

Municipal Separate Storm Sewer System and Combined Sewer Overflow Control Program – Public Meeting

March 26, 2026



Meeting Agenda

- 1 Introductions
- 2 Storm Sewer System
- 3 Combined Sewer System
- 4 Storm Sewer System Illicit Discharge Detection and Elimination (IDDE)
- 5 Combined Sewer Overflow Control Program Website
- 6 Upcoming Projects and Next Steps
- 7 Questions



Introductions: Representing the City of Peoria

1



Andrea Klopfenstein, PE
Deputy Director –
City Engineer



Stormwater

Tim Sumner, PE
Project Manager



Combined & Sanitary Sewer

Eric Carlson, PE
Senior Engineer





“Wet weather”

The rain and melting snow that our city infrastructure must handle, in the form of runoff and infiltration.

EVERY PART OF PEORIA SUFFERS FROM WET WEATHER PROBLEMS.



Peoria's Sewer Systems



OUR FOCUS



	SANITARY-ONLY SEWERS	STORM-ONLY SEWERS	COMBINED SEWERS
Function	Carry wastewater	Carry rain/snowmelt	Carry rain/snowmelt and wastewater
Owns/ Maintains	GPSD 450 miles City 64 miles	City 198 Miles (mapped)	City 136 Miles
Funding	User charge - GPSD sewer bill	User charge - City Stormwater Utility	User charge - GPSD sewer bill



Storm Sewer System

CMT



Storm Sewer System

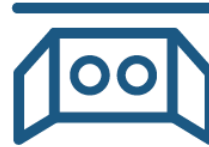
What is stormwater infrastructure? Do I use it?



DITCHES



CREEKS



PIPES &
CULVERTS



PONDS &
LAKES



CURBS &
GUTTERS



INLETS &
MANHOLES



WETLANDS



OCEANS



RAIN
GARDENS



BIOSWALES

Peoria's Stormwater Permit Obligations

- **Clean Water Act (CWA) of 1972 established the NPDES permit program.**
 - Reauthorization of CWA in 1987 required addressing stormwater point discharges through NPDES program.
- **Municipal Separate Storm Sewer System (MSSSS= MS4)**
- **An MS4 is a conveyance or system of conveyances that is:**
 - Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.;
 - Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, ponds, etc.);
- **All Illinois, small, MS4 communities issued the same permit: ILR40**



Peoria's Stormwater Permit Obligations

- **ILR40 Permit was reissued on August 1, 2025. Additional requirements were added that include:**
 - Public Education and Outreach: Develop educational materials for residential and industrial issues.
 - Public Involvement and Participation: Utilize public meeting input in developing the stormwater management program.
 - Illicit Discharge Detection and Elimination: Develop written procedures to observe and document illicit discharges in storm sewer system

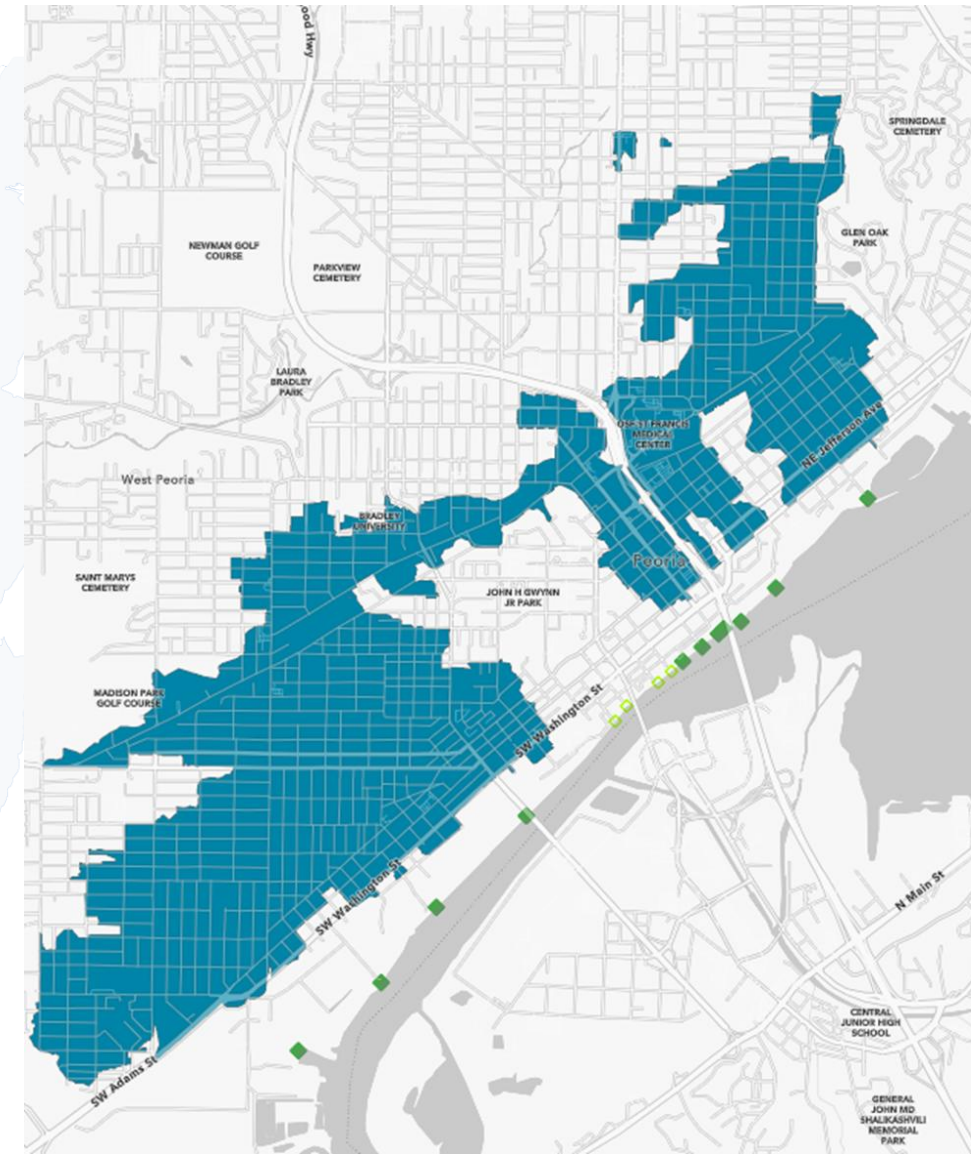
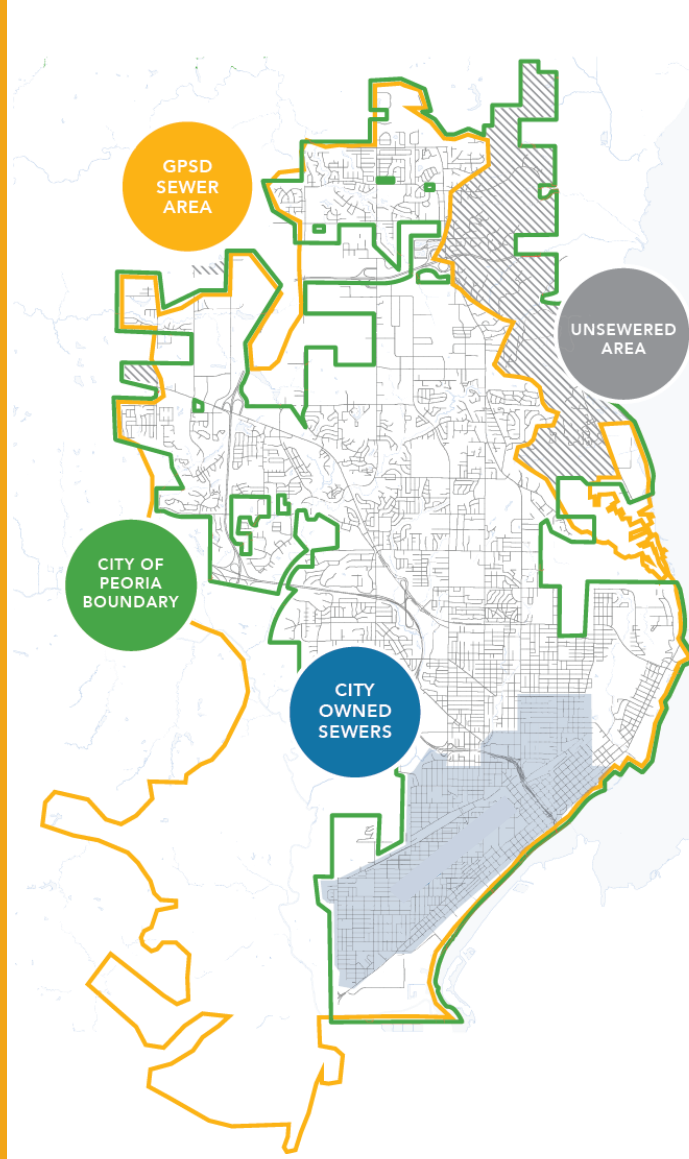


Combined Sewer System

MEAD & HUNT



Peoria's Combined Sewer Area





Darst Street Outfall

Consent Decree to Reduce CSO Discharges

- Peoria entered into a Consent Decree with U.S. EPA **to reduce CSO discharges** to the Illinois River
- **18-year implementation period**
 - Starting January 2022
 - Ending December 2039

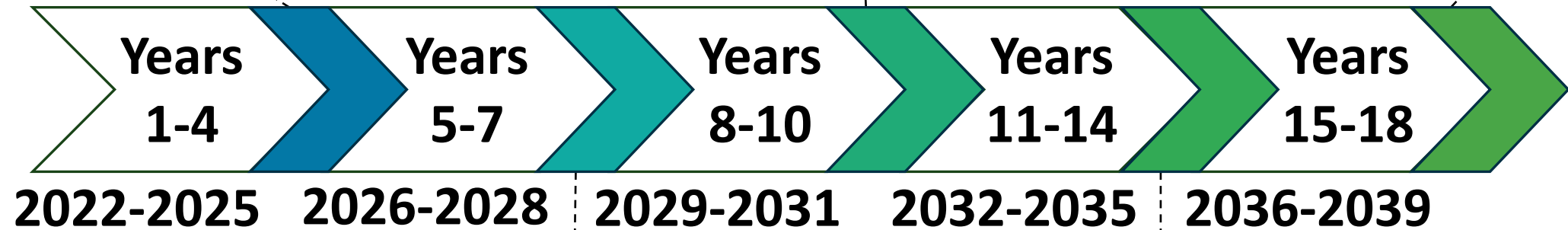


Consent Decree Performance Milestones

By 2026: Milestone #1
20% CSO Volume Reduction

By 2032: Milestone #3
50% CSO Volume Reduction
40% CSO Event Reduction

**By 2040: Achieve
Final Performance
Criteria**



By 2029: Milestone #2
35% CSO Volume Reduction
25% CSO Event Reduction

By 2036: Milestone #4
70% CSO Volume Reduction
60% CSO Event Reduction

Note: These requirements apply to rainfall events equal to or smaller than the 6-month, 6-hour design storm.

