



**Metropolitan Water  
Reclamation District  
of Greater Chicago**

# **Stormwater Management Program**

**2018 Annual Report**





Skokie-Devonshire Park Rain Garden & Naturalized Detention Basin at the Skokie Police Headquarters. 16-IGA-10.

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## BACKGROUND AND HISTORY

For years, stormwater management in Cook County has been 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 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. MWRD’s Board of Commissioners adopted the plan in February 2007. Adoption of the plan and the implementation of 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, MWRD 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, and adopted and implemented the Watershed Management Ordinance (WMO).

The program expanded significantly in 2014. The Cook County Stormwater Management Plan was amended in July of 2014 to be consistent with P.A. 98-0652, which grants MWRD authority to allow for the acquisition of flood-prone properties and to plan, implement, finance, and operate local stormwater management projects. MWRD entered into a Consent Decree with the Environmental Protection Agency 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, MWRD’s Stormwater Management Program addresses both regional and local flooding problems throughout Cook County. MWRD has made significant investments in developing over 140 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 <http://stormwater.mwrdd.org>



### 2018 YEAR IN REVIEW

During 2018, MWRD continued preliminary engineering and design work for several of the alternatives recommended in Detailed Watershed Plans, continued work on the Small Streams Maintenance Program and administered the Watershed Management Ordinance (WMO). Other activities in 2018 included soliciting applications for Green Infrastructure, Flood-Prone Property Acquisition, and Phase II projects to address flooding issues in partnership with other government agencies and local communities. Further details concerning these items and other stormwater management activities are provided in this Annual Report.

### 2018 ACCOMPLISHMENTS FOR THE STORMWATER MANAGEMENT PROGRAM INCLUDE THE FOLLOWING:

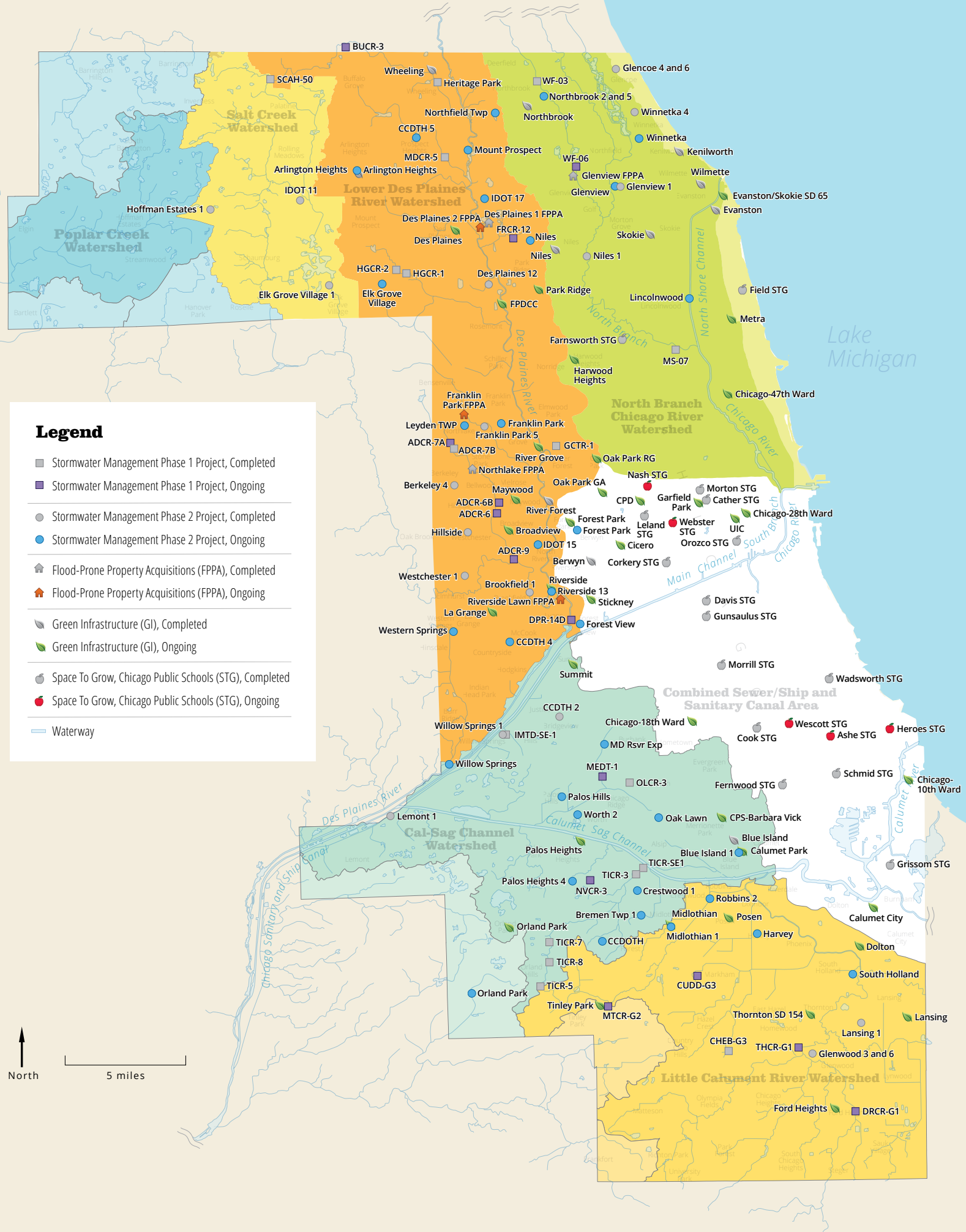
- Completed construction of the Cherry Creek Flood Control project, originally identified in the Detailed Watershed Plans;
- Awarded construction contracts for five flood control and streambank stabilization projects;
- Continued design of Phase I regional projects recommended in the Detailed Watershed Plans, including three streambank stabilization and flood control projects;
- Continued design of Phase II conceptual flood control projects identified by local governmental agencies;
- Entered into an intergovernmental agreement for a pilot study with the City of Chicago to explore the effectiveness of various technologies aimed at reducing basement backups at private sites;
- Entered into intergovernmental agreements for 20 Green Infrastructure and 14 Phase II shovel-ready projects based on solicitations and prioritization of projects from local communities;
- Continued the Small Streams Maintenance Program with the objective of removing debris and blockages from 532 miles of area waterways;
- Continued to solicit applications for Green Infrastructure projects from local communities and agencies and identify partnership opportunities to assist in constructing local improvements to address flooding issues;
- Provided 112 million gallons of volume control, detention, and floodplain compensatory storage as a result of WMO enforcement;
- Conducted a technical advisory committee meeting every two months to present changes to the WMO and Technical Guidance Manual and provided status of the Watershed Specific Release Rate Study;
- Presented status of the Infiltration/Inflow Control Program at Watershed Planning Council meetings;
- Amended the WMO on February 15, 2018 to include clarifications to better serve MWRD and its constituents;
- Created an Earthwork/ Foundation Limited permit application to allow limited construction activities to commence prior to WMO permit issuance;
- Provide Global Positioning System units to local municipalities as a resource to begin mapping their sewer systems in a Geographic Information System or to improve their existing sewer system map.

◀ Cherry Creek East Branch. Flood Control Project. 10-883-BF

### 2019 BUDGET - SIGNIFICANT FEATURES

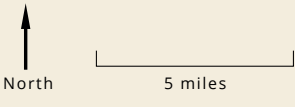


- Prioritize and implement** new Green Infrastructure projects from 2018 solicitations;
- Continue** engineering design for Phase I and Phase II projects and begin construction of projects that have completed final design and have been approved by the Board of Commissioners;
- Identify** partnership opportunities to assist in implementing local drainage improvements and acquisition of flood-prone properties;
- Continue** the Small Streams Maintenance Program to reduce flooding in urbanized areas;
- Amend** the WMO to include results of the Watershed Specific Release Rate Study;
- Continue the implementation** of the Infiltration / Inflow Control Program to reduce sanitary sewer overflows and basement backups.



**Legend**

- Stormwater Management Phase 1 Project, Completed
- Stormwater Management Phase 1 Project, Ongoing
- Stormwater Management Phase 2 Project, Completed
- Stormwater Management Phase 2 Project, Ongoing
- 🏠 Flood-Prone Property Acquisitions (FPPA), Completed
- 🏠 Flood-Prone Property Acquisitions (FPPA), Ongoing
- 🌿 Green Infrastructure (GI), Completed
- 🌿 Green Infrastructure (GI), Ongoing
- 🎓 Space To Grow, Chicago Public Schools (STG), Completed
- 🎓 Space To Grow, Chicago Public Schools (STG), Ongoing
- 🌊 Waterway



## 2018 COMPLETED PROJECTS

### ALBANY PARK STORMWATER DIVERSION TUNNEL

**ID:** MS-07 **Contract:** 14-066-3F  
**Watershed:** North Branch  
**Location:** Albany Park, IL  
**Description:** A cost-sharing agreement with the City of Chicago. Constructed by the Chicago Department of Transportation, 5,800 feet of 18-foot diameter rock tunnel with inlet and out shaft facilities protecting approximately 336 structures from overbank flooding in the Albany Park neighborhood in Chicago.  
**Estimated Construction Cost:** \$70,655,320  
**MWRD Contribution:** \$25,920,000  
**Status:** Construction completed 4/25/2018

### CHERRY CREEK EAST BRANCH FLOOD CONTROL PROJECT

**ID:** CHEB-G3 **Contract:** 10-883-BF  
**Watershed:** Little Calumet River  
**Location:** Flossmoor, IL  
**Description:** Construction of an overflow channel on Homewood-Flossmoor High School's property, west of Governors Highway. Created flood shelf storage north of the school. Replaced two collapsed culverts and created shelf storage on Cherry Creek.  
**Estimated Construction Cost:** \$3,304,500  
**Status:** Construction substantially complete. Under maintenance and monitoring. FEMA map revision effective as of 10/26/2018.

### ADDISON CREEK WETLAND RESTORATION PROJECT

**ID:** ADCR-7B **Contract:** 15-IGA-13  
**Watershed:** Lower Des Plaines  
**Location:** Northlake, IL  
**Description:** A cost-sharing agreement with the City of Northlake providing streambank stabilization along Addison Creek from Wolf Road to Palmer Avenue. Included removal of two degraded dams and restoration of riparian area and wetland creation.  
**Estimated Construction Cost:** \$4,544,450  
**MWRD Contribution:** \$1,000,000  
**Status:** Construction complete 11/1/2018

### MCDERMOTT DRIVE / MORRIS AVENUE STORM SEWER IMPROVEMENTS

**ID:** Berkeley 4 **Contract:** 16-IGA-04  
**Watershed:** Lower Des Plaines  
**Location:** Berkeley, IL  
**Description:** Constructed two new storm sewers along McDermott Drive and Morris Avenue, expanded the existing detention basin, and constructed a stormwater pumping facility at the southwest corner of the existing detention basin to adequately convey a 100-year storm event. This is a cost-sharing agreement with the Village of Berkeley.  
**Estimated Construction Cost:** \$6,338,595  
**MWRD Contribution:** \$949,829  
**Status:** Construction completed 5/10/18.

