



# 2023 Stormwater Utility Report

Prepared by Public Works

## Table of Contents

EXECUTIVE SUMMARY .....	1
ENTERPRISE FUND ACCOUNT .....	1
ROLES AND RESPONSIBILITIES .....	2
ADMINISTRATION .....	1
STORMWATER UTILITY MANAGEMENT.....	1
CUSTOMER ACCOUNTS.....	1
STORMWATER UTILITY CREDIT PROGRAM.....	1
VOLUME CONTROL CREDIT.....	2
WATER QUALITY CREDIT .....	2
RATE REDUCTION CREDIT .....	2
DIRECT DISCHARGE CREDIT.....	2
FEE EXCLUSION .....	3
PERMIT COMPLIANCE .....	3
PUBLIC ENGAGEMENT .....	3
POLLUTANT CONTROL MEASURES .....	4
WATER QUALITY MONITORING TMDL.....	4
ASSET MANAGEMENT.....	5
GIS DATABASE.....	5
INSPECTIONS AND CONDITION ASSESSMENT .....	5
RECORD DRAWINGS.....	6
SYSTEM MAINTENANCE.....	6
ASSET CLEANING AND MAINTENANCE .....	6
EQUIPMENT MAINTENANCE.....	7
WORKFORCE DEVELOPMENT.....	7
PEORICORPS .....	7
MAYOR’S YOUTH PROGRAM.....	8
INFRASTRUCTURE INVESTMENT .....	8
Channel Stabilization .....	8
Outfall Improvements (various locations) .....	8
Springdale Creek .....	8
Dry Run Creek Tributary C at University Street .....	8
Springdale Creek Lake Avenue.....	9

- Culvert Replacement..... 9
  - Merle & Knoxville Culvert ..... 9
  - Abington & Madison Culvert..... 9
  - Glen Culvert West of Sheridan..... 9
  - Gift to MacQueen ..... 9
- Drainage Analysis Engineering ..... 9
  - Dry Run Creek Watershed Study..... 9
  - Springdale Creek Outfall at E Lake Avenue ..... 9
- Green Infrastructure ..... 10
  - Native Planting – City Facilities ..... 10
  - Green Infrastructure Maintenance & Performance Testing For CSO Control ..... 10
- Street Drainage Improvement ..... 10
  - Ronald Road at Stafford Court..... 10
  - El Vista Subdivision Ditch Improvements ..... 10
  - Kickapoo Terrace Access Road ..... 10
  - Moss Avenue from Western Avenue to Sheridan Road ..... 10
  - Sheridan Road – Between Northmoor & Knoxville..... 10
  - Deerbrook Drive Green Street..... 11
  - North Street and Stonegate Storm Sewer ..... 11
  - Donald Street Storm Sewer Improvements..... 11
  - Ridgelawn, Edgewood, Queen Ann & Greenwood ..... 11
- Stormwater Infrastructure..... 11
  - Storm Sewer Lining & Repairs..... 11
  - Stormwater Infrastructure Improvements ..... 11
  - Drainage Repair Program..... 11
  - Stormwater Utility Grant Program..... 12
- Appendix A - MS4 Annual Inspection Report..... A
- Appendix B - TMDL Strategy ..... B
- Appendix C - MS4 Water Quality Sampling Results..... C
- Appendix D - Drainage System Mapping ..... D
- Appendix E - Our Water, Our Way ..... E
- Appendix F - Capital Expenses ..... F
- Appendix G - Drainage Repair Annual Contract Work.....G

Appendix H - Grant Locations ..... H  
Appendix I - Storm Water Utility Credits ..... I  
Appendix J - Maintenance Expenses..... J  
Appendix K - PeoriaCorps Report..... K  
Appendix L - Equipment Maintenance ..... L

# EXECUTIVE SUMMARY

The year 2023 was the fifth complete calendar year of the City of Peoria Stormwater Utility (SWU). On December 5, 2017, City Council amended Chapter 31 of the Municipal Code of Peoria to create the SWU to fund the municipal responsibilities for owning and operating a storm sewer system. The stormwater drainage system consists of a network of pipes and natural channels that provide for the safety and benefit of the community. Table 1 is a list of stormwater management activities that are all funded by Peoria’s stormwater utility. These activities are all essential to providing a safe and reliable drainage system within the community.

Administration		Asset Management		Infrastructure Investment	
SWU Management	Permit Compliance	Data Management	System Maintenance	Studies & Planning	Capital Investments
Utility Administration	Public Engagement	GIS Database	Asset Cleaning & Maintenance	Watershed Studies	Project Delivery
Customer Accounts	Pollutant Controls	Inspections and Condition Assessment	Equipment Maintenance	Floodplain Management	Equipment Purchase
SWU Credit Program	Water Quality/TMDL Compliance	Record Drawings	Workforce Development	Community Investment Plan	SWU Grant Program

Table 1: Stormwater Utility Activities

Operating a successful stormwater management program is contingent upon having the appropriate resources available to deliver the required services. The activities identified in Table 1 require persons with expertise in mechanical equipment, software systems, engineering, surveying, construction, public administration, finance, communications, and legal matters. Before the existence of the SWU, the City’s ability to deliver these services was limited because funds dedicated to stormwater management were not available. The stormwater utility provides the City with the financial stability to execute a Stormwater Management Program within the Public Works Department that delivers services in the most effective manner.

## ENTERPRISE FUND ACCOUNT

The following information is based on Public Works records and not the result of a financial audit.

The SWU account began the 2023 year with a fund balance (net position) of \$41,160,555. SWU revenues (including interest) from approximately 46,300 customers was \$19,148,630. Customers are split into three billing cycles and are billed quarterly (4 times per year). The collection rate, from the start of the utility, is 88.3%. Expenses were \$15,815,985. Unaudited SWU expenses include encumbrances for continuing project costs into the following year. Because of how projects work and the timing of invoices, it could be several months after the start of the new year that the last year’s invoices are sent to the city and processed. The

unaudited numbers mean that the 2023 year has not been closed and encumbrances (expenses that have been planned for and approved but have not yet been spent) are still held in that year. Table 2 provides fund revenue and expense data for the 2023 fiscal year and comparison to prior years. The fund balance amounts for prior years are slightly different than what was reported in the annual SWU report because we are using unaudited data to generate these reports.

	2023	2022	2021	2020
Jan. 1 Fund Balance	\$41,160,555	\$31,136,669	\$19,856,307	\$12,340,551
SWU Revenues	\$19,148,630	\$19,148,697	\$16,685,423	\$13,319,817
Administrative Expenses	(\$4,412,183)	(\$3,667,889)	(\$2,381,717)	(\$2,208,776)
Maintenance Expenses	(\$1,363,015)	(\$1,155,832)	(\$851,525)	(\$2,029,444)
Capital Expenses	(\$2,230,166)	(\$4,301,091)	(\$2,171,819)	(\$1,565,841)
Dec. 31 Fund Balance	\$43,512,046	\$41,160,555	\$31,136,669	\$19,856,307

Table 2: SWU Revenues and Expenses

The fund balance continues to increase as revenues exceed the annual expenses. The SWU fund balance will be reduced in future years as a significant increase in annual capital projects are itemized in the 2023 to 2027 Community Investment Plan.

## ROLES AND RESPONSIBILITIES

The City Council is responsible for setting the policies and priorities for the stormwater utility funds. The City Manager is responsible for oversight of and guidance to the departments of city government. The Public Works Department is responsible for capital improvements, maintaining and repairing drainage infrastructure, public education about environmental impacts of stormwater runoff, and administering the SWU which includes appeals, credits, and grant applications. The Finance Department is responsible for identifying costs that are eligible for stormwater utility funds, following all accounting rules and laws for spending and reporting related to the stormwater utility and ensuring the financial health of the stormwater utility fund. The Finance Department is also responsible for billing stormwater utility fees, paying invoices, and tracking revenues and expense for the SWU fund. The Treasurer’s office is responsible for collecting stormwater utility payments. The Legal Department manages legal questions about the utility structure relative to state and federal laws and regulatory policies.

The Public Works Department added a Green Infrastructure Coordinator to city staff. This person is providing technical support for the combined sewer and stormwater programs. The technical support includes overseeing inspections after rainfalls as required for the Combined Sewer Overflow Long-term Control Plan (CSO LTCP), identifying and scheduling maintenance of green infrastructure best management practices and performing inspections of CSO and stormwater assets. Three engineering technicians have been hired with one having a primary focus of stormwater related needs. The stormwater technicians will perform technical engineering tasks to ensure public safety and quality infrastructure. This is accomplished by overseeing development and maintenance projects; construction oversight/review of projects in the right-of-way for utility companies and private contractors; reviewing and issuing right-of-way permits, asset inventory and condition assessments, maintaining permitting, asset management, and other data and systems. Other duties include resolving citizen complaints; assisting with field analysis; performing construction related fieldwork and creating reports.

