TABLE OF CONTENTS

BACKGROUND AND HISTORY  3
2022 YEAR IN REVIEW  4
2022 COMPLETED PROJECTS  7

MWRD STORMWATER MANAGEMENT PROGRAM OVERVIEW  13

PHASE I – REGION-WIDE STREAMBANK AND FLOOD CONTROL PROJECTS

PHASE II – LOCALIZED STORMWATER MANAGEMENT
Localized Flooding Call for Projects

FLOOD-PRONE PROPERTY ACQUISITION
Stormwater Master Plan Pilot Studies

GREEN INFRASTRUCTURE

SPACE TO GROW

STORMWATER MAINTENANCE AND OPERATION  36
WATERSHED MANAGEMENT ORDINANCE  37
PARTNERSHIPS AND PUBLIC OUTREACH  40
2022 STORMWATER MANAGEMENT PRESS RELEASES  42
2022 STORMWATER MANAGEMENT COMMITTED EXPENDITURES  43
BACKGROUND AND HISTORY

For years, stormwater management in Cook County was a patchwork of efforts by local, regional, state and federal agencies. The Illinois General Assembly enacted Public Act 93-1049 in November of 2004, 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).

The Act required the MWRD to develop the Cook County Stormwater Management Plan. The Cook County Stormwater Management Plan provides the framework for the stormwater management program, including its mission, goals, and program elements. The MWRD’s Board of Commissioners (Board) adopted the plan in February 2007. Adoption of the plan and the implementation of the MWRD’s countywide stormwater management program afford Cook County the means to address a range of stormwater management issues through proper watershed regulations and watershed planning.

Under this plan, the MWRD has established Watershed Planning Councils and completed Detailed Watershed Plans for all six major watersheds in Cook County, initiated a Stormwater Management Capital Improvement Program, initiated a Small Streams Maintenance Program (SSMP), and adopted and implemented the Watershed Management Ordinance (WMO). The six major watersheds are Calumet-Saganashkee Channel (Cal-Sag Channel), Little Calumet River (Little Calumet), Lower Des Plaines River (Lower Des Plaines), North Branch of the Chicago River (North Branch), Poplar Creek, and Upper Salt Creek.

The program expanded significantly in 2014. The Cook County Stormwater Management Plan was amended in July 2014 to be consistent with P.A. 98-0652, which grants the MWRD authority to allow for acquisition of flood-prone properties and to plan, implement, and finance local stormwater management projects. The MWRD entered into a Consent Decree with the United States Environmental Protection Agency (EPA) in January 2014, establishing the Green Infrastructure Program. Additionally, the Infiltration/Inflow Control Program was incorporated into the WMO in 2014.

Through a variety of engineered solutions, both green and gray, and flood-prone property acquisitions, the MWRD’s Stormwater Management Program addresses both regional and local flooding problems throughout Cook County. The MWRD has made significant investments in developing over 180 capital stormwater projects since it assumed the authority for stormwater management in 2004. These projects, which range in both size and scope, provide flood protection for thousands of homes, businesses, and critical infrastructure.

FOR MORE INFORMATION VISIT Metropolitan Water Reclamation District of Greater Chicago

▲ Red-winged Blackbird
2022 YEAR IN REVIEW

As MWRD continued to advance its mission and goals to alleviate the impact of flooding and erosion, its Stormwater Management Program has also been aligned with the new organization-wide Strategic Plan released in June 2022. Under this new Strategic Plan, goals and objectives have been established to ensure our approach to mitigate flooding across Cook County is done through a proactive and equitable approach for stormwater management, including implementation of gray and green infrastructure, enforcement of the WMO, and acquisition of flood-prone property. In 2022, projects under construction in partnership with municipalities included large scale flood control and streambank stabilization projects (i.e., Addison Creek Reservoir and Melvina Ditch Streambank Stabilization); Green Alley projects in numerous communities; and new stormwater storage and conveyance systems throughout Cook County. Further details concerning these items and other stormwater management activities are provided in this Annual Report.

2022 Accomplishments for the Stormwater Management Program include the following:

- Thirty-five stormwater management and green infrastructure (GI) projects were completed, including four new Space to Grow projects in the City of Chicago.
- Removed 19,000 cubic yards of debris from small streams and rivers in Cook County, to prevent flooding under the Small Streams Maintenance Program.
- Developed a Volumetric Approach to Stormwater Planning to serve as a long-term vision plan that is flexible, dynamic, and compatible with local communities’ timeline and strategies for addressing flooding problems.
- Advanced negotiations for a strategic partnership with the Chicago Park District for the planning, prioritization, design, and oversight of GI projects. Through regular coordination with the Forest Preserve District of Cook County and City of Chicago, the framework for future strategic partnerships with those agencies is also being developed.
- Called for GI, local stormwater, and flood-prone property acquisition projects, resulting in a large submission of potential partnership projects. In December 2022, a report to the MWRD Board identified 10 initial projects to recommend for advancing through partnerships based on the anticipated funding available in 2023, and an additional 13 applicant projects as suitable for future GI program partnerships, depending on budget and schedule considerations.
- Also in December 2022, the MWRD Board granted authority to negotiate and enter into intergovernmental agreements (IGAs) with the initial 10 GI projects to advance them to construction in 2023.
- Provided guidance to satellite entities to help them achieve compliance with the Infiltration/Inflow Control Program.
- Under the Forging Resilient Communities program, which receives funding from the EPA grants, MWRD is awarding contracts for inspection of local sanitary sewers in Disproportionately Impacted Community areas to facilitate removal of infiltration and inflow.

U.S. Senators Tammy Duckworth and Dick Durbin announce collaboration with MWRD and the City of Harvey on flood mitigation and improving water quality.
Worker inspects Thorn Creek connection tunnel.
## 2022 COMPLETED PROJECTS

### Flood Control Project
**For the West Fork of the North Branch of the Chicago River**
- **Contract:** 16-IGA-18
- **Watershed:** North Branch
- **Location:** Glenview, IL
- **Description:** Constructed 2.2 acre-feet of underground storage, pump station, and a new storm sewer.
- **Estimated Construction Cost:** $9,600,000
- **Status:** Construction completed.

### Stormwater Storage Areas in Niles
- **Contract:** 18-IGA-31
- **Watershed:** Lower Des Plaines
- **Location:** Niles, IL
- **Description:** Constructed a new storm sewer and surface and underground stormwater storage areas near Greenwood Avenue to provide flood relief to nearby residential and commercial properties.
- **Estimated Construction Cost:** $11,089,452
- **MWRD Contribution:** $2,000,000
- **Status:** Construction substantially completed.

### Expansion of Existing Detention Basin in Orland Park
- **Contract:** 18-IGA-33
- **Watershed:** Cal-Sag Channel
- **Location:** Orland Park, IL
- **Description:** Expansion of the Grasslands Regional Detention Basin in Orland Park. This will provide upstream storage and flood protection for the Grasslands Subdivision by reducing flooding for an estimated 30 structures.
- **Estimated Construction Cost:** $600,000
- **MWRD Contribution:** $558,000
- **Status:** Construction completed.

### Stormwater Storage Areas in Summit
- **Contract:** 21-IGA-15
- **Watershed:** Cal-Sag Channel
- **Location:** Summit, IL
- **Description:** Replaced two alleys with permeable pavement.
- **Estimated Construction Cost:** $540,000
- **MWRD Contribution:** $350,000
- **Status:** Construction completed.

### Lemoyne Parkway Relief Sewer
- **Contract:** 20-IGA-34
- **Watershed:** Lower Des Plaines
- **Location:** Oak Park, IL
- **Description:** Installed new relief sewers to alleviate flooding resulting from moderate to large rain events.
- **Estimated Construction Cost:** $1,610,000
- **Status:** Construction completed.

### Demolition for the Addison Creek Channel Improvements
- **Contract:** 11-187-AF
- **Watershed:** Lower Des Plaines
- **Location:** Northlake, Melrose Park, Stone Park, Bellwood, IL