Projects to Achieve CSO Reduction Goals



1100 SW Adams



City has **flexibility** to implement a **variety of projects**



Projects include **green infrastructure** and **offline storage facilities**



Green Infrastructure (GI)

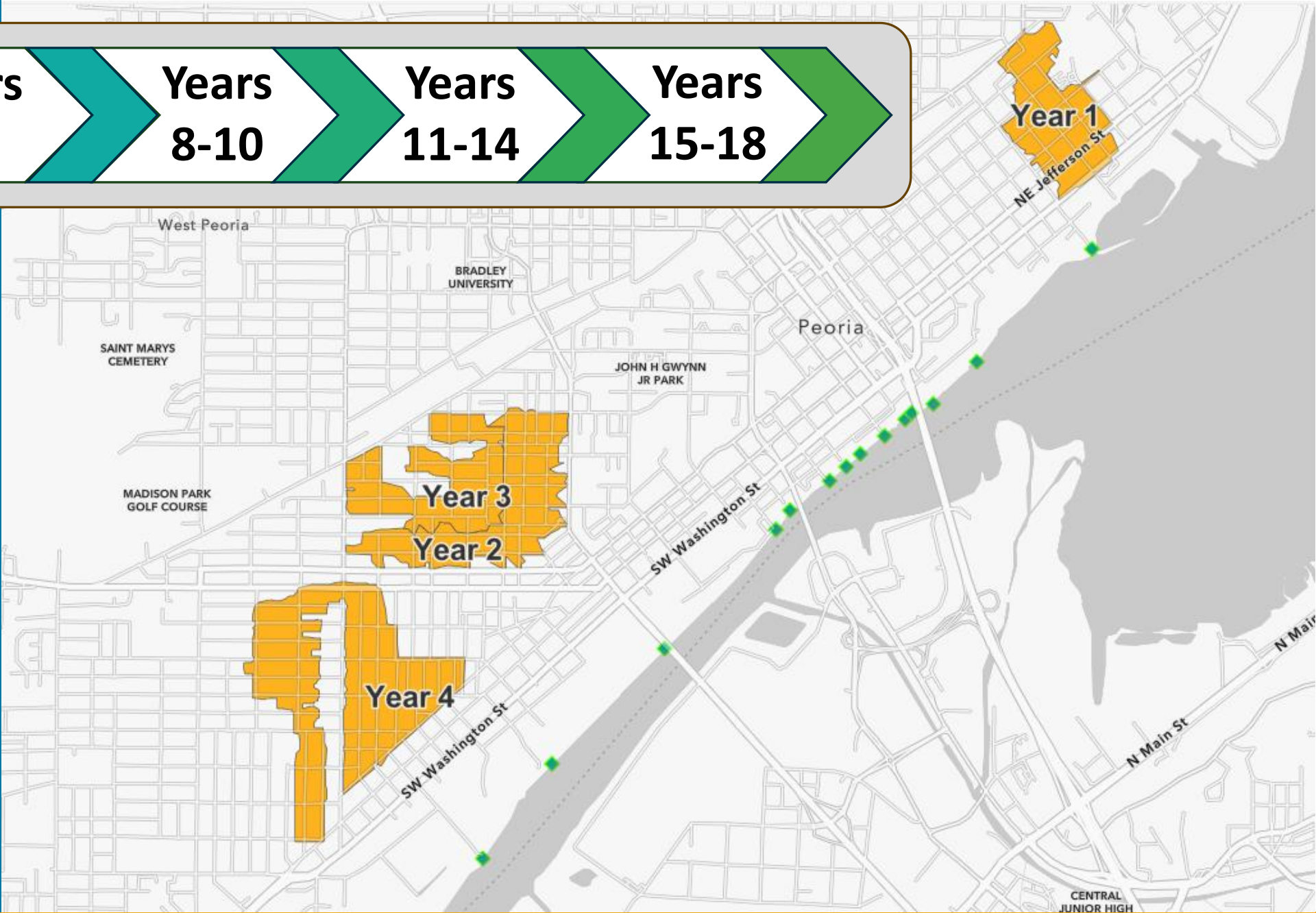
Best management practices, such as bioretention and permeable pavement, that use an approach to water management that protects, restores, or mimics the natural water cycle





Milestone 1

- Four green infrastructure projects
- Evaluation in 2026
- Expected to achieve Milestone 1



