



DUPAGE COUNTY

Stormwater Management 2019 Annual Report



DUPAGE COUNTY
STORMWATER MANAGEMENT
PLANNING COMMITTEE

Dan Cronin, *County Board Chairman*

Jim Zay, *Committee Chairman*

County Board Members:

Sadia Covert

Greg Hart

Sean Noonan

Mary FitzGerald Ozog

Sam Tornatore

Municipal Members:

Janice Anderson

David Brummel

Steve Nero

Chester Pojack

Nunzio Pulice

Asif Yusuf

In 2019, DuPage County Stormwater Management strengthened and grew a number of existing programs and initiatives aimed at alleviating flooding and improving the quality of local streams and rivers.

Notably, Stormwater Management expanded its Shared Services Division, established in 2018, considerably. Within the division, DuPage County assists local municipalities and townships in meeting water quality and stormwater management initiatives, including the use of equipment and crews both routine maintenance and emergency services. The program generates revenue for the County, while also limiting the burden on communities to staff extra crews or purchase costly equipment.

Throughout the year, the Stormwater Management crew assisted nine local entities with services ranging from emergency floodwater pumping in Lisle to clearing storm sewer inlets in Itasca to a long-term agreement with Westmont to inspect and maintain detention basins and pump stations. This is in addition to responding to 260 service callouts for unincorporated drainage issues, another program that falls under the division.

The Shared Services Division has been so successful that the National Association of Counties recognized it on a national scale as “Best in Category” for Community and Economic Development.

We are so proud of this and all of our accomplishments in 2019, and we invite you to learn about them in this annual report. We look forward to continuing to grow this work in 2020.

Sincerely,

Jim Zay, Chairman
Stormwater Management Planning Committee

DuPage County Stormwater Management (SWM) plans, designs and constructs regional flood control, wetland restoration and water quality projects countywide.



In 2019, two local chapters of the American Public Works Association awarded the **Graue Mill Flood Control Improvement Project**, constructed by SWM in 2018, as Environmental Project of the Year (Under \$5 Million).



Located in unincorporated Glendale Heights, the **Pearl Avenue Drainage Improvement Project** repaired a deteriorating streambank. SWM's crew installed a block wall and stone rip rap to prevent erosion on a stretch of stream flowing between two homes.



To provide drainage relief to four properties, the **Massel Court Drainage Improvement Project** included installation of underdrains and the re-establishment of an existing swale. The project was constructed entirely by SWM's in-house crew.

IN-HOUSE PROJECTS

In 2016, SWM created an in-house maintenance crew to more efficiently and effectively operate and maintain the County-owned land and flood control facilities. The crew has doubled since its inception to a total of 8 staff members with 2 added in 2019. During the year, they assisted communities with 2 large-scale projects and 6 smaller initiatives.

SWM developed its Shared Services Division to assist municipalities and townships in meeting water quality and stormwater management initiatives through the shared use of equipment and personnel.



The National Association of Counties recognized SWM’s Shared Services Program as “Best in Category” for Community and Economic Development, beating out national submissions.

COMMUNITY ASSISTANCE



SWM provided the Village of Lisle emergency pumping assistance when flooding occurred during several large storm events.



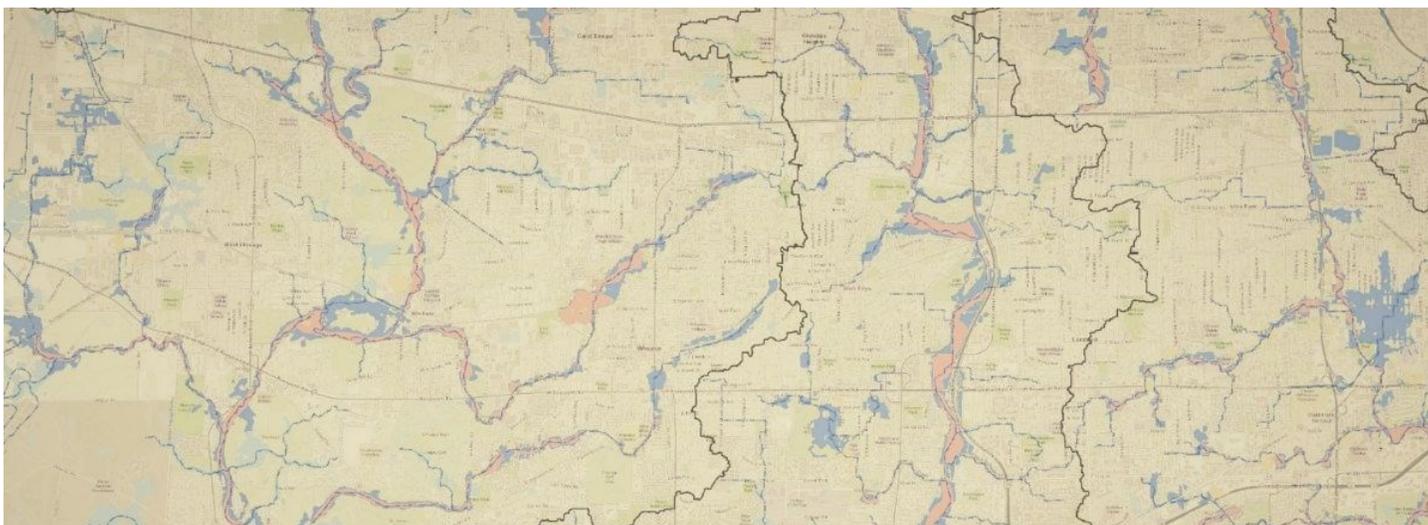
SWM entered into an agreement with the Village of Westmont to maintain several pump stations and detention basins.