## ADMINISTRATION

Administrative efforts to manage the City's Stormwater Program require engineering, maintenance, fiscal, and administrative staff to perform a variety of services. Staff prepares and issues quarterly invoices, assists customers with questions about their bills, reviews appeals requesting changes to the impervious area measurements, processes credit and grant applications, manages the GIS database with information from maintenance staff and contractors, responds to storm-related problems, and manages contractors and consultants.

## STORMWATER UTILITY MANAGEMENT

Utility administration includes the day-to-day activities to manage the utility including customer service, processing invoices, financial/budget reviews, overseeing work completed by contractors and engineering consultants and cross-departmental coordination. It also includes planning efforts such as identifying projects and budgets for the community investment plan and determining system needs.

## CUSTOMER ACCOUNTS

Multiple departments work with customer accounts. Good customer service depends on individuals within each department following through on their respective responsibilities.

The Finance Department Accounts Receivable (AR) division manages over 46,300 accounts, generating quarterly bills and delinquency notices for past due balances. Accounts Receivable staff create final bills for the property owners. AR updates accounts when property ownership changes. Additionally, AR assists with questions regarding the stormwater utility bills, updating customer contact information as requested by customers, and guiding customers using the online payment portal. They process refunds for overpayment and work with Public Works on issuing adjustments if needed for customer appeals.

The City Treasurer's office is responsible for the administration and management of the collection, verification, depositing and recording of the stormwater utility fees.

The Public Works Department reviews customer appeals. An appeal is a way for a customer to contact the department if they feel that their bill has is based on an incorrect impervious surface area. In 2023 the department received approximately 46 appeals. Public Works also maintains an online impervious area map where customers can view up the impervious surface area of their property. It is available on the City's [peoriagov.org](https://www.peoriagov.org) website, which is responsible for educating the public about the stormwater utility and why it is needed. Public Works also helps customers with private property drainage issues and offers multiple credit and grant programs for SWU customers.

## STORMWATER UTILITY CREDIT PROGRAM

A credit is an ongoing reduction to the stormwater bill. Credits sunset after 4 years but are renewable. Credits require an annual inspection by the property owner to ensure that the stormwater management systems are in good working order. Credits are offered for actions that retain runoff on private property, remove pollutants from the runoff stream, or other innovative ideas that benefit the public drainage system. Credits are not expenditures in the SWU accounting system. **Appendix I** provides a map of approved 2023 Credits. The Credit and Grant Manual is available to the public on the website [peoriagov.org](https://www.peoriagov.org).

### VOLUME CONTROL CREDIT

Public Works received one application for the Volume Control Credit in 2023. The volume control credit offers two different levels of volume control credit depending on the volume of water captured. Capturing the 1" rainfall event earns a 15% volume control credit. Capturing the Combined Sewer Overflow (CSO) design storm event of 1.6" of rainfall earns a 30% volume control credit. These reductions apply to the impervious area that contributes flow to the infiltration basin. Previous years were eligible for 10% credit and 25% credit, with the 25% credit for capturing the 2.61" of rainfall.

	2018	2019	2020	2021	2022	2023
Capture 1" rainfall	3	1	0	2	0	0
Capture 1.6" rainfall *Previously 2.61" rainfall	1	7	0	0	0	0

### WATER QUALITY CREDIT

Credits are also available to property owners that construct and maintain facilities that remove pollutants from runoff that flows into the public drainage system. There are two different levels of water quality credit depending on the percent of total suspended solids (TSS) removed. Removing 50% TSS earns a 10% credit and removing 75% TSS earns a 20% credit. Public Works did not receive any applications during 2022.

	2018	2019	2020	2021	2022	2023
Removing 50% TSS	0	1	1	0	0	0
Removing 75% TSS	0	0	0	0	0	0

### RATE REDUCTION CREDIT

Public Works received one application for the Rate Reduction Credit in 2022 and it was approved. The rate reduction credit offers two different levels of credits depending on the level of control, detaining the 2-year/24-hour and 25-year/24-hour storm rainfall event is eligible for 15% credit and detaining the 100-year/24-hour storm rainfall event is eligible for 30% credit. Previous years these were eligible for a 10% credit and 25% credit.

	2018	2019	2020	2021	2022	2023
Detaining 25yr	1	4	0	0	0	0
Detaining 100yr	0	5	0	0	1	0

### DIRECT DISCHARGE CREDIT

Applicants had to demonstrate that their impervious area drained directly to the Illinois River. This credit has now been replaced with the Fee Exclusion. A total of 31 properties met the requirements for the direct discharge credit.

	2018	2019	2020	2021	2022
Direct Discharge	3	16	0	8	4

## FEE EXCLUSION

Fee Exclusions are available to qualifying applicants who demonstrate the impervious area on the property either is being detained and cleaned or drains directly out and does not re-enter, directly or indirectly, the City storm drainage system. Qualifying properties are eligible to receive a fee exclusion of 50% or 90% by meeting the standards set in the credit and grant manual for each level of fee exclusion. Public Works has received no applications for fee exclusion. The fee exclusion replaced the direct discharge credit in 2022.

## PERMIT COMPLIANCE

The Clean Water Act (CWA) classifies stormwater runoff as a pollutant to be regulated. The 1989 Amendment to the CWA established the National Pollutant Discharge Elimination System (NPDES) for Municipal Separate Storm Sewer Systems (MS4). Within the State of Illinois, the Illinois Environmental Protection Agency (IEPA) administers the MS4 program and policies. The City manages a stormwater management program under the terms of IEPA Permit Number ILR40 that is effective until February 28, 2025.

The MS4 permit requires the City to develop a Storm Water Management Program comprised of best management practices (BMPs) and measurable goals for each of the following six minimum control measures:

1. Public education and outreach on storm water impacts
2. Public involvement and participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post construction storm water management in new development and redevelopment
6. Pollution prevention/good housekeeping for municipal operations

These six minimum controls can be simplified into public engagement and pollutant controls.

Peoria submitted an annual report to the IEPA for the period of March 1, 2022 to February 28, 2023 by June 1, 2023. See **Appendix A** for the Annual report. The annual report for March 1, 2023 to February 28, 2024 is due on June 1, 2024. The annual report describes actions taken by the City to fulfill the permit requirements and implement the City's stormwater management program established in the Notice of Intent dated May 26, 2016.

Water quality Testing and Total Maximum Daily Load (TMDL) water quality testing are also required under the permit. **Appendix B**, Strategy for TMDL Limits in Peoria, contains the TMDL plan. **Appendix C**, MS4 Water Quality Sampling, contains the water quality testing.

## PUBLIC ENGAGEMENT

The City has an informational packet named "Our Water, Our Way" related to stormwater education and the stormwater utility that has been used since its creation in 2018. The documents are available on the peoriagov.org website. See **Appendix E** for the flyers.

Stormwater information continues to be on the City of Peoria website. The Peoria Stormwater website was incorporated into the new City of Peoria website in 2022. Stormwater information contains public education materials on stormwater issues as well as provides customers tools to review their impervious area, learn about the appeals process, read the credit and grant manual, download credit and grant application forms, and contact City staff.

Over the past several years, the Clean Water Celebration, Party for the Planet, and Public Works Open House were canceled due to COVID-19. In 2023, the Public Works Open House returned and featured booths on Stormwater. The Department looks to be present at this year's Clean water Celebration and Party for the Planet. Public meetings and meetings with Neighborhood Associations were held in person for projects on Deerbrook Drive, Moss Avenue, Lamont Avenue, Kickapoo Terrace, and Combined Sewer Overflow Year 3. Information about stormwater management and infrastructure improvements was provided at these meetings and everyone in attendance had the opportunity to ask questions about the projects.

## **POLLUTANT CONTROL MEASURES**

Public Works contracts with consulting engineers to perform the mapping and dry weather screening required by the IEPA permit. These investigations record the location, size, material, and condition of the constructed elements of the storm drainage system. Efforts to date have documented 1,241 outfalls within the City drainage system. The City received a report of one illicit discharge regarding illicit dumping into stormwater drains. The City immediately investigated the complaint and notified the company in writing that their actions were not allowed and directed them to stop. Staff used the opportunity to explain the regulations and why this activity is not allowed.

The consulting engineer also performs quarterly water sampling. A report of the Separate Storm Sewer System water quality samples is included in **Appendix C**.

The City contracts with consulting engineers to perform construction site runoff control oversight and permit reviews. These efforts involve review of pollution prevention plans for the proposed site and inspections during construction to confirm the site is being managed to prevent erosion.

New construction permits issued by the City require volume control of the runoff produced by the first inch of rainfall. The volume control requirement results in the capture of the runoff with the highest concentration of pollutants. This requirement is classified as a post-construction stormwater control.

Public Works staff typically attend the annual APWA Illinois Section meeting in May of each year to learn how to provide good housekeeping for municipal operations. The 2023 conference was held at the Peoria Civic Center after three years of virtual conferences due to the COVID pandemic. Public Works had 15 staff attended the 2023 conference.