---

Niles Greenwood Stormwater Park during (L) and after (R) construction.
<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Construction</th>
<th>Cost</th>
<th>MWRD Contribution</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of 13 mobile homes and 16 residential properties. Work was in conjunction with the Addison Creek Channel Improvement Project 11-187-3F.</td>
<td></td>
<td></td>
<td></td>
<td>Construction completed.</td>
</tr>
<tr>
<td>Estimated Construction Cost: $750,601</td>
<td></td>
<td>$227,847</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STREAMBANK STABILIZATION ON MELVINA DITCH</strong></td>
<td><strong>SCUTH’S GROVE GREEN INFRASTRUCTURE PARKING LOT RETROFIT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contract:</strong> 13-248-5F</td>
<td><strong>Contract:</strong> 20-IGA-10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Watershed:</strong> Cal-Sag Channel</td>
<td><strong>Watershed:</strong> Lower Des Plaines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Chicago Ridge and Oak Lawn, IL</td>
<td><strong>Location:</strong> Unincorporated Proviso Township, IL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Description:</strong> Stabilized Melvina Ditch between 95th and 99th Streets through the use of a twin box culvert, riprap, and pre-cast modular block wall.</td>
<td><strong>Description:</strong> Construction of an entire parking lot with porous unit paving and retrofit approximately 2,000 square feet of bioretention into the four parking lot islands.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Construction Cost: $11,969,548</td>
<td>Estimated Construction Cost:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PERMEABLE PAVER PARKING LOT IN CHICAGO RIDGE</strong></td>
<td><strong>Cost:</strong> $615,807</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contract:</strong> 20-IGA-07</td>
<td><strong>Status:</strong> Construction completed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Watershed:</strong> Cal-Sag Channel</td>
<td><strong>PARK RIDGE PUBLIC LIBRARY PERMEABLE PARKING LOT PROJECT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Chicago Ridge, IL</td>
<td><strong>Contract:</strong> 19-IGA-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Description:</strong> Construction of a permeable parking lot at the Village’s police station.</td>
<td><strong>Watershed:</strong> Lower Des Plaines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Park Ridge, IL</td>
<td><strong>Description:</strong> Construction of a permeable paver parking lot and rain gardens in the parking lot islands.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated Construction Cost: $1,263,511</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Status:</strong> Construction completed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DRAINAGE IMPROVEMENTS AT EVANS ROAD AND DOUGLAS AVENUE IN FLOSSMOOR</strong></td>
<td><strong>STORMWATER TREATMENT TRAIN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contract:</strong> 20-IGA-36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Watershed:</strong> Little Calumet</td>
<td><strong>Contract:</strong> 21-IGA-05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Flossmoor, IL</td>
<td><strong>Watershed:</strong> Lower Des Plaines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Description:</strong> Construction of new storm sewers and upsizing existing storm sewers at Evans Road and new storm sewers at Douglas Avenue to improve stormwater drainage and conveyance.</td>
<td><strong>Location:</strong> Elmwood Park, IL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Construction Cost:</strong> $816,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MWRD Contribution:</strong> $754,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Status:</strong> Construction completed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Schuth’s Grove parking lot is transformed with permeable pavers and bioswales, retaining stormwater instead of adding more run off to sewers.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BERRY LANE STORMWATER IMPROVEMENTS IN FLOSSMOOR
Contract: 21-IGA-07
Watershed: Little Calumet
Location: Flossmoor, IL
Description: Installation of permeable pavers along Berry Lane, from Sunset Avenue to Bob O Link Road.
Construction Cost: $1,214,334
MWRD Contribution: $208,000
Status: Construction substantially completed.

PERMEABLE PAVER INTERSECTION RECONSTRUCTION
Contract: 21-IGA-14
Watershed: Lower Des Plaines
Location: La Grange Park, IL
Description: Replacement of pavement in three intersections with permeable pavers.
Estimated Construction Cost: $481,335
Status: Construction completed.

GREEN ALLEY IMPROVEMENTS PROJECT
Contract: 19-IGA-14
Watershed: Combined Sewer/Sanitary and Ship Canal Area
Location: Oak Park, IL
Description: Replacement of four alleys with permeable pavement.
Estimated Construction Cost: $1,254,280
Status: Construction completed.

GREEN ALLEY PROGRAM
Contract: 20-IGA-18
Watershed: North Branch
Location: Skokie, IL
Description: Replacement of three alleys with permeable pavement.
Estimated Construction Cost: $750,911
Status: Construction completed.

WEST BELLWOOD PARKWAY BIORETENTION PROJECT
Contract: 21-IGA-01
Watershed: Lower Des Plaines

Location: Bellwood, IL
Description: Construction of 11 bioretention facilities within the parkways of village streets.
Estimated Construction Cost: $508,378
Status: Construction completed.

RIVER TRAILS MIDDLE SCHOOL GREEN INFRASTRUCTURE IMPROVEMENTS
Contract: 22-IGA-07
Watershed: Lower Des Plaines
Location: Mount Prospect, IL
Description: Construction of over 1,000 square yards of rain gardens within the parkways of village streets.
Estimated Construction Cost: $1,653,997
Status: Construction completed.

PROKSA PARK GREEN INFRASTRUCTURE IMPROVEMENTS
Contract: 20-IGA-02
Watershed: Combined Sewer/Sanitary and Ship Canal Area
Location: Berwyn, IL
Description: Construction of two bioretention areas within Proksa Park.
Estimated Construction Cost: $149,800
Status: Construction completed.

CITY HALL PARKING LOT PAVING IMPROVEMENT
Contract: 21-IGA-03
Watershed: Cal-Sag Channel
Location: Burbank, IL
Description: Construction of a permeable parking lot at the Burbank City Hall Parking Lot.
Estimated Construction Cost: $365,368
Status: Construction completed.

POSSUM HOLLOW WOODS GREEN INFRASTRUCTURE PARKING LOT RETROFIT
Contract: 21-IGA-10
Watershed: Lower Des Plaines
Location: Unincorporated Proviso Township, IL
Description: Reconstruction of a parking lot using permeable pavers and restoring a portion of the existing asphalt parking lot to natural open space.
Estimated Construction Cost: $964,861
Status: Construction completed.

PACIFIC AVENUE INDUSTRIAL CORRIDOR GREEN INFRASTRUCTURE
Contract: 21-IGA-11
Watershed: Lower Des Plaines
Location: Franklin Park, IL
Description: Construction of over 1,000 square yards of rain gardens within the parkways of village streets.
Estimated Construction Cost: $964,861
Status: Construction completed.
six village street intersections with Pacific Avenue.

**GREEN INFRASTRUCTURE ALLEY IMPROVEMENTS**

**Contract:** 22-IGA-05  
**Watershed:** Lower Des Plaines  
**Location:** Maywood, IL  
**Description:** Replacement of two alleys with permeable pavement.  
**Estimated Construction Cost:** $738,634  
**Status:** Construction completed.

**GREEN ALLEYS PROJECT**

**Contract:** 22-IGA-01  
**Watershed:** Combined Sewer/ Sanitary and Ship Canal Area  
**Location:** Calumet City, IL  
**Description:** Replacement of three alleys with permeable pavement.  
**Estimated Construction Cost:** $583,200  
**Status:** Construction completed.

**GREEN PARKING LOT IMPROVEMENTS**

**Contract:** 22-IGA-02  
**Watershed:** Lower Des Plaines  
**Location:** Countryside, IL  
**Description:** Reconstruction of two parking lots at Countryside Park using permeable pavers.  
**Estimated Construction Cost:** $599,233  
**Status:** Construction completed.

**PERVIOUS CONCRETE ALLEY IMPROVEMENT PROJECT**

**Contract:** 22-IGA-03  
**Watershed:** Lower Des Plaines  
**Location:** Des Plaines, IL  
**Description:** Replacement of five alleys with permeable pavement.  
**Estimated Construction Cost:** $1,998,133  
**Status:** Construction completed.

**DETENTION BASIN NATURALIZATION**

**Contract:** 22-IGA-06  
**Watershed:** Cal-Sag Channel  
**Location:** Oak Lawn, IL  
**Description:** Converted one existing grass-bottom detention basin into one that contains native plantings; project will also include monitoring of the naturalized detention basin and a control basin for evaluation of stormwater benefits.  
**Estimated Construction Cost:** $91,800  
**Status:** Construction completed and monitoring to begin once plants have established.

**133RD STREET DRAINAGE IMPROVEMENTS PROJECT**

**Contract:** 20-IGA-33  
**Watershed:** Cal-Sag Channel  
**Location:** Orland Park, IL  
**Description:** Drainage improvements to convey runoff from right-of-way via system upsizing.  
**Estimated Construction Cost:** $130,079  
**MWRD Contribution:** $98,120  
**Status:** Construction completed.

**WILLOW SPRINGS FLOOD-PRONE PROPERTY ACQUISITIONS**

**Contract:** 20-IGA-26  
**Watershed:** Lower Des Plaines  
**Location:** Willow Springs, IL  
**Description:** Purchase one flood-prone home.  
**Estimated Construction Cost:** $465,000  
**Status:** Drafting IGA.

**PROSPECT HEIGHTS FLOOD-PRONE PROPERTY ACQUISITIONS**

**Contract:** 20-IGA-28  
**Watershed:** Lower Des Plaines  
**Location:** Prospect Heights, IL  
**Description:** Purchase one flood-prone home.  
**Estimated Construction Cost:** $375,000  
**MWRD Contribution:** $345,600  
**Status:** Completed. City-lead demolition scheduled for Spring 2023.
Ice Dance Sedge is one of the deep-rooted native plants at the Oak Park Rain Garden.
MWRD STORMWATER MANAGEMENT PROGRAM OVERVIEW

PHASE I – REGION-WIDE STREAMBANK AND FLOOD CONTROL PROJECTS

One of the initial goals of the Stormwater Management Program is to develop detailed watershed plans for each of the six watersheds in Cook County. The detailed watershed plans identify and prioritize regional stormwater projects based on a benefit to cost ratio. Projects are identified into two categories.

1). Streambank stabilization projects address critical active streambank erosion threatening public safety, structures, and/or infrastructure.

2). Flood control projects address regional overbank flooding through traditional measures such as stormwater detention reservoirs, levees, and conveyance improvements. MWRD Board has approved over 30 regional projects moving forward to design and construction.

STREAMBANK STABILIZATION PROJECTS (PHASE I – REGIONAL)

The following is a detailed list of ongoing streambank stabilization projects. For projects completed in 2022, refer to page 6. Locations of both ongoing and completed streambank stabilization projects can be found on page 12.

STREAMBANK STABILIZATION ALONG TINLEY CREEK

Contract: 19-IGA-22
Watershed: Cal-Sag Channel
Location: Orland Park, IL
Description: Cost sharing agreement with the Village of Orland Park. Project will stabilize approximately 2,200 linear feet of Tinley Creek between 86th Avenue and Crystal Creek Drive and 2,800 linear feet between 151st Street and Oriole Court.
Estimated Construction Cost: $3,800,000
Status: IGA between the Village and MWRD has been executed. The Village is finalizing design, easement acquisitions have started, and construction is expected to begin in 2023.

