# SUMMARY PROPOSED ACTIONS WITHIN THE PROGRAMMATIC ENVIRONMENTAL ASSESSMENT FOR STORM, SANITARY, AND COMBINED SEWER SYSTEM PROJECTS STATES OF ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, OHIO, AND WISCONSIN

## **COMMON SCOPE OF WORK**

- Storm, sanitary, and combined sewer mitigation and construction system work may take
  place in areas threatened by floodwater inundation and damage. Proposed actions covered
  by the Programmatic Environmental Assessment (PEA) would be limited to no more than 500
  acres of impact area and no more than 50 acres of ground disturbance.
- Typical construction activities for sewer projects may include:
  - Demolition or modification of existing facility or structure
  - Installation of new water lines
  - o Tree and vegetation cutting, clearing, removal, and restoration/planting
  - o Trench excavation
  - o Grading
  - o Permanent access points such as manholes
  - o Creation and use of staging areas and site access routes
  - Installation of erosion and sediment control (ES&C) measures
  - Traffic disruptions, lane closures, possible detours for projects adjacent to or crossing roadways
  - Site closure and restoration
- Included under the PEA are sanitary sewers, storm sewers, and combined sewers. Combined sewer systems would include both storm and sanitary sewer system elements.

### **STORM SEWERS**

- Storm sewer work encompasses construction of new systems or upgrading of current storm systems, including all supporting elements. Elements unique to storm include the following:
  - o Catch Basins (Inlets)
  - o Culverts
  - o Ditches
  - o Temporary detention basins
  - Catch Basins
  - o Flow Regulators
  - o Outfalls
  - Weir structures
  - Green infrastructure
- Design and implementation of storm lines would follow guidelines provided in the U.S. Army Corps of Engineers (USACE) Drainage and Erosion Control Mobilization Construction (USACE 1984) and the USACE Management of Water Control Systems (USACE 2017).

• Storm sewer lines within U.S. Census designated "Urbanized Areas" would comply with U.S. Environmental Protection Agency's and their respective state's Municipal Separate Storm Sewer System (MS4) program requirements.

# **SANITARY SEWERS**

- Sanitary sewer work encompasses construction of new systems or upgrading of current sanitary sewer systems, including all supporting elements. Sanitary line system elements may include the following:
  - o Sanitary lines parts that include property service connections, lateral and branch sewers, main sewers, trunk sewers, and interceptor sewers and manholes.
  - o Pump or lift stations
  - Force mains (pressurized pipes)
  - Outfall piping from water treatment plants, including in and under water body outfalls.
  - o Mitigation measures to prevent infiltration and inflow of groundwater, rainwater, and snow melt.
- Sewer systems would comply with USACE permit requirements and respective state water regulations.
- Mitigation of septic systems and elements within water treatment plants, such as wet weather storage tanks are not included under the PEA.

# **REFERENCES**

U.S. Army Corps of Engineers (USACE). 1984. "Drainage and Erosion Control Mobilization Construction."

 $\underline{\text{https://www.publications.usace.army.mil/portals/76/publications/engineermanuals/em 1110-3-136.pdf}$ 

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