## **WATER QUALITY MONITORING TMDL**

In 2018, IEPA staff performed an audit of the City's compliance with Permit ILR40. One of the audit findings directed the City to incorporate strategies that will lead to improved water quality as reported in the Total Maximum Daily Load (TMDL) and Load Reduction Strategies for the Middle Illinois River, dated August 9, 2012, and issued by the Region 5 office of the USEPA. The City engaged a consulting engineer to prepare a plan to implement testing procedures that will guide actions aimed at reducing the volume of bacteria that enters the Illinois River and

Kickapoo Creek. The consultant's recommendations are included in **Appendix B**. The City consultants installed water quality sampling equipment and additional rain gauges in 2022. The expanded sampling program will begin in 2023.

The TMDL testing protocols required for the separate storm sewer system are in addition to testing requirements for the combined sewer system and standard MS4 testing procedures of the Separate Storm Sewer System.

## ASSET MANAGEMENT

The City of Peoria has a land area of approximately 48 square miles along the west bank of the Illinois River primarily north of Kickapoo Creek. The Municipal Separate Storm Sewer System (MS4) captures runoff from 40 square miles while the Combined Sewer System captures runoff from approximately 8 square miles. The storm drainage system consists of constructed and natural infrastructure that provides for the safety, prosperity, and benefit of the community. The infrastructure system of streets and storm sewers are also assets of the city. Assets are tangible things of value, such as equipment, facilities, and infrastructure systems. All equipment, facilities and infrastructure require maintenance, repairs, improvement, and eventual replacement. In 2022, the City's Stormwater Program Manger initiated steps to modernize the ten-year-old database to current GIS industry standards to allow for improved management of system attributes. The database schema upgrades are being implemented in concert with new and expanded methods to collect data.

## GIS DATABASE

Public Works contracts with consulting engineers to perform the mapping and dry weather screening required by the IEPA permit. Through this effort, each year the City adds storm sewer location, attribute, and condition data to the City's GIS database. Since the start of the mapping project, this effort has mapped 205 miles of storm sewer within 38.33 square miles of the City. The CSO area is eight square miles. This mapping effort to date has identified 1,241 locations where a storm sewer pipe discharges runoff into a natural drainage path such as a creek. These are commonly referred to as outfalls. **Appendix D** identifies the area that was mapped in 2023.

## INSPECTIONS AND CONDITION ASSESSMENT

In the 2022 calendar year, the City contracted with a local company to clean, measure, and report the condition of approximately 75,000 feet of storm sewer pipes ranging in size from 4" diameter to 60" diameter. This represents approximately 7% of the city's existing storm sewer pipe network. The work was completed in 2023 and the results of the inspection were incorporated into the GIS database. The city has once again contracted with a local company to perform this same service on approximately 58,000 feet of storm sewer pipes in 2023 and that work will be completed in 2024.

Public Works uses this information, along with other data, to determine maintenance and capital investment priorities for storm sewer pipe projects. The City will continue the cleaning and inspection work in future years to determine the condition of the existing storm sewer system and establish maintenance, repair and replacement plans.

## RECORD DRAWINGS

It is a significant effort to create and manage records also known as “as-built” or “record” drawings of constructed infrastructure. Many construction projects encounter unexpected field conditions that require changes to the plans to build the needed improvements. Tracking information on what was constructed is important to have for future maintenance needs, watershed modeling, and to understand what assets were constructed. Storm sewer GIS mapping has been updated with “as-built” records for roadway construction projects on Glen Avenue, MacArthur Highway Bridge, CSO-Y1 and CSO-Y2 in 2023. This process will continue in 2024 and future years as projects are completed.

## SYSTEM MAINTENANCE

SWU funds allow the City to maintain properties to control debris and vegetation that typically clog the city storm sewer system when they enter inlets and pipes. During 2023, the City used contracted services to perform mowing, tree removal, and other routine maintenance activities. City staff provided the bulk of the storm drainage related maintenance activities in 2023.

## ASSET CLEANING AND MAINTENANCE

Public Works maintenance crews were busy in 2023 inspecting, cleaning, and maintaining the storm sewers. Cleaning and repairing inlets, culverts, and storm sewers are priorities for city maintenance staff. **Appendix J** provides details about the work performed and labor costs reported to these activities. Inspecting and cleaning storm sewer pipes was also completed as part of the Drainage Repair Annual Contract for 2023. The following is a summary of the maintenance work performed:

- 2,667 hours cleaning inlet tops
- 16 hours cleaning headwalls
- 2,956 hours of concrete work
- 15 hours inspecting inlets
- 3,340 hours repairing storm sewers
- 4,390 hours cleaning storm sewers
- 8,831 hours sweeping streets

Public works swept city streets nine times during the year which removed 2,700 tons of debris and pollution that would have ended up in the storm sewer pipes, streams, and eventually the Illinois River.

SWU funds paid for the Forestry section. Forestry removes dead and diseased trees, tree uplifting, tree planting, and tree pruning in the Right of way and on City property. The following is a summary of the forestry work performed:

- 7,236 hours trimming tree/brush
- 17 hours planting trees
- 175 trees planted<sup>1</sup>
- 18 hours removal of tree/brush

---

<sup>1</sup> 100 trees planted during a volunteer tree planting event hosted by Ameren

- 63 hours weeding/trim

In addition to work performed by City crews, SWU funds are also used to pay local contractors for mowing and weed control on approximately 1,277 vacant lots at a cost of \$507,481.15. The contractors mowed the vacant lots approximately 18 times.

The following is a tabulation of asset maintenance costs:

City labor (32,089 hours)	\$1,138,030
Contracted services	\$0
Equipment depreciation	\$1,380,357
Material cost	\$80,370
Totals	\$2,598,762

## EQUIPMENT MAINTENANCE

The Public Works crews use street sweepers, work trucks, jetting and vacuuming trucks, excavators, back hoes, as well as an array of other equipment and tools. Public Works fleet staff maintain the tools and equipment used by Public Works crews. Having the right equipment in good condition creates a safe and efficient work environment. The cost of parts in 2023 was \$113,961. The cost of labor to repair and maintain the units was \$82,032. The aging equipment needed more frequent and extensive repairs when compared to previous years. The total costs of these services as tabulated in **Appendix L** is \$195,992.

2019	2020	2021	2022	2023
\$265,690	\$211,014	\$11,173	\$125,046	195,992

## WORKFORCE DEVELOPMENT

### PEORACORPS

The training program focuses on job skills required to maintain green infrastructure intended to replicate natural conditions within the urban environment to reduce the amount of rainfall that becomes runoff and enters the storm sewer pipes. **Appendix K** provides additional details about the 2023 PeoriaCorps program.

Between September 2022 and March 2023, a cohort of five (5) young adults participated in the program. Between March and Summer 2023 a cohort of five (5) adults of diverse ages completed the program. In October 2023 six (6) additional members were recruited and started their service, totaling 16 citizens of Peoria that participated in PeoriaCorps between late fall 2022 and fall 2023.

In 2023 members recorded a cumulative 5,158 hours of service, including 4,580 program hours of litter removal, seed harvesting, plant maintenance, installation, and watering of green infrastructure landscapes within the City of Peoria, servicing a total of over 66 acres of green space.

Members in each cohort participated in The National Service Opening Day of Service, two community service days including Martin Luther King Jr. Day and Juneteenth, and the MLK community wide service day hosted by PeoriaCorps.

## MAYOR'S YOUTH PROGRAM

The Mayor's Youth Program is an eight-week, paid summer internship program for Peoria Public Schools District 150 high school juniors and seniors. During the summer-enrichment initiative, students perform tasks such as weeding and mulching, litter and tire pick-up, and other beautification tasks throughout the City that focus on improving the City's green infrastructure. On Fridays, students attend career exploration events and presentations. In 2023, there were 24 students in the program and 5 adult team leaders. The Stormwater Utility Fund paid \$88,342 for the 2023 program.

Year	Amount spent
2020	\$785 *Covid-19 shortened
2021	\$60,000* not Stormwater Utility funded
2022	\$74,445
2023	\$88,342

## INFRASTRUCTURE INVESTMENT

Each year the City prepares a Community Investment Plan that identifies projects, equipment, and engineering studies to complete in the coming year. The 2023 budget year spent \$9,519,371 of SWU funds in delivering the Community Investment Plan to make capital improvements to storm drainage infrastructure. As reported in Table 2 of this report, capital investments in storm drainage infrastructure increased each year. Capital improvements require considerable time to gather information, design improvements, and construct the facilities. Several capital projects are in the design stage in 2023 that will be constructed in 2024 and 2025. The following is a description of the major capital expenditures of 2023.

### CHANNEL STABILIZATION

During 2023, four distinct projects were in progress to plan, design, and make improvements to stabilize natural channels that carry runoff from the city streets and developed properties.