STREAMBANK STABILIZATION ON MELVINA DITCH

Contract: 13-248-5F
Watershed: Cal-Sag Channel
Location: Chicago Ridge and Oak Lawn, IL
Description: Stabilize Melvina Ditch between 95th and 99th Streets, using a twin box culvert, riprap, and pre-cast modular block wall.
Estimated Construction Cost: $3,806,000
Status: Project under construction.
STORMWATER MANAGEMENT OVERVIEW

FLOOD CONTROL PROJECTS (PHASE I - REGIONAL)

The following is a detailed list of ongoing flood control projects. For projects completed in 2022, refer to page 6. Locations of both ongoing and completed flood control projects can be found on page 12.

---

**ADDISON CREEK RESERVOIR**

*Contract:* 11-186-3F  
*Watershed:* Lower Des Plaines  
*Location:* Bellwood, IL  
*Description:* Creates an approximately 600-acre-foot flood control reservoir in Bellwood just north of Washington Boulevard and east of Addison Creek. Includes reservoir excavation and installation of necessary appurtenances for operation of the facility, such as control structure, inlet structure, spillway, piping, and a pumping station.  
*Estimated Construction Cost:* $81,291,388  
*Status:* Project under construction. Scheduled to be completed Summer 2023.

---

**ADDISON CREEK CHANNEL IMPROVEMENTS**

*Contract:* 11-187-3F  
*Watershed:* Lower Des Plaines  
*Location:* Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview, IL  
*Description:* Improves channel conveyance through channel improvements from Northlake to Broadview that include open channel, soldier piles wall, articulated concrete blocks, gabions, and channel clearing. Removal of three bridges along Harrison Street at 30th, 31st, and 32nd Avenues.  
*Estimated Construction Cost:* $81,291,388  
*Status:* Project under construction. Scheduled to be completed Summer 2023.

---

**FLOOD CONTROL PROJECT ON FARMERS AND PRAIRIE CREEKS**

*Contract:* 12-056-5F  
*Watershed:* Lower Des Plaines  
*Location:* Park Ridge and Maine Township, IL  
*Description:* Provides flood storage and conveyance improvements along Farmers and Prairie Creeks, including channel modifications and detention expansion, diversion sewer construction, and streambank stabilization.  
*Estimated Construction Cost:* $14,100,000  
*Status:* Modifying final design. IGA with Maine Township finalized, IGA with Park Ridge being negotiated. Acquiring permits. Construction anticipated to begin in 2024.

---

**LYONS LEVEE FLOOD CONTROL IMPROVEMENTS**

*Contract:* 13-199-3F  
*Watershed:* Lower Des Plaines  
*Location:* Lyons, IL  
*Description:* Restoration and improvement of the levee to a condition that will elevate the levee to modern design standards, provide flood protection, and prevent overtopping by events up to a 100-year design flood.  
*Estimated Construction Cost:* $3,500,000  
*Status:* Phase I completed. Easement acquisition for Phase II underway.

---

**LEVEE ALONG THORN CREEK AT ARQUILLA PARK**

*Contract:* 15-IGA-14  
*Watershed:* Little Calumet  
*Location:* Glenwood, IL  
*Description:* A cost-sharing agreement with the Village of Glenwood to provide a levee at Arquilla Park to protect residential structures from overbank flooding.  
*Estimated Construction Cost:* $5,770,000  
*MWRD Contribution:* $3,870,000  
*Status:* Currently under design. Construction currently scheduled for 2023.

---

Installing new culvert pipes in Robbins, Ill., is part of a larger stormwater project that will address flooding and be a potential catalyst for economic and social growth.
PHASE II – LOCALIZED STORMWATER MANAGEMENT

In 2014, the State Legislature expanded the authorities of MWRD’s stormwater management legislation to address local drainage and flooding problems, and to acquire flood-prone property from property owners on a voluntary basis. These legislative changes form the basis of MWRD’s Phase II Stormwater Management Program. MWRD is also conducting Stormwater Master Plan studies to address flooding by identifying potential projects within publicly and privately owned property.

LOCALIZED FLOODING CALL FOR PROJECTS

MWRD initiated a Phase II Call for Projects to directly support municipalities with stormwater management. The program assists municipalities throughout Cook County in identifying, funding, and building projects that address localized flooding and drainage concerns. These projects utilize a variety of traditional engineered solutions such as localized detention, upsizing critical storm sewers and culverts, pumping stations, and establishing drainage ways, alongside green infrastructure (GI).

Projects are prioritized on their ability to reduce localized flooding and the number of structures benefitted by the project amongst other criteria. Projects are identified as either Shovel Ready Projects with a near finalized design, or Conceptual Projects where flooding has been identified but no engineering analysis has been performed. Selected Shovel Ready Projects will enter into a cost-share agreement to build the project. MWRD assists Conceptual Projects with identifying flood control alternatives through a preliminary engineering study.

MWRD and the partnering agency execute an IGA to facilitate the project, with long term maintenance responsibilities assigned to the partnering agency. Design and/or construction of each installation is monitored by MWRD. After completion, MWRD inspects the project installation, ensuring maintenance is in line with the project’s operation and maintenance plan.

Based on the initial Phase II outreach by MWRD starting in September 2013, dozens of projects were initially approved by the MWRD’s Board. The approved projects that resulted from the initial outreach and subsequent Call for Projects are distributed across Cook County and include GI improvements, localized detention, upsizing critical storm sewers/culverts, pump stations, and establishing drainage ways.

In 2020, the Phase II Program became the Local Stormwater Partnership Program to better reflect the fact that the resulting projects are a partnership between MWRD and government agencies. Since 2013, 70 projects have been selected. In late 2022, the MWRD announced the latest round of Local Stormwater Partnership Program applications. It is anticipated selection for this round will be finalized in Spring 2023.
LOCALIZED FLOODING PROJECTS (PHASE II)

The following is a detailed list of ongoing localized flooding projects. For 2022 completed projects, refer to page 6. Locations of both ongoing and completed localized flooding projects can be found on page 16.

FLOOD CONTROL PROJECT ON CENTRAL ROAD FROM DES PLAINES RIVER TO GREENWOOD ROAD
Contract: 14-065-5F
Watershed: Lower Des Plaines
Location: Maine and Northfield Townships, IL
Description: Installation of additional flood storage through a new stormwater detention facility and improving conveyance of stormwater through the construction of a main line storm sewer in Central Road, and lateral sewers feeding the main line sewer. The project will reduce flood damages for over 114 structures.
Estimated Construction Cost: $20,000,000
Status: Final design underway.

FLOOD CONTROL PROJECT ON 1ST AVENUE FROM ROOSEVELT ROAD TO CERMAK ROAD
Contract: 14-111-5F
Watershed: Lower Des Plaines
Location: Proviso Township, IL
Description: The construction of approximately 13,000 linear feet of storm sewer along 1st Avenue and the 1st Avenue Cutoff, a new sewer outfall structure at the Des Plaines River, and bioswales behind the east side of 1st Avenue within the Forest Preserve District of Cook County.
Estimated Construction Cost: $20,000,000
Status: Final design underway.

THE ACACIA ACRES FLOOD RELIEF PROJECT IN LYONS TOWNSHIP
Contract: 22-IGA-08
Watershed: Lower Des Plaines
Location: Lyons Township, IL
Description: A new storm water detention facility along with conveyance improvements that will reduce flooding impacts to residential structures as well as several roadways in unincorporated Lyons Township.
Estimated Construction Cost: $1,171,500
Status: Property acquisition for the detention facility is complete. Final design underway.

FLOOD CONTROL ON MIDLOTHIAN CREEK
Contract: 14-253-5F /17-IGA-02
Watershed: Little Calumet
Location: Robbins, IL
Description: Creation of a naturalized wetland detention area along with channel improvements to resemble a park setting. The project will reduce flood damages for over 92 structures. The actual MWRD cost share will be determined based upon funding being sought from various local and regional agencies as well as grants.
Estimated Construction Cost: $11,000,000
Status: Working on final design of Phase II. Phase I construction ongoing with an expected completion date in November 2023.

FLOOD CONTROL IN WORTHWOODS SUBDIVISION
Contract: 14-256-5F
Watershed: Cal-Sag Channel
Location: Worth, IL
Description: Construction of a swale and new storm sewers in the vicinity of 112th Place and Beloit Avenue, with an outlet to Lucas-Berg Quarry in the Village of Worth. The Village will be responsible for ownership and maintenance of the improvements.
Estimated Construction Cost: $3,500,000
Status: Working on final design, estimated to go out to bid in Fall 2023.

FLOOD CONTROL IN THE VICINITY OF 135TH STREET AND CENTRAL AVENUE
Contract: 14-258-5F
Watershed: Cal-Sag Channel
Location: Crestwood, IL
Description: Installation of a new storm sewer along 135th Street and existing storage and conveyance improvements at a detention basin on the Nathan Hale School property and Crestwood Drainage Ditch.
Estimated Construction Cost: $7,700,000
Status: Construction to complete in Fall 2023.

FLOOD CONTROL IN THE VICINITY OF 131ST STREET AND CYPRESS DRIVE
Contract: 14-259-5F /17-IGA-04
Watershed: Cal-Sag Channel
Location: Palos Heights, IL

LOCALIZED STORMWATER MANAGEMENT 18
Description: This project involves the acquisition and demolition of one structure and the installation of a swale and a new downstream storm sewer and outfall to Navajo Creek.

Estimated Construction Cost: $250,000

Status: Final design.