Types of GI Projects – Permeable Pavement



Caroline South of Madison



Kane from Aiken to Hinton

Types of Projects – Stormwater Bump-outs

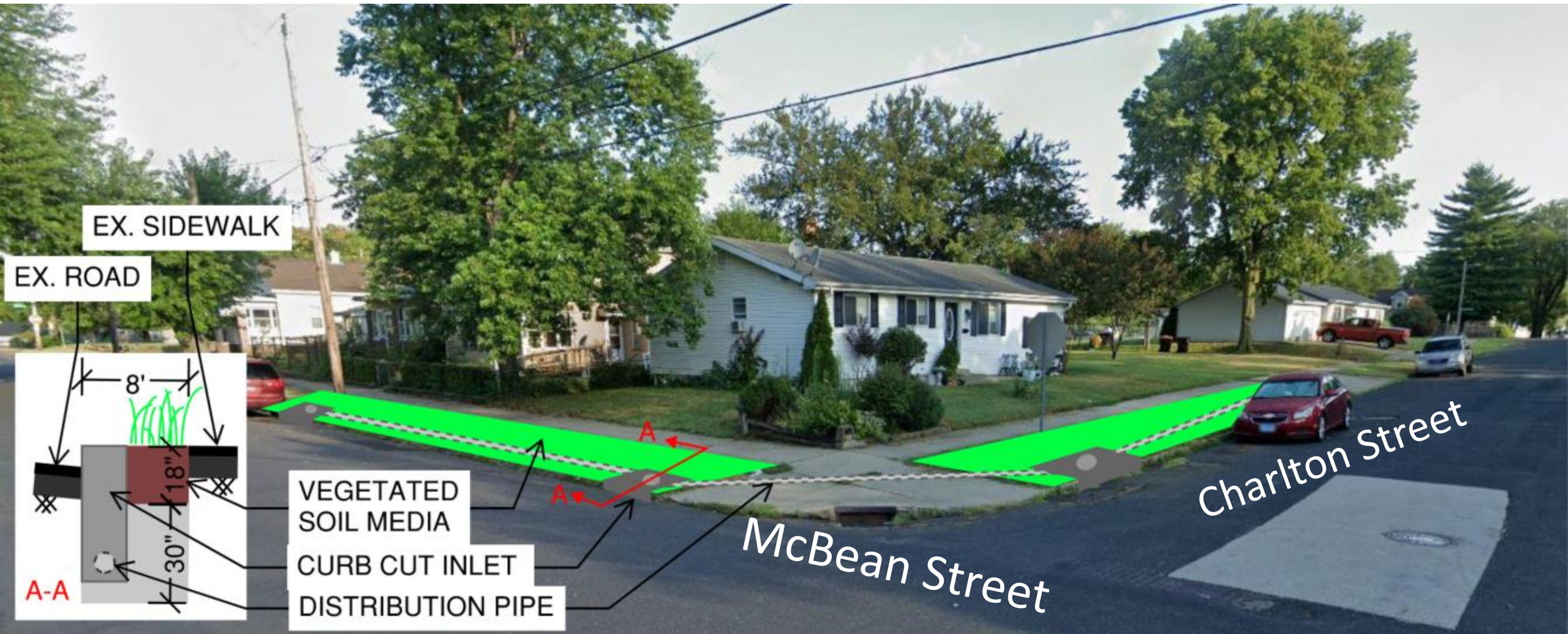


1525 NE Madison Ave

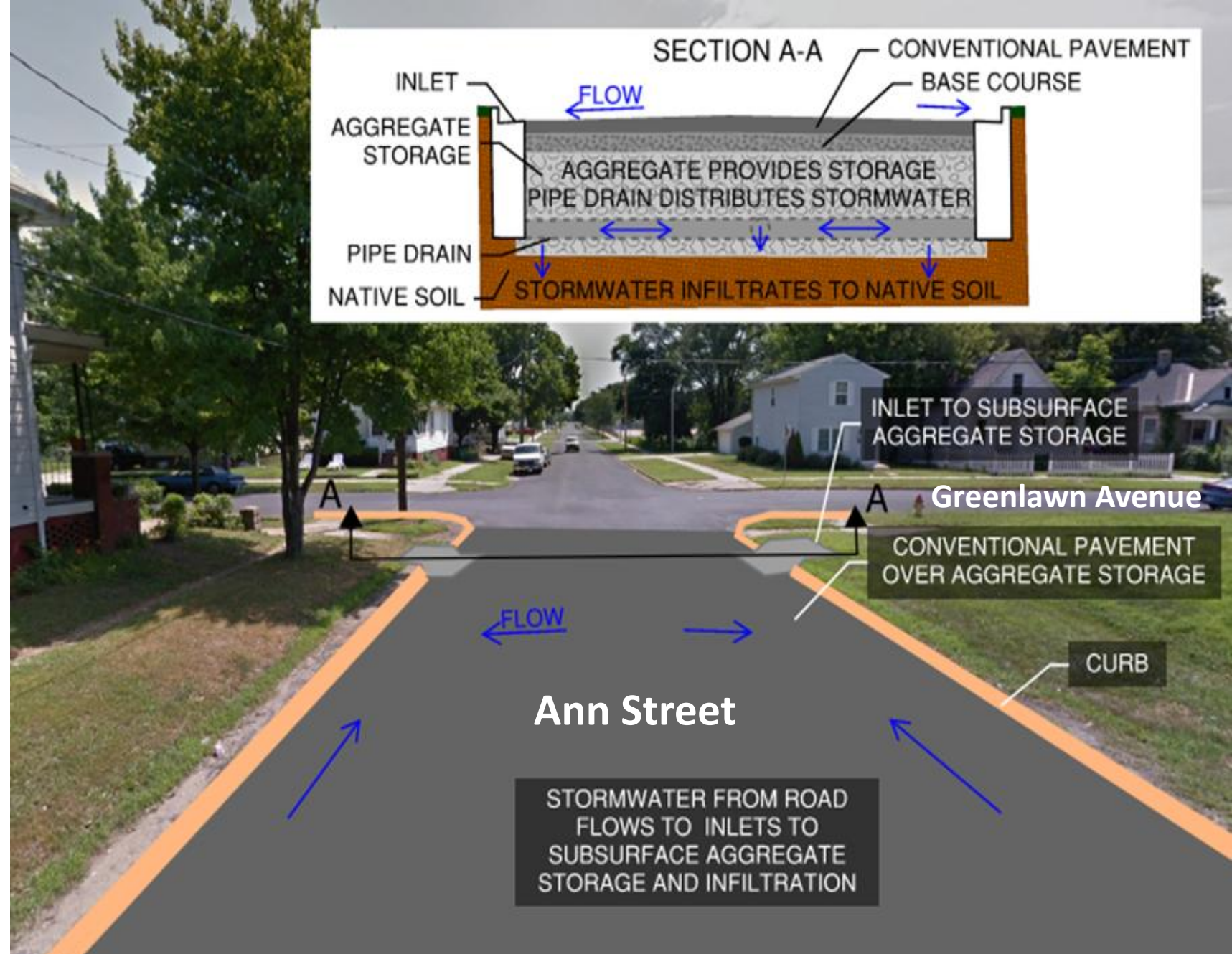


701 Mary St

Types of GI Projects – Stormwater Bump-ins

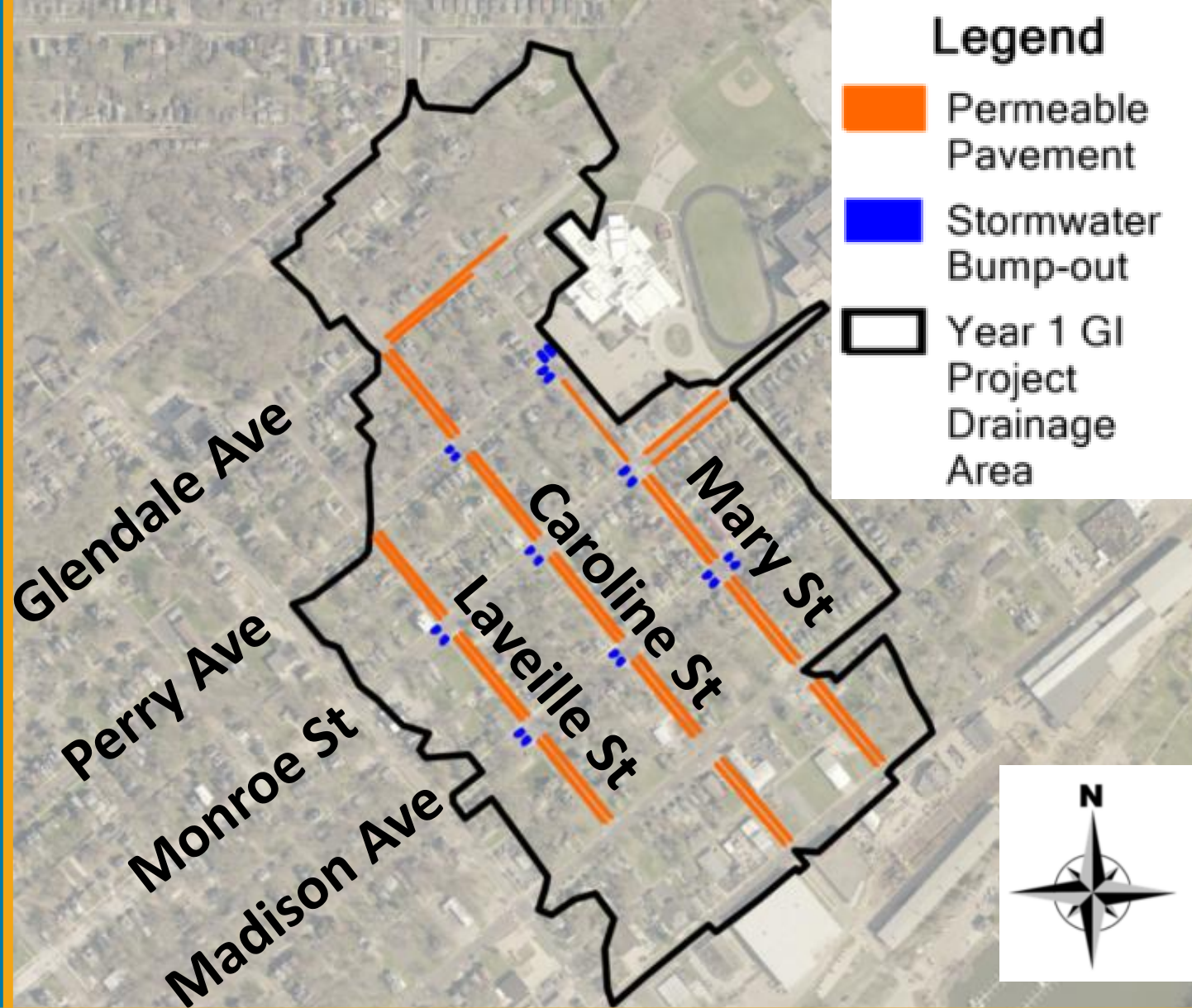


Types of GI Projects – Subsurface Infiltration Below Pavement



Year 1 CSO Control Project

- Green Infrastructure
 - Permeable pavers in parking lanes (>29,000 SF)
 - Stormwater bump-outs (20)
- Co-Benefits
 - Sidewalks (>9,000 SF)
 - Trees (43)



\$5.3M Loan Amount

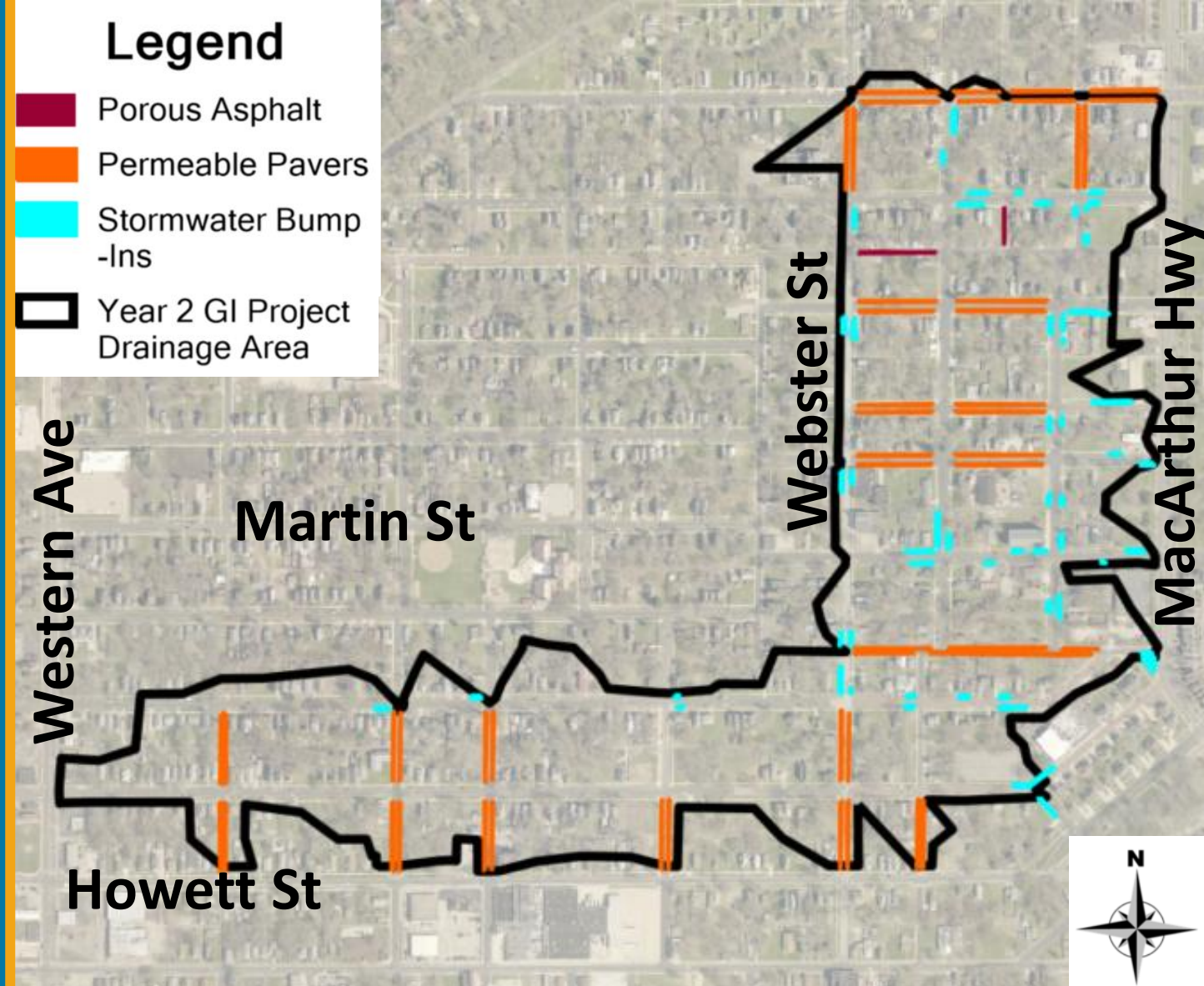
Completed Spring 2023

CITY OF PEORIA



Year 2 CSO Control Project

- Green Infrastructure
 - Permeable pavers in parking lanes (>40,000 SF)
 - Porous asphalt (>8,000 SF)
 - Stormwater bump-ins (52)
- Co-Benefits
 - ADA compliant ramps (27)
 - Sidewalks (>44,000 SF)