#### Outfall Improvements (various locations)

A consulting engineer was designing outfall improvements at 17 sites at various locations throughout the city in 2023. The 17 locations were selected because inspections identified structural and channel instability problems where storm sewer pipes release runoff into natural streams and creeks. The \$93,153 of engineering services in 2023 will lead to an \$800,000 construction project in 2024.

#### Springdale Creek

The 2022 project was concluded in 2023 with a final payment of \$6,000. The project made improvements to a portion of Springdale Creek within Springdale Cemetery.

#### Dry Run Creek Tributary C at University Street

A consulting engineer was designing outfall improvements west of University Street and south of Lake Avenue where an 84" diameter storm sewer releases runoff into the stream known as Tributary C of Dry Run Creek. The stream is unstable and experiencing significant erosion. The

\$17,495 of engineering services in 2023 will be completed at an additional cost of \$171,000 and lead to a \$2,000,000 construction project in 2024 and 2025.

#### Springdale Creek Lake Avenue

A consulting engineer was designing outfall improvements south of Lake Avenue and west of Shady Oak Drive where a 36" diameter storm sewer releases runoff into the stream known as Springdale Creek. The stream is unstable and experiencing significant erosion. The \$4,878 of engineering services in 2023 will be completed at an additional cost of \$145,000 and lead to a \$725,000 construction project in 2024.

## **CULVERT REPLACEMENT**

Three culvert replacement projects were completed and one was in progress in 2023.

#### Merle & Knoxville Culvert

The project to replace the culvert that carries the East Branch of Dry Run Creek under Merle Lane was completed in June. Project expenses for this project in 2023 were \$1,335,959.

#### Abington & Madison Culvert

The project to replace the culvert that carries Springdale Creek under the former railroad tracks near the intersection of Abington Street and Madison Avenue was completed on 11/10/2023. Project expenses for this project in 2023 were \$908,788.

#### Glen Culvert West of Sheridan

The project to replace a 1930's era culvert under Glen Avenue was completed on 11/10/2023. Project expenses for this project were \$641,301.

#### Gift to MacQueen

The project to replace the culverts carrying Tributary A under streets between Gift and MacQueen. Design engineering services were started in 2023 at a cost of \$40,637 and will be completed in 2024 for an additional \$89,000. Construction is planned to begin in 2024 once property acquisition and design is completed.

## **DRAINAGE ANALYSIS ENGINEERING**

Five drainage analysis projects were completed by engineering consultants at a cost of \$210,000 in 2022. These studies have identified \$13,510,000 of infrastructure improvements that will protect public and private property from catastrophic damage.

#### Dry Run Creek Watershed Study

The survey and services associated with the drainage study and hydrologic and hydraulic modeling of Dry Run Creek watershed was completed in 2023. The project expenses were \$164,269.

#### Springdale Creek Outfall at E Lake Avenue

This project was (designed) during the past year. A contractor will be awarded with this project in 2024. The total expenses for this project in 2023 were \$65,102.

# GREEN INFRASTRUCTURE

## Native Planting – City Facilities

The project to improve the City of Peoria Public Works facility with the addition of native plants, walking paths, and an accessible entrance was completed (00/00/2023). The total project expenses for this project in 2023 were \$1,001,400.

## Green Infrastructure Maintenance & Performance Testing For CSO Control

Green infrastructure requires periodic inspections to ensure that the systems are functioning properly, as well as maintenance and replanting as needed. In accordance with the Consent Decree, routine inspections must occur at least four times per year from March to November, with additional inspections within 48 hours after a 1" or larger rainfall event. The total expenses for this project in 2023 were \$89,216.

SWU Inspections completed, number of inlets, number of events (1" rainfall)

Number of Events (1" rainfall)	8
SWU Inlet Inspection	104 Total
Permeable pavers, Bioswales& Bumpouts	128 Total

# STREET DRAINAGE IMPROVEMENT

SWU funds were used for nine street drainage improvement projects in 2023.

## Ronald Road at Stafford Court

The improvements designed in 2023 will remove a 36" storm sewer that drains a large portion of the Rolling Acres subdivision. The new 42" and 48" storm sewer will provide sufficient capacity such that the Ronald and Stafford Court intersection will not flood during a 10-year design storm event. A 2022 drainage study examined the drainage conditions of the 71 acres of the western portion of the Rolling Acres subdivision. This project is planned for construction in 2024. The total expenses for this project in 2023 were \$49,696.

## El Vista Subdivision Ditch Improvements

This project is in the design stage and planned to go out to bid in summer 2024. The total expenses for this project in 2023 were \$129,515.

## Kickapoo Terrace Access Road

This project was completed in 2023. The total expenses for this project in 2023 were \$411,600. The project consists of the design and construction of a new pavement section along Kickapoo Terrace in Peoria, Illinois. Pervious pavement will be utilized for the replaced pavement section.

## Moss Avenue from Western Avenue to Sheridan Road

Project will include curb and gutter, storm sewers, permeable paver parking lane, subsurface storage for infiltration and detention, and pavement improvements for the 6,000 foot long street. This project is still in the design stage. Total expenses for this project in 2023 were \$213,130.

## Sheridan Road – Between Northmoor & Knoxville

The existing drainage system for the properties along Sheridan Road, north of Northmoor, and west of Knoxville is insufficient. A drainage study completed in 2022 recommends new pipes

and inlets be designed to carry runoff produced by a 10 year storm event. This project will be assigned to a contractor in 2024. The total expenses for this project in 2023 were \$93,850.

#### Deerbrook Drive Green Street

The design process continued in 2023 with an expense of \$478,647. The project consists of roadway and stormwater improvements on and near approximately 3,000 linear feet of roadway on West Deerbrook Drive from the intersection of Knoxville Avenue to the end of the roadway in a cul-de-sac to the west. This project is estimated to begin in the summer of 2024.

#### North Street and Stonegate Storm Sewer

This project is currently in the design stage and planned to go out to bid in the fall of 2024. The total expenses for this project in 2023 were \$54,836.

#### Donald Street Storm Sewer Improvements

The improvements designed in 2023 will provide curb and gutter along the unimproved street and include inlets and 12" storm sewer to carry runoff produced by a 10-year storm event. The design for this project was completed in 2023 at a cost of \$45,721. This project is planned for construction in 2024.

#### Ridgelawn, Edgewood, Queen Ann & Greenwood

This subdivision was initially constructed with roadside ditches to manage storm water runoff. This system no longer functions properly and requires maintenance/reconstruction. This project is planned for construction in 2024. The total expenses for this project in 2023 were \$119,722.

## STORMWATER INFRASTRUCTURE

### Storm Sewer Lining & Repairs

Inventory and inspection of the city storm drainage assets is identifying defects that require repair and reconstruction in order to extend the useful life of the storm sewer pipe system and prevent damage to other infrastructure assets and private property. Total expenses for these repairs in 2023 were \$32,542.

#### Outfall Repairs 2023

\$100,000 in engineering services in 2023.

### Stormwater Infrastructure Improvements

A variety of engineering services and construction work was done in 2023 under the project description of Stormwater Infrastructure Improvements. In total, \$687,609 went towards these activities in 2023. The completed projects are:

Project Number	Name	Dollar Amount
O2107	Spring Lane/Orchard Lane Drainage Improvements	\$49,694
O2215	Storm Sewer Improvements and Cleaning	\$637,915
	Total	\$687,609

### Drainage Repair Program

This program funds the Annual Drainage Repair Contract (ADRC) which provides for relatively quick repairs to drainage infrastructure. The contract is awarded based on time and material costs for designated bid items. Contracts are eligible for up to two annual extensions. The drainage repair contract provides contractor resources to repair broken stormwater

infrastructure that is too big for operations staff or requires special skills or equipment. This contract includes lining. Lining includes inserting a liner into the pipe to repair the existing pipe. Lining is less expensive, faster, and has less impact on the neighborhood and streets than the traditional open trench excavation type of construction. In 2023, \$1,271,539.90 of the \$1,358,226.87 budget was for forty-three different locations through the city repairing and reconstruction existing storm sewer infrastructure. Of the remaining \$86,686.97, \$75,488.18 has been allocated for emergency environmental remediation due to a diesel spill discovered in the creek during Work Order 23 ARC-06. This reserved amount ensures that we are prepared to cover the costs of the cleanup. **Appendix G** provides a detailed report of the improvements. The three largest repair projects completed in 2023 were:

- Work Order 22-29: \$110,065.31 – Sloan St included installation of a new manhole and two dry wells, along with construction including trenching and laying 160 feet of 12-inch PVC pipe along with 100 feet of 12-inch perforated PVC pipe to enhance the area’s stormwater management capabilities.
- Work Order 23-03: \$123,831.68 – N Idaho St storm drain system comprised of storm inlet, a culvert connected to the drainage network, and a manhole with a pipe that directs water across Nebraska St to the outfall was determined to require replacement. This involved excavating the buried pipe, partially closing the street for safety, and replacing the existing manhole. New piping and lining were installed leading to the outfall. Additionally, geofabric and Rip Rap were installed at the outfall to address the erosion problems.
- Work Order 23-18&19: \$144,592.32 – North and McClure in previous years, Significant progress was made in grading and filling the work area. Erosion control measures stabilized the site, including installing a gabion wall and seeding with appropriate erosion control materials like straw matting, Curlex, or Geomat. This work marks the final phase in bringing this location to completion. Completed installation of 364 linear feet of black aluminum fencing and a 6 ft chain link fence, approximately 296 ft in length, including a gate for future equipment access on a structural concrete wall.