FLOOD CONTROL FOR THE WASHINGTON STREET AREA

Contract: 21-IGA-28
Watershed: Cal-Sag Channel
Location: Blue Island, IL

Description: Stormwater storage and conveyance improvements to address flooding of approximately 45 structures. The actual MWRD cost share will be determined based upon funding being sought from various local and regional agencies as well as grants.

Estimated Construction Cost: $5,700,000

Status: Project under construction.

MELVINA DITCH RESERVOIR IMPROVEMENTS

Contract: 14-263-3F
Watershed: Cal-Sag Channel
Location: Burbank, IL

Description: Expands the existing Melvina Ditch Reservoir by up to 195 acre-feet to increase its storage capacity (up to a 118 percent increase), modifying the pumping station to accommodate the reservoir expansion, and installing a new emergency overflow weir to reduce the likelihood of reservoir overtopping.

Estimated Construction Cost: $14,245,000

MWRD secured a $10 million Build Illinois Grant from the Illinois Environmental Protection Agency (IEPA).

Status: Project under construction.

GROVELAND AVENUE LEVEE IMPROVEMENTS

Contract: 18-IGA-20
Watershed: Lower Des Plaines
Location: Riverside, IL

Description: The Groveland Avenue levee will be improved by raising the levee with a sheet pile floodwall. A pumping station will be built to drain the land side of the levee. An adjacent street will be raised or protected by additional flood walls. The Village has entered a project partnership agreement with the Army Corps of Engineers as its local sponsor. MWRD has entered into an IGA with the Village to provide the non-federal share of the design and construction costs.

Description: Provide relief from flooding of structures in the study area stormwater storage and conveyance improvements.

Estimated Construction Cost: To be determined (TBD) by Northfield Township.

Status: Northfield Township and MWRD are working to identify additional funding needed to advance the project.

CITATION LAKE STORMWATER IMPROVEMENTS IN NORTHFIELD TOWNSHIP

Contract: 18-082-5F
Watershed: Lower Des Plaines
Location: Northfield Township, IL

Description: Provide relief from flooding of structures in the study area stormwater storage and conveyance improvements.

Estimated Construction Cost: To be determined (TBD) by Northfield Township.

Status: Northfield Township and MWRD are working to identify additional funding needed to advance the project.
Estimated Construction
Cost: $7,200,000
MWRD Contribution: $2,500,000
Status: Currently under design by the Army Corps of Engineers.

SOUTH AREA SEWER SEPARATION
Contract: 18-IGA-21
Watershed: Lower Des Plaines
Location: Forest Park, IL
Description: New storm sewers and connection to existing Des Plaines River outfall.
Estimated Construction
Cost: $2,800,000
MWRD Contribution: $1,955,206
Status: Drafting IGA.

FLOODED CONTROL PROJECT ON WILLLOW ROAD AT MCDONALD CREEK TRIBUTARY A
Contract: 20-IGA-23
Watershed: Lower Des Plaines
Location: Prospect Heights, IL
Description: Elevation of Willow Road, one foot above the 100-year flood elevation, and local roads to the 100-year flood elevation. Includes the installation of new culverts and compensatory storage areas.
Estimated Construction
Cost: $3,120,000
MWRD Contribution: TBD
Status: Finalizing IGA with City. Design is under development and analysis.

HIBBARD ROAD FOREST PRESERVE WETLAND AND DUKE CHILDS STORAGE PROJECT
Contract: 18-IGA-24
Watershed: North Branch
Location: Winnetka, IL
Description: Wetland enhancement facility on Forest Preserve District property and an underground storage and water quality facility on Duke Childs Field.
Estimated Construction
Cost: $25,903,340
MWRD Contribution: TBD
Status: Finalizing IGA with Village.

VAN BUREN AND 5TH AREA STORM RELIEF PROJECT
Contract: 20-IGA-29
Watershed: Lower Des Plaines
Location: Maywood, IL
Description: Installation of separate storm sewers in a combined sewer area.
Estimated Construction
Cost: $7,299,727
MWRD Contribution: $4,000,000
Status: Construction to begin in March 2023.

ORIOLE AVENUE FLOOD MITIGATION PROJECT
Contract: 20-IGA-30
Watershed: Lower Des Plaines
Location: Harwood Heights, IL
Description: Construction of an underground box culvert for stormwater storage.
Estimated Construction
Cost: $1,500,000
MWRD Contribution: $411,600
Status: Finalizing IGA with Village.

FLANAGIN SUBDIVISION: NORTH CREEK FLOOD RELIEF PROJECT
Contract: 20-IGA-37
Watershed: Little Calumet
Location: Lansing, IL
Description: Construction of a new culvert to prevent backflow into a subdivision.
Estimated Construction
Cost: $1,600,000
MWRD Contribution: $1,600,000
Status: Project awarded, construction to begin in Spring 2023.

DETENTION BASIN AT BUTTERFIELD CREEK IN RICHTON PARK
Contract: 20-IGA-38
Watershed: Little Calumet
Location: Richton Park, IL
Description: Construction of a regional detention basin along Governors Highway, south of the intersection of Sauk Trail, at the Butterfield Creek East Branch.
Estimated Construction
Cost: $19,595,300
MWRD Contribution: $2,000,000
Status: IGA with the Village was executed December 20, 2021. Construction to begin in Spring 2022.

FLOOD CONTROL ON CAL-SAG TRIBUTARY C
Contract: 21-IGA-18
Watershed: Cal-Sag Channel
Location: Bremen Township, Crestwood, & Midlothian, IL
Description: Installation of flood control measures for an estimated 8,000 linear feet along Cal-Sag Tributary C from Central Avenue and Maple Lane to Midlothian Turnpike and Lavergne Avenue in the Township of Bremen and Villages of Crestwood and Midlothian.
Flood control measures include the replacement of culverts, channel improvements at various locations, expansion of existing detention facilities, and construction of new detention facilities. The project will reduce flood damages for 17 structures and 5 roads.

**Estimated Construction Cost:** $3,780,000  
**Status:** Drafting IGA.

---

**CENTRAL PARK STORMWATER DETENTION BASIN AND SEPARATE STORM SEWER IMPROVEMENTS IN HARVEY**

**Contract:** 18-249-AF  
**Watershed:** Little Calumet  
**Location:** Harvey, IL  
**Description:** This project will construct a 23-acre-foot stormwater detention basin along Myrtle Avenue, between 153rd Street and 154th Street on an approximately 20-acre site of the future Central Park in the City of Harvey. New separated storm sewer will be constructed to convey stormwater to the proposed basin and allow discharge into the Wood Street storm sewer system.

**Estimated Construction Cost:** $9,660,000  
**MWRD Contribution:** $9,660,000  
**Status:** Design and negotiating IGA. Construction anticipated to begin in early 2024.
FLOOD-PRONE PROPERTY ACQUISITION

On August 7, 2014, the MWRD Board adopted a policy on the selection and prioritization of projects for acquiring flood-prone property. This program is comprised of three distinct components:

- **Local Sponsor Assistance Program**: MWRD’s top priority will be to facilitate the Illinois Emergency Management Agency’s federally funded program by assisting Local Sponsor communities in providing their share of the cost for property acquisition.

- **MWRD Initiated Program**: In communities where MWRD’s Board of Commissioners approved capital projects from MWRD’s Detailed Watershed Plans, should the cost of a property acquisition alternative be less than the capital project while providing equivalent benefits, the acquisition alternative will be pursued.

- **Local Government Application Program**: MWRD will consider applications directly from local governments requesting property acquisition of specific flood-prone structures.

Since 2017, MWRD solicited applications from municipalities and townships for assistance with the acquisition of flood-prone structures located throughout Cook County. MWRD has entered into IGAs with several municipalities and the Cook County Land Bank Authority to acquire 103 flood-prone properties to date. Upon acquisition, the structures are removed and deed restrictions are placed on the acquired properties, requiring them to remain as open spaces in perpetuity.

FLOOD-PRONE PROPERTY ACQUISITION PROJECTS

The following is a detailed list of ongoing flood-prone property acquisition projects. For 2022 completed projects, refer to page 6. Locations of both ongoing and completed flood prone property acquisition projects can be found on page 22.

---

### DES PLAINES III FLOOD-PRONE PROPERTY ACQUISITIONS

**Contract**: 20-IGA-22  
**Watershed**: Lower Des Plaines  
**Location**: Des Plaines, IL  
**Description**: Purchase 13 flood-prone homes.  
**Estimated Construction Cost**: $3,115,890  
**MWRD Contribution**: $800,000  
**Status**: Three parcels have been acquired.

### DES PLAINES IV FLOOD-PRONE PROPERTY ACQUISITIONS

**Contract**: 20-IGA-24  
**Watershed**: Lower Des Plaines  
**Location**: Des Plaines, IL  
**Description**: Purchase 19 flood-prone homes.  
**Estimated Construction Cost**: $11,500,000  
**MWRD Contribution**: $5,000,000  

### PALATINE TOWNSHIP FLOOD-PRONE PROPERTY ACQUISITIONS

**Contract**: 20-IGA-26  
**Watershed**: Lower Des Plaines  
**Location**: Palatine, IL  
**Description**: Purchase three flood-prone homes along Salt Creek.  
**Estimated Construction Cost**: $1,650,000  
**MWRD Contribution**: $1,400,000  
**Status**: Finalizing IGA.

### NORTHLAKE FLOOD-PRONE PROPERTY ACQUISITION III

**Contract**: 21-IGA-25  
**Watershed**: Lower Des Plaines  
**Location**: Northlake, IL  
**Description**: Purchase one flood-prone home.  
**Estimated Construction Cost**: $230,000  
**MWRD Contribution**: $230,000  
**Status**: Project is ongoing. Northlake is working with property owners on acquisitions.