### NORTHLAKE FLOOD-PRONE PROPERTY ACQUISITION

**ID:** Northlake FPPA  
**Contract:** 16-IGA-14  
**Watershed:** Lower Des Plaines  
**Location:** Northlake, IL  
**Description:** In collaboration with the City of Northlake, purchased 7 flood-prone properties along Addison Creek.  
**Estimated Construction Cost:** \$1,184,018  
**Status:** Acquisitions completed 12/31/2018.

### DES PLAINES FLOOD-PRONE PROPERTY ACQUISITIONS (PHASE I)

**ID:** Des Plaines FPPA  
**Contract:** 15-IGA-18  
**Watershed:** Lower Des Plaines  
**Location:** Des Plaines, IL  
**Description:** Provided local sponsor assistance for Illinois Emergency Management Agency grant project to acquire 13 properties in the Big Bend neighborhood along the Des Plaines River  
**Estimated Cost:** \$3,949,639  
**MWRD Contribution:** \$949,829  
**Status:** Acquisitions completed. 11 of 13 Properties were acquired.

### STREAMBANK STABILIZATION ALONG OAK LAWN CREEK

**ID:** OLCR-3 **Contract:** 10-237-3F  
**Watershed:** Cal-Sag Channel  
**Location:** Oak Lawn, IL  
**Description:** Stabilized approximately 1,200 linear feet of Oak Lawn Creek from Central Avenue to Massasoit Avenue using soldier piles and pre-cast concrete panels.  
**Estimated Construction Cost:** \$3,035,000  
**Status:** Construction substantially complete. Under maintenance and monitoring.

### STREAMBANK STABILIZATION & FLOOD CONTROL PROJECT ALONG TINLEY CREEK

**ID:** TICR-5 **Contract:** 10-882-DF  
**Watershed:** Cal-Sag Channel  
**Location:** Orland Hills; Orland Park, IL  
**Description:** Provided naturalized channel stabilization/flood control on Tinley Creek, from Lake Lorin to 88th Avenue in Orland Hills.  
**Estimated Construction Cost:** \$664,000  
**Status:** Construction substantially complete. Under maintenance and monitoring.

### FLOOD CONTROL & STREAMBANK STABILIZATION PROJECT ALONG TINLEY CREEK

**ID:** TICR-3 **Contract:** 10-883-AF  
**Watershed:** Cal-Sag Channel  
**Location:** Crestwood, IL  
**Description:** Increased conveyance capacity of Tinley Creek downstream of Central Avenue and stabilized approximately 1,000 linear feet of Tinley Creek, downstream of the conveyance improvements.  
**Estimated Construction Cost:** \$7,222,220  
**Status:** Construction substantially complete. FEMA Letter of Map Revision is effective.



Albany Park Stormwater Diversion Tunnel (Contract: 14-066-3F). Rising water flows through the grated areas into the tunnel, coming out further downstream. This keeps the water levels from rising and causing a flood.

**WHEELING PARK DISTRICT – CHAMBER PARK RAIN GARDEN**

**ID:** Wheeling PD **Contract:** 18-IGA-19  
**Watershed:** Lower Des Plaines  
**Location:** Wheeling, IL  
**Description:** Construction of a rain garden as part of the Chamber Park parking lot reconstruction in Wheeling. The MWRD provided funding for 38.1% of the total \$160,000 construction cost. Project provides 41,732 gallons of design retention capacity. The Park District is to provide long term maintenance per the intergovernmental agreement.  
**Estimated Construction Cost:** \$160,000  
**MWRD Contribution:** \$61,000  
**Status:** Substantially completed in 2018.

**ARLINGTON HEIGHTS - PERMEABLE PARKING LOT PAVERS AND A BIO-INFILTRATION BASIN**

**ID:** Arlington Heights  
**Contract:** 18-IGA-01  
**Watershed:** Upper Salt Creek  
**Location:** Arlington Heights, IL  
**Project Description:** Installation of a permeable pavement parking lot along with a bioswale at the Village of Arlington Heights Police Station. MWRD provided funding for 23.6% of the total \$1,515,000 construction cost. Project provides 90,807 gallons of design retention capacity in a flood-prone area. The Village is to provide long term maintenance per the intergovernmental agreement.  
**Estimated Construction Cost:** \$1,515,000  
**MWRD Contribution:** \$358,000  
**Status:** Substantially completed in 2018.

**SKOKIE – DEVONSHIRE PARK RAIN GARDEN & NATURALIZED DETENTION BASIN AT THE SKOKIE POLICE HEADQUARTERS**

**ID:** Skokie **Contract:** 16-IGA-10  
**Watershed:** North Branch  
**Location:** Skokie, IL  
**Description:** Construction of rain garden at Devonshire Park and a naturalized detention basin at the Village of Skokie Police Headquarters. Basin is designed to receive runoff from police station rooftop. MWRD provided funding for 40% of the total \$500,000 construction cost. Project provides 46,424 gallons of design retention capacity in a flood-prone area. The Village is to provide long term maintenance per the intergovernmental agreement.  
**Estimated Construction Cost:** \$500,000  
**MWRD Contribution:** \$200,000  
**Status:** Substantially completed in 2018.

**RIVER FOREST - GALE AVENUE GREEN ALLEY IMPROVEMENT**

**ID:** River Forest **Contract:** 18-IGA-16  
**Watershed:** Lower Des Plaines  
**Location:** River Forest, IL  
**Description:** Reconstructed a 10,000 sq. ft. alley with permeable pavers in the Village of River Forest. MWRD provided funding for 38.7% of the total \$193,740 construction cost. Project provides 26,490 gallons of design retention capacity in a flood-prone area. The Village is to provide long term maintenance per the intergovernmental agreement.  
**Estimated Construction Cost:** \$193,740  
**MWRD Contribution:** \$75,000  
**Status:** Substantially completed in 2018.

**GREEN INFRASTRUCTURE AT CHICAGO PUBLIC SCHOOLS, SPACE 2 GROW (VARIOUS LOCATIONS)**

**ID:** Multiple Locations **Contract:** 15-IGA-20 **Watershed:** Chicago  
**Location:** Multiple Locations  
**Description:** MWRD, the Chicago Department of Water Management, and the Chicago Public Schools are partnering to design and install playgrounds at various Chicago Elementary Schools utilizing Green Infrastructure. The projects will reduce flooding, reduce the load on the combined sewer system, and educate students and neighbors about Green Infrastructure techniques and purpose.  
**MWRD Max Contribution (through 2022):** \$16,000,000  
**Status:** 6 playgrounds were transformed in 2018. The 6 schools along with their design retention capacity are as follows:  
 John W. Cook Elementary School | 8150 S. Bishop Street | 217,978 Gal  
 Nathan S. Davis Elementary School | 3014 W. 39th Place | 197,422 Gal  
 Fernwood Elementary School | 10041 S. Union Avenue | 138,222 Gal  
 Eugene Field Elementary School | 7019 N. Ashland Avenue | 422,169 Gal  
 Morton School of Excellence | 431 N. Troy Street. | 155,783 Gal  
 James B. Farnsworth Elementary School | 5414 N. Linder Avenue | 156,077 Gal  
**Total Design Retention Capacity for 2018 CPS Schools** 1,287,651 Gal

# MWRD STORMWATER MANAGEMENT PROGRAM OVERVIEW

## PHASE I REGION-WIDE STREAMBANK AND FLOOD CONTROL PROJECTS

One of the initial goals of the Stormwater Management Program was to develop detailed watershed plans for each of the six watersheds in Cook County. The detailed watershed plans identified and prioritized "regional" stormwater projects based on a benefit to cost ratio. Projects were identified into two categories. Streambank stabilization projects address critical active streambank erosion threatening public safety, structures, and/or infrastructure. Flood control projects address regional overbank flooding through traditional measures such as stormwater detention reservoirs, levees, and conveyance improvements. The Board of Commissioners 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 2018, refer to page 7. Locations of both ongoing and completed streambank stabilization projects can be found on page 10.

#### STREAMBANK STABILIZATION ALONG CALUMET UNION DRAINAGE DITCH

**ID:** CUDD-G3  
**Contract:** 10-882-BF  
**Watershed:** Little Calumet River  
**Location:** Markham, IL  
**Description:** Stabilize approximately 3,559 linear feet of Calumet Union Drainage Ditch, between Sunset and Central Park Avenues. Replaces sanitary sewer under the ditch with new sanitary sewer on each side with service connections to existing residences.  
**Estimated Construction Cost:** \$2,109,036  
**Status:** Coordinating utility relocations and preparing final documents for bidding in Spring 2019.

#### STREAMBANK STABILIZATION ALONG MIDLOTHIAN CREEK

**ID:** MTCR-G2  
**Contract:** 10-882-CF  
**Watershed:** Little Calumet River  
**Location:** Tinley Park, IL  
**Description:** Stabilize approximately 495 linear feet of Midlothian Creek from 66th Court, north of 173rd Street. Lay back the creek banks. Install two rock cross-vanes, four rock vanes, and 280 linear feet of soil lifts. Project protects structures and infrastructure in imminent danger

of failure from active streambank erosion and flooding.  
**Estimated Construction Cost:** \$654,948  
**Status:** Bids under review.

#### STREAMBANK STABILIZATION ALONG MELVINA DITCH

**ID:** MEDT-1 **Contract:** 13-248-3F  
**Watershed:** Cal-Sag Channel  
**Location:** Chicago Ridge, Oak Lawn, IL  
**Description:** Stabilization along Melvina Ditch, from 95th Street to 99th Street. Approximately 150 linear feet of the ditch at the north end of the project will be stabilized with twin box culverts. The remaining 2,500 linear feet of the ditch will be stabilized with a precast concrete modular block retaining wall system.  
**Estimated Construction Cost:** \$8,800,000  
**Status:** Finalizing easements and permits. Preparing for bidding in Fall 2019.