\$9.6M

Loan Amount

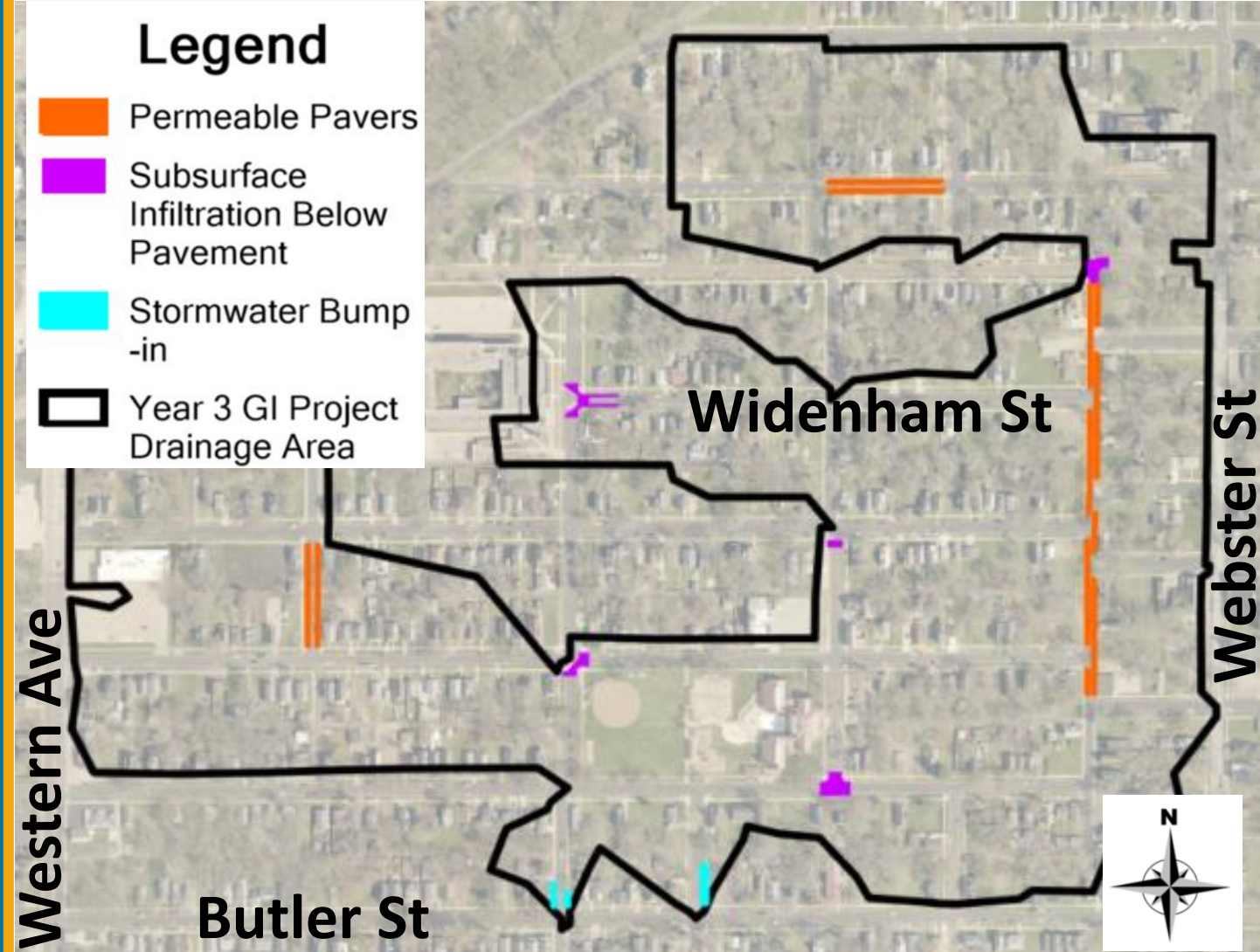
Completed Spring 2025

CITY OF PEORIA



Year 3 CSO Control Project

- Green Infrastructure
 - Permeable pavers (>8,000 SF)
 - Subsurface infiltration below pavement (5)
 - Stormwater bump-ins (3)
- Co-Benefits
 - ADA compliant ramps (56)
 - Sidewalks (>3/4 mile)



\$8.8M

Loan
Amount

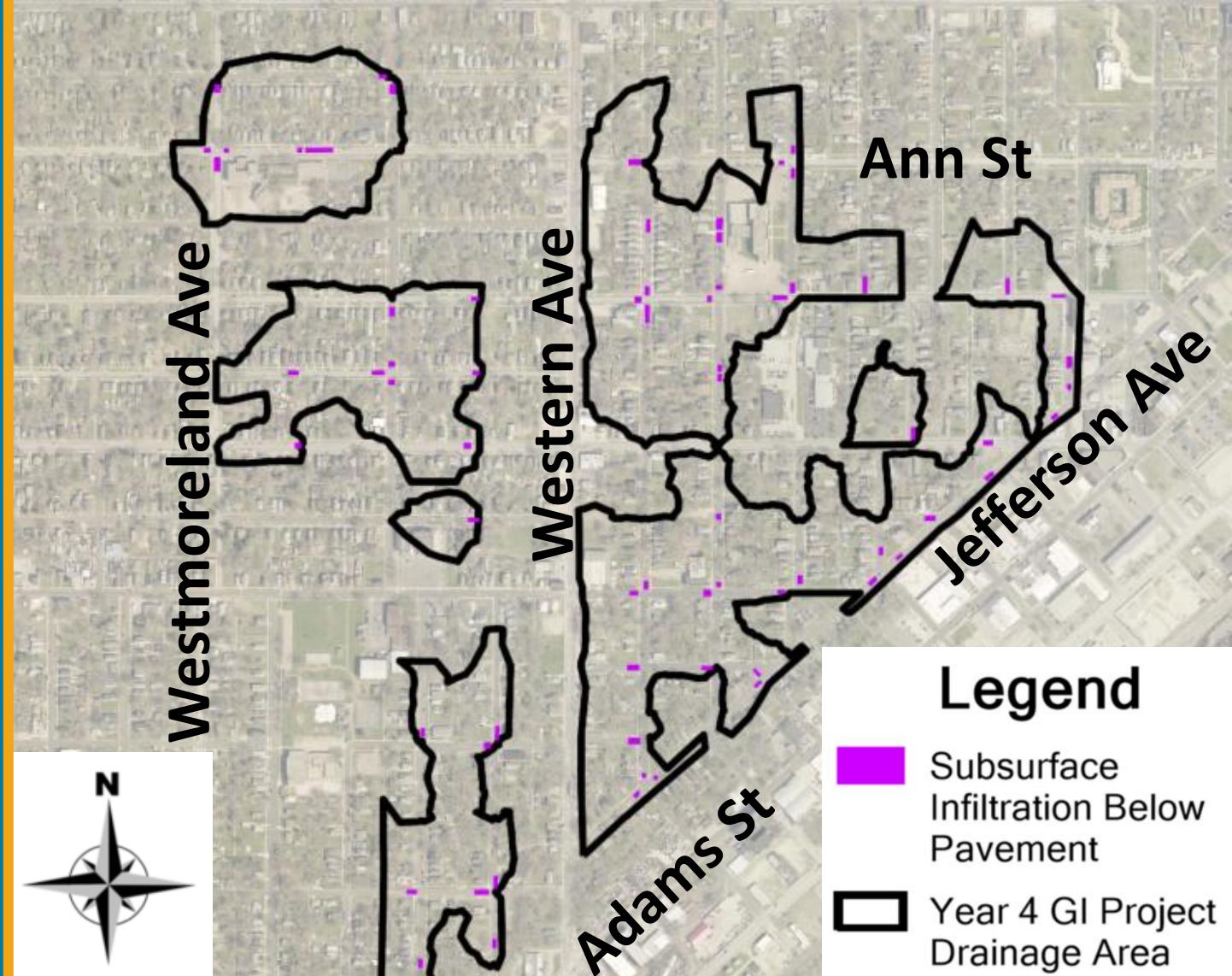
Started Summer 2024
Complete Spring 2026

CITY OF PEORIA



Year 4 CSO Control Project

- Green Infrastructure
 - Subsurface infiltration facilities (71)
- Co-Benefits
 - ADA compliant ramps (155)
 - Sidewalks (>1/3 mile)
 - Roadway (>189,000 SF)



\$12.1M

Loan
Amount

Started Summer 2025
Complete Summer 2027

CITY OF PEORIA



Year 3 and Year 4 CSO Control Projects



Funding for these projects provided, in part, by the Illinois Environmental Protection Agency through the Green Infrastructure Grant Opportunities (GIGO) Program – Agreement No. 25-2388-23GIGO01.



Storm Sewer System Illicit Discharge Detection and Elimination (IDDE)



Illicit Discharge Detection and Elimination (IDDE)

- An IDDE plan is a program that lays out the procedures to detect, eliminate, and prevent illicit or illegal connections to the Municipal Separate Storm Sewer System (MS4).
- The city of Peoria, as a MS4 owner, is required to have an IDDE plan, implement the plan, and keep it up to date.
- It is a tool to maintain the quality of public waters.



