Cook County American Rescue Plan Act Stormwater Management Project Implementation Program

Adam James, P.E., CFM Cook County Department of Transportation and Highways



Snapshot of Cook County



Source: David Benbennick, Public domain, via Wikimedia Commons Centered in northeast Illinois

Home to 5.2 million people

Roughly 45% of Illinois' population

2nd largest (most populous) county in America

Larger population than 27 states

134 municipalities



Cook County DoTH

Department of Transportation and Highways (DoTH)

COOK COUNTY Beyond Transportation

- Jurisdictional authority over 568 center line miles of highways
- Maintenance responsibilities for:
 - 1,620 lane miles of pavement
 - 132 bridges
 - 360 traffic signals
 - 7 stormwater pump stations
 - 4 maintenance facilities
- \$1.3 Billion 5-Year Transportation Improvement Program

Flooding in Northeast IL

- Most flooding in NE IL is Urban Flooding, as opposed to Riverine Flooding (overland flow from waterways).
- Per the Illinois Urban Flooding Awareness Act, Urban Flooding is defined as "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."
- Common sources of Urban Flooding include:
 - Overwhelmed sewer systems
 - Lack of overland flow routes and storage facilities (detention basins)
 - Combined sewage (basement) backups
- Climate change will exacerbate the problem.



Source: Chicago Tribune, Dan Waters

Stormwater Management / Flood Control in Cook County – A Brief History

- For years, stormwater management in Cook County was a patchwork of efforts by local, regional, state and federal agencies.
- November of 2004, the Illinois General Assembly enacted Public Act 93-1049, allowing for the creation of a comprehensive stormwater management program in Cook County under the supervision of the Metropolitan Water Reclamation District of Greater Chicago (MWRD).
- Different than **most other Counties** in NE IL where **stormwater management is handled by** a department of the **County government**.
- As a County government, Cook County is still involved in regional stormwater management efforts.
- Cook County does not have a stormwater management department, but the engineers with stormwater management knowledge employed by the County work in DoTH – this is why DoTH is involved.

Existing Programs

MWRD Stormwater Partnership Program



- MWRD can assist communities in addressing flooding by directly supporting their efforts through its Stormwater Program. The program funds projects in Cook County that address flooding and drainage concerns.
- Projects are prioritized on their ability to reduce flooding and the number of structures benefited among other criteria.
- MWRD and selected partnering agencies execute intergovernmental agreements to define the roles and responsibilities of the project development, including long term operation and maintenance responsibilities which are assigned to the partnering agency.

Additional Need

- Limited funding available for Urban Flooding. And, its NON-Motor Fuel Tax eligible.
- Significant planning effort has been expended in the area of flood mitigation in Cook County but there continues to be numerous barriers to the development and implementation of projects.
- Specifically, a lack of municipal capacity with respect to project identification, securing of funding, administration of engineering and construction contracts, and maintenance and operations of stormwater infrastructure.
- This is **especially true in communities with historic disinvestment** which were also disproportionately impacted by COVID-19.



Source: Center for Neighborhood Technology

Opportunity

- American Rescue Plan Act (ARPA) signed into law by President Biden on March 11, 2021.
- APRA authorized \$350 billion in Coronavirus State and Local Fiscal Recovery Funds (SLFRF) for state, territorial, local, and Tribal governments to support their response to and recovery from the COVID-19 public health emergency.
- Cook County received > \$1 billion
- Cook County developed 74 impactful and transformative programs
- \$20 million for Stormwater Management Project Implementation Program led by DoTH
- Funds must be obligated by December 31, 2024, and spent by December 31, 2026

AMERICAN RESCUE PLAN ACT (ARPA) AT A GLANCE



Toni Preckwinkle Cook County Board President

Aligns with County Goals

Policy Roadmap: Sustainable Communities

Objective 1: Ensure environmental justice and a healthy environment for all people and places.

1.1) Address communities' environmental priorities and identify their assets and vulnerabilities.