#### Stormwater Utility Grant Program

The grant program provides investments into best management practices on private property. Four different grant programs are available to property owners that want to take an active role in managing stormwater by installing new stormwater management systems on their property. The City received and approved applications for three of the four grant programs. During 2023, the City awarded \$168,370 of SWU funds as grants for stormwater improvements on private property.

#### Rain Barrel Grant

Four property owners applied to the Rain Barrel Grant program to purchase 6 rain barrels, with one property owner purchasing diverters for previously purchased rain barrels. The grant is for subsidizing the purchase of up to two rain barrels per property and the property owner commits to using the rain barrels for a minimum of four years.

Grant Year	Number of Properties	Number of Barrels	Dollars Spent
2020	8	11	\$550
2021	9	12	\$600
2022	3	4	\$172
2023	5	6	\$328

Totals	25	33	\$1,650
--------	----	----	---------

#### *Green Infrastructure Grant*

Public Works uses a consultant to review the Green Infrastructure Grant applications. The consultant approved one grant application from 2022 to be postponed until 2023. This project has been completed and reimbursed \$ 30,000.00 and through multiple best managed practices managing 31,345 square feet of impervious area, capturing 4,407 inches of rainfall, and installing 500 square feet of permeable pavers. **Appendix H** provides a map of these project locations.

Grant Year	Number of Applicants	Number of Approved	Dollars Spent
2020	10	10	\$6,600
2021	5	5	\$46,967
2022	2*	2*	\$11,730
2023	0	0	\$30,000*
Totals	17	17	\$65,297

\*One application from the previous year was postponed from the 2022 grant year to the 2023 due to a late start and inclement weather.

#### *Private Property Drainage Assistance Grant*

The program reimburses small drainage projects on private property that have damage caused by upstream runoff. The maximum grant amount per property was updated from \$7,500 to \$10,000 in 2022. Public Works uses a consultant to run the Private Property Drainage Assistance (PPDA) grant program. Out of the eighteen received PPDA applications, the consultant approved ten PPDA applications. The approved projects were reimbursed a total of \$138,042. **Appendix H** provides a report of these project locations.

Grant Year	Number of Applicants	Number of Approved	Dollars Spent
2018	28	28	\$154,976
2019	30	30	\$167,039
2020	21	19	\$98,725
2021	26	24	\$174,961
2022	18	15	\$96,915
2023	14	10	\$138,042
Totals	123	116	\$830,658

#### *Stormwater Infrastructure Investment Grant*

Stormwater Infrastructure Grants Investment Grants will fund large and complicated projects such as stream restoration and stabilization. One application was received and was approved for stabilizing the creek bank. This project included work to remove failing railroad ties and install gabion baskets to preserve the creek bank. The approved project was reimbursed a total of \$34,500. **Appendix H** provides a report of these project locations.

Grant Year	Number of Applicants	Number of Approved	Dollars Spent
2019	1	0	\$0
2020	0	0	\$0
2021	0	0	\$0

2022	1	1	\$34,500
2023	0	0	\$0
Totals	2	1	\$34,500

**APPENDIX A - MS4 ANNUAL INSPECTION REPORT**

Attachments to Annual Facility Inspection Report  
General NPDES Permit for Discharges  
from Small Municipal Separate Storm Sewer Systems (MS4)  
City of Peoria, IL  
YEAR 2– MARCH 1, 2022 – FEBRUARY 28, 2023  
For Permit #ILR40-0424

Best Management Practices are derived from the Notice Intent for the March 1, 2021 - February 28, 2025, permit.

**Attachment A. Changes to Best Management Practices**

1. Public Education and Outreach
  - Public events that the City normally attends to host a booth and provide public education and outreach were cancelled. There are plans to attend these events in 2023 when they are back in person.
  - See attachment B.
2. Public Participation/Involvement
  - Public meetings and meetings with Neighborhood Associations have been in person for projects on Deerbrook, Glen Ave, and for Combined Sewer Overflow year 1 and year 2 in 2022. Information about the project's purpose and impact were provided for everyone in attendance, along with the opportunity to ask questions about the project.
  - See attachment B.
3. Illicit Discharge Detection & Elimination
  - See attachment B.
4. Construction Site Runoff Control
  - See attachment B.
5. Post-Construction Runoff Control
  - See attachment B.
6. Pollution Prevention/Good Housekeeping
  - APWA conference was held at the Peoria Civic Center and Public Works had 24 Staff in attendance.
  - See attachment B.

**Attachment B. Status of Compliance with Permit Conditions**

The City of Peoria has complied with applicable conditions of its NPDES Phase II Permit for the MS4 system during this reporting period except as noted.

### Assessment of Appropriateness of Identified BMP's

At this date, it is the opinion of City staff that the City of Peoria NOI includes Best Management Practices that are effective and appropriate for minimizing stormwater pollution.

### Progress Towards a Reduction in Pollutants Discharged

Based on the achievement of measurable goals, it is the opinion of City staff that satisfactory progress has been made towards the goal of reducing the discharge of pollutants to the maximum extent practicable.

### Progress Towards Achievement of Measurable Goals Identified for Permit Year

The status of progress towards achieving identified measurable goals for each of the minimum control measures is presented below.

#### BMP A. Public Education and Outreach

##### A.1 Distribute Paper Material

- The City distributed a handout titled "Rain Gardens". The handout was available at the public works office and community events, where they were distributed, and an unknown number downloaded online.
- The City distributed a packet titled "Our Water, Our Way" which includes information on stormwater, combined sewer overflow (CSO) issues, green infrastructure, and pollution reduction. Included in the packets are the "Watershed Moments" which is a CSO timeline, "Investing in Smart Wet Weather Solutions" which contains information on a possible stormwater utility, "Co-Benefits of Green Infrastructure" which describes the additional benefits of green infrastructure, "Path to Stormwater" which describes the path runoff takes to the river, "What is Stormwater Infrastructure?" which describes different components of a storm water system, "Protecting Peoria from Pollution" which describes what individuals can do to help prevent pollution, "Where does it go when it Overflows?" which explains what a CSO system is and finally "Nature's Water Filter, The Rain Garden" which describes what rain gardens are and how they function. Packets were distributed at meetings and an unknown number downloaded.
- The Credit and Grant manual which describes the stormwater utility Credits and Grants available and includes some basic stormwater education materials were updated and distributed. An unknown number downloaded.
- The City notified developers of NPDES requirements for approximately 34 potential projects, with permits issued for 19 of those projects. Copies of

written notification are on file. Information is distributed when projects request information for an erosion control permit.

#### A.6 Other Public Education (also labeled as A4.2)

- Public Presentations were cancelled due to COVID
- “Clean Water Celebration” normally held at the Peoria Civic Center was cancelled due to COVID
- Peoria Public Works Open house was cancelled due to COVID.
- The city updated the stormwater website, migrating from PeoriaStormwater.com to the City website Peoriagove.org. This website has educational materials on stormwater related topics and other resources.

#### A. Additional BMP completed

- During the summer-enrichment initiative, students perform tasks such as weeding and mulching, litter and tire pick-up, and other beautification tasks throughout the City that focus on improving the City’s green infrastructure. On Fridays, students attend career exploration events and presentations. In 2022, there were eighteen students in the program and five adult team leaders.
- Peoria Corps is a program intended for disadvantaged persons and was on hiatus from October 2021-April 2022 due to program director vacancy and contract transition from IDPH to IDHS funding, the contract transition affected all Illinois AmeriCorps programs. The program returned robustly in September of 2022 under new program director, Amelia Ohlrogge, with a fall cohort of 5 young adults whose service term runs through March of 2023 (please note that PeoriaCorps was reduced from 10 slots per cohort to 6 slots per cohort in 2021 due to recruitment and retention challenges experienced historically by the program)

#### BMP B. Public Participation/Involvement

##### B.3 Stakeholder Meeting

- Public Presentations held during the reporting period
  - CSO Control Project Year 1 Meeting – June 13, 2022
  - Deerbrook Drive Reconstruction Meeting – July 21, 2022
  - CSO Control Project Year 2 Meeting - August 16, 2022
  - Deerbrook Drive Reconstruction Meeting – October 19, 2022

- Merle Lane Culvert Replacement Project – November 10, 2022

### B.3.2 Environmental Justice

- Public Presentations were cancelled due to COVID. We did not complete the meeting within this permit year. We intend to complete it in the next few years and hope to tie it into a meeting with the Combined Sewer Overflow. We have identified the environmental justice areas using the Environmental Protection Agency's EJSCREEN tool. The environmental justice areas in Peoria's MS4 area are generally west of Dry Run Creek and up to War Memorial Drive to the north, as well as in the City's CSO area.