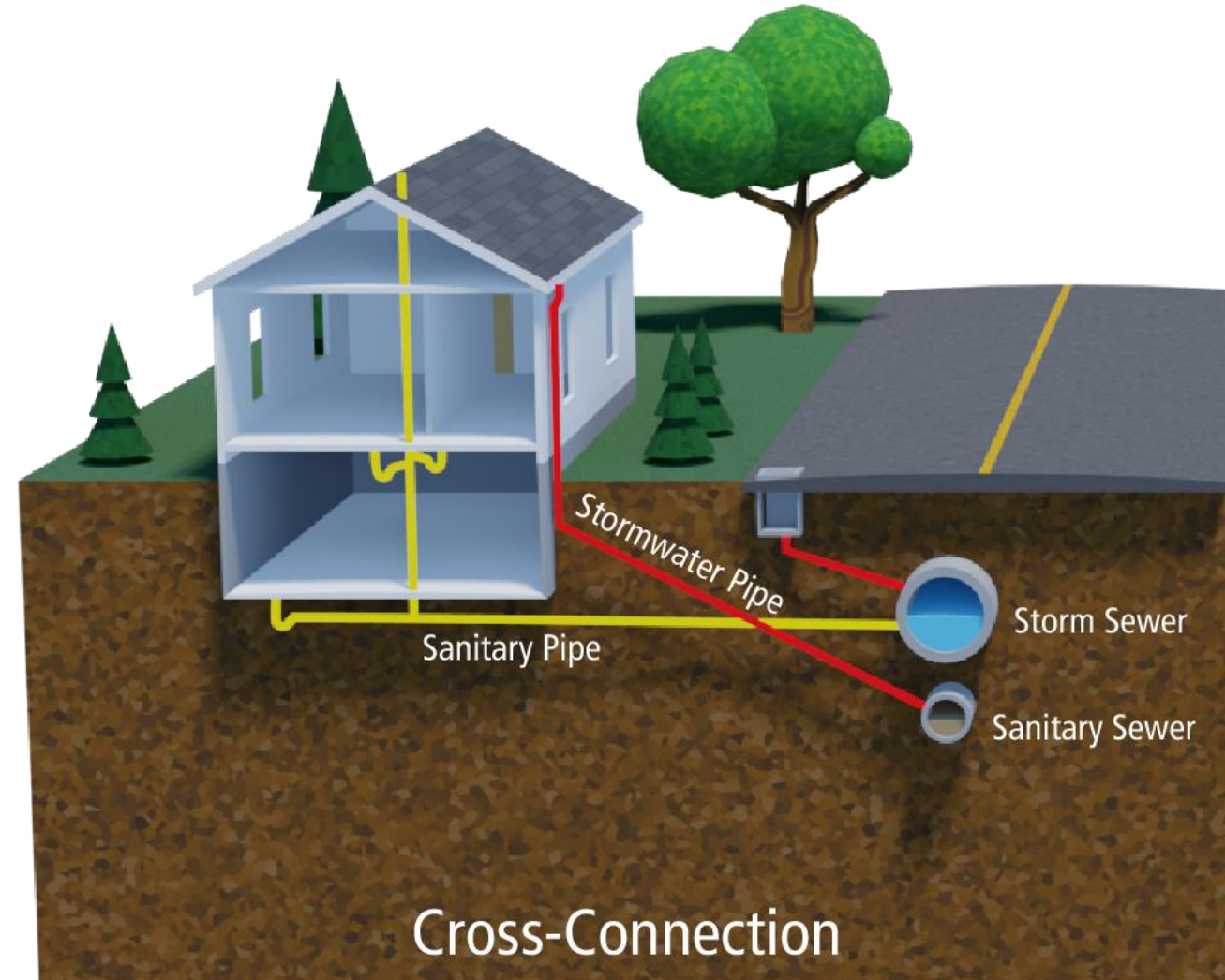
Illicit Discharge Detection and Elimination (IDDE)

Potential Illicit Direct Discharges:

- Sewer service pipes connected
- Building floor drains connected
- Illegal dumping of pollutants

Potential Illicit Indirect Discharges:

- Nearby sanitary sewers leaking
- Failing septic systems leaking
- Other underground leaking tanks (oil, fuel).



Illicit Discharge Detection and Elimination (IDDE)

Peoria's IDDE Ordinance:

- Article 5 was added to Chapter 31 – Water, Sewers, Sewage Disposal and Drains of the City Code.
- Establishes legal authority to perform inspections, monitoring and procedures needed to ensure compliance with the ordinance.

ARTICLE V. - ILLICIT DISCHARGE AND CONNECTION

Sec. 31-201. - Purpose/intent.

The purpose of this article is to provide for the health, safety, and general welfare of the the maximum extent practicable as required by federal and state law. This article establishes order to comply with requirements of the National Pollutant Discharge Elimination System (C

- (a) To regulate the contribution of pollutants to the MS4 by stormwater discharge
- (b) To prohibit Illicit Connections and Discharges to the municipal separate storm
- (c) To establish legal authority to carry out all inspection, surveillance and monitoring

([Ord. No. 18245](#), § 2(Exh. A), 3-11-25)



Illicit Discharge Detection and Elimination (IDDE)

Peoria's IDDE Ordinance Continued:

- Prohibits illicit connections and discharges to the storm sewer system.
- Prohibits non-stormwater discharges into the storm sewer system and receiving waters, including pollutants, waters containing pollutants that cause or contribute to water quality standard violations



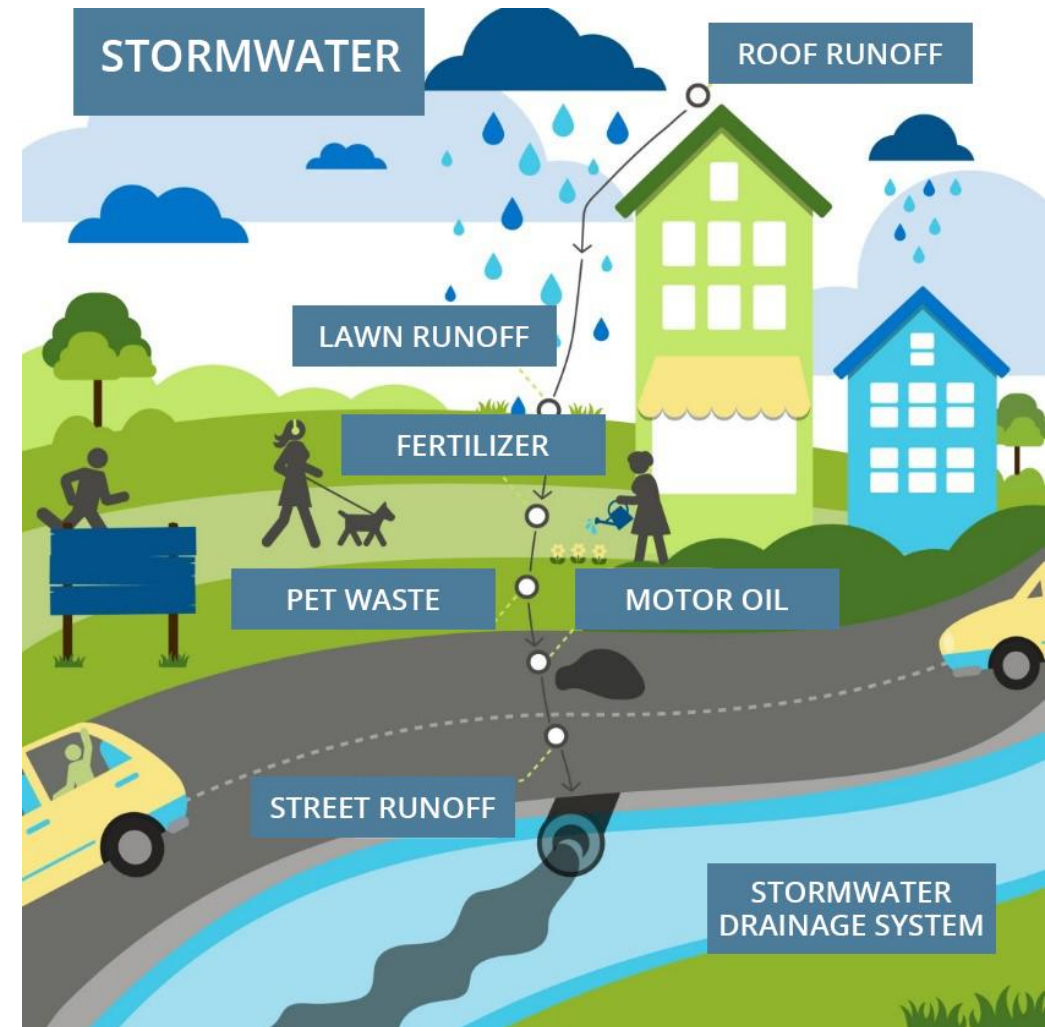
Peoria Grease Trap Spill



Illicit Discharge Detection and Elimination (IDDE)

Examples of common illicit non-stormwater discharges include:

- Vehicle maintenance fluids/ car wash soap
- Leaking dumpsters
- Paint or stains
- Silt, sediment, concrete, or gravel
- Pet waste or fertilizers
- Herbicides or pesticides
- Runoff from failing septic systems



Illicit Discharge Detection and Elimination (IDDE)

Consequences of illicit discharges:

- Suspend access
- Terminate access

Actions by the City:

- may enter facilities and construction sites to determine compliance
- conduct monitoring and/or sampling of facilities to assess compliance
- require permittee to install monitoring equipment