Objective 3: Reduce climate change and provide ways to mitigate its effects.

3.4) Develop a plan to address community, business, and infrastructure vulnerabilities due to climate change.

Equity Fund Task Force Recommendations

5.1) Invest in climate-resilient infrastructure to address decades of disinvestment in Black and Latine communities.



Sustainable Communities

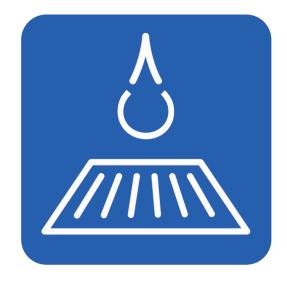
Project Selection

- DoTH collaborated with MWRD to compile an initial list of over 120 known drainage problems/potential projects from review of existing inventories including:
 - Cook County Hazard Mitigation Plan
 - MWRD Stormwater Partnership Applications
 - DoTH flooding records
- Projects were evaluated based upon:
 - Flood relief benefit
 - Municipal support
 - Clarity of problem definition
 - Feasibility
 - State of readiness
 - Qualification for other types of funding
- Developed a "pipeline" of projects at different phases to position nonconstruction projects for future potential funding opportunities



Program Highlights

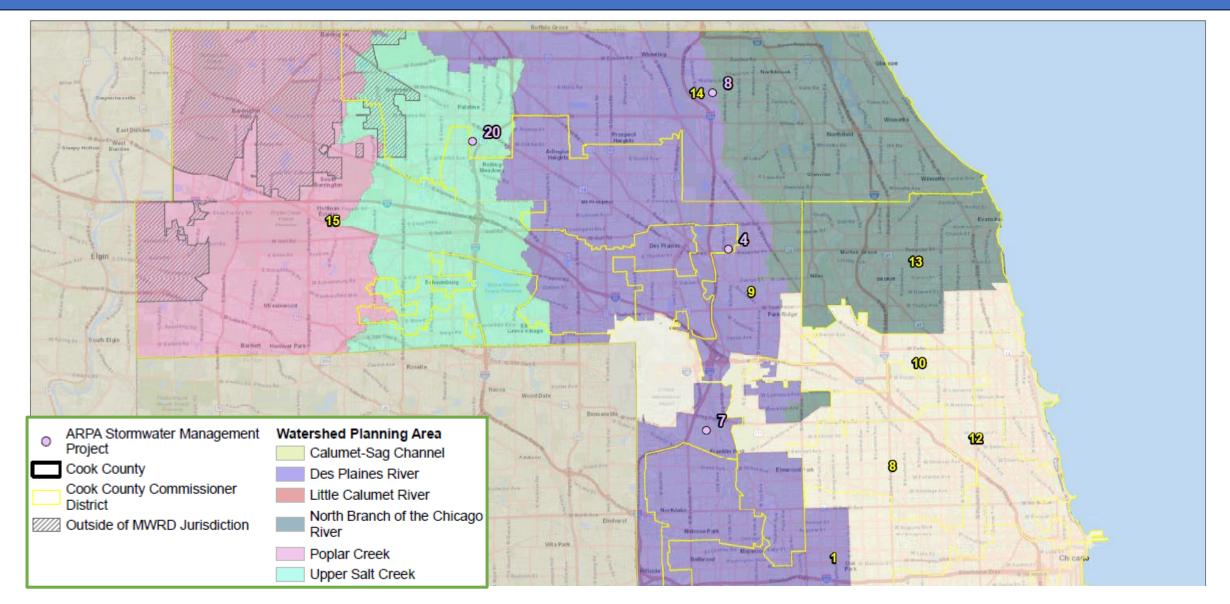
- Leverages \$20M of ARPA funding
- 16 Construction projects
- 4 Phase II (Design Engineering) projects
- 4 Phase I (Preliminary Engineering) projects
- 2 Feasibility/Planning Studies
- Project phase diversity has cost and schedule benefits (doesn't overload any one part of the vendor/supplier pool)
- 6 projects worth \$5,750,000 in Unincorporated areas
- Capacity building opportunities in partnering communities