#### STREAMBANK STABILIZATION ALONG ADDISON CREEK - PHASE I

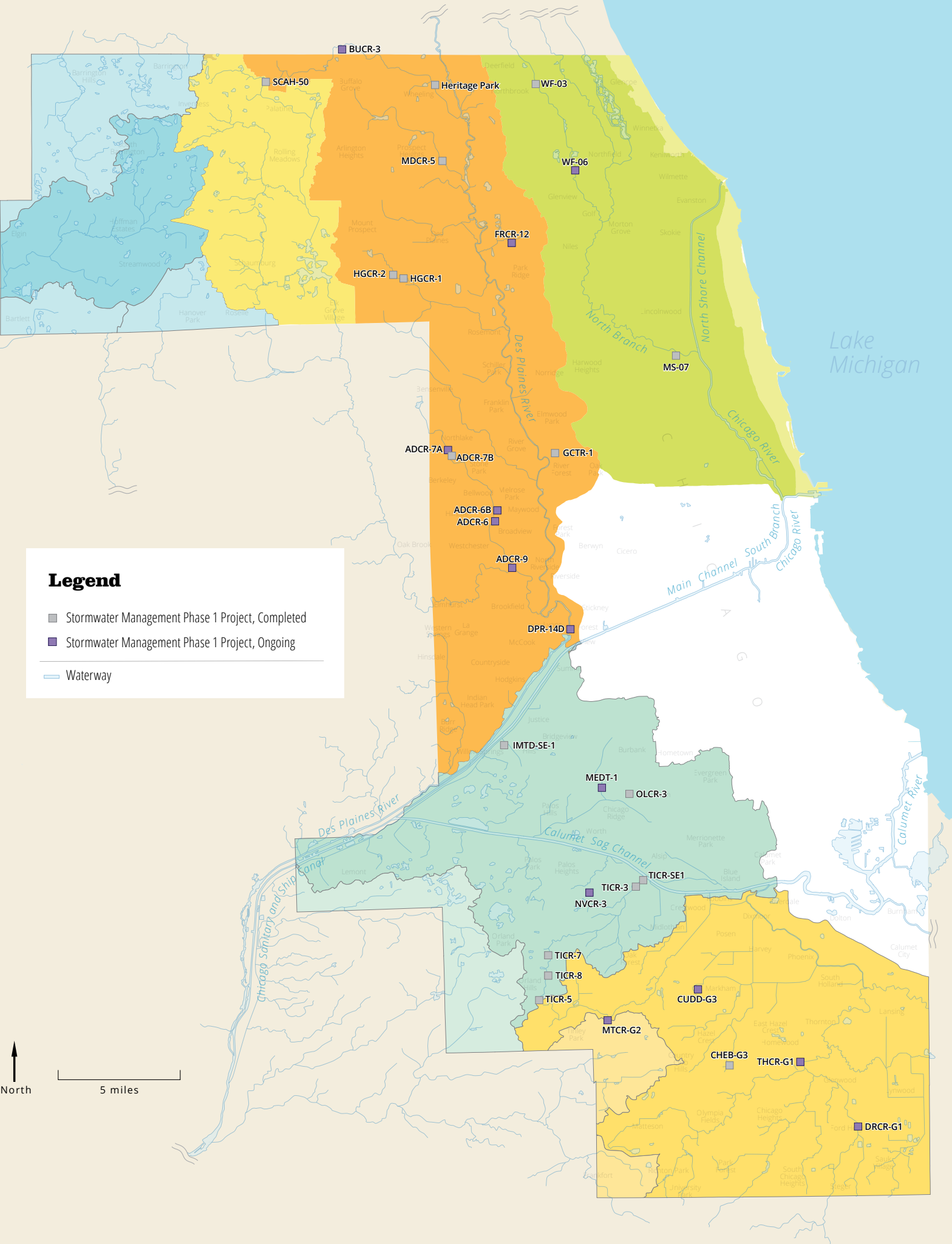
**ID:** ADCR-7A, 9 **Contract:** 14-108-3F  
**Watershed:** Lower Des Plaines  
**Location:** Northlake; North Riverside, IL  
**Description:** Stabilizing 1,950 feet of Addison Creek adjacent to Fullerton Avenue in the City of Northlake and 410 linear feet of streambank adjacent to 19th Avenue in the Village of North Riverside. Stabilization methods include the installation of native vegetation, a vegetated geogrid, turf reinforcing mat, and the placement of riprap.  
**Estimated Construction Cost:** \$998,696  
**Status:** Awarded, construction to begin in Spring 2019.

#### STREAMBANK STABILIZATION ALONG TINLEY CREEK

**ID:** TICR-7 **Contract:** 10-882-AF  
**Watershed:** Cal-Sag Channel  
**Location:** Orland Park, IL  
**Description:** 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:** \$3,806,000  
**Status:** Final design. Working with the Village of Orland Park on finalizing terms of intergovernmental agreement.



Melvina Ditch Reservoir Improvements. 14-263-3F



## FLOOD CONTROL PROJECTS (PHASE I - REGIONAL)

The following is a detailed list of ongoing flood control projects. For projects completed in 2018, refer to page 7. Locations of both ongoing and completed flood control projects can be found on page 10.

### FLOOD CONTROL AT ARROWHEAD LAKE

**ID:** NVCR-3 **Contract:** 10-883-BF  
**Watershed:** Cal-Sag Channel  
**Location:** Palos Heights, IL  
**Description:** Increase floodwater storage in Arrowhead Lake by replacing an existing dam and raising an existing bicycle trail on the north and east sides of the lake in unincorporated Palos Heights, removing 70 structures from the 100-year floodplain.  
**Estimated Construction Cost:** \$1,615,000  
**Status:** Under construction.

### FLOOD CONTROL PROJECT AT DEER CREEK

**ID:** DRCR-G1 **Contract:** 10-884-BF  
**Watershed:** Little Calumet River  
**Location:** Ford Heights, IL  
**Description:** Improves channel conveyance and raising a berm approximately 3,000 feet, between U.S. Route 30 and Hammond Lane, within the Village of Ford Heights. Includes the construction of vegetated berm, stabilization of bank

slopes, placement of pools and rock riffles, and planting of diverse native landscaping.  
**Estimated Construction Cost:** \$3,440,000  
**Status:** MWRD is currently working with the Village and SSMMA to rework design to accommodate pending development opportunity. Wetland delineation report under review.

### ADDISON CREEK RESERVOIR

**ID:** ADCR-6 **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:** \$63,280,000  
**Status:** Project under construction.

### ADDISON CREEK CHANNEL IMPROVEMENTS

**ID:** ADCR-6B **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 3 bridges along Harrison St. at 30th Ave., 31st Ave., and 32nd Ave  
**Estimated Construction Cost:** \$43,400,000  
**Status:** Executed intergovernmental agreements with all six villages. Final design. Right-of-way acquisitions in progress.

### FLOOD CONTROL PROJECT ON FARMERS AND PRAIRIE CREEKS

**ID:** FRCR-12 **Contract:** 12-056-3F  
**Watershed:** Lower Des Plaines  
**Location:** Park Ridge, Des Plaines, and Maine Township, IL

**Description:** Provides flood storage and conveyance improvements along Farmers and Prairie Creeks, including channel modifications, detention expansion, diversion sewer construction, and stream-bank stabilization.  
**Estimated Construction Cost:** \$15,000,000  
**Status:** Final Design. Intergovernmental agreement being finalized. Acquiring easements.

### LYONS LEEVE FLOOD CONTROL IMPROVEMENTS

**ID:** DPR-14D **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:** \$7,285,000  
**MWRD Contribution:** \$2,550,000

**Status:** Construction contract has been awarded by the Army Corps of Engineers with MWRD as the local sponsor. Right-of-way acquisitions from BNSF and CN railroads and ComEd in progress.

### BUFFALO CREEK RESERVOIR EXPANSION

**ID:** BUCR-3 **Contract:** 13-370-3F  
**Watershed:** Lower Des Plaines  
**Location:** Buffalo Grove, IL  
**Description:** Increases the storage volume of the existing Buffalo Creek Reservoir by approximately 180 acre-feet. Pedestrian bridges and boardwalks will be replaced and existing trails will be relocated to remove them from the 10-year storm event.  
**Estimated Construction Cost:** \$9,678,900  
**Status:** Under construction.

### LEEVE ALONG THORN CREEK AT ARQUILLA PARK

**ID:** THCR-G1 **Contract:** 15-IGA-14  
**Watershed:** Little Calumet River  
**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.  
**MWRD Contribution (Estimated Construction Cost):** \$3,870,000 (\$5,770,000)

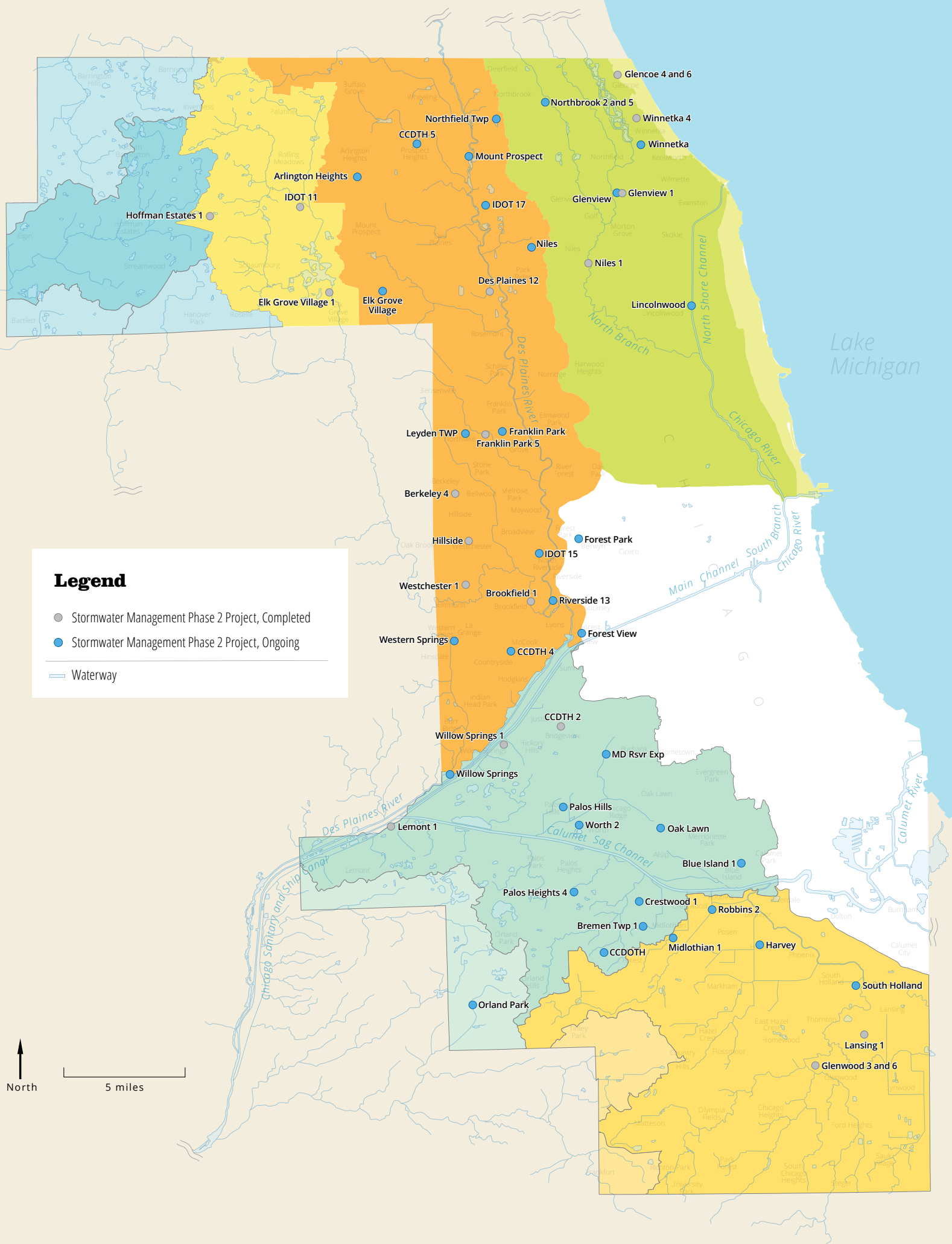
**Status:** Village working to acquire remaining properties needed for levee.

### FLOOD CONTROL PROJECT FOR THE WEST FORK OF THE NORTH BRANCH OF THE CHICAGO RIVER

**ID:** WF-06 **Contract:** 16-IGA-18  
**Watershed:** North Branch  
**Location:** Glenview, IL  
**Description:** Construct 80 acre-feet of storage, a floodwall, pump station, and a new storm sewer.  
**Estimated Construction Cost:** \$6,600,000  
**Status:** Village of Glenview is collaborating with the U.S. Army Corps of Engineers on a feasibility study.