### B.7 Other Public Involvement

- The City continues to sponsor and fund a private property drainage program to address erosion and flooding on private property. Fifteen (15) private property owners were approved to use this program during the reporting period.
- The City continued funding the rain barrel grant program. The grant funds \$50 per 55 gallon or larger rain barrels up to two per property. During the reporting period, 4 rain barrels were funded with this program.
- The City continued funding the Green Infrastructure grant program. Two projects were approved during the reporting period but only one was completed in the 2022 grant year running from January 1 to December 31, with the second project postponed due to contractor availability and weather conditions to grant year 2023.
- The City funded Great American Clean Up, was held April 23, 2022.
- The City supports the Mayor's litter Commission which had five participants in it. They focus on cleaning up the area around Bradley University and along Main Street. Steve Tyler, litter Czar, hopes to continue to grow the group and continue this year.
- According to PubWorks, 202 calls were logged in the reporting period related to drainage or stormwater utility issues.

### B Additional BMP completed

- Continued to use inlet grates with language "Dump no waste. Drains to River". Stamped grates are installed in new subdivisions and inlets that are replaced.

## BMP C. Illicit Discharge Detection & Elimination

### C.1 Sewer Map Preparation Develop

- The City continues to work on developing a GIS map of the storm water system. Some additional GIS map elements were mapped in the reporting period. To date, the project has mapped 176 miles of storm sewer across 38.33 square miles of the City. See Exhibit 1.
- Stormwater outfall AutoCAD map completed in 2007, map on file.

### C.2 Regulatory Control Program

- The City continued enforcing existing illicit discharge ordinances. We are currently working with other departments to identify additional policies, procedures and ordinance changes that may be necessary for Public Works staff to enforce city ordinances. This is an ongoing process. If ordinance changes are required, they would require City Council approval which could extend our expected timeline. The City recognizes that enforcement of the stormwater ordinances needs to be strengthened. This is a major change for the city that will require possible ordinance changes, procedural changes, and staff from multiple departments to support it.

### C.4 Illicit Discharge Tracing Procedures

- The City continues to use PubWorks software to aid in tracking complaints at the City. Complaints and evaluations are recorded and maintained on file. There was one illicit discharge reported to Public Work during the reporting period. The city received a complaint from a citizen about a company dumping a liquid into an alley where the liquid entered the storm water system. The City sent the company a letter to cease and desist the illicit discharge and received a response from the company they would correct the behavior. No further evidence of the behavior has been seen since the letter was received.

### C.7 Perform dry weather screening outfall inspections

- Outfalls were screened as part of the GIS mapping project. Screening of outfalls helps to identify illicit discharges. To date, 1,183 outfalls have been mapped.
- City operation staff continued inlet inspections and performed routine maintenance and repair.

### C.9 Public Notification

- The City created and distributed a packet titled “Our Water, Our Way” which includes information on stormwater, combined sewer overflow (CSO) issues, green infrastructure, and pollution reduction. Included in the packets are the “Watershed Moments” which is a CSO timeline, “Investing in Smart Wet Weather Solutions” which contains information on a possible

stormwater utility, “Co-Benefits of Green Infrastructure” which describes the additional benefits of green infrastructure, “Path to Stormwater” which describes the path runoff takes to the river, “What is Stormwater Infrastructure?” which describes different components of a storm water system, “Protecting Peoria from Pollution” which describes what individuals can do to help prevent pollution, “Where does it go when it Overflows?” which explains what a CSO system is and finally “Nature’s Water Filter, The Rain Garden” which describes what rain gardens and how they function. Packets were distributed and an unknown number downloaded.

- The city updated the PeoriaStormwater.com website and was migrated to the City’s website Peoraigov.org, which has educational materials on stormwater related topics.

#### C.10 Other Illicit Discharge Controls

- The City continues to use PubWorks software to aid in tracking complaints at the City. Complaints and evaluations are recorded. Record on file. Complaints such as illicit discharges and illegal dumping are recorded and addressed.

### BMP D. Construction Site Runoff Control

#### D.1 Regulatory Control Program

- The City uses a consultant to review projects during construction on a complaint basis to enforce the erosion and stormwater control ordinance that is on file. No complaints were received in the reporting year.

#### D4. Site Plan Review Procedure

- By Ordinance, the City required Erosion and Sediment Control Permits for projects meeting the guidelines. The City continued to review site plans for compliance with City ordinance requirements. Thirty-Four (34) site plans were reviewed in 2021.
- The city hosts a virtual weekly meeting between staff, consultants, developers and property owners to discuss stormwater requirements and programs titled, “One Stop Shop”.

#### D.5 Public Information Handling Procedures

- PubWorks software is used to track complaints at the City. Complaints and evaluations are recorded. Record on file. The public can call in, email or use the Peoria Cares App to document a complaint. No complaints were received in the reporting year.

### BMP E. Post-Construction Runoff Control

#### E.2 Regulatory Control Program

- The City continued enforcing the erosion and stormwater control ordinance that is on file. Currently the City is only reviewing enforcement by complaint.

#### E.6 Post construction Inspections

- Due to staff reductions, post construction BMP inspection are performed by complaint only. City staff or a consultant are used to investigate complaints on private construction projects. City staff and/or consultants investigate complaints on City projects.

#### E.7 Other Post Construction Runoff Controls

- The City is looking at ways of incorporating green infrastructure on as many projects as feasible to address stormwater volume, velocity and water pollution.
- The 2022 APWA conference at the Peoria Civic Center was held in person this year with Peoria Public Works having 24 staff in attendance.

#### E7.1 Develop and implement policies to minimize the volume of runoff and pollutants

- The City adopted the volume control ordinance in 2016 effective January 1, 2017. The volume control ordinance requires that projects that disturb over 5,000 sf provide volume control practices to control the first inch of runoff from the impervious area of development on the site.

#### E7.2 Develop and implement a process to assess the water quality impacts in the design of all new and existing flood management projects

- In 2018 the City hired a consultant to prepare a water quality monitoring plan. The consultant took the first set of quarterly samples on February 6, 2019. The 2019-2022 data is posted on our website and attached as Exhibit 2. The city is working on establishing TMDL monitoring. Two locations will be monitored and sampled starting in 2023. Equipment includes samplers, flow meters and enclosures totaling approximately \$28,000. Two additional rain gauges have been added to the rainfall monitoring network: one at Public Works on Dries Lane and the other at Mt. Hawley Airport west of Knoxville Avenue.

### BMP F. Pollution Prevention/Good Housekeeping

#### F.1 Employee Training Program

- Deputy Director/City Engineer Andrea Klopfenstein and Assistant City Engineer Paola Mendez-Silvagnoli attended last year's ICAT. The ICAT has been renamed ICI, Innovations Conference on Infrastructure.

- The 2022 APWA conference at the Peoria Civic Center was held in person this year with Peoria Public works having 24 staff in attendance.
- Training specifically for contractors was not completed by the City of Peoria.

#### F.1.1 Develop and provide annual employee training

- Additional training material and topics will be covered in future years. The City assisted the American Public Works Association (APWA) local chapter conference committee helping to line up speakers on stormwater issues for the May 5-6, 2022, conference.

#### F.2 Inspection and Maintenance Program

- City streets were swept 10 times, removing 2,700 tons of debris and approximately 75,000 feet of storm sewer was inspected and cleaned.
- Other storm water related maintenance activities are summarized in Exhibit 3.

#### F.3 Municipal Operations Storm Water Control

- The City will review policies and procedures to minimize the discharge of pollutants from municipal properties, infrastructure and operations in the future.

#### F.6 Other Municipal Operations Controls

- The City will begin identification of septic systems within Peoria city limits to locate potential sources of bacteria.

### **Attachment C. Results of Information Collected and Analyzed, Including Monitoring Data**

- In 2018 the City hired a consultant to prepare a water quality monitoring plan. The consultant took quarterly samples in 2022. The 2022 sampling report is available on the Peoriagov.org website. The city is working on setting up TMDL sampling in the future. See attached water quality report, as Exhibit 2.
- Please note that the City Fire Department has jurisdiction over and documentation responsibility for hazardous material spills.
- See section C4 for the illicit discharges that were reported and investigated.

### **Attachment D. Summary of Stormwater Activities Planned by the City of Peoria During the Next Reporting Cycle March 1, 2023 – February 28, 2024**

#### BMP A. Public Education and Outreach

- Continue program.
- Distribute stormwater educational materials.
- Hold one presentation.