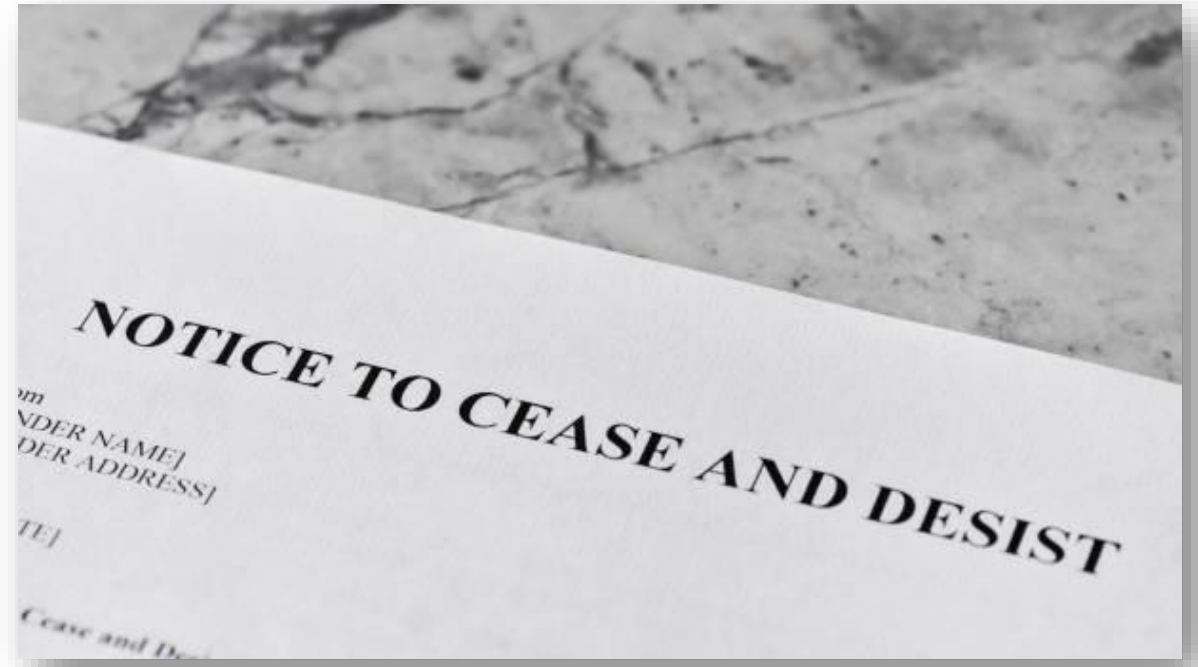


Illicit Discharge Detection and Elimination (IDDE)

City may order compliance through:

- Elimination of connections or discharges
- Abatement or remediation of storm water pollution or contamination hazards
- Payment of fines to cover administration and remediation costs
- Implementation of source control or treatment practices

City may also seek criminal prosecution per Sec. 31-221



IDDE: Development of an IDDE Plan

Public Works will develop and implement a plan to prohibit non-stormwater discharges through:

- Establish procedures to address non-stormwater discharges
- Perform periodic inspection of storm sewer outfalls during dry weather conditions
- Develop, implement and enforce a program to detect and eliminate illicit connections or discharges



Outfall from PPSD 150 Illicit
Discharge

What can citizens do to help?

- **Take care of your yard waste**
 - Keep yard clippings out of the storm drains and gutters
 - Minimize fertilizers and chemicals on yard
 - Remove pet waste from yards
 - Recycle automobile fluids
- **Report illicit discharges if you see them**



How to Report an Illicit Discharge

- **Peoria Cares:**
 - peoriagov.org/903/Peoria-Cares
 - 309-494-2273
- **Peoria Public Works:**
 - publicworks@peoriagov.org
 - 309-494-8800



Paint in Creek from
PPSD 150 Illicit Discharge



IDDE Investigation Process

1. Complaint about possible Illicit Discharge is reported to Peoria Public Works.
2. Information is then gathered via contacting complainant for more information, site visit, use of resources to map drainage and impact, and identifying contact information for responsible party.
3. Contact is made with the responsible party to inquire about the incident.



Example Map for
Complaint Research



IDDE Investigation Process Continued

4. Request for remediation of illicit discharge and provide education about Illicit Discharge ordinances/responsibilities with the responsible party.
5. Follow up to make sure remediation actions have been taken. This can include a site visit, proof of remediation, etc.
6. Report is created for IEPA on the incident which includes complaint, responsible party, actions taken to contact, responsible parties' actions to remediate the illicit discharge, impact on the stormwater system, and rainfall amounts from time of illicit discharge until remediation.



Illicit Discharge Examples in Peoria

Leaking Oil:

- Citizen reported a vehicle had leaked oil on the city street.
- Investigation found oil in the storm sewer system.
- Responsible party took remediation steps and provided education about proper cleaning to employees.

Bar/Restaurant:

- Anonymous report of dumping of used grain.
- Investigation found there was no dumping into storm sewer system.

Colored water in creek:

- Citizen reported a white substance coming from a drain in the creek.
- Investigation found paint sprayer had accidentally been rinsed over the incorrect drain. Education provided and remediation steps taken.



Illicit Discharge Examples in Peoria

Restaurant:

- Received notice of grease traps having issues causing cooking grease to drain into parking lot and into the storm drains on the property.
- Grease traps were cleaned and fixed.
- Remediation steps were taken to remove cooking grease from storm sewer drains and regular maintenance of grease traps has been established.



Grease Trap Spill



Combined Sewer Overflow Control Program Website

www.PeoriaCSO.com



CSO Overview – History and Background

CSO OVERVIEW

CSO CONTROL PROJECTS

PROGRAM OVERVIEW

What are CSOs?

Peoria Goes Green

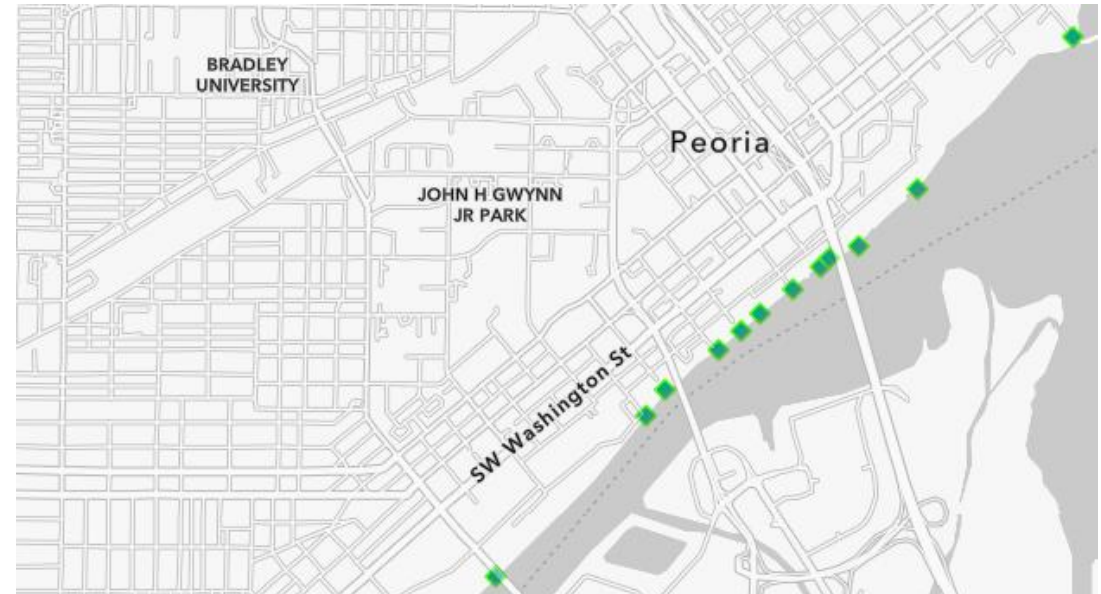
GI Project Locations

Contact

A Little History



What are CSOs?