Addison Creek Reservoir. 11-186-3F





**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 way, alongside green infrastructure.

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 partnering agency execute an intergovernmental agreement to facilitate the project, with long term maintenance responsibilities assigned to the partnering agency. Design and/or construction of each installation is monitored by the 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 the MWRD starting in September 2013, dozens of projects were initially approved by the MWRD Board of Commissioners. The approved projects that resulted from the initial outreach and subsequent ‘Call for Projects’ are distributed across Cook County and include green infrastructure improvements, localized detention, upsizing critical storm sewers/culverts, pump stations, and establishing drainage ways.

A ‘Call for Phase II Projects’ was made in late 2017 with 64 applications submitted in early 2018 and evaluated. 14 ‘Shovel Ready’ Projects and 6 ‘Conceptual’ projects were approved in 2018. Most of the ‘Shovel Ready’ projects are currently undergoing IGA negotiations. Preliminary engineering scope of works are being developed for ‘Conceptual’ projects.

**LOCALIZED FLOODING PROJECTS (PHASE II)**

The following is a detailed list of ongoing localized flooding projects. For 2018 completed projects, refer to page 7. Locations of both ongoing and completed localized flooding projects can be found on page 14.

**CENTRAL ROAD FLOOD CONTROL PROJECT**  
**ID:** IDOT-17 **Contract:** 14-065-5C  
**Watershed:** Lower Des Plaines  
**Location:** Unincorporated Northfield, Maine Township, and Glenview, IL  
**Description:** Analysis of new conveyance improvements along Central Road and possible detention facilities.  
**Estimated Construction Cost:** TBD  
**Status:** Ongoing coordination with the Illinois Department of Transportation.

**FIRST AVENUE FROM ROOSEVELT ROAD TO CERMAK ROAD FLOOD CONTROL**  
**ID:** IDOT-15 **Contract:** 14-111-5C  
**Watershed:** Lower Des Plaines  
**Location:** Maywood, IL  
**Description:** Flood relief along 1st Avenue from Roosevelt Road to Cermak Road.  
**Estimated Construction Cost:** \$652,000  
**MWRD Contribution:** TBD  
**Status:** Final design.

**PLAINFIELD ROAD FROM WILLOW SPRINGS TO EAST AVENUE FLOOD CONTROL**  
**ID:** CCDTH 4 **Contract:** 14-112-5C  
**Watershed:** Lower Des Plaines  
**Location:** LaGrange; Countryside; McCook; and Lyons Township, IL  
**Description:** May include construction of a new trunk sewer along portions of Plainfield Road, 55th Street and East Avenue and stormwater improvements to the McCook Ditch, McCook Ditch Overflow, and McCook Levee.  
**Estimated Construction Cost:** TBD  
**Status:** Preliminary engineering being finalized.





Flood Control along Natalie Creek. 14-252-5F

### FLOOD CONTROL ALONG NATALIE CREEK

**ID:** Midlothian 1 **Contract:** 14-252-5F  
**Watershed:** Little Calumet River  
**Location:** Oak Forest; Midlothian, IL  
**Description:** Installation of flood control measures for an estimated 15,800 linear feet along Natalie Creek from 157th and Central Park in Oak Forest to 146th and Pulaski in Midlothian. Flood control measures involve the upsizing of restrictive culverts, improving the channel at several locations and the installation of a stormwater detention basin. The project will reduce flood damages for over 230 structures.  
**Estimated Construction Cost:** \$7,629,000  
**Status:** Project under construction

### FLOOD CONTROL ON MIDLOTHIAN CREEK

**ID:** Robbins 2  
**Contract:** 14-253-5F/17-IGA-02  
**Watershed:** Little Calumet River  
**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.

### FLOOD CONTROL ON CALUMET-SAG TRIBUTARY C

**ID:** Bremen Twp 1  
**Contract:** 14-257-5C  
**Watershed:** Cal-Sag Channel  
**Location:** Bremen Township & Midlothian, IL  
**Description:** Preliminary engineering alternatives developed to address flooding along Calumet-Sag Tributary Channel in the vicinity of 143rd Street and Linder Avenue.  
**Estimated Construction Cost:** TBD  
**Status:** Preliminary design

### FLOOD CONTROL IN THE VICINITY OF 135TH STREET AND CENTRAL AVENUE

**ID:** Crestwood 1 **Contract:** 14-258-5C  
**Watershed:** Cal-Sag Channel  
**Location:** Crestwood, IL  
**Description:** Preliminary engineering analysis to identify and evaluate solutions to address flooding in the vicinity of 135th Street and Central Avenue.  
**Estimated Construction Cost:** \$9,250,000  
**Status:** Final design

### FLOOD CONTROL IN THE VICINITY OF 131ST STREET AND CYPRESS DRIVE

**ID:** Palos Heights 4  
**Contract:** 14-259-5F/17-IGA-04

**Watershed:** Cal-Sag Channel  
**Location:** Palos Heights, IL  
**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:** \$200,000  
**Status:** Currently under design

### FLOOD CONTROL FOR THE WASHINGTON STREET AREA

**ID:** Blue Island 1  
**Contract:** 14-260-5F  
**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:** TBD  
**Status:** MWRD and the City are investigating additional flood control alternatives in order to ensure that the most effective solution is selected.

### MELVINA DITCH RESERVOIR IMPROVEMENTS

**ID:** MD Rsvr Exp **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  
**Status:** Project under construction

### RAILROAD DRAINAGE OUTLET

**ID:** Riverside 13  
**Contract:** 16-IGA-03  
**Watershed:** Lower Des Plaines  
**Location:** Riverside, IL  
**Description:** Construction of a 24-inch storm sewer outlet to the Des Plaines River and blocking or restricting flow from the storm sewers of the railroad drainage area to the existing combined sewer. This is a cost-sharing agreement with the Village of Riverside.  
**Estimated Construction Cost:** \$90,000  
**MWRD Contribution:** \$64,000  
**Status:** Construction by Village tentatively planned for 2019.

### PILOT STUDY FOR INVESTIGATING TECHNOLOGY TO ADDRESS BASEMENT BACKUPS

**ID:** N/A **Contract:** 16-IGA-20  
**Watershed:** Chicago  
**Location:** Chicago, IL  
**Description:** Intergovernmental agreement with the City of Chicago to share the cost of a research pilot study on the south side of Chicago to gain insight into the effectiveness of various technologies aimed at reducing basement backups.  
**MWRD Contribution:** \$400,000  
**Status:** Intergovernmental agreement being executed.

### GROVELAND AVENUE LEVEE IMPROVEMENTS

**ID:** Riverside 11  
**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 flood-

wall. 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 will enter a project partnership agreement with the Army Corps of Engineers as its local sponsor. MWRD will enter into an intergovernmental agreement with the Village to provide the non-federal share of the design and construction costs.

**Estimated Construction Cost:** \$7,200,000  
**MWRD Contribution:** \$2,506,028  
**Status:** Currently under design.

### SOUTH AREA SEWER SEPARATION 18-IGA-21

**ID:** Forest Park  
**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:** TBD  
**Status:** Drafting intergovernmental agreement.

### NEW STORM SEWERS AND OUTFALL ALONG NORTH SHORE AVENUE

**ID:** Lincolnwood  
**Contract:** 18-IGA-22  
**Watershed:** North Branch  
**Location:** Lincolnwood, IL  
**Description:** New storm sewer system will protect residential homes from basement backups and drain into a new outfall along North Shore Avenue.  
**Estimated Construction Cost:** \$3,600,000  
**MWRD Contribution:** \$1,392,000  
**Status:** Drafting intergovernmental agreement.

### REUTERS SUBDIVISION IMPROVEMENTS - PHASE IB

**ID:** Franklin Park  
**Contract:** 18-IGA-23  
**Watershed:** Lower Des Plaines  
**Location:** Franklin Park, IL  
**Description:** Upsizing existing storm sewers, constructing new sewers and other infrastructure improve-

ments in the Reuter's subdivision in order to protect an estimated 67 structures from a 100-year design storm.  
**Estimated Construction Cost:** \$3,242,000  
**MWRD Contribution:** \$378,000  
**Status:** Under construction.

### HIBBARD ROAD FOREST PRESERVE WETLAND AND DUKE CHILDS STORAGE PROJECT 18-IGA-24

**ID:** Winnetka **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:** Drafting intergovernmental agreement.

### STORMWATER STORAGE IN MOUNT PROSPECT

**ID:** Mount Prospect  
**Contract:** 18-IGA-25  
**Watershed:** Lower Des Plaines  
**Location:** Mount Prospect, IL  
**Description:** Design and construction of two new flood storage basins and upgrade of ancillary storm sewers to provide a cumulative flood storage volume of approximately 30 acre-feet.  
**Estimated Construction Cost:** \$2,000,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement.

### CULVERT UPSIZING AND CHANNEL IMPROVEMENTS ON BOCA RIO DITCH COOK COUNTY DOTH 18-IGA-26

**ID:** CCDOTH **Contract:** 18-IGA-26  
**Watershed:** Little Calumet River  
**Location:** Oak Forest, IL  
**Description:** Culvert upsizing and channel improvements.  
**Estimated Construction Cost:** \$619,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement.

### **EAST OF HARMS ROAD DRAINAGE IMPROVEMENTS**

**ID:** Glenview **Contract:** 18-IGA-27  
**Watershed:** North Branch  
**Location:** Glenview, IL  
**Description:** Upsize nearly 3,500 linear feet of storm sewers in the drainage area east of Harms Road to provide flood reduction benefits to 20 residential structures.  
**Estimated Construction Cost:** \$3,860,000  
**MWRD Contribution:** \$500,000  
**Status:** Drafting intergovernmental agreement

### **WENONAH AVENUE BASIN FLOODING RELIEF IMPROVEMENTS**

**ID:** Forest View **Contract:** 18-IGA-28  
**Watershed:** Lower Des Plaines  
**Location:** Forest View, IL  
**Description:** New storm sewers and outfall in coordination with IDOT drainage project.  
**Estimated Construction Cost:** \$1,300,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement

### **CULVERT IMPROVEMENTS IN ELK GROVE VILLAGE**

**ID:** Elk Grove Village **Contract:** 18-IGA-30  
**Watershed:** Lower Des Plaines  
**Location:** Elk Grove Village, IL  
**Description:** Culvert improvements in conjunction with channel maintenance.  
**Estimated Construction Cost:** \$2,215,019  
**MWRD Contribution:** \$1,250,000  
**Status:** Drafting intergovernmental agreement

### **STORMWATER STORAGE AREAS IN NILES**

**ID:** Niles **Contract:** 18-IGA-31  
**Watershed:** North Branch  
**Location:** Niles, IL  
**Description:** New stormwater storage in open space in coordination with recreational improvements.  
**Estimated Construction Cost:** \$8,838,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement

### **OLD TOWN SOUTH COMBINED SEWER SEPARATION**

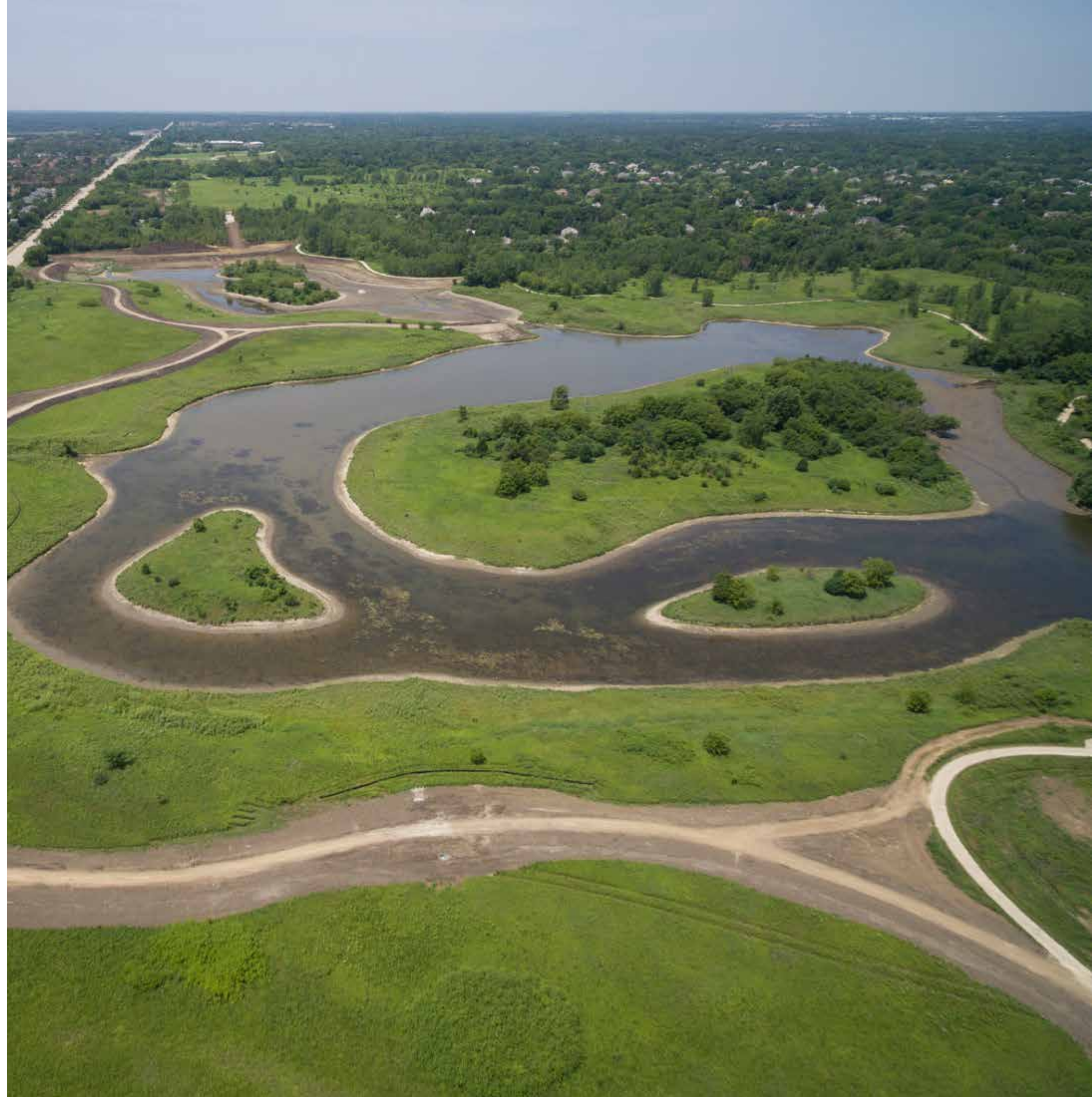
**ID:** Western Springs **Contract:** 18-IGA-32  
**Watershed:** Lower Des Plaines  
**Location:** Western Springs, IL  
**Description:** Construction of new storm sewers and outfall to Flagg Creek  
**Estimated Construction Cost:** \$1,000,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement

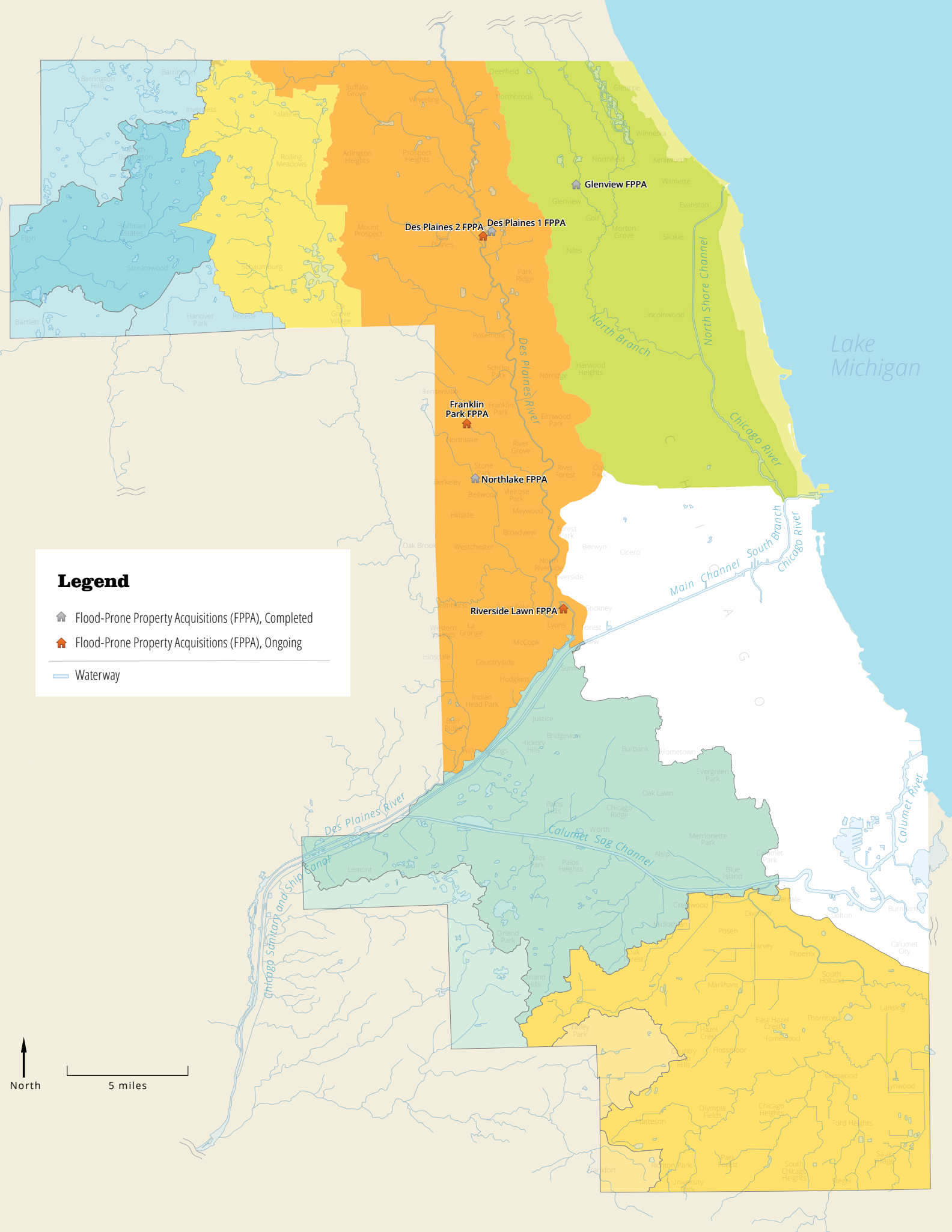
### **EXPANSION OF EXISTING DETENTION BASIN IN ORLAND PARK**

**ID:** Orland Park **Contract:** 18-IGA-33  
**Watershed:** Little Calumet River  
**Location:** Orland Park, IL  
**Description:** Expansion of the Grasslands Regional Detention Basin in Orland Park.  
**Estimated Construction Cost:** \$600,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement

### **RELIEF SEWERS TO MITIGATE BASEMENT BACKUPS IN ARLINGTON HEIGHTS**

**ID:** Arlington Heights **Contract:** 18-IGA-34  
**Watershed:** Lower Des Plaines  
**Location:** Arlington Heights, IL  
**Description:** Construction of relief sewers for various locations to mitigate basement backups along Campbell Street, Vail Avenue, Dunton Avenue, and Sigwalt Street and in downtown areas.  
**Estimated Construction Cost:** \$1,800,000  
**MWRD Contribution:** TBD  
**Status:** Drafting intergovernmental agreement





### FLOOD-PRONE PROPERTY ACQUISITION

On August 7, 2014, the Board of Commissioners 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 and provide 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.

In 2017, MWRD solicited applications from municipalities and townships for assistance with the acquisition of flood-prone structures located throughout Cook County. MWRD previously entered into intergovernmental agreements with several municipalities and the Cook County Land Bank Authority to acquire 58 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 2018 completed projects, refer to page 7. Locations of both ongoing and completed flood-prone property acquisition projects can be found on page 20.

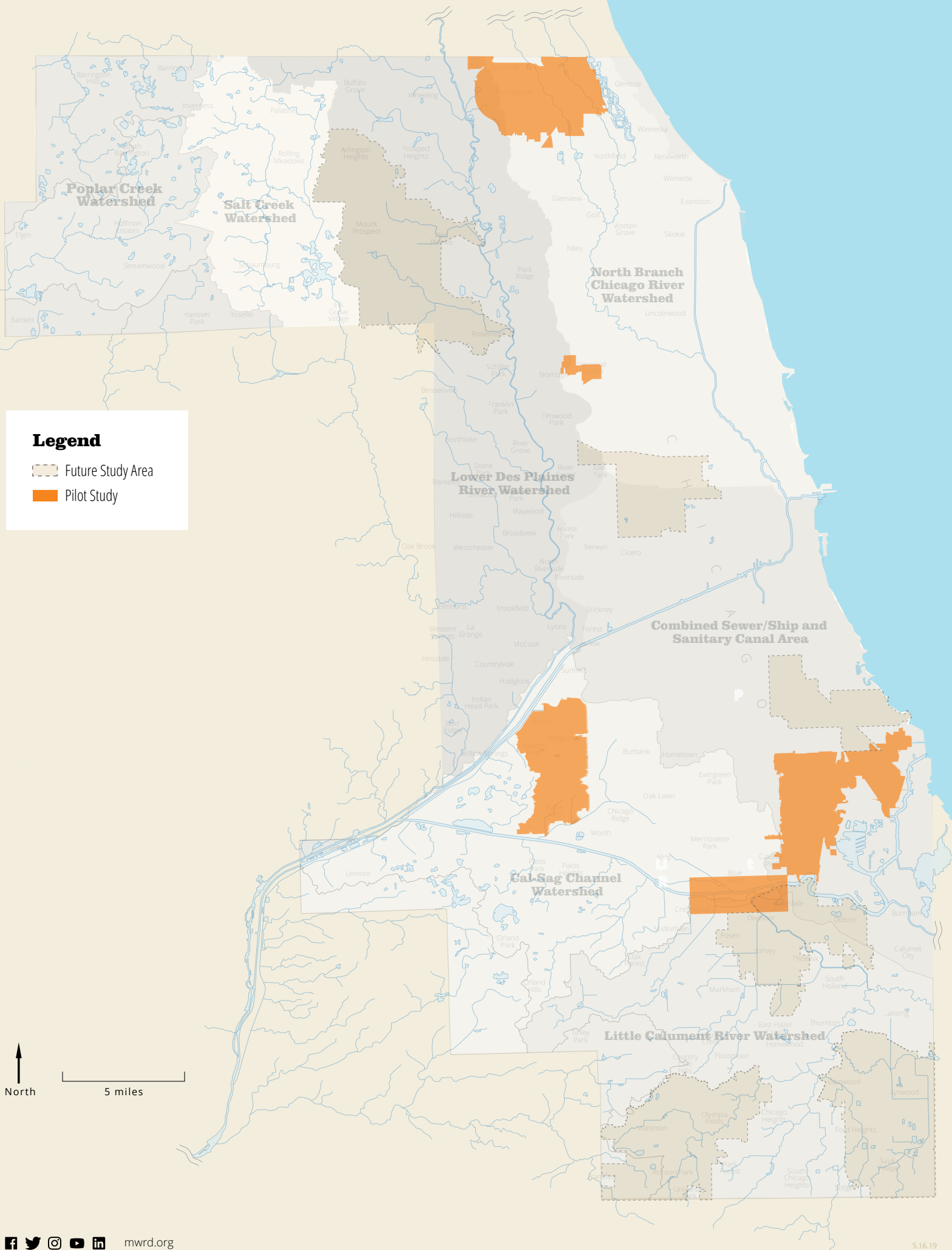
**RIVERSIDE LAWN FLOOD-PRONE PROPERTY ACQUISITIONS**  
**ID:** Riverside Lawn FPPA  
**Contract:** 16-IGA-11  
**Watershed:** Lower Des Plaines  
**Location:** Riverside Lawn, IL  
**Description:** Purchase 39 flood-prone homes along the Des Plaines River. This is a cost-sharing agreement with the Cook County Land Bank Authority for the acquisition of flood-prone properties in unincorporated Riverside Lawn.  
**Estimated Construction Cost:** \$12,000,000  
**MWRD Contribution:** \$8,000,000  
**Status:** Intergovernmental agreement executed. Acquisitions are ongoing.