### ACQUISITION OF FLOOD-PRONE PROPERTIES IN LYONS

**Contract**: 21-IGA-24  
**Watershed**: Lower Des Plaines  
**Location**: Lyons, IL  
**Description**: Purchase 25 residential properties along Salt Creek.  
**Estimated Construction Cost**: $5,777,581  
**MWRD Contribution**: $3,000,000  
**Status**: Project is ongoing. Lyons continues to work with property owners on acquisition.
STORMWATER MASTER PLANNING

Under Phase II of MWRD's Stormwater Management Program, initiated in 2014 to plan, implement, and finance local stormwater projects, five master plan pilot studies were performed for the Little Calumet/Cal-Sag Channel drainage areas, Northbrook, Roberts Road drainage area, Village of Harwood Heights, and the City of Chicago's 8th Ward and surrounding area. Upon completion of these studies in 2017, a standard approach using lessons learned from the pilot studies for performing additional master plans was developed. Six additional study areas were identified and prioritized in 2019: Butterfield Creek, North Creek and Deer Creek, Weller Creek and Willow Creek, South Suburbs, Chicago West and Chicago South. The scope of these studies includes analysis of existing flooding issues, development of concept level alternative solutions, and review of potential funding opportunities for implementing stormwater improvements. While these ongoing studies are expected to provide meaningful recommendations for reducing the impact of flooding issues in the identified priority study areas, MWRD realized that expanding this approach for master planning countywide could take several decades.

A New Approach

Because master plans developed through a traditional approach can have a limited shelf-life due to changing conditions such as climate, development, and community priorities, there is a narrow window of time they will remain relevant. This approach to stormwater planning can result in static solutions being developed for dynamic conditions. In order for MWRD to develop a long-term vision for master planning that is flexible and dynamic, an innovative approach has been developed to be more compatible with each community's needs and timeline for addressing their evolving stormwater issues. MWRD found that the basic principle of its WMO—to ensure volume control and/or detention is created for new development to abate the negative impacts of stormwater runoff—could serve as a useful planning tool to apply across the entire county. By adopting this WMO principle, an estimate of volume needed throughout subwatersheds and sewersheds across the county can be established and serve as the foundation of a planning tool that places each community's stormwater needs on common ground.

This Volumetric Approach will provide a set of dynamic tools that can be used to provide focus for areas where flooding is more likely and can be developed countywide in a much shorter timeframe. It includes building an online platform to allow communities and other agencies to easily access information from a Geographic Information System (GIS) database, which will also be easily adaptable to climate change and development trends to ensure it remains relevant and compatible with each community's changing priorities and timelines. Initially, this approach will allow MWRD to answer two key questions about Urban Flooding: Where is it most likely to occur, and what size is the issue? Development of this tool includes a series of countywide maps and data metrics that are being created to identify:

- where potential flood problem areas are located;
- opportunities for mitigation projects;
- priority areas for actionable next steps.

The Volumetric Approach for Stormwater Master Planning is expected to achieve more results in a shorter timeframe than traditional planning approaches. Based on the foundation of the GIS data, additional tools could be incorporated to further reduce efforts and investment in studies and planning and to be even more prepared to conceptualize and implement projects. Examples of additional data that could be incorporated to make this tool even more powerful include local storm and combined sewer conveyance information, flooding data collected by past studies, and location of planned infrastructure projects, amongst other relevant community data that align with the goals and objectives of MWRD's Stormwater Management Program.
Workers laying permeable pavers.
GREEN INFRASTRUCTURE

The Green Infrastructure Program focuses on engineered systems that capture and manage precipitation where it falls rather than it traveling through conventional stormwater systems. By addressing the increase of impervious area due to land development, GI can reduce combined sewer discharges, localized flooding and stormwater impacts in an area. GI includes natural systems which use vegetation, such as bioswales and rain gardens, to manage rainfall. GI also includes manufactured solutions such as rain barrels, permeable pavement and rainwater harvesting. Established in 2014, the Green Infrastructure Program seeks to increase the acceptance and investment of GI throughout Cook County through numerous partnerships.

GREEN INFRASTRUCTURE CALL FOR PROJECTS

MWRD introduced the Green Infrastructure Call for Projects to scale its investment into GI. The program seeks to partner with local communities and public agencies throughout Cook County to fund and build GI projects. These projects vary in size and scope and can include roadside bioswales and rain gardens, green roofs, permeable pavement alleys, green streetscapes, and eco-orchards.

The program is available to government organizations within MWRD’s corporate boundaries. Projects are prioritized on their ability to capture and store water (measured as design retention capacity), flood risk, and structures benefitted by the GI amongst other criteria. MWRD and a partnering agency execute an IGA to facilitate the project, with long term maintenance responsibilities assigned to the partnering agency. Design and construction of each installation are monitored by MWRD to optimize benefits. After completion, MWRD inspects the installation, ensuring maintenance is in line with the project’s operation and maintenance plan.

From 2017 through 2021, 83 projects were selected. The projects selected in those years that have since completed construction have provided a total of approximately 6 million gallons of design retention capacity (DRC). In June of 2022, another Call for Projects was issued. 34 applications were reviewed and 10 were selected, which will provide a combined estimated DRC of 808,100 gallons.

In 2022, MWRD worked with the Forest Preserve District of Cook County, River Trails School District 26, Berwyn Park District, the Cities of Berwyn, Burbank, Calumet City, Countryside, Des Plaines, and Park Ridge, and the villages of Bellwood, Chicago Ridge, Elmwood Park, Franklin Park, Flossmoor, La Grange Park, Maywood, Oak Lawn, Oak Park, Skokie, and Summit to complete GI projects consisting of green alleys, permeable parking lots, bioswales, and rain gardens. MWRD contributed $6,280,295 to these projects which provided a combined DRC of 2,457,918 gallons.

▲ Oak Park’s rain garden sign educates the public about the garden’s benefits.
**GREEN INFRASTRUCTURE PARTNERSHIPS CALL FOR PROJECTS**

The following is a list of Green Infrastructure Partnerships scheduled for construction in 2023. For completed projects, refer to page 6. Locations of both ongoing and completed Green Infrastructure Partnerships can be found on page 26.

<table>
<thead>
<tr>
<th>WINCHESTER AVENUE GREEN INFRASTRUCTURE PROJECT IN CALUMET PARK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract:</strong> 18-IGA-02</td>
</tr>
<tr>
<td><strong>Watershed:</strong> Cal-Sag Channel</td>
</tr>
<tr>
<td><strong>Location:</strong> Calumet Park, IL</td>
</tr>
<tr>
<td><strong>Description:</strong> Construction of a roadside bioswale and permeable pavers in the parking lane of Winchester Avenue.</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost:</strong> $1,375,000</td>
</tr>
<tr>
<td><strong>MWRD Contribution:</strong> $360,000</td>
</tr>
<tr>
<td><strong>Status:</strong> Advertisement of construction contract.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LAKE KATHERINE COMMUTER PARKING LOT IN PALOS HEIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract:</strong> 18-IGA-14</td>
</tr>
<tr>
<td><strong>Watershed:</strong> Cal-Sag Channel</td>
</tr>
<tr>
<td><strong>Location:</strong> Palos Heights, IL</td>
</tr>
<tr>
<td><strong>Description:</strong> Installation of a new permeable parking lot and bioswales at Lake Katherine Nature Center.</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost:</strong> $831,969</td>
</tr>
<tr>
<td><strong>MWRD Contribution:</strong> $184,000</td>
</tr>
<tr>
<td><strong>Status:</strong> Construction anticipated in Summer 2024.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GARFIELD PARK COMMUNITY ECO ORCHARD IN CHICAGO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract:</strong> 18-IGA-05</td>
</tr>
<tr>
<td><strong>Watershed:</strong> Combined Sewer/Sanitary and Ship Canal Area</td>
</tr>
<tr>
<td><strong>Location:</strong> Chicago, IL</td>
</tr>
<tr>
<td><strong>Description:</strong> Construction of bioswales and food forests.</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost:</strong> $900,000</td>
</tr>
<tr>
<td><strong>MWRD Contribution:</strong> $500,000</td>
</tr>
<tr>
<td><strong>Status:</strong> Partner has initiated procurement process for the construction contract.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>119TH PLACE BIOSWALE AND PERMEABLE ALLEY IN BLUE ISLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract:</strong> 20-IGA-03</td>
</tr>
<tr>
<td><strong>Watershed:</strong> Cal-Sag Channel</td>
</tr>
<tr>
<td><strong>Location:</strong> Blue Island, IL</td>
</tr>
<tr>
<td><strong>Description:</strong> Construction of a new bioretention area in a vacant, low-lying lot and a permeable alley using permeable pavers.</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost:</strong> $831,969</td>
</tr>
<tr>
<td><strong>MWRD Contribution:</strong> $250,000</td>
</tr>
<tr>
<td><strong>Status:</strong> Construction anticipated in 2023.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GREEN STREETS PROJECT IN FORD HEIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract:</strong> 19-IGA-12</td>
</tr>
<tr>
<td><strong>Watershed:</strong> Little Calumet</td>
</tr>
<tr>
<td><strong>Location:</strong> Ford Heights, IL</td>
</tr>
<tr>
<td><strong>Description:</strong> Construction of roadside bioswales located in the street rights-of-way.</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost:</strong> $356,125</td>
</tr>
<tr>
<td><strong>MWRD Contribution:</strong> $356,125</td>
</tr>
<tr>
<td><strong>Status:</strong> Construction completed in early 2023.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAIN STREET IMPROVEMENTS PROJECT IN EVANSTON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract:</strong> 21-IGA-06</td>
</tr>
<tr>
<td><strong>Watershed:</strong> North Branch</td>
</tr>
<tr>
<td><strong>Location:</strong> Evanston, IL</td>
</tr>
<tr>
<td><strong>Description:</strong> Reconstruction of the parking lanes along several blocks of Main Street using permeable pavers.</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost:</strong> $430,000</td>
</tr>
<tr>
<td><strong>MWRD Contribution:</strong> $322,500</td>
</tr>
<tr>
<td><strong>Status:</strong> Construction to begin in April 2023.</td>
</tr>
</tbody>
</table>

Before installation of green infrastructure, this residential, impervious road in LaGrange Park showed signs of water damage with a large crack down the middle. After installation of permeable pavers, the residential road allows stormwater to seep down instead of running off into the sewers, potentially causing floods. (See page 29.)
**GREEN ALLEYS WATER MANAGEMENT PROJECT 2 IN LYONS**  
**Contract:** 22-IGA-04  
**Watershed:** Lower Des Plaines  
**Location:** Lyons, IL  
**Description:** Replacing three alleys with permeable pavement.  
**Estimated Construction Cost:** $750,000  
**MWRD Contribution:** TBD  
**Status:** Advertisement of construction contract.