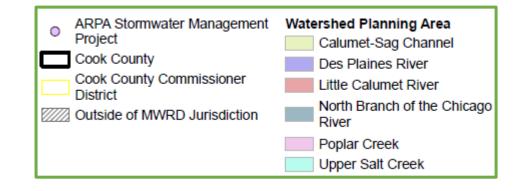
Program Implementation

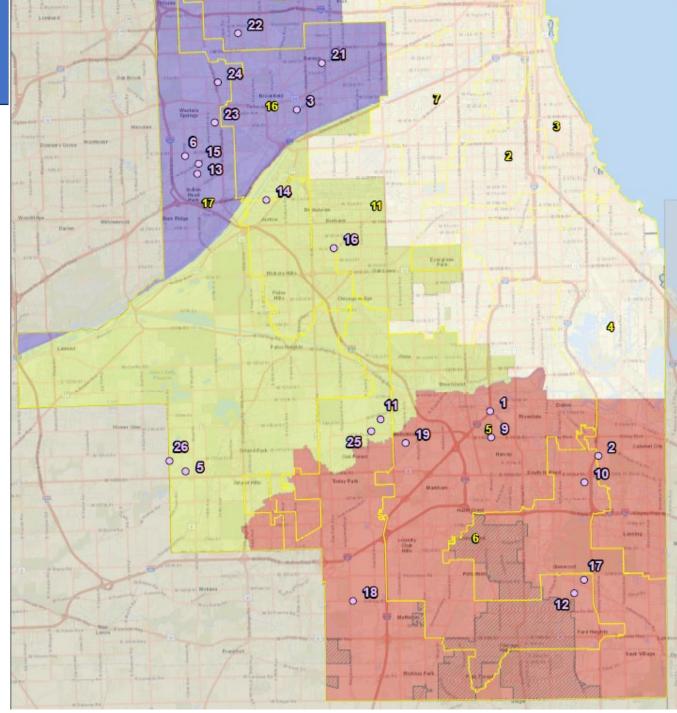
Implementation Agency	Number of Projects	Funding Amount
MWRD	16	\$16,050,000
Municipalities	8	\$2,375,000
Cook County DoTH	2	\$350,000
Total	26	\$18,775,000

ARPA Stormwater Investments- Northern Cook



ARPA Stormwater Investments - Southern Cook





ARPA Subrecipients

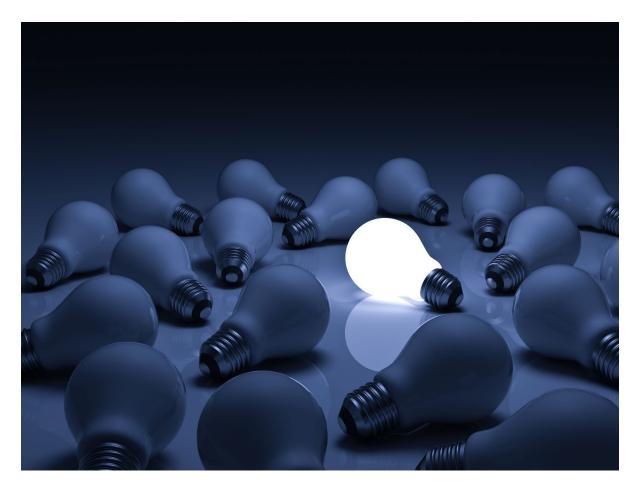
Project					
Number	Subrecipient	Project Name	Location	Phase	Value
1	MWRD	Northeast Dixmoor Stormwater Projects	Village of Dixmoor	Feasibility/Planning Study	\$100,000
2	MWRD	Dolton Flood Mitigation	Village of Dolton, between 154th Street and 158th Street, Clyde Avenue to the east and Greenwood Avenue on west	Preliminary Engineering	\$300,000
3	MWRD	Lyons and McCook Levee Improvements	Villages of Forest View, Lyons, and McCook	Construction	\$1,000,000
4	MWRD	Flood Control Projects on Prairie Creek	Unincorporated Maine Township; City of Park Ridge	Construction	\$1,500,000
5	MWRD	157th Street and Spring Creek Flood Mitigation	Orland Township Road District (Unincorporated Cook County)	Preliminary Engineering	\$150,000
6	MWRD	Flood Mitigation in the 5500 Block of South Wolf Road	Unincorporated Lyons Township	Construction	\$500,000
7	MWRD	Schiller Park Drainage Improvements	Village of Schiller Park, southwest of intersection of Irving Park Road and Des Plaines River Road	Construction	\$500,000
8	MWRD	Northfield Township/Citation Lake Project	Unincorporated Northfield Township, Pleasant St to the N, Western Ave to the W, Highland Ave to the E and Techny Rd to the S	Construction	\$1,500,000
9	MWRD	147th Street and Wood Street Area Flooding	City of Harvey	Construction	\$1,500,000