**DES PLAINES FLOOD-PRONE PROPERTY ACQUISITIONS (PHASE II)**  
**ID:** Des Plaines FPPA  
**Contract:** 16-IGA-11  
**Watershed:** Lower Des Plaines  
**Location:** Des Plaines, IL  
**Description:** Purchase 47 flood-prone homes along the Des Plaines River. This is a cost-sharing agreement with the City of Des Plaines.  
**Estimated Construction Cost:** \$15,263,444  
**MWRD Contribution:** \$3,625,000  
**Status:** Intergovernmental agreement executed. Acquisitions are ongoing.

**FRANKLIN PARK FLOOD-PRONE PROPERTY ACQUISITIONS**  
**ID:** Franklin Park FPPA  
**Contract:** 16-IGA-13  
**Watershed:** Lower Des Plaines  
**Location:** Franklin Park, IL  
**Description:** Purchase 32 flood-prone homes along Silver Creek. This is a cost-sharing agreement with the Village of Franklin Park.  
**Estimated Construction Cost:** \$6,400,000  
**MWRD Contribution:** \$4,681,000  
**Status:** Intergovernmental agreement executed. Appraisals are being performed.

Des Plaines Flood Prone Property Acquisitions. 16-IGA-11





## STORMWATER MASTER PLAN PILOT STUDIES

MWRD initiated five Stormwater Master Plan pilot studies in 2015 to begin putting together a Cook County green and gray infrastructure plan that would better protect the community against severe weather events. The goal of these pilot studies was to identify solutions to 100-year flooding of structures and basement backups located in publicly and privately owned properties. To achieve this goal, it will be necessary to demonstrate to the general public that no agency alone can solve the flooding woes plaguing our region. Through extensive public outreach and education, MWRD will work to educate the public as to the magnitude of the flooding issues faced by our region. Based on input from each of the four Councils of Government and the City of Chicago, the five pilot locations were:

- The Little Calumet River/Calumet-Sag Channel drainage areas,
- Northbrook,
- Roberts Road drainage area,
- Village of Harwood Heights, and
- The City of Chicago's 8th Ward and surrounding area (on the southeast side).

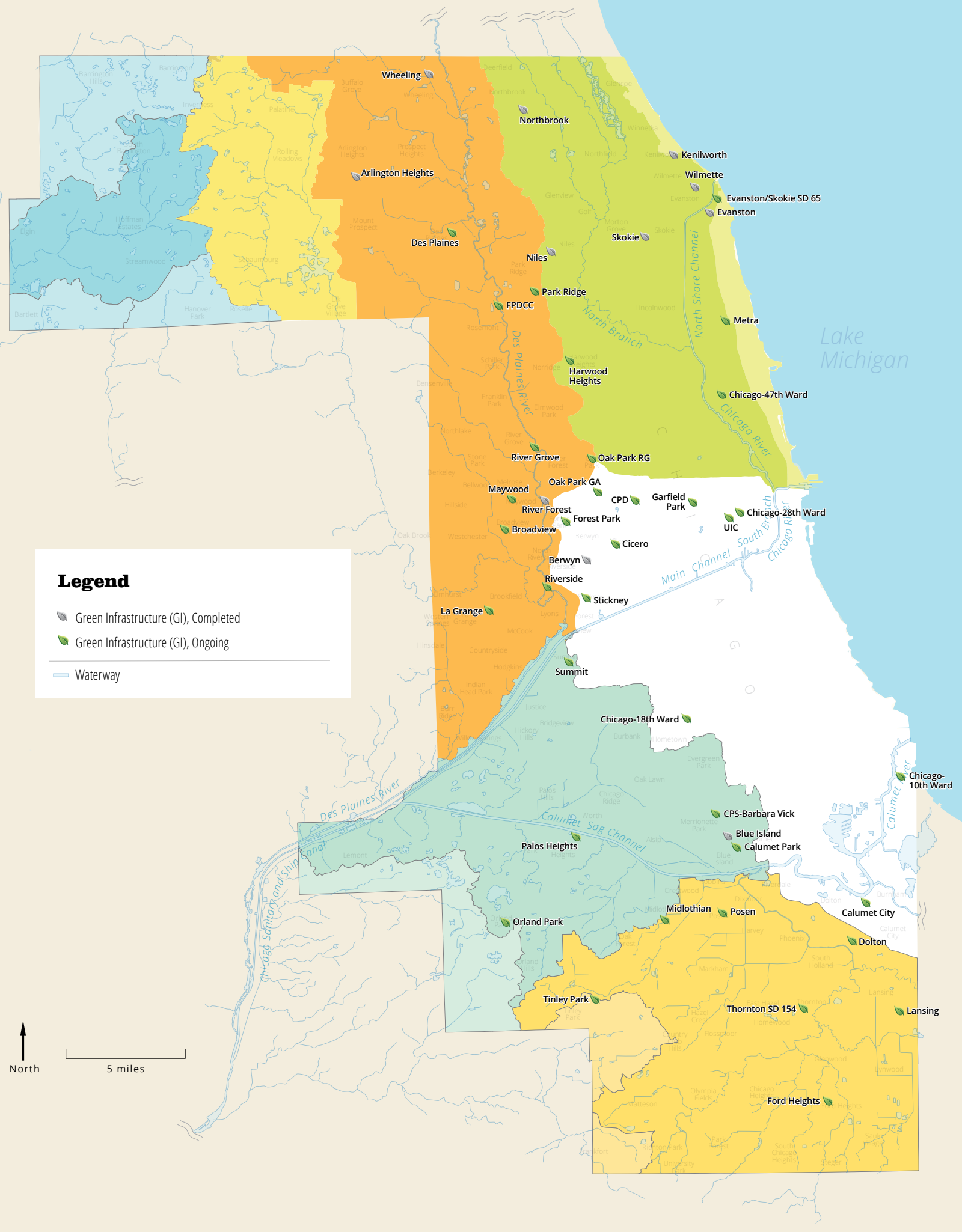
After completing the pilot Stormwater Master Plans, the findings of these studies revealed that exorbitant investments by MWRD and the local communities would be necessary to protect structures from flooding through traditional gray or blended green and gray infrastructure. As MWRD moves forward with its stormwater master planning effort for the entire county, the lessons learned in the pilot studies will be applied, and an adaptive approach will be utilized to find ways to address community issues that considers local communities' capacity and identifies potential partnership opportunities to help fund multi-objective solutions centered on stormwater management. After an assessment and review of community planning needs across Cook County is completed, additional stormwater master planning studies will be pursued in order to create an overall plan for Cook County.

It is anticipated that Stormwater Master Plans will be developed for areas across Cook County over the next several years following the process defined through initial pilot studies completed in 2016.

As part of the MWRD's continuing Stormwater Master Planning effort, questionnaires will be sent out in the 1st quarter of 2019 to all communities to gather available information related to stormwater issues for use in future plans initiated by the MWRD. The data sought in the questionnaire includes:

- Location, frequency and severity of flood problems
- Whether flooding and flood solutions are an important need in the community
- If planning or engineering efforts have already been made to address stormwater issues
- Other top community needs.

The questionnaire will be in two parts. The first part will be general questions answered through an online application. The second will be an interactive online GIS tool to show locations of flooding on a map.



**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, Green infrastructure can reduce combined sewer discharges, localized flooding and stormwater impacts in an area. Green infrastructure includes natural systems which use vegetation, such as bioswales and rain gardens, to manage rainfall. Green infrastructure also includes manufactured solutions such as rain barrels, permeable pavement and rain water harvesting. Established in 2014, the Green Infrastructure Program seeks to increase the acceptance and investment of green infrastructure throughout Cook County through numerous partnerships.

**GREEN INFRASTRUCTURE ‘CALL FOR PROJECTS’**

MWRD introduced the Green Infrastructure Call for Projects to scale its investment into green infrastructure. The program seeks to partner with local communities and public agencies throughout Cook County to fund and build green infrastructure 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 amongst other criteria. MWRD and a partnering agency execute an intergovernmental agreement 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.

In May 2017, the program’s first year, 19 partnerships were selected. The Arlington Heights, River Forest, Skokie, and Wheeling Park District projects were completed in 2018, providing 205,453 gallons of design retention capacity for an investment of \$694,000. The remainder of the selected 2017 projects are anticipated to be completed in 2019. These projects include partnerships with the villages of Des Plaines, Forest Park, Harwood Heights, Maywood, Midlothian and Riverside and the Chicago Park District.

A second ‘Call for Projects’ was held in June 2018 with 48 applications evaluated. 20 partnerships were selected, providing up to 1.4 million gallons of design retention capacity. Most of the 2018 year projects are currently undergoing intergovernmental agreement negotiations and design reviews.

**GREEN INFRASTRUCTURE PARTNERSHIPS ‘CALL FOR PROJECTS’**

The following is a list of Green Infrastructure Partnerships scheduled for construction in 2019. For 2018 completed projects, refer to page 7. Locations of both ongoing and completed Green Infrastructure Partnerships can be found on page 24.