**GREEN INFRASTRUCTURE PARTNERSHIP SELECTIONS – 2021 CALL FOR PROJECTS**

The following is a list of agencies and associated projects selected during the 2021 Green Infrastructure Call for Projects.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Contract</th>
<th>Watershed</th>
<th>Location</th>
<th>Estimated Construction Cost</th>
<th>MWRD Contribution</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GREEN ALLEY PROJECT IN BLUE ISLAND</strong></td>
<td>23-IGA-01</td>
<td>Cal-Sag Channel</td>
<td>Blue Island, IL</td>
<td>Replacing three alleys with permeable pavement.</td>
<td>TBD</td>
<td>Design and negotiating IGA.</td>
</tr>
<tr>
<td><strong>POLICE DEPARTMENT PARKING LOT PERMEABLE PAVEMENT PROJECT IN HICKORY HILLS</strong></td>
<td>23-IGA-03</td>
<td>Cal-Sag Channel</td>
<td>Hickory Hills, IL</td>
<td>Reconstruction of a parking lot at the Hickory Hills Police Department using permeable pavers.</td>
<td>$575,000</td>
<td>Design and negotiating IGA.</td>
</tr>
<tr>
<td><strong>GREEN ALLEY PROJECT IN LINCOLNWOOD</strong></td>
<td>23-IGA-04</td>
<td>North Branch</td>
<td>Lincolnwood, IL</td>
<td>Replacing one alley with permeable pavement.</td>
<td>$190,000</td>
<td>Design and negotiating IGA.</td>
</tr>
<tr>
<td><strong>MORTON COLLEGE EXTERIOR IMPROVEMENTS IN CICERO</strong></td>
<td>23-IGA-05</td>
<td>Combined Sewer/ Sanitary and Ship Canal Area</td>
<td>Cicero, IL</td>
<td>Construction of a bioretention area as part of a larger green initiative to overhaul the campus exterior.</td>
<td>$270,000</td>
<td>Design and negotiating IGA.</td>
</tr>
<tr>
<td><strong>VILLAGE COMMONS PARKING LOTS PERMEABLE PAVER PROJECT IN NORTH RIVERSIDE</strong></td>
<td>23-IGA-06</td>
<td>Lower Des Plaines</td>
<td>North Riverside, IL</td>
<td>Reconstruction of several parking lots at North Riverside's Village Commons using permeable pavers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MILLENNIIUM PARK PERMEABLE PARKING LOT PROJECT IN NORTHLAKE
Contract: 23-IGA-07
Watershed: Lower Des Plaines
Location: Northlake, IL
Description: Reconstruction of two parking lots at Millennium Park in Northlake using permeable pavers.

GREEN ALLEY IMPROVEMENTS IN RIVER FOREST
Contract: 23-IGA-08
Watershed: Lower Des Plaines
Location: River Forest, IL
Description: Reconstruction of two alleys using permeable pavers.

GREEN ALLEY PROGRAM IN RIVER GROVE 2
Contract: 23-IGA-09
Watershed: Lower Des Plaines
Location: River Grove, IL
Description: Reconstruction of four alleys using permeable pavers.

GREEN ALLEY PROGRAM IN SUMMIT
Contract: 23-IGA-10
Watershed: Combined Sewer/Sanitary and Ship Canal Area
Location: Summit, IL
Description: Reconstruction of three alleys using permeable pavers.
Schuth’s Grove parking lot is transformed with permeable pavers and bioswales, retaining stormwater instead of adding more run off to sewers.
**SPACE TO GROW**

Space to Grow is an innovative public-private partnership with a mission of transforming Chicago schoolyards into vibrant green spaces for physical activity, outdoor learning and play. As centers of school and community life, Space to Grow schoolyards typically feature expanded and safer playground equipment, track and field areas, multi-purpose courts, turf fields, outdoor classrooms and vegetable gardens. The schoolyards also incorporate many GI design elements to reduce water pollution and neighborhood flooding. These features include permeable play surfaces, native plantings and rain gardens.

The program is co-managed by the Healthy Schools Campaign and Openlands with capital funding, leadership and expertise from MWRD, Chicago Public Schools (CPS) and the City of Chicago Department of Water Management. MWRD also provides technical support for GI elements to ensure that the new schoolyards provide optimal stormwater capture benefits.

Space to Grow schools are prioritized based on flood risk, site suitability and socioeconomic factors. Numerous community meetings were held to describe project details and benefits. MWRD and CPS executed an IGA to facilitate the projects whereby long-term maintenance responsibilities are assigned to CPS. MWRD maintains the right to inspect the GI to ensure it is being properly maintained in accordance with the operations and maintenance plan developed for each school.

Starting in 2014, MWRD has invested in 34 schools providing 6.54 million gallons of design retention capacity. The program was amended to continue through 2022, funding GI at 34 schools for a total investment of over $16 million. Construction was completed at 4 schools in 2022 and a new IGA for future projects is in negotiations.

![Coles Academy playground before (L) and after (R) green infrastructure installation.](image-url)
SPACE TO GROW PARTNERED SCHOOLS

The following is a list of Space to Grow Projects that were constructed in 2022. Locations of both ongoing and completed Space to Grow Projects can be found on page 32.

CONTRACT: 14-IGA-06 AND 15-IGA-20

Watershed: Chicago
Location: Multiple Locations
Description: MWRD, City of Chicago Department of Water Management, and the CPS are partnering to design and install playgrounds at various Chicago Elementary Schools utilizing GI. The projects will reduce flooding, reduce the load on the combined sewer system, and educate students and neighbors about GI techniques and purpose.

MWRD Max Contribution $18,000,000
Status: All 34 schools have been completed through 2022 and a new IGA for future projects is in negotiations. The following four schools were constructed in 2022:

- Robert A. Black Magnet Elementary School 9101 S. Euclid Avenue
- Edward Coles School 8441 S. Yates Boulevard
- Benjamin E. Mays Elementary Academy 6656 S. Normal Avenue
- Brian Piccolo School of Excellence 1040 N. Keeler Avenue

The existing IGA between MWRD and CPS was amended to extend the timeline for the remaining projects through 2022. MWRD invested $1 million to fund ten school designs, with the remaining school designs to be funded by CPS and the City of Chicago Department of Water Management.

SUBURBAN GREEN SCHOOLYARD PILOT PROGRAM

In 2020, MWRD conducted a feasibility study for a GI program for suburban Cook County schools. The program would be similar to the Space to Grow Program. In June 2021, a summary report and recommendations on the implementation of a suburban green schoolyard pilot program was presented to MWRD’s Board. This memo highlighted the pilot selection process and recommended the following pilot project locations: 1) the Burnham School District 154.5’s Elementary School; 2) the Des Plaines School District 62’s Forest Elementary and Algonquin Middle Schools’ shared campus; 3) the Morton High School District 201’s Morton East High School in Cicero; and 4) the Summit School District 104’s Graves Elementary and Heritage Middle Schools’ shared campus.

The Engineering Department, with assistance from Greenprint Partners, is currently developing preliminary engineering and cost estimates for green schoolyard pilot projects at the above referenced schools. Additional assistance will be provided by the Office of Public Affairs to solicit stakeholder input, and grants and other potential funding opportunities for the pilot sites will be identified through this preliminary engineering effort.

Clockwise from upper left: Coles community cheers during a student performance on their new permeable turf field; Brian Piccolo School of Excellence students play soccer on the new field installed as part of the Space to Grow green infrastructure; Three MWRD commissioners celebrate new green playground with Mays Academy students, faculty, administration, staff and community at ribbon cutting ceremony; Mays Academy student vaults over a classmate; Piccolo student smiles while climbing new playground ladder; Benjamin E. Mays Elementary Academy students enjoy their new playground equipment during the Space to Grow ribbon cutting.
STORMWATER MAINTENANCE AND OPERATION

CAPITAL PROJECT MAINTENANCE AND INTERGOVERNMENTAL AGREEMENTS

Regular upkeep and maintenance are necessary for the new installations to function properly and provide the expected stormwater benefit. For that reason, routine maintenance is required as dictated by an operation and maintenance plan developed for each project.

Agencies that receive financial assistance from MWRD enter into an IGA, which includes an operation and maintenance plan defining the partner agencies responsibilities for inspection, operation, and maintenance of the project. MWRD reviews inspection reports generated to assess the operation of the final project and to ensure proper maintenance is being performed. MWRD may also conduct their own inspections of the project on an as needed basis.

