Village of Carpentersville, Kane County, Illinois

Stormwater Management Plan (SMP)

Introduction

The Village of Carpentersville operates under the General NPDES Permit ILR40 for its Municipal Separate Storm Sewer System (MS4). This Stormwater Management Plan (SMP) outlines the Village's strategies to reduce stormwater pollution and protect water quality in the Upper Fox River watershed. The plan is designed to meet IEPA requirements and is informed by ongoing monitoring, public engagement, and interagency collaboration.

The Village has reviewed the IEPA's website for information regarding approved or ongoing Total Maximum Daily Load (TMDL) limits on Upper Fox River watershed and the tributary streams which the MS4 is tributary to. There are currently no TMDLs approved or ongoing, therefore no changes to the existing Best Management Practices (BMPs) will be required to comply with a TMDL at this time.

1. Public Education and Outreach

Goals:
Raise awareness about stormwater pollution and promote best practices among residents and businesses.

Practices:
Maintain a dedicated stormwater webpage with brochures, videos (in English and Spanish), and climate change resources.
- Post semi-annual stormwater-related content, including NPDES Phase II, on social media.
- Distribute educational signage at stream crossings and in parks (e.g., Carpenter Park).
- Partner with Friends of the Fox River (FOTFR) for school programs, cleanups, and nature-based education.

2. Public Involvement and Participation

Goals:
Engage the community in stormwater-related activities and decision-making.

Practices:
- Host and participate in public meetings (e.g., Village Board meetings) with stormwater topics on the agenda.
- Maintain Adopt-A-Highway, Adopt-A-Park, and develop Adopt-A-Stream programs.
- Collaborate with FOTFR and other local watershed groups for river cleanups and restoration events.

-Participate in a local watershed group meeting in a municipal facility.

3. Illicit Discharge Detection and Elimination (IDDE)

Goals:
Prevent and eliminate non-stormwater discharges into the MS4.

Practices:
- Maintain and update a GIS-based storm sewer and outfall map (299 outfalls identified).
- Enforce Municipal Code Sections 13.04.300 and 13.20.100 prohibiting illicit discharges.
- Implement the prioritization plan.
- Conduct annual inspections of high-priority outfalls and 20% of remaining outfalls.
- Implement tracing and source removal procedures.
- Train Fire Department and Public Works staff in spill response and hazardous material containment.

4. Construction Site Stormwater Runoff Control

Goals:
Minimize sediment and pollutant runoff from construction sites.

Practices:
- Enforce Ordinance 05-13 (adopting Kane County Stormwater Management Ordinance).
- Require SWPPPs for sites over one acre.
- Conduct pre-construction erosion control inspections.
- Perform unannounced site inspections before construction by CISEC-certified staff.
- Perform unannounced site inspections during construction by Village staff.
- Coordinate with Kane-DuPage Soil and Water Conservation District for large projects.

5. Post-Construction Stormwater Management

Goals:
Ensure long-term control of stormwater runoff from developed sites.

Practices:
- Enforce long-term O&M plans through CCRs and Dormant Special Service Areas.
- Require 15-month maintenance periods with performance bonds.
- Conduct final inspections and require documentation of system functionality.
- Maintain native vegetation and riparian buffers (e.g., Carpenter Creek, Sleepy Creek).

6. Pollution Prevention and Good Housekeeping

Goals:
Reduce pollutant runoff from municipal operations.

Practices:
- Train staff annually on BMPs and green infrastructure.

- Continue the Storm Sewer System Cleaning Program (SSSCP).
- Conduct regular street sweeping and catch basin cleaning.
- Use native vegetation and riparian buffers in municipal landscaping.
- Properly dispose of municipal waste and promote recycling education.
- Maintain stormwater infrastructure and implement restoration projects (e.g., Keith Andres Park, Wakefield-Bristol drywell).

Program Evaluation and Reporting

- Submit annual reports to the IEPA.
- Track BMP effectiveness using tools like the MS4 Non-Point Source Control Measure Tracking Tool.
- Continue participation in the Fox River Study Group and FOTFR for data sharing and collaboration.