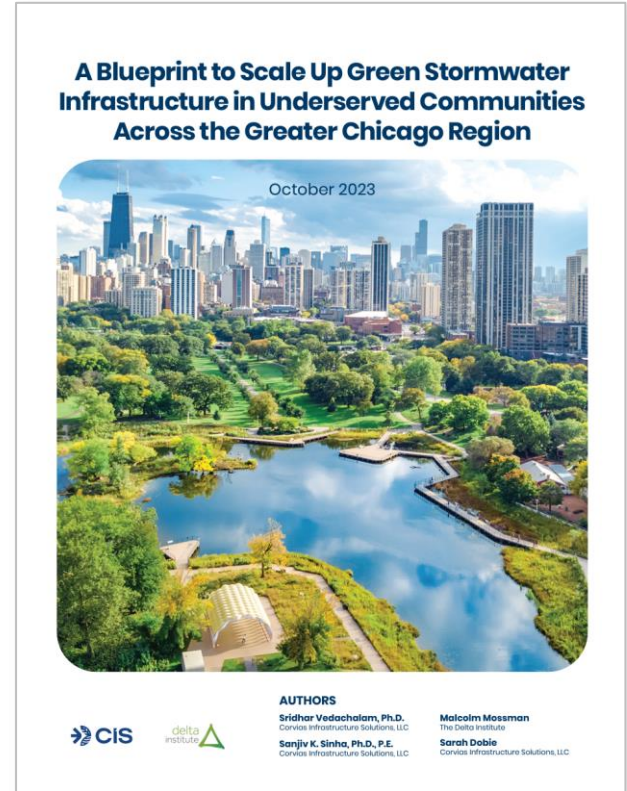
# MMSD's Fresh Coast Protection Partnership (FCPP)

- ➔ **\$29.2M in total development costs**
- ➔ **\$11.9M gallons of GSI projects completed/in-progress**
  - 22% of gallons captured in combined sewer area
  - 41% of gallons captured outside the City of Milwaukee
- ➔ **90% of projects located on private property**
- ➔ **50% of projects located in low-to-moderate income areas**
- ➔ **46% of contracts awarded to SWMBE and veteran-owned enterprises**



# Next Steps for Greater Chicago

- ➔ Determine the CBP **scope** and identify a **source of finance/funding** (e.g., can leverage SRF funding for initial payment)
- ➔ Identify designed **contract requirements** (e.g., program goals, payment terms, etc.)
- ➔ **Draft an RFP** and **solicit feedback** from the community and other stakeholders (e.g., set the vision with the community)
- ➔ Issue the RFP, select a contractor, and **implement the CBP**



# Potential Requirements for an RFP

- ➔ **Program goals**, e.g., gallons of storage capacity, SWMBE participation
- ➔ **Upfront capital** to pay for the initial work
- ➔ **Bonding** to reduce barriers to SWMBE participation and help them build credit
- ➔ **Payment structure**, e.g., partial pay for performance, pay for performance, full delivery
- ➔ **Outreach and engagement plan**, i.e., how community members will be engaged
- ➔ **Maintenance plan**, i.e., how the infrastructure will be maintained over the long-term

# Conclusion

**Increased flooding in Greater Chicago calls for rapid and equitable scale-up of GSI**

**CBPs have been successful in a variety of communities and deliver multiple benefits**

**CBPs offer an Opportunity for Greater Chicago to lead in equitable & sustainable flood management**

Thank You!

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