CSO Control Projects – Project Locations

CSO OVERVIEW

CSO CONTROL PROJECTS

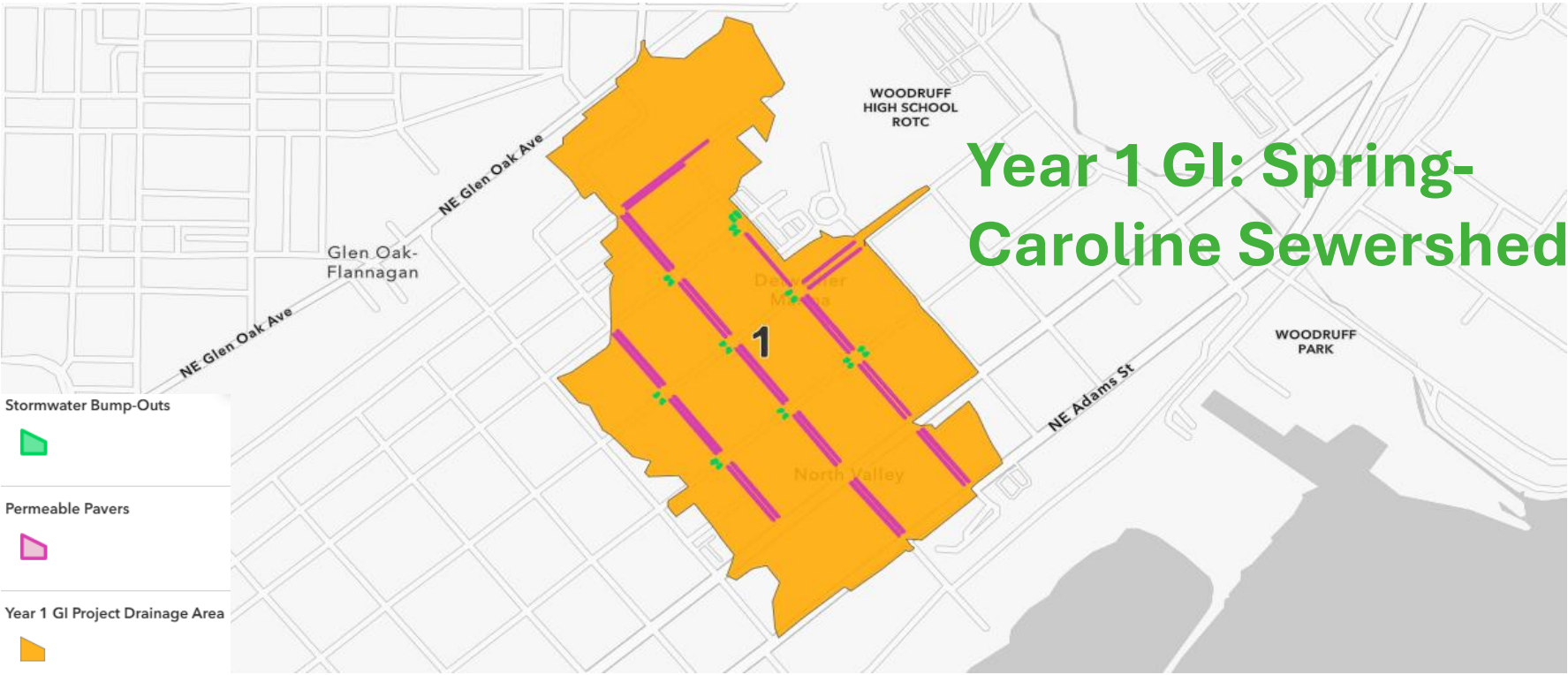
PROGRAM OVERVIEW

Year 4 GI

Year 3 GI

Year 2 GI

Year 1 GI



CSO Control Projects – Project Photos

CSO OVERVIEW

CSO CONTROL PROJECTS

PROGRAM OVERVIEW

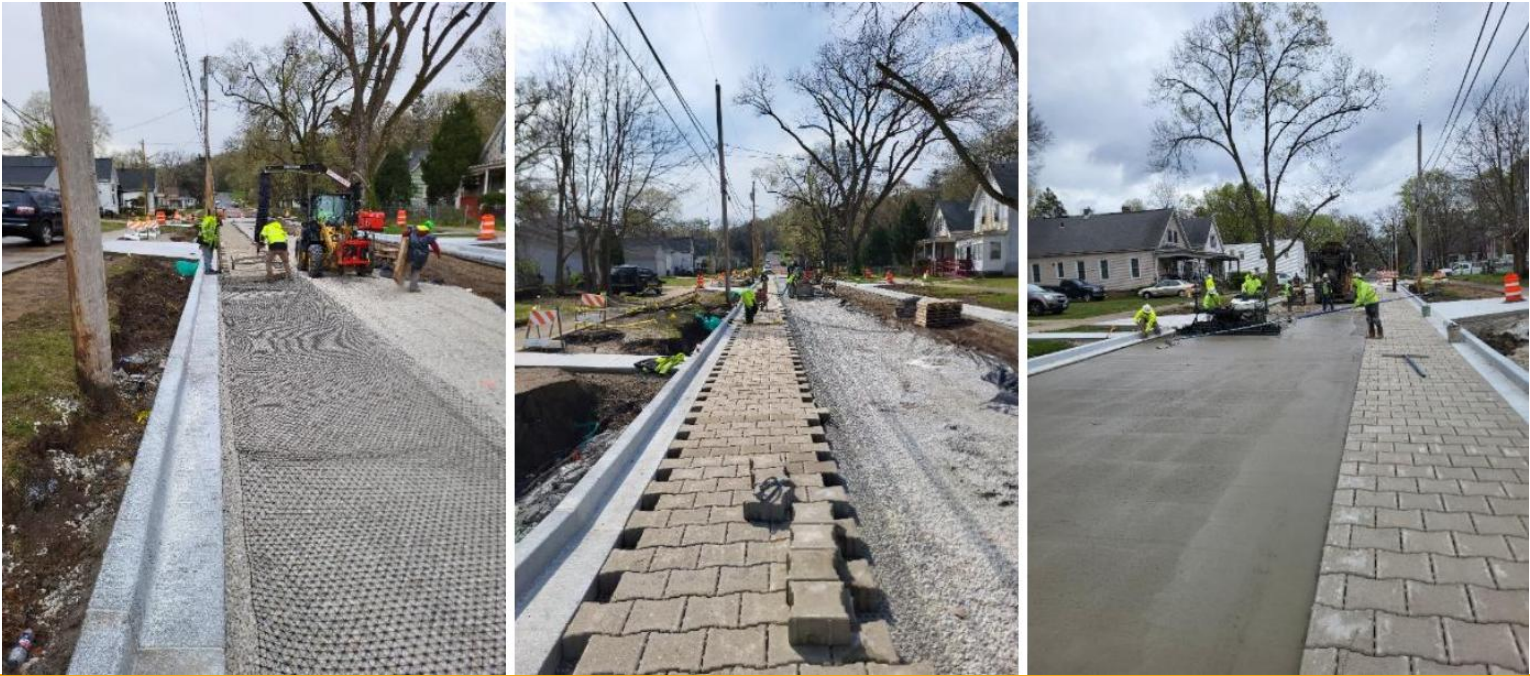
Year 4 GI

Year 3 GI

Year 2 GI

Year 1 GI

Year 3 Construction Photos



Program Overview – Milestone Planning

CSO CONTROL PROJECTS

PROGRAM OVERVIEW

CONSENT DECREE

Program Overview

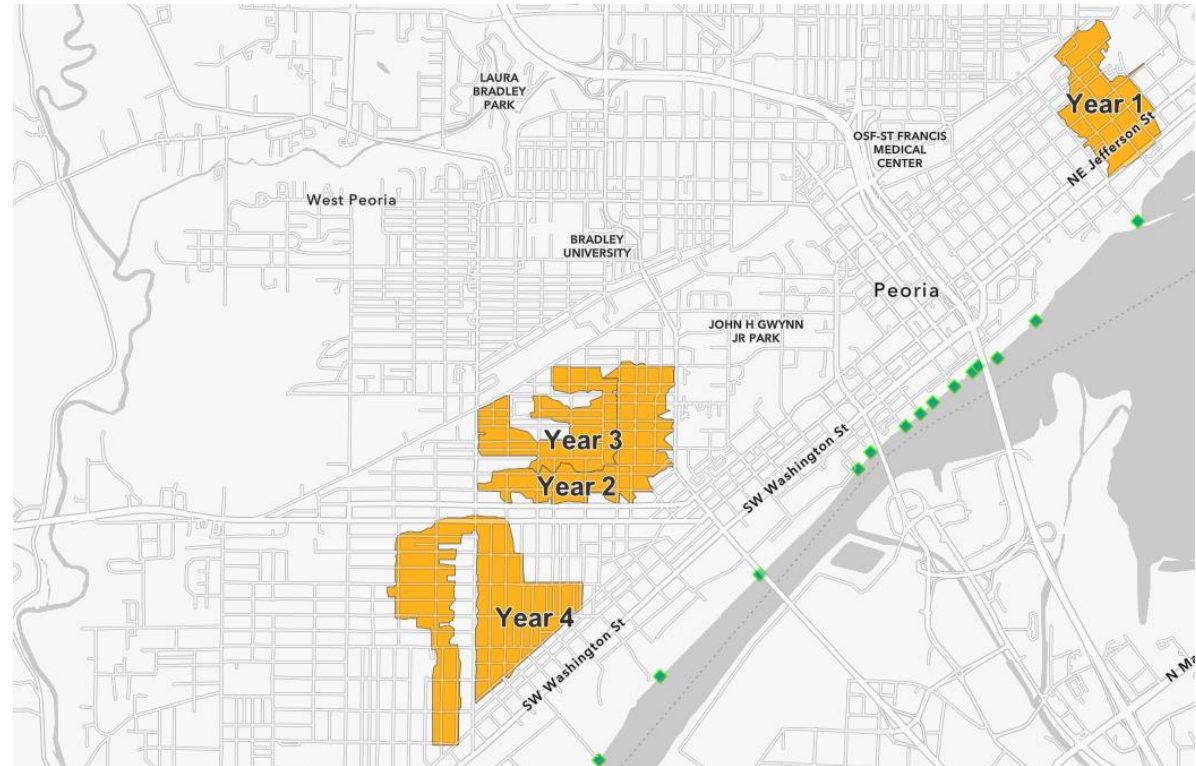
Milestone 1

Milestone 2

GI Locations for Years 1 through 4

The City's Plan is Flexible

- Can change locations or mix and match areas



Consent Decree – Summary of Requirements

PROGRAM OVERVIEW

CONSENT DECREE

CSO NOTIFICATIONS

Consent Decree Overview

Consent Decree Deliverables

Final Performance Criteria:

- Eliminating CSOs during all storms less than or equal to the hourly rainfall intensity and the total rainfall depth produced by the Six-Month Design Storm
- Eliminating CSOs for all but one precipitation event (July 21, 1949) during Peoria's Typical Year
- Limiting the CSO volume discharged during July, 21 1949, storm to no more than 16.3 million gallons when analyzed in Peoria's approved Final Conditions H&H Model



Consent Decree – Summary of Requirements

PROGRAM OVERVIEW

CONSENT DECREE

CSO NOTIFICATIONS

Consent Decree Overview

Consent Decree Deliverables

Final Performance Criteria (cont):

- No CSOs during a precipitation event equal to or smaller than (i) Peoria's Six-Month Design Storm event and (ii) Peoria's Typical Year precipitation events (excluding the July 21, 1949 Typical Year precipitation event) from December 31, 2039 to the termination of the Consent Decree.



Consent Decree – View Deliverables

PROGRAM OVERVIEW

CONSENT DECREE

CSO NOTIFICATIONS

Consent Decree Overview

Consent Decree Deliverables

REMEDIAL MEASURES PROGRAM

- H&H Model Report
- Flow Monitoring Plan
- GI Design Manual

See website for others

CSO ANNUAL REPORTS

- 2021
- 2022
- 2023
- 2024
- 2025 (coming soon)

POST-CONSTRUCTION COMPLIANCE MONITORING (PCCM) PLAN

- PCCM Plan



CSO Notifications – Sign Up for Alerts

CONSENT DECREE

CSO NOTIFICATIONS

LEARN MORE

Monthly CSO Discharge

Monthly Rainfall

Sign Up for CSO Notifications

Sign Up for CSO Notifications

CSO Notifications

A combined sewer overflow (CSO) has recently occurred.