**GREEN INFRASTRUCTURE PARTNERSHIP PROJECTS SCHEDULED FOR CONSTRUCTION IN 2019**

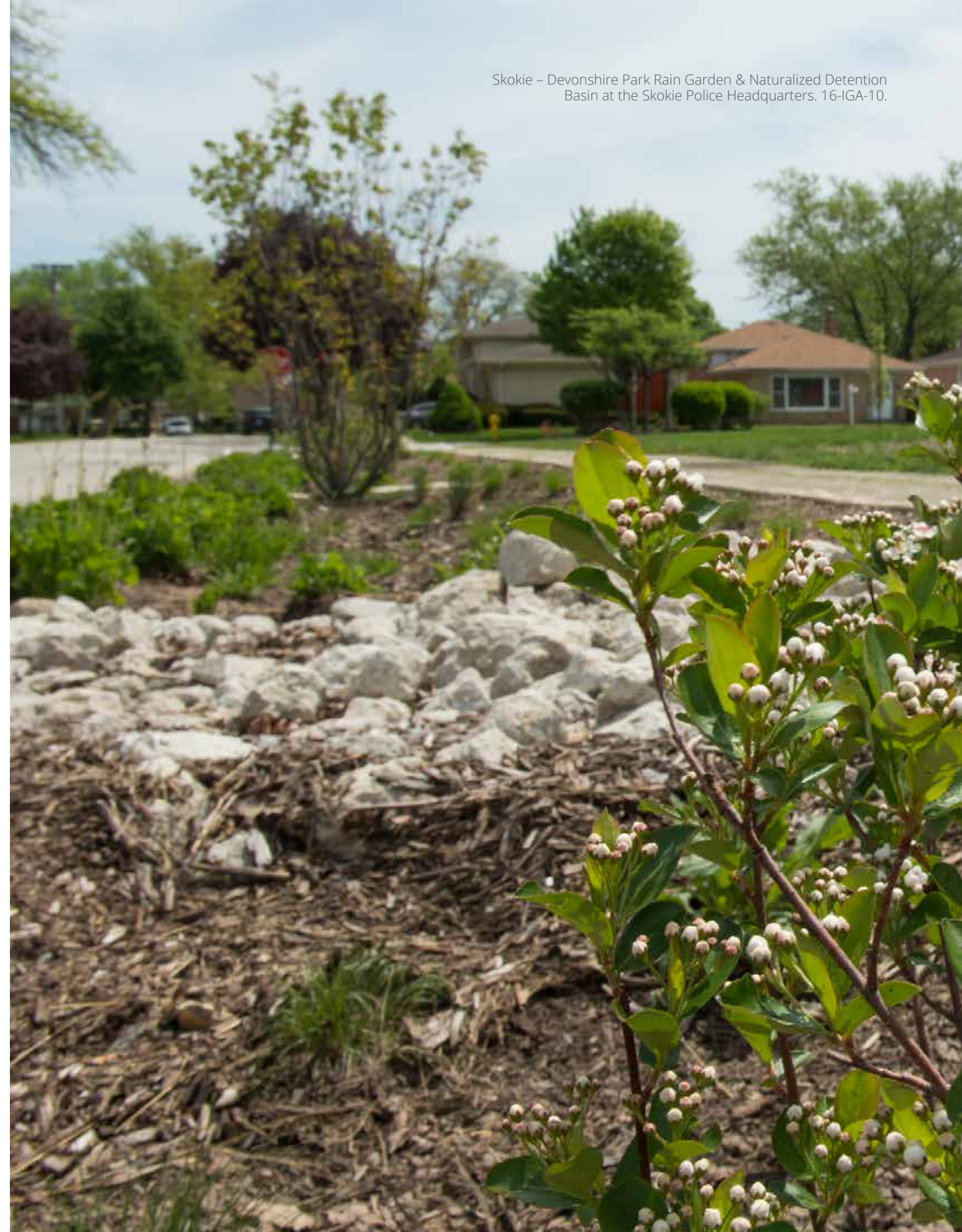
ID	Contract	Project Title
CPD	18-IGA-04	Stormwater Infiltration through the Establishment of Native Habitat at 3 Chicago Parks
Des Plaines	18-IGA-06	Des Plaines Green Infrastructure Project
Forest Park	18-IGA-07	Forest Park Green Infrastructure Project
FPDCC	18-IGA-08	Forest Preserve District of Cook County Green Infrastructure Project
Maywood	18-IGA-10	Village of Maywood Green Infrastructure Project
Midlothian	18-IGA-12	Village of Midlothian Keystone Ave. Permeable Parking Lot
Orland Park	18-IGA-13	Village of Orland Park Green Infrastructure Project
Palos Heights	18-IGA-14	Palos Heights Lake Catherine Commuter Parking Lot
Posen	18-IGA-15	Village of Posen Green Infrastructure Project
Riverside	18-IGA-17	Village of Riverside Green Infrastructure Project

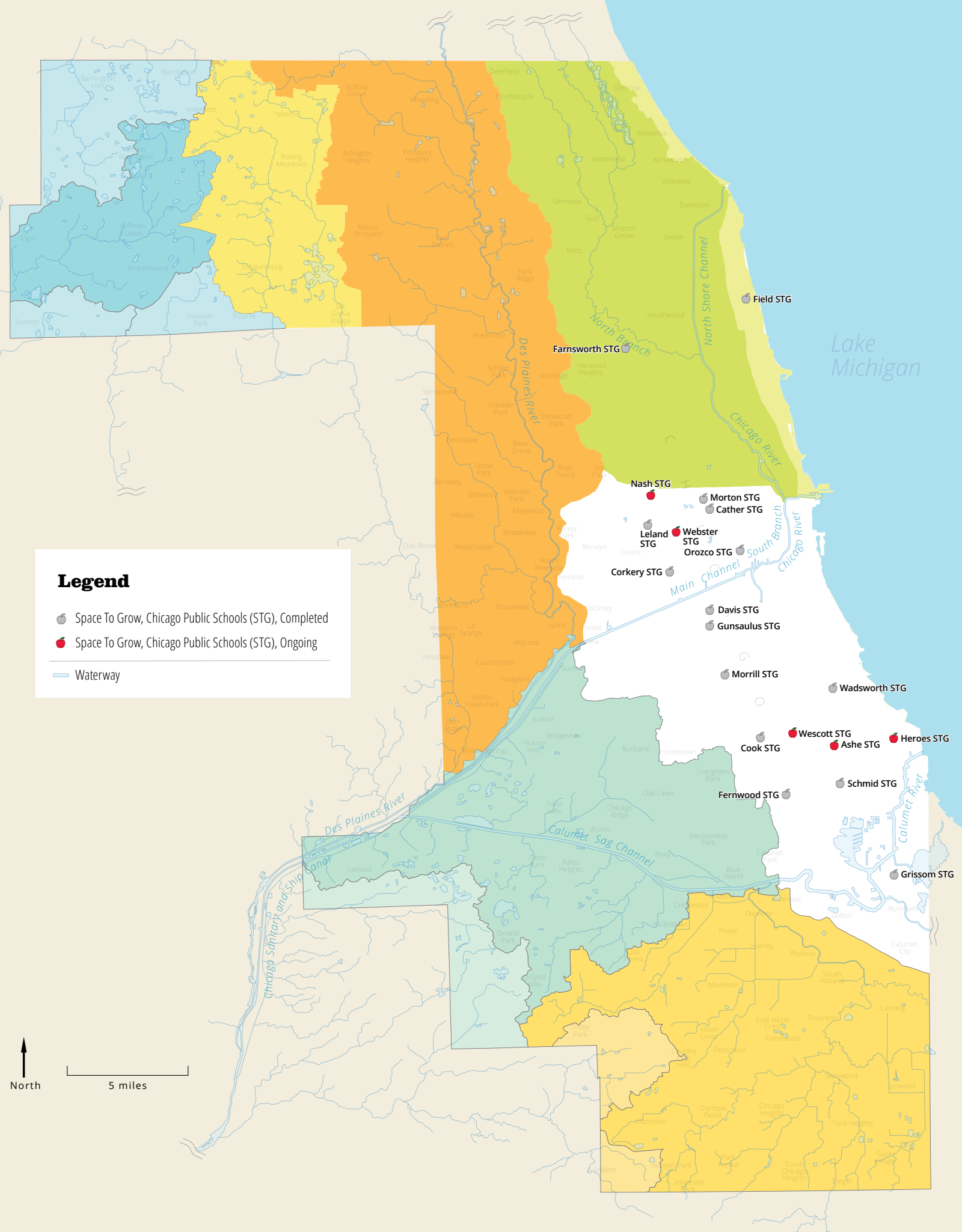
**GREEN INFRASTRUCTURE PARTNERSHIP SELECTIONS – 2018 ‘CALL FOR PROJECTS’**

The following is a list of agencies and associated projects selected during the 2018 Green Infrastructure ‘Call For Projects’. Intergovernmental Agreements are currently being drafted between the MWRD and listed agencies.

ID	Partnering Agency	Project Title
CPS-Barbara Vick	Chicago Public Schools - Barbara Vick Early Childhood and Family Center	Barbara Vick Outdoor Classrooms
Broadview	Village of Broadview	2019 Green Alley Improvements
Calumet City	City of Calumet City	Calumet City- Green Infrastructure
Chicago-18 <sup>th</sup> Ward	City of Chicago - 18th Ward	8000 S Homan Green Alley
Chicago-28 <sup>th</sup> Ward	City of Chicago - 28th Ward	725 S. Laflin Green Alley
Chicago-47 <sup>th</sup> Ward	City of Chicago - 47th Ward	1900 W Eddy-Addison Green Alley
Cicero	Town of Cicero	2019 Green Infrastructure Alley Paving Improvements
Dolton	Village of Dolton	Cornell Avenue Green Infrastructure Project
Evanston/Skokie SD 65	Evanston/Skokie School District 65	Green Infrastructure at Orrington Elementary School
Ford Heights	Village of Ford Heights	Ford Heights Green Streets Project
La Grange	Village of La Grange	La Grange Parking Lots Green Infrastructure Retrofit
Lansing	Village of Lansing	Washington Street Green Infrastructure Parking Lot Improvements
Oak Park GA	Village Of Oak Park	Green Alley Improvements Project
Oak Park RG	Village of Oak Park	Public Works Facility Demonstration Rain Garden
Park Ridge	City of Park Ridge	Park Ridge Public Library Green Parking Lot
River Grove	Village of River Grove	2018 FY Green Alleys Program
Stickney	Village of Stickney	Public Parking Lot Reconstruction Green Infrastructure Improvements
Summit	Village of Summit	Green Infrastructure Alley Improvements
Thorton SD 154	Thornton School District 154	Wolcott School Playground Enhancement
Village Of Tinley Park	Village Of Tinley Park	North Street Permeable Pavers

Skokie – Devonshire Park Rain Garden & Naturalized Detention Basin at the Skokie Police Headquarters. 16-IGA-10.





**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 green infrastructure 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 and the City of Chicago Department of Water Management. MWRD also provides technical support for green infrastructure 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 Chicago Public Schools executed an intergovernmental agreement to facilitate the projects whereby long term maintenance responsibilities are assigned to Chicago Public Schools. MWRD maintains the right to inspect the green infrastructure to ensure it is being properly maintained in accordance with the operations and maintenance plan developed for each school. Since 2015, MWRD has invested in 15 schools providing 2.77 million gallons of design retention capacity. The program will be amended to continue through 2022, funding green infrastructure at up to thirty schools for a total investment of approximately \$16 million. Construction was completed at 6 schools in 2018. Another 5 projects have been designed with construction anticipated in early 2019.

Space to Grow Donald L. Morrill Math and Science School. 15-IGA-20.



**SPACE TO GROW PARTNERED SCHOOLS**

The following is a list of Space to Grow Projects scheduled for construction in 2019. For 2018 completed projects, refer to page 7. Locations of both ongoing and completed Space to Grow Projects can be found on page 28.