Using DuPage County’s vactor truck, SWM crews have inspected and cleared storm sewer inlets for the Village of Itasca over the past few years.

To identify countywide projects, SWM works with local agencies to develop watershed plans with both flood mitigation and water quality recommendations.

FLOODPLAIN MAPPING



New **countywide floodplain maps** became effective on August 1, 2019. They are used for both regulatory and flood insurance purposes. These maps reflect updated hydrologic and hydraulic study data for 24 watersheds in DuPage County, which was accomplished by SWM staff using a more than \$2 million grant from the Federal Emergency Management Agency.

FLOOD CONTROL PLANS

- Currently studying the **Winfield Creek, St. Joseph Creek** and **Wards Creek** watersheds to develop flood control plans.
- In partnership with SWM, the U.S. Army Corps of Engineers recommended their **DuPage River Corridor Plan** to Congress for funding.

WATER QUALITY PLANS

- Received a \$244,010 grant from the Illinois Environmental Protection Agency to complete the **East Branch DuPage River Watershed Water Quality-Based Plan**.
- The Illinois Environmental Protection Agency approved the **Lower Salt Creek Watershed Plan**.

ORDINANCE UPDATES

- Updated the **DuPage County Countywide Stormwater Management and Floodplain Ordinance** to include new floodplain maps and updated rainfall data.

SWM maintains and operates 17 flood control facilities countywide. In total, these facilities have the capacity to divert nearly 6 billion gallons of floodwater.

FLOOD CONTROL OPERATIONS

SWM staff operated the County's larger flood control facilities 5 times in 2019. Two of those operations took place in the spring, which was one of the wettest on record. Smaller, gravity-operated facilities took in floodwater as needed throughout the year.



FLOOD CONTROL MAINTENANCE



SWM's staff responded to approximately 260 service calls for unincorporated drainage issues. Under the drainage program, SWM assesses these localized flooding issues and provides assistance, including project design and construction, when feasible.



As part of routine maintenance, SWM replaced 2 pumps to ensure optimal operation at flood control facilities. The new pumps were installed at the Spring Creek Reservoir (Bloomington) and Wood Dale-Itasca Flood Control Facility (Wood Dale).

SWM fosters partnerships between local agencies, organizations and residents to help advance water quality goals throughout the region.



In partnership with the Elmhurst History Museum, SWM opened its Elmhurst Quarry Flood Control Facility to a sold-out crowd in September 2019. More than 500 people registered to get a rare, inside look at this DuPage County landmark.



Members from the MABAS Division 12 participated in a 3-day training at SWM's Elmhurst Quarry Flood Control Facility.



The American Society of Engineers - IL recognized SWM Director Anthony J. Charlton as Government Engineer of the Year.



SWM painted and planted an educational planter box as part of a community garden initiative on display at the DuPage County Fairgrounds.

COMMUNITY ENGAGEMENT

- Nearly 10,000 E-Newsletter Subscribers
- More than 800 Social Media Followers
- 18 YouTube Videos with Nearly 16,000 Views
- Awarded 25 Water Quality Flags Countywide
- Participated in or Sponsored over 60 Events
- Events Attracted over 8,000 Attendees

Staff across all of SWM's divisions accomplished a significant amount in 2019.

Regulatory

- Performed 213 stormwater management permit reviews for development in the County.
- Issued 119 stormwater authorizations and certifications.
- Conducted 117 stormwater pre-application meetings.
- Monitored 305 wetland mitigation and enhancement projects.
- Granted regulatory sign-off on 23 wetland mitigation and enhancement sites.
- Performed vegetation monitoring on approximately 110 County-owned sites.
- Launched online permit submittal and payment system.

Water Quality

- Inventoried and monitored 1,375 storm sewer outfalls for the Illicit Discharge Detection and Elimination (IDDE) program.
- Awarded \$306,505 in funding under the Water Quality Improvement Program Grant to:
 - Village of Bloomingdale
 - Village of Downers Grove
 - City of Naperville
 - Village of Westmont
 - City of Wheaton

Flood Mitigation

- Removed 25 major stream blockages to alleviate flooding.
- Field crew managed nearly 180 County-owned properties, spanning more than 750 acres of land countywide.