CSO Start Date & Time: 3/15/26, 4:05 PM

CSO End Date & Time: 3/15/26, 11:55 PM



CSO Notifications – Monthly CSOs and Rainfall

CONSENT DECREE

CSO NOTIFICATIONS

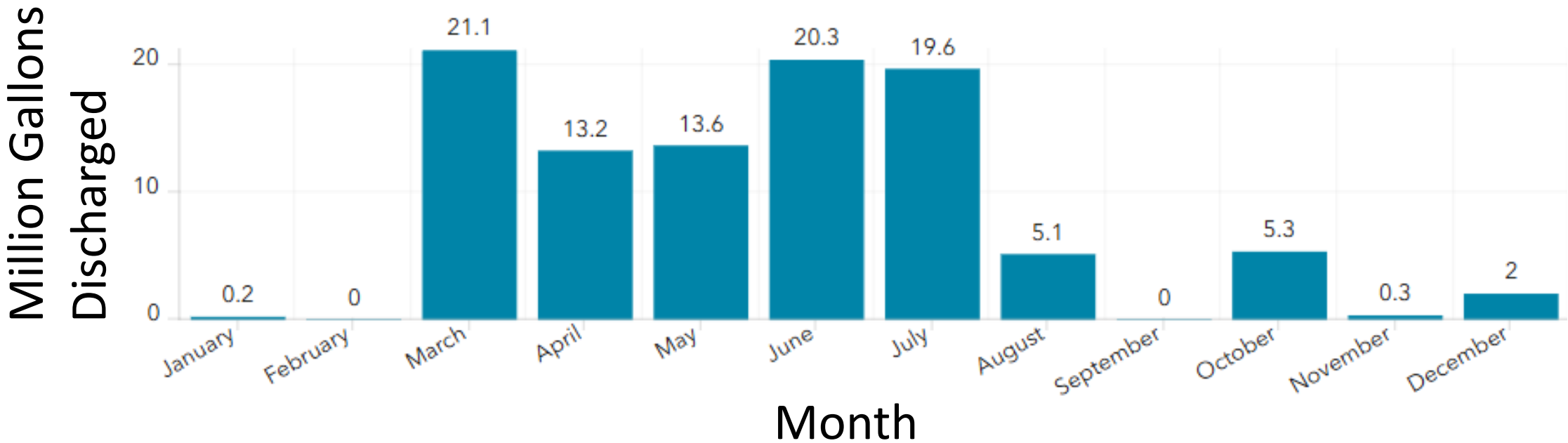
LEARN MORE

Monthly CSO Discharge

Monthly Rainfall

Sign Up for CSO Notifications

2025 CSO Discharge by Month



Learn More – Upcoming Meetings & More

CONSENT DECREE

CSO NOTIFICATIONS

LEARN MORE

Public Meetings

Planning Documents

Fact Sheets

Photos

Upcoming Public Meetings

2026 CSO Annual Update Meeting

Thursday, March 26, 2026, 11:00 AM – 12:00 PM

Peoria Public Library (107 NE Monroe St, Peoria, IL 61602)

Annual CSO Meetings

- 2025 CSO Annual Meeting Slides
- 2025 CSO Annual Meeting Notes

Fact Sheets

- Rain Garden
- Green Infrastructure Co-Benefits
- Understanding CSOs



Upcoming Projects and Next Steps

Years
1-4

Years
5-7

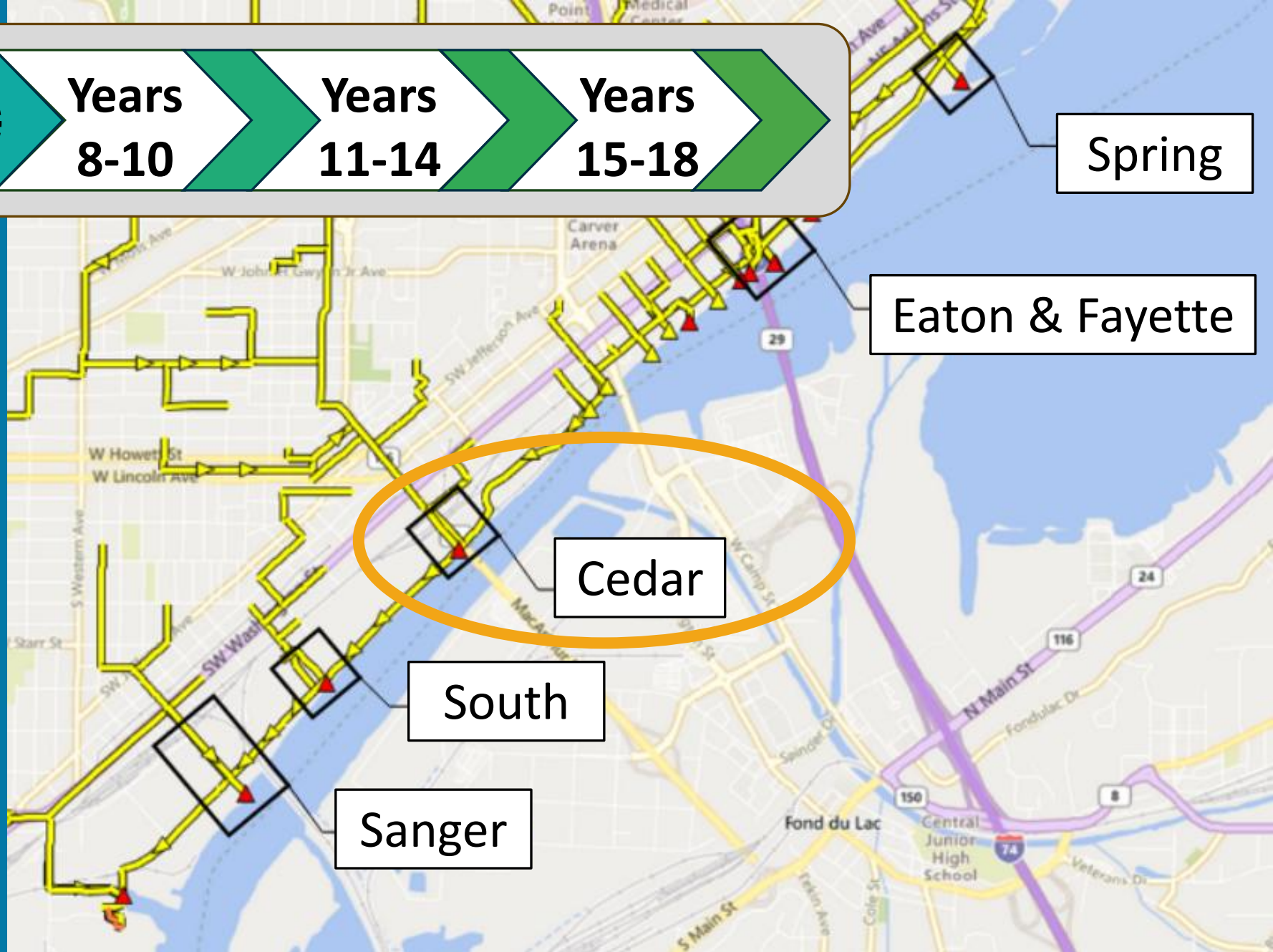
Years
8-10

Years
11-14

Years
15-18

Milestone #2

- Offline storage facility at Cedar Street Outfall
- 6.4 million gallons
- Design underway
- Construction in 2027-2028
- \$60 million estimated construction cost



CSO Control Next Steps

01

Jan – Dec 2026
Evaluate for
Interim
Performance
Milestone #1 –
20% CSO Volume
Reduction

02

Fall 2026
Complete Design
of Cedar Street
CSO Storage
Facility

03

2027 – 2028
Construction of
Cedar Street CSO
Storage Facility



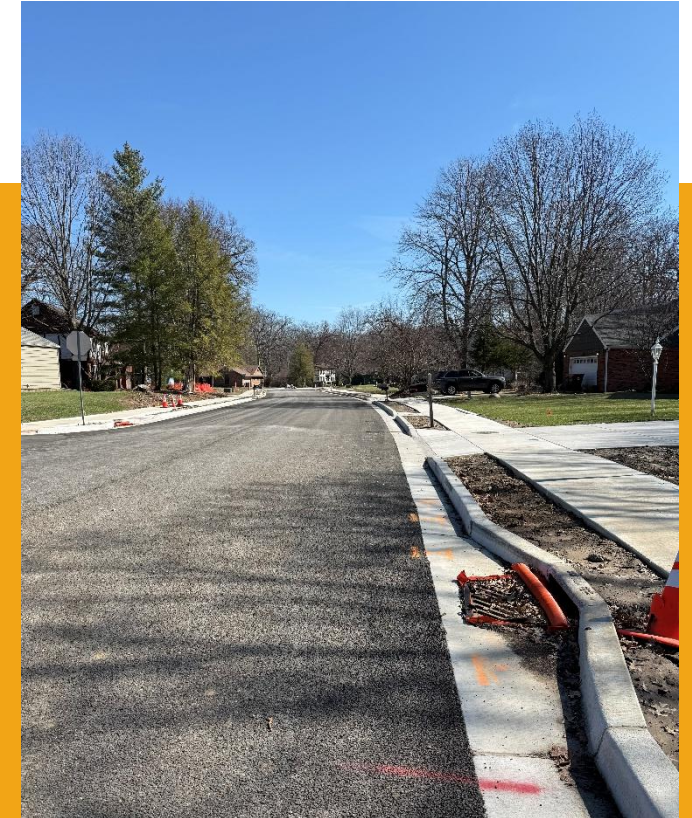
Recent & Ongoing Stormwater Projects



Golden Acres
Subdivision Drainage
Improvements, 2025



Moss Avenue
Reconstruction, 25-26



Deerbrook Drive
Reconstruction, 25-26



Upcoming Stormwater Projects



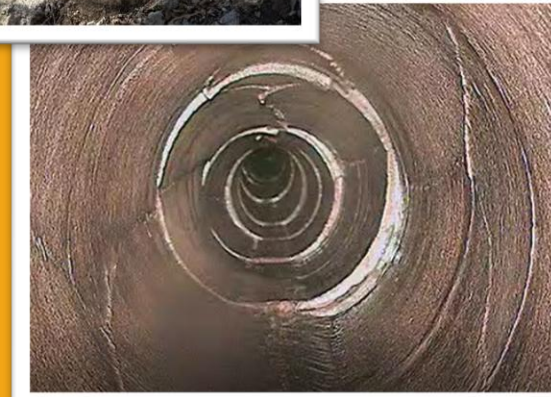
North Sheridan
Reconstruction and
Storm Sewer
Improvement 2027



Tributary A Culvert
Replacements at Gift,
Virginia, McClure, &
MacQueen, 2027



Annual
Drainage
Repairs & SS
Lining





Learn More at:



Peoriagov.org/488/Stormwater-Utility

PeoriaCSO.com

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Public Works

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Questions

Thank you for your time.