#### BMP B. Public Participation/Involvement

- Continue program.
- Hold a stakeholder meeting in an environmental justice area.
- Schedule a public meeting to provide the public an opportunity to provide input into adequacy of the city's MS4 program.
- Support Great American Cleanup

#### BMP C. Illicit Discharge Detection & Elimination

- Continue program.
- Develop prioritization plan for dry weather screening.
- Continue GIS mapping of storm sewer system.
- Review current illicit discharge ordinances and update where needed.
- Distribute public education materials.

#### BMP D. Construction Site Runoff Control

- Continue program.
- Continue reviewing projects and issuing Erosion and Sediment Control Permits
- Review current erosion and sediment control ordinances.
- Document on-site inspection protocols.

#### BMP E. Post-Construction Runoff Control

- Continue program.
- Develop a process to assess the water quality impacts in the design of all new and existing flood management projects.
- Develop a plan to inspect and inventory public and private BMPs.

#### BMP F. Pollution Prevention/Good Housekeeping

- Continue program.
- Update policies and procedures to minimize the discharge of pollutants from municipal properties, infrastructure and operations.
- Develop additional training materials for operations staff and implement training.
- Prepare a city-wide Pollution Prevention & Good Housekeeping plan to guide these efforts.

#### Results of Information of Collected and Analyzed, Including Monitoring Data

- In 2018 the City hired a consultant to prepare a water quality monitoring plan. The consultant took the first set of quarterly samples on February 6, 2019, and continued sampling through 2022. The 2022 sampling report will be available on the [peoriastormwater.com](http://peoriastormwater.com) website. The city anticipates TMDL sampling in 2023.

**Attachment E. Notice of Reliance on Another Government Entity**

The City of Peoria is not relying on another government entity to formally satisfy permit obligations.

**Attachment F. Construction Projects Funded by the City of Peoria and covered by General Permit ILR400424:**

Community Investment Plan (CIP):

- Drainage Repair Program
  
- Storm Water Management - Clean Water Act
- SWU Grants
  
- Concrete Lined Drainage Channel Repair
- Drainage Repair Program
- Green Infrastructure Maintenance
- Merle & Knoxville Culvert
- Glen & Sheridan Road Culvert
- Drainage Analysis Engineering
- SWU Infrastructure Improvements
- Storm Water Asset Management
- Glen Ave - War Memorial Drive to University Street
- Springdale Channel Stabilization
- Abington & Madison Culvert
- Riverfront Flood Wall Protection
- Deerbrook Drive Green Street
- Orange Prairie Native Planting
- City Facilities Native Planting
- NPDES MS4 Permit
- Storm Sewer Lining & Repairs
- Prospect Rd – Knoxville to Belmont
- Roadway Infrastructure Overlays
- Annual Storm Sewer Repair Projects List (sites less than 1 ac each)

**Project List**

701 E. Cox Ave
5611 Humboldt Ave
413 W. Lakewood Ave
937 W. Deerbrook Dr
127 E. Frances Roadside

E. Branch of Dry Run Creek at Oak Cliff Ct
Public Works Building
Orchard and Derby Intersection
N. Megan Ct. & Wilder St. Intersection
602 W. Kellar Pkwy
3216 N. Isabell to Hudson
8118 Crab Orchard Rd
7210 N. Park Edge Ct
Oak & Jefferson
2400 W. Wisconsin Ave
2802 N. Easton Place
1738 Great Oak Rd
2373 N Ardell Pl
2229 N. Ardell Pl
2315 N. Lehman Road
123 E. Morningside Dr
University St. & Brons Ave
6135 N. Pin Oak Circle
5317 N. Hamilton Rd
1818 W. Willow Wood Dr
7011 Willow Wood Dr
4606 Sable Way
2145 Knoxville Ave
6312 N. Glenrock Ct
401 W. McClure Ave
2300 Pioneer Pkwy

- Private Property Program List - 16 projects approved (sites less than 1 ac each)

<b>Address Name</b>
223 W. Wynnwood Dr.
513 W. Illinois Ave.
515 E. Illinois Ave.
2411 W. Marks Pl.
10620 N. Alex Dr.
2533 Benton Ct.
2537 Benton Ct.
2539 Benton Ct.

2145 N. Hampton Ct.
7710 N. Derby Rd.
2302 E. Grandview Ave.
918 W. Deerbrook Dr.
9011 N. Locust Ln.
609 W. Clybourn Ct.
135 E. Oak Cliff Ct.
11032 Moonstone Ct.

**Prepared by:**  
**Engineering Division**  
**Public Works Department**  
**City of Peoria**  
**3505 N. Dries Lane**  
**Peoria, IL 61604**  
**May 2023**

**APPENDIX B - TMDL STRATEGY**

CITY OF PEORIA, IL  
BACTERIA TMDL – WATER QUALITY SAMPLING PLAN

Total Maximum Daily Load (TMDL) sampling is needed to either confirm or refute only the fecal coliform concentrations in the TMDL report prepared by USEPA <sup>(1)</sup>. Separate from the ILR40 permit sampling currently being conducted at four locations within the Kickapoo Creek watershed, it is recommended that wet weather sampling for fecal coliform be performed at two locations: one in the Kickapoo Creek watershed (Dry Run Creek at North Park Road) and one in Illinois River Main Stem watershed (IL Rt. 6 over Moon Hollow Creek). Proposed sampling locations are shown in Figures 1 and 2.

Automated sampling equipment is recommended to improve the chances of collecting samples outside normal business hours. This requires purchasing and installing various pieces of equipment. The sampler will have to be iced down prior to the storm event to preserve the samples for laboratory testing. This means persons responsible for maintaining the samplers and taking samples to the laboratory will have to monitor the weather and anticipate storm events worthy of producing runoff. Automated sampling sites will essentially consist of a sampler containing a carousel of 24 bottles where the samples are collected and stored for retrieval. The sampler will be programmed to start collecting samples when water level in the stream begins to rise and will continue until the water level drops back to ambient conditions or all the bottles are full, depending on the sampling interval. Sampler activation is triggered by a flow meter in the channel that is connected to the sampler, which tells the sampler when to begin collecting samples. A modem will be connected to the sampler to notify personnel via text message when sampling has been initiated and when complete. Samplers will be powered by batteries that will have to be recharged or replaced depending on the type of sampler. Recommended equipment is the ISCO Model 6712 Sampler and ISCO Signature Flow Meter.

A minimum of two rainfall events should be sampled between May 1 and October 31 each year for the foreseeable future.

Rainfall data from the MS4 area should also be collected to correlate the runoff and sampling events. Peoria’s rain gauge network does not cover the central and northern parts of the city. Two additional recording rain gauges are recommended to supplement the existing network: one in the vicinity of Dries Lane and the other in the vicinity of Wilhelm Road (See Figures 1 and 2). Rain gauges should be purchased from the vendor being used to monitor CSO events and linked together for efficiency.

Table 1 provides an opinion of cost (2020 \$s) to purchase and install the sampling and rain gauge equipment.

Item #	Item Description	Quantity	Unit	Unit Price	Amount
1	Teledyne ISCO 6712 Portable Sampler	2	Each	\$4,071	\$8,142
2	24 Bottle Carriage for Discrete Sampling	2	Each	\$236	\$473
3	Rechargeable Ni-Cad Battery	2	Each	\$287	\$573
4	Ni-Cad Battery Charger	2	Each	\$152	\$305
5	External Battery Cable - 6 FT Long	2	Each	\$104	\$208
6	3/8" vinyl suction tubing - 100 FT Long	2	Each	\$93	\$187
7	3/8" vinyl suction tubing coupler	2	Each	\$22	\$44
8	3/8" vinyl suction tubing - SS Strainer	2	Each	\$66	\$132
9	6712Ci modem module	2	Each	\$2,374	\$4,748
10	4-20 mA input interface cable	2	Each	\$173	\$347
11	Liquid Level Actuator	2	Each	\$492	\$985
12	Equipment Shipping Freight	1	LS	\$700	\$700
13	Installation Site Scoping Visit (2 hours/site)	2	Each	\$760	\$1,520
14	Equipment Enclosures	2	Each	\$1,600	\$3,200
15	Teledyne ISCO Signature A-V Meter & Attachments	2	Each	\$6,300	\$12,600
16	Marine Batteries	2	Each	\$210	\$420
17	Rain Gauge w/ installation	2	Each	\$3,675	\$7,350
18	Sampler & A-V Meter Installation (12 hours/site)	2	Each	\$4,560	\$9,120
19	Miscellaneous Equipment / Expenses (Cellular Plan)	1	LS	\$2,100	\$2,100
20	Contingencies	1	LS	\$13,000	\$13,000
TOTAL					\$66,153