ARPA Subrecipients

Project					
Number	Subrecipient	Project Name	Location	Phase	Value
10	MWRD	Thorn Ditch Flood Mitigation Project	Village of South Holland, between Cottage Grove Avenue and Dan Ryan Expressway	Construction	\$1,500,000
11	MWRD	Flood Control on Calumet-Sag Tributary C	Villages of Crestwood and Midlothian; Unincorporated Bremen Township	Construction	\$1,500,000
12	MWRD	Southeast Cook County Stormwater Storage and Open-Space Recreational Improvement	Village of Glenwood; Unincorporated Bloom Township	Preliminary Study	\$750,000
13	MWRD	Local Stormwater Improvements in LaGrange Highlands Area	Lyons Township (Unincorporated Cook County) – La Grange Highlands Area	Construction	\$1,000,000
14	MWRD	71st Street Ditch Area Flood Mitigation	Village of Bedford Park	Construction	\$1,250,000
15	MWRD	Voluntary Flood-Prone Property Buyouts and Stormwater Storage in Non-Floodplain Areas	Cook County, multiple locations	Construction	\$2,000,000
16	MWRD	Melvina Ditch Reservoir Flood Mitigation Enhancements	Villages of Burbank and Oak Lawn	Construction	\$1,000,000
17	Village of Glenwood	Upgrade outfall sewer to creek in Forest Preserve from Brookwood Point Subdivision.	Village of Glenwood	Design Engineering	\$75,000
18	Village of Matteson	Vollmer Road at Red Barn Drive Flood Mitigation	Village of Matteson, Vollmer Road at Red Barn Drive - east of Ridgeland Avenue	Design Engineering	\$200,000

ARPA Subrecipients

Project					
Number	Subrecipient	Project Name	Location	Phase	Value
19	Village of Midlothian	Belly Button Hill Neighborhood Detention and Conveyance Improvements	Village of Midlothian	Design Engineering	\$300,000
20	Village of Rolling Meadows	Northwest Industrial Area Drainage Improvements, Phases 2A and 2B	Village of Rolling Meadows	Design Engineering	\$175,000
21	City of Berwyn	Residential Sewer Backup Prevention Program	City of Berwyn	Construction	\$500,000
22	Village of Broadview	Flood Control Assistance Program	Village of Broadview	Construction	\$500,000
23	Village of La Grange	Residential Sewer Backup Prevention Program	Village of La Grange	Construction	\$325,000
24	Village of La Grange Park	Sewer Backup Prevention Program	Village of La Grange Park	Construction	\$300,000
25	Cook County DoTH	Linder Avenue Flooding	Unincorporated Bremen Township, north of 147th Street	Planning	\$100,000
26	Cook County DoTH	Will-Cook Road Flood Mitigation	Village of Orland Park, north of Oak Hills Drive	Preliminary Engineering	\$250,000





Adam James, P.E., CFM Drainage and Utilities Manager Cook County Department of Transportation and Highways adam.james@cookcountyil.gov 312-603-7283