**ID:** Multiple Locations **Contract:** 15-IGA-20 **Watershed:** Chicago **Location:** Multiple Locations  
**Description:** MWRD, the Chicago Department of Water Management, and the Chicago Public Schools are partnering to design and install playgrounds at various Chicago elementary schools utilizing green infrastructure. The projects will reduce flooding, reduce the load on the combined sewer system, and educate students and neighbors about green infrastructure techniques and purpose.

**MWRD Max Contribution:** \$16,000,000  
**Status:** 15 of a total up to 30 schools have been completed through 2018. 6 playgrounds were transformed in 2018. An additional 5 schools have been designed and are planned for construction in 2019. They are as follows:

- Arthur R. Ashe Elementary School | 8505 S. Ingleside Avenue
- Ninos Heroes Elementary Academic Center | 8344 S. Commercial Avenue
- Henry H. Nash Elementary School | 4837 W. Erie Street
- Daniel Webster Elementary School | 4055 W. Arthington Street
- Oliver S. Wescott Elementary School | 409 W. 80th Street

The existing intergovernmental agreement between MWRD and Chicago Public Schools will be amended to extend the timeline for the remaining projects through 2022. MWRD plans to invest \$1 million to fund ten school designs, with the remaining school designs to be funded by Chicago Public Schools and the City of Chicago Department of Water Management.



MWRD crew clearing debris from stream.

## STORMWATER MAINTENANCE AND OPERATION

### CAPITAL PROJECT MAINTENANCE & 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 intergovernmental agreement with the MWRD, which includes the operation and maintenance plan, and the maintainer of the project is established. Typically, the partnering agency is responsible for all costs associated with 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 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 twelfth 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 26,229 cubic yards of debris in 2018. In addition 3,055 cubic yards of river and canal debris was removed by MWRD's debris and skimmer boat crews along the Chicago Area Waterways. In 2018, MWRD continued to utilize a two-year stream maintenance contract, paying a total of \$2,382,830 to contractors to provide stream maintenance. Listed in the table below are the debris amounts removed in each watershed for the past two years.

Total Debris Removed By Watershed (Cubic Yard)		
Watershed	2017	2018
Little Cal	8,810	7,821
Cal-Sag	4,326	9,791
Lower Des Plaines	5,889	7,041
North Branch	1,443	1,321
Upper Salt Creek	295	185
Poplar Creek	280	70
Total	21,043	26,229

The 2018 expenditure for the Small Streams Maintenance Program was \$2,835,979. The average cost per cubic yard of debris removed was \$108.12.

The Small Streams Maintenance Program will continue in 2019 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, IL, by either visiting <https://gispub.mwrld.org/incidentreporting/> or downloading the Citizen Incident Reporting iPhone app (search for **MWRD Citizen Incident Reporting** on the iPhone App store or visit: <https://apple.co/2LTtEa8>).

## WATERSHED MANAGEMENT ORDINANCE

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's Board of Commissioners 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 replaces 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. The MWRD has included a green infrastructure component in the ordinance which requires the capture of 1-inch of runoff from impervious surfaces for parcels greater than ½ acre in size when a WMO permit is required.

The WMO was amended by MWRD's Board of Commissioners on July 10, 2014 to incorporate the Infiltration/Inflow Control Program (Article 8). It was amended again on February 15, 2018. In 2018, the Board of Commissioners authorized public notification of the intent to amend the WMO to include watershed specific release rates. The proposed amendment is anticipated to be adopted in 2019. MWRD continues to develop the Technical Guidance Manual, which serves as a technical reference to the WMO. The WMO webpage, <http://wmo.mwrld.org/>, 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 2018, five hundred permits were issued, requiring a total of 145,110,200 gallons of detention volume. 208 permits required



a total of 16,196,196 gallons of green infrastructure retention volume. The following table illustrates the number of permits issued and inspected in 2018 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.

<b>Watershed Management Ordinance Program</b>				
<b>Year</b>	<b># Permits Issued</b>	<b># Site Inspections</b>	<b>Total Detention Volume</b>	<b>Total Green Infrastructure Volume</b>
2018	500	5,482	145,110,200 gallons	16,196,100 gallons
<b>Total</b>	<b>1,944</b>	<b>-</b>	<b>418,060,300 gallons</b>	<b>54,141,600 gallons</b>

### **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. To obtain GPS equipment and related software at no cost, sewer system owners must enter into an intergovernmental agreement with MWRD. As of January 2018, seven municipalities have entered into an intergovernmental agreement with MWRD to utilize the GPS units. 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 intergovernmental agreement and modifiable letter of intent can be found at <http://wmo.mwrld.org/>.

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



MWRD Engineer Michael "Mick" Cosme at Watershed Planning Council Meeting.

## 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 2018–2019 agreement, MWRD is funding the following seven 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
- Natalie Creek at Midlothian
- Tinley Creek near Palos Park

MWRD is also funding two rain gages located on Salt Creek near Rolling Meadows and on Natalie Creek at Midlothian. 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 website at <https://waterdata.usgs.gov/nwis>. Precipitation data is available at <https://il.water.usgs.gov/gmaps/precip/index.php>.

## 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-Sag 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 concerns of the public 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 2018 and 2019. 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. Visit <https://mwrdd.org/irj/portal/anonymous/meetingschedule> to view the current Watershed Planning Council meeting schedule.

## PUBLIC AFFAIRS

In 2018, MWRD staff provided information about MWRD and the Stormwater Management Program at various public events in communities throughout the region and at various 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 Chicago Public Schools and the 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 green infrastructure is demonstrated. MWRD also worked to educate the general public on their water footprint by attending numerous community and environmental fairs throughout Cook County.

MWRD Staff will continue to participate in community outreach events in 2019. 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 against flooding through projects identified in our annual report.

A list of stormwater management press releases issued in 2018 can be found on the next page.

## 2018 STORMWATER MANAGEMENT PRESS RELEASES

December 20, 2018	CPS schools selected for schoolyard transformations in 2019
December 10, 2018	Partnership inspires Space to Grow at Jefferson Park School; Farnsworth Elementary School is sixth CPS schoolyard to be transformed in 2018
November 20, 2018	Natalie Creek to undergo overhaul; MWRD project to mitigate flooding in Midlothian, Oak Forest
November 16, 2018	Problematic Natalie Creek to undergo overhaul; MWRD project to mitigate flooding in Midlothian, Oak Forest
October 25, 2018	Space to Grow celebrates new schoolyard at Morton School of Excellence
October 24, 2018	MWRD's Sustainability Summit honors partners excelling in resource recovery, stormwater management
October 12, 2018	Flossmoor homes to be removed from flood plain after MWRD construction
October 9, 2018	Ribbon-cutting ceremony to be held on Cherry Creek East Branch Flood Control project in Flossmoor
September 24, 2018	Rotterdam delegation tours Space to Grow schoolyards
September 12, 2018	New school year opens at Cook Academy with dynamic schoolyard thanks to Space to Grow partners
September 11, 2018	Space to Grow transforms Fernwood Elementary schoolyard in Chicago
August 8, 2018	Skokie improvements highlight power of MWRD's green infrastructure
August 6, 2018	Village of Skokie, MWRD and Skokie Park District to hold ribbon cutting ceremony
July 30, 2018	Dam removal on North Branch of Chicago River to clear way for boaters and wildlife
July 26, 2018	New tunnel to relieve Albany Park from catastrophic flooding
June 21, 2018	Nathan S. Davis Elementary is 10th CPS schoolyard transformed through Space to Grow partnership
June 18, 2018	Nathan S. Davis Elementary Celebrates New Schoolyard Through Space to Grow: Greening Chicago Schoolyards
June 13, 2018	MWRD seeks local government partners for green infrastructure projects
May 31, 2018	MWRD pledges support for critical stormwater management projects
May 30, 2018	Stormwater lesson from MWRD inspires local students to action
May 23, 2018	MWRD work on Tinley Creek takes Crestwood residents and businesses out of harm's way
May 3, 2018	Buffalo Creek Reservoir Expansion is underway as MWRD, USACE, Buffalo Grove, Wheeling and LCFPD shovel first soil
April 26, 2018	Groundbreaking on Buffalo Creek Reservoir expansion will provide stormwater protection for Buffalo Grove and downstream communities
April 3, 2018	MWRD reservoir expansion to alleviate Burbank and Oak Lawn flooding
March 28, 2018	Groundbreaking on Melvina Ditch Reservoir expansion will provide stormwater protection for Burbank and Oak Lawn
March 23, 2018	Now is the time to plant a (free) tree and restore the canopy with MWRD
March 5, 2018	MWRD to share stormwater management tips, showcase exceptional quality compost during Chicago Flower and Garden Show at Navy Pier March 14 - 18
February 26, 2018	Westchester reservoir expansion earns Engineering Excellence award
February 23, 2018	Water rises to the top of MWRD's McCook Reservoir to protect region
February 23, 2018	Niles flood relief project named Public Works Project of the Year
January 16, 2018	MWRD prioritizes green infrastructure projects in 2018
January 12, 2018	First fill: Water unleashed into McCook Reservoir for first time January rains set reservoir into service to mitigate flooding and protect waterways from pollution

## 2018 STORMWATER MANAGEMENT COMMITTED EXPENDITURES

Category	Description	Committed Expenditures	
<b>Personal Services: Consultants</b>	<b>Fees paid to consultants for professional services rendered:</b>	<b>\$ 3,424,253</b>	<b>7.25%</b>
	Preliminary Engineering	\$ 1,098,908	
	Final Engineering	\$ 2,308,890	
	Post Award	\$ 16,455	
<b>Personal Services: In-House</b>	<b>Salaries and associated costs related to MWRD personnel (57 Full time Employee Positions):</b>	<b>\$ 6,415,017</b>	<b>13.59%</b>
<b>Contractual Services</b>	<b>Fees paid for services provided by Councils of Governments, agencies or companies:</b>	<b>\$ 37,360,334</b>	<b>79.14%</b>
	Small Streams Maintenance Program	\$ 2,405,182	
	Small Streams Maintenance Program Waste Disposal	\$ 29,172	
	Court Reporting Services	\$ 12,934	
	Contractual Services, N.O.C	\$ 533,470	
	Land Acquisition and Appraisals	\$ 338,874	
	Waterways Facilities Structures (Construction)	\$ 14,083,828	
	Army Corps of Engineers Services	\$ 1,358,335	
	Permit Review	\$ 283,649	
	IGAs	\$ 12,030,314	
	Payments for Easements	\$ 345,700	
	Debt Service for Alternate Revenue Bonds	\$ 5,770,550	
	Miscellaneous Contractual Services	\$ 168,327	
<b>Administrative Expenses</b>	<b>Materials, equipment, supplies:</b>	<b>\$ 7,899</b>	<b>.02%</b>
	<b>Total 2018 Committed Expenditures</b>	<b>\$ 47,207,503</b>	
	<b>Net Assets Applicable for 2019</b>	<b>\$ 47,791,173</b>	



Space to Grow  
James B. Farnsworth Elementary School.  
15-IGA-20.

## **BOARD OF COMMISSIONERS**

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## **Metropolitan Water Reclamation District of Greater Chicago**

100 East Erie Street • Chicago, Illinois 60611-3154

### **Visit our facilities.**

To schedule a tour, call 312.751.6333 or email [tours@mwrdd.org](mailto:tours@mwrdd.org).  
Tours are offered for groups of up to 25.



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Established in 1889, the MWRD is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in Cook County, Illinois.

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