SMALL STREAMS MAINTENANCE PROGRAM

Through the management of the Small Streams Maintenance Program, the MWRD Maintenance & Operations Department works to reduce flooding in urbanized areas. Cook County has little elevation change; therefore, its streams tend to move slowly and are naturally prone to flooding. Many developed areas were originally uninhabited muddy marshes with meandering streams that often overtopped their banks. The streams that flow through the neighborhoods of Cook County are more than just a scenic part of the landscape or a habitat for wildlife. They serve the vital function of draining stormwater and preventing flooding. Minor blockages can build up quickly in heavy rains, restricting flow and creating a potential for urban flooding. In order to function properly, the streams must be maintained.

The Small Streams Maintenance Program, established in 2006, has successfully concluded its 17th year of operation. The program follows MWRD's stormwater management mission to relieve flooding in urbanized areas through immediate and relatively simple remedies. The program's top priorities are to maintain creeks, streams, and waterways by removing blockages, obstructions, and debris. The program also prevents future blockages by removing dead and unhealthy trees, which can fall into streams. Maintenance crews also remove harmful invasive species, such as buckthorn and honeysuckle, which can choke out native plants and leave the ground vulnerable to erosion.

MWRD and contractor crews removed approximately 19,534 cubic yards of debris in 2022. In addition, 1,425 cubic yards of river and canal debris was removed by MWRD's debris and skimmer boat crews along the Chicago Area Waterways. In 2022, MWRD continued to utilize a two-year stream maintenance contract, paying a total of $2,520,145 to contractors to provide stream maintenance. Listed in the table below are the debris amounts removed in each watershed for the past two years.

<table>
<thead>
<tr>
<th>Watershed</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Cal</td>
<td>5,420</td>
<td>7,956</td>
</tr>
<tr>
<td>Cal-Sag</td>
<td>3,516</td>
<td>3,395</td>
</tr>
<tr>
<td>Lower Des Plaines</td>
<td>5,074</td>
<td>5,514</td>
</tr>
<tr>
<td>North Branch</td>
<td>1,730</td>
<td>2,159</td>
</tr>
<tr>
<td>Upper Salt Creek</td>
<td>941</td>
<td>360</td>
</tr>
<tr>
<td>Poplar Creek</td>
<td>212</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14,842</strong></td>
<td><strong>19,534</strong></td>
</tr>
</tbody>
</table>

The 2022 expenditure for the Small Streams Maintenance Program was $2,520,145 at an average cost per cubic yard of debris removed of $129.

The Small Streams Maintenance Program will continue in 2023 and is anticipating removal of approximately 25,000 cubic yards of debris. Major goals include standardizing procedures, identifying critical stream areas, scheduling critical inspections, and continuing to introduce MWRD's small stream crews to local governments to increase the public's awareness of MWRD's presence and execution of the program.

Citizens are encouraged to report waterway blockages and request removal of debris from small creeks or waterways in Cook County by either visiting MWRD Citizen Incident Reporting or downloading the MWRD Citizen Incident Reporting app for iPhones from the App Store.
STORMWATER MAINTENANCE AND OPERATION

MWRD began requiring stormwater detention in 1972 under the Sewer Permit Ordinance for development projects greater than five acres. In 2007, MWRD began work on a new stormwater management regulatory ordinance known as the Watershed Management Ordinance (WMO). Numerous public hearings were held on the WMO in order to receive public input. The MWRD Board subsequently approved the WMO, which became effective on May 1, 2014. The WMO is a comprehensive regulatory ordinance drafted with the assistance of an Advisory Committee consisting of regulatory agencies, municipalities, and non-governmental organizations.

The WMO aims to protect public health, safety, and welfare, and Cook County homes and businesses from flood damage by managing and mitigating the effects of development and redevelopment on stormwater drainage. It provides uniform minimum stormwater management regulations for Cook County that are consistent with the region. The WMO replaced the MWRD’s Sewer Permit Ordinance with more comprehensive permit requirements. Components regulated under the WMO include drainage and detention, volume control, floodplain management, isolated wetland protection, riparian environment protection and soil erosion and sediment control. MWRD has included a GI component in the ordinance which requires the capture of 1-inch of runoff from impervious surfaces for parcels greater than one-half acre in size when a WMO permit is required.

The WMO was amended by the MWRD Board on July 10, 2014, to incorporate the Infiltration/Inflow Control Program (Article 8). It was amended again on May 16, 2019, to include watershed specific release rates. The WMO was also amended on May 7, 2020, to allow the regional stormwater detention and volume control trading program pilot study in the Lower Des Plaines and Little Calumet watershed planning areas to commence. References to current rainfall data were also updated. The most recent amendment to the WMO was adopted on April 7, 2022. This amendment added new regulatory requirements and terminology for projects involving and/or impacting wetlands. This amendment also included clarifications to requirements for development in flood protection areas.

MWRD has developed the Technical Guidance Manual (TGM), which serves as a technical reference to the WMO, and updates the TGM as needed. The WMO webpage contains more information on both the WMO and the Technical Guidance Manual.

Regulation of the WMO is administered by issuing permits for development within Cook County. Permits are reviewed by MWRD Engineering Department staff to ensure the project design is in compliance with the WMO. Additionally, construction sites are inspected to enforce the provisions approved under the permit. In 2022, 394 permits were issued, requiring a total of 154,538,649 gallons of detention volume and 27,144,692 gallons of GI retention volume. The following table illustrates the number of permits issued and inspected in 2022 and since the inception of the WMO. Volumes of water captured onsite in the form of detention and volume control (green infrastructure) are also included.

<table>
<thead>
<tr>
<th>Year</th>
<th># Permits Issued</th>
<th># Site Inspections</th>
<th>Detention Volume</th>
<th>Green Infrastructure Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>394</td>
<td>4,220</td>
<td>154,538,649</td>
<td>27,144,692</td>
</tr>
<tr>
<td>Total</td>
<td>2,805</td>
<td>42,942</td>
<td>634,935,501</td>
<td>138,950,918</td>
</tr>
</tbody>
</table>

GIS/GPS ASSISTANCE

In 2017, MWRD purchased six Global Positioning System (GPS) units to provide sewer system owners with resources to begin mapping their sewer systems in a Geographic Information System (GIS) or to improve their existing sewer system maps. In return, sewer system owners provide MWRD with their sanitary, storm and combined sewer data. In February 2022, the six GPS units became unusable due to their 3G network capability. As such, three new EOS Arrow 200 GPS units were purchased by MWRD in February 2022 to allow for continued sewer system mapping. To obtain GPS equipment and related software at no cost, sewer system owners must enter into an IGA with MWRD. Since 2017, ten municipalities have entered into an IGA with MWRD to utilize the GPS units. No municipalities have requested to use the new GPS units that were
purchased in 2022. Sewer system owners that wish to be added to the list for the next available GPS unit should submit a letter of intent to the MWRD Director of Engineering. A template IGA and modifiable letter of intent can be found at MWRD’s website.

INFILTRATION / INFLOW CONTROL PROGRAM ADMINISTRATION

MWRD's Infiltration/Inflow Control Program provides a framework for asset management of separate sewer systems to meet the following goals:

- Maintain infrastructure to prevent sanitary sewer overflows and basement backups due to sewer surcharging and other adverse sewer system conditions.
- Comply with MWRD's National Pollution Discharge Elimination System permits and all other applicable federal, state, and local laws and regulations.
- Minimize extraneous flows transported to MWRD's facilities due to defective system components or illegal connections.

The Infiltration/Inflow Control Program is implemented due to special conditions imposed within the National Pollutant Discharge Elimination System permits issued by the IEPA for MWRD's Water Reclamation Plants. In addition to adopting a Capacity, Management, Operation and Maintenance Program for the conveyance and treatment facilities, MWRD is required to take action to reduce excessive Infiltration/Inflow within the local sanitary sewer systems.

All satellite entities (sewer system owners) within MWRD's separate sewer area that discharge directly or indirectly into MWRD facilities are required to identify and address infiltration and inflow sources within the public and private sewer systems. This will be accomplished by the individual satellite entities performing ongoing inspections and conducting maintenance and rehabilitation work on the sewer system. All satellite entities must annually report work completed to meet the goals of the Infiltration/Inflow Control Program to MWRD.
INFILTRATION / INFLOW CONTROL PROGRAM SATELLITE ENTITIES

Alsip
Aqua Illinois
Arlington Heights
Bartlett
Bedford Park
Bellwood
Berkeley
Bridgeview
Broadview
Brookfield
Buffalo Grove
Burr Ridge
Calumet City
Chicago Ridge
Country Club Hills
Countryside
Crestwood
Deer Park
Des Plaines
Dolton
East Hazel Crest
Elk Grove Township
Elgin
Elk Grove Village
Evergreen Park
Flagg Creek WRD**
Flossmoor
Ford Heights
Forest River SD*
Franklin Park
Garden Homes SD*
Glenbrook SD*
Glencoe
Glenview
Glenwood
Hanover Park
Harvey
Harwood Heights
Hazel Crest
Hickory Hills
Hillside
Hinsdale
Hodgkins
Hoffman Estates
Homewood
Illinois American Water
Indian Head Park
Inverness
Justice
Kenilworth
Kimberly Heights SD*
La Grange
La Grange Highlands SD*
La Grange Park
Lansing
Lemont
Leyden Township
Lynwood
Markham
Matteson
McCook
Melrose Park
Merriamette Park
Midlothian
Mission Brook SD*
Morton Grove
Mount Prospect
Niles
Norridge
Northbrook
Northfield
Northfield Township
Northfield Woods SD*
Northlake
Oak Forest
Oak Lawn
Oak Meadow SD*
Olympia Fields
Orland Park
Palatine
Palatine Township
Palos Heights
Palos Hills
Palos Park
Park Ridge
Plum Grove Estates SD*
Plum Grove Woodlands SD*
Prospect Heights
Richton Park
River Grove
Riverdale
Robbins
Rolling Meadows
Roselle
Rosemont
Sauk Village
Schaumburg
Schiller Park
South Barrington
South Holland
South Lyons Township SD*
South Palos Township SD*
South Stickney SD*
Stone Park
Streamwood
Thornton
Tinley Park
Westchester
Western Springs
Wheeling
Willow Springs
Wilmette
Winnetka
Woodley Road SD*
Worth
*Sanitary District
**Water Reclamation District
PARTNERSHIPS AND PUBLIC OUTREACH

