



STORMWATER MANAGEMENT COMMISSION

To: Lake County Stormwater Management Commission
From: Kurt Woolford, Jacob Jozefowski
Date: May 29, 2026
Subject: FY24 Stream and Channel Maintenance Pilot Program Final Report

Background

The Stream and Channel Maintenance Pilot Program (SCMPP) was established in FY24 to:

1. Address a gap in services to address interjurisdictional drainage concerns. Prior to the SCMPP, the Lake County Stormwater Management Commission would assist in the resolution of interjurisdictional drainage concerns through interjurisdictional coordination and funding assistance through grant programs including the Watershed Management Board (WMB), Stormwater Infrastructure Repair Fund (SIRF), and Illinois Environmental Protection Agency Section 319 Clean Water Act (IEPA 319). Interjurisdictional coordination for these drainage concerns requires substantial staff resources and the yearly cycle, limited scope, and match requirements of current grant programs limit their effectiveness as tools for resolving interjurisdictional drainage concerns. It was anticipated that the SCMPP would address this gap in services by creating a no-match program that could quickly address interjurisdictional drainage concerns with minimal coordination.
2. Maintain existing indistinguishable relative permanent continuous surface connection between wetlands and Waters of the United States to lessen the loss of federal protection of wetlands in Lake County.
3. Maintain Lake County Stormwater Management Commission (SMC) owned infrastructure.

Accomplishments

- SMC identified 16 potential maintenance projects with a total estimated cost of implementation of \$640,920. Projects were primarily identified through requests for maintenance from municipalities and residents. The most common maintenance requests were for beaver management and debris jam removal.
- SMC purchased an electric Utility Task Vehicle (UTV) and trailer to transport and store the UTV. The UTV has increased SMC's ability to safely reach remote areas in the county and reduced the use of standard issued county vehicles for accessing off-road areas with terrain that exceeds those vehicles capabilities.



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- Three SMC staff members attended a Lake County Forest Preserve District chainsaw safety training.
- SMC met with DuPage County and Metropolitan Water Reclamation District of Greater Chicago (MWRD) staff to discuss their maintenance program structure and lessons learned.
- SMC held multiple field meetings with residents, one public meeting, and distributed two public notification mailings related to the SCMPP. Lake County Communications assisted with notification mailing development and distribution.
- SMC performed one drone flight and two stream inspections at Indian Creek between Buffalo Grove Road and Port Clinton Road.
- SMC hired a consultant to trap 16 beavers and remove approximately 15 cubic yards of debris from a beaver dam at a culvert at Midlane Golf Course (located in the City of Waukegan), which was contributing to high-water levels at the Shirley Drive culvert in Warren Township.

Lessons Learned and Unanticipated Challenges

- Demand for SMC assistance with stream and channel maintenance was higher than anticipated. The \$30,000 yearly allocation was inadequate to meet the maintenance demand. For reference, MWRD's maintenance program has a yearly budget of approximately \$1.7 million.
- Equipment needs for a fully functioning maintenance program were higher than expected. Other regional maintenance programs own crane trucks, UTVs, dump trucks, woodchippers, chainsaws, winches, grapples, skid steers, mini skid steers, and cradles with extension booms. Costs to acquire, store, transport, operate, and maintain this equipment exceeded the SCMPP's funding.
- Response times for support resources such as the States Attorney were longer than anticipated, resulting in project implementation delays.
- The UTV experienced a recall and battery failure, and repairs were delayed due to limited parts availability. This caused long periods where the UTV was out of service, resulting in project implementation delays.
- Demand for public education and outreach related to the SCMPP was higher than expected and it was difficult to meet residents' expectations for communication without impacting other tasks in SMC's work program. The 10% staff headcount reduction SMC experienced during this pilot program further impacted SMC's ability to meet communication expectations.



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- Beaver management requires nearly continuous inspection and action that the SCMPP could not provide. Trapping beavers and removing dams was not an effective management option. For example, trapping and debris removal at the Midlane Golf Course culvert cost \$11,546 and beavers were observed rebuilding the dam within 24 hours of debris removal. A Fiscal Year 2023 WMB grant demonstrated that non-lethal beaver management, such as beaver pond levelers, can be effective, but they require continuous maintenance and can be a source of conflict between the organizations/individuals maintaining the beaver pond levers and property owners impacted by the resulting changes in water levels. Additionally, while SMC has the authority to remove drainage obstructions, its statutory stormwater management authority does not include wildlife management
- The need to maintain existing indistinguishable relative permanent continuous surface connection between wetlands and Waters of the United States was lower than expected.
- Lake County-owned infrastructure maintenance needs were lower than expected.

Conclusion

The SCMPP it not feasible at current funding levels and implementation of the program was unsuccessful. The SCMPP did not result in a reduction of flood damages, improve water quality, reduce erosion, or reduce complaint resolution duration. The financial and staff resources needed to implement a successful county-wide stream and channel maintenance program exceeds currently available resources.

The information gathered during the SCMPP can be used to inform the future Lake County Comprehensive Stormwater Management Plan update. Updates to the maintenance functional area component of the Comprehensive Stormwater Management Plan should identify funding and staffing needs, funding sources, position classification requirements, safety compliance needs, project prioritization criteria, property owner notification requirements, and equipment needs for an effective maintenance program.