JOINT FUNDING AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY FOR STREAM GAGING STATION IN COOK COUNTY

MWRD entered into a Joint Funding Agreement with the United States Geological Survey beginning in 2006 and has since renewed the agreement annually to fund the continued maintenance and operation of various stream gages and rain gages within Cook County. Under the 2022-2023 agreement, MWRD is funding the following ten stream gages:

- Salt Creek at Rolling Meadows
- Salt Creek near Elk Grove Village
- Salt Creek at Western Springs
- Des Plaines River at Lyons
- North Branch of the Chicago River at Deerfield
- North Branch of the Chicago River at N Pulaski Rd at Chicago
- Deer Creek near Chicago Heights
- Calumet Union Drainage Ditch at Markham
- Natalie Creek at Midlothian
- Tinley Creek near Palos Park

MWRD is also funding two rain gages located on Salt Creek near Rolling Meadows and at Calumet Union DR Canal near Markham. The data from the streamflow gaging stations has proven useful for MWRD with calibration of the hydrologic and hydraulic models in the Detailed Watershed Plan development, and MWRD will continue to use data from these stations in ongoing and future planning and design of stormwater improvements. Real time data from the stream gages are available on the United States Geological Survey's (USGS) website. Precipitation data is available at USGS Rainfall Map.

WATERSHED PLANNING COUNCILS

The Watershed Planning Councils were formed in 2005 to serve as advisory bodies to MWRD for its Stormwater Management Program. Municipalities and townships are represented in the councils by their chief elected officials or designees. Unincorporated areas are represented by the Cook County Board President or his or her designee. Councils meet at least quarterly for the watersheds of the North Branch of the Chicago River, the Lower Des Plaines River, the Calumet- Saganashkee Channel, the Little Calumet River, Poplar Creek, and Upper Salt Creek. Watershed Planning Council meetings serve as a mechanism for representatives of municipalities and townships to be updated on MWRD's stormwater management program as well as to communicate the public's concerns to MWRD.

The following Councils of Government are responsible for coordination of the WPCs:

- Northwest Municipal Conference
- West Central Municipal Conference
- South Suburban Mayors and Managers Association
- Southwest Conference of Mayors

MWRD negotiated agreements with each of the Councils of Government to provide administrative assistance related to coordination of the Watershed Planning Councils; the current agreement was renewed for 2022 and 2023. The Councils of Government assist MWRD by arranging meeting schedules, drafting and distributing meeting agendas, distributing information from MWRD to council members, assembling contact information for council representatives, and forwarding information about stormwater management concerns from the council members to MWRD.

For more information, visit Watershed Planning Council meeting schedule.
Public Affairs

In 2022, MWRD staff provided information about MWRD and the Stormwater Management Program at various virtual events for communities throughout the region and at various virtual technical conferences. MWRD attends all Watershed Planning Council meetings to provide updates on watershed planning efforts, changes to the WMO, and stream maintenance activities. These meetings are open to the public and provide an opportunity for concerns of the public to be communicated to MWRD. The Space to Grow projects in partnership with CPS and City of Chicago Department of Water Management also have a large public affairs component, including community meetings to recommend design elements, community planting days and ribbon cutting ceremonies, where the value of GI is demonstrated.

MWRD staff will continue to participate in community outreach events in 2022, virtually and in person when possible. MWRD will also continue to participate in Watershed Planning Council meetings and continue to promote MWRD stormwater management efforts using press releases and other media outlets.

Cook County Hazard Mitigation Plan

The Cook County Hazard Mitigation Plan is the use of long-term and short-term policies, programs, projects, and other activities to alleviate the death, injury and property damage that can result from a disaster. Cook County, MWRD, and a coalition of planning partners prepared the Cook County Multi-Jurisdictional Hazard Mitigation Plan in order to identify the risks posed by hazards and find ways to reduce their impacts. The plan reduces risk for those who live in, work in, and visit the County. MWRD continues to work closely with Cook County and our other planning partners to mitigate flooding through projects identified in our annual report.

A list of stormwater management press releases issued in 2022 can be found on the next page.
2022 STORMWATER MANAGEMENT PRESS RELEASES

January 19, 2022  MWRD to fund seven green infrastructure projects in 2022

March 28, 2022  Water infrastructure resiliency: U.S. Sens. Duckworth, Durbin support MWRD work to mitigate flooding, improve water quality

April 27, 2022  Illinois stormwater management leaders praise MWRD

April 28, 2022  Achieving Resilience: MWRD, Palos Heights and Cook County Forest Preserves to mark completion of Arrowhead Lake project

May 9, 2022  MWRD to break ground on Crestwood Flood Control Project

May 10, 2022  Achieving Resilience: MWRD, Palos Heights and Cook County Forest Preserves to mark completion of Arrowhead Lake project

May 11, 2022  MWRD breaks ground to provide flood relief for Crestwood

May 16, 2022  MWRD, partners celebrate completion of Arrowhead Lake Flood Control project that removes homes in Palos Heights from flood plain

June 9, 2022  Friends of the Chicago River honor MWRD’s work protecting Midlothian and Oak Forest and restoring Natalie Creek

June 22, 2022  Have green infrastructure in mind? Apply for MWRD support

July 15, 2022  Ribbon-cutting ceremony on Buffalo Creek Reservoir expansion set for Wednesday, July 20 at 11 a.m.

July 25, 2022  Buffalo Creek Reservoir expansion and improved aesthetics celebrated by partners, community

August 10, 2022  MWRD and partners break ground on transformative project to protect Robbins from flooding

September 13, 2022  Aspen Trails Park upgrades protect Mount Prospect from flooding thanks to MWRD, community assistance

October 21, 2022  Space to Grow partners unveil new Piccolo School of Excellence permeable schoolyard

October 24, 2022  “Call for Projects: The MWRD to provide funding to local government partners to manage stormwater

October 27, 2022  President Preckwinkle Cuts Ribbon on Schuth’s Grove Accessible Canoe and Kayak Launch

November 1, 2022  New Cook County Forest Preserves boat launch and local water quality at Schuth’s Grove benefit from MWRD green infrastructure

November 2, 2022  Surface protection: Partnership with La Grange Park introduces green intersections

November 4, 2022  MWRD’s Buffalo Creek Reservoir claims top engineering feat

November 9, 2022  Edward Coles School in South Chicago now has space to grow, play and manage stormwater

November 10, 2022  Space to Grow® program celebrates Halloween ribbon cutting at Mays Elementary Academy in Englewood

December 8, 2022  Space to Grow® partners celebrate new schoolyard and path to resilience at Black Magnet Elementary School
### 2022 STORMWATER MANAGEMENT COMMITTED EXPENDITURES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Services: Consultants</td>
<td>$3,013,949</td>
</tr>
<tr>
<td>Preliminary Engineering</td>
<td>$1,413,075</td>
</tr>
<tr>
<td>Final Engineering and Post Award</td>
<td>$1,600,875</td>
</tr>
<tr>
<td>Personal Services In-House</td>
<td>$10,900,358</td>
</tr>
<tr>
<td>Contractual Services</td>
<td>$28,989,233</td>
</tr>
<tr>
<td>Small Streams Maintenance Program</td>
<td>$2,729,353</td>
</tr>
<tr>
<td>Small Streams Maintenance Program waste disposal</td>
<td>$30,358</td>
</tr>
<tr>
<td>Court Reporting Services</td>
<td>$7,583</td>
</tr>
<tr>
<td>Contractual Services NOC</td>
<td>$171,516</td>
</tr>
<tr>
<td>Land Acquisition and Appraisals</td>
<td>$658,716</td>
</tr>
<tr>
<td>Waterways Facilities Structures (Construction)</td>
<td>$12,033,420</td>
</tr>
<tr>
<td>Army Corps of Engineers Services</td>
<td>$0</td>
</tr>
<tr>
<td>Permit Review</td>
<td>$199,883</td>
</tr>
<tr>
<td>IGAs</td>
<td>$12,712,026</td>
</tr>
<tr>
<td>Payments for Easements</td>
<td>$32,997</td>
</tr>
<tr>
<td>Miscellaneous Contractual Services</td>
<td>$413,383</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>$506,573</td>
</tr>
<tr>
<td>Materials, Equipment, &amp; Supplies</td>
<td>$506,573</td>
</tr>
<tr>
<td><strong>Total 2022 Committed Expenditures</strong></td>
<td><strong>$43,410,113</strong></td>
</tr>
</tbody>
</table>

* These figures do not include stormwater bond funds used to finance larger capital projects. Refer to MWRD’s [2022 Annual Budget Report](#) for more detailed information.
Established in 1889, the MWRD is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in Cook County, Illinois.