Figure 1 – Kickapoo Creek Watershed Sampling Location and Associated Rain Gauge

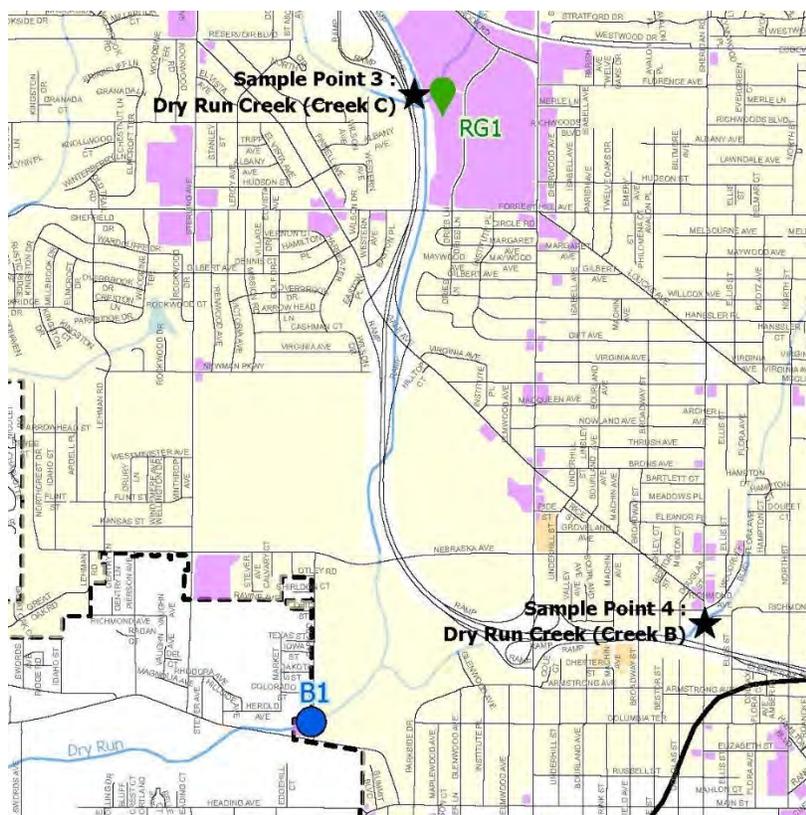
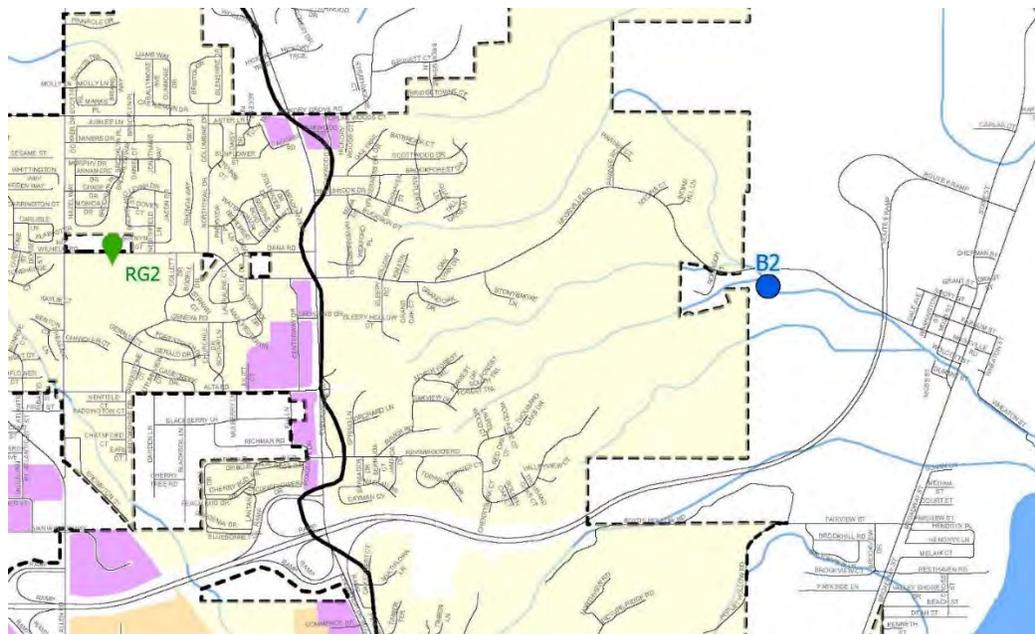


Figure 2 – Illinois River Main Stem Sampling Location and Associated Rain Gauge



**APPENDIX C - MS4 WATER QUALITY SAMPLING RESULTS**



2314 West Altorfer Drive  
Peoria, IL 61615  
(309) 691-5300  
foth.com

March 6, 2024

Andrea Klopfenstein, P.E.  
Deputy Director – City Engineer  
City of Peoria Public Works Department  
3505 N. Dries Lane  
Peoria, IL 61604

Re: Review of Storm Water Samples Collected for the Separate Storm Sewer System –  
MS4 Permit for Calendar Year 2023

Dear Andrea Klopfenstein:

The following is a summary report for storm water samples collected in 2023 from Sampling Points P1 through P4 (Summary Report). Included in this Summary Report are:

- ◆ Goals of the MS4 Permit, Sampling Point Location and Descriptions
- ◆ Summary of Procedures Utilized to Collect Storm Water Samples
- ◆ Analytical Data Summary, Including Trends and Potential Areas of Concern
- ◆ Figure showing Sampling Point Locations
- ◆ Laboratory Analytical Data

## **Goals of the MS4 Permit, Sampling Point Location and Descriptions**

Four sampling locations (P1 through P4) were selected to meet requirements of the MS4 Permit and determine whether surface water quality is improving, remaining stable, or decreasing. The sampling point locations are located outside of the known Combined Sewer Overflows (CSO) system and storm water flowing within the City of Peoria (City) boundaries. Sampling Point P1 is located the farthest to the north and encompasses a mix of residential, industrial, and commercial properties. Sampling Point P2 covers the northwest and some of the middle parts of the City with a mix of residential, commercial, and industrial properties. Sampling Point P3 is a mix of residential and commercial properties, and Sampling Point P4 encompasses the eastern portions of the City and is predominately residential. The four sampling point locations are shown on attached Figure 1.

## **Summary of Procedures Utilized to Collect Storm Water Samples**

Per General National Pollutant Discharge Elimination System (NPDES) Permit ILR40, storm water samples must be collected within 48 hours of a precipitation event greater than or equal to 0.25 inch of precipitation in a 24-hour period. Only one storm water grab sample per location is required to be collected per quarter. If there is insufficient precipitation during a quarter, storm water samples are not collected. Storm water samples were collected every quarter in 2023.

## **Analytical Data Summary, Including Trends and Potential Areas of Concern**

Storm water samples are grab samples and collected directly from the stream. Flow rate is not factored in sample collection, as flow monitoring devices are not installed at the sampling points. Field observation sheets noting precipitation amount, weather conditions, sample appearance, etc. were completed at each sampling point every quarter and are included in Attachment 1. There were no observed factors that appeared to bias sample results. Some of those factors (if present) could be sheens, discoloration, smell, animal carcasses/feces, etc. The parameters analyzed are required under General NPDES Permit ILR40 Part V.(A)(2)(c) and are shown in attached Tables 1 through 4 (2023 Analytical Laboratory Results) and graphically on Figures 2 through 8 (Data Graphs). A graph was not generated for the parameter grease and oil since all grease and oil concentrations have been reported as non-detect (ND), below the laboratory reporting limit (RL).

As shown on Figure 2, the overall total chloride concentration since the first quarter of 2019 has been exhibiting a downward trend. The highest chloride concentration for each year usually occurs during the first quarter event. A plausible explanation for this trend could be related to the seasonal effect of snowfall and the runoff of "salt" placed on local roads, residential driveways, and sidewalks as a deicer.

A total suspended solid (TSS) is a waterborne particle that exceeds 2 microns in size (micron thickness is 0.001 millimeter [mm]). TSS can be anything that floats or is suspended in water and can affect water clarity. Common suspended solids are bacteria and sediments, such as clay, gravel, sand, and silt. Common causes of TSS in water are erosion and runoff from rainfall or snowmelt. In 2023, the average TSS concentrations at Sampling Point P2 were the highest since the 2019 average concentrations. Field sheets did not note any observations of debris or turbidity above what is normally reported in the stream when samples are taken. The TSS concentrations remained consistent with historical concentrations at the other three sampling points. In 2024, the TSS concentration will be studied at all sampling points, but especially at Sampling Point P2, to determine if the TSS concentration is still exhibiting an upward trend or has returned to historical levels. If the TSS concentration continues to exhibit an upward trend, possible sources will be investigated.

A particle smaller than 2 microns is considered a total dissolved solid (TDS). The United States Environmental Protection Agency (USEPA) secondary drinking water standard for a TDS concentration is 500 parts per million (ppm). Since there is no regulatory standard for TSS, those concentrations currently reported at Sampling Points P1 through P4 were compared to the USEPA standard for TDS. The TSS concentrations are considerably lower than the TDS standard.

The total nitrogen (Figure 4), and total Kjeldahl nitrogen (TKN) ammonia (Figure 6) concentrations were reported as ND, below the laboratory RL, for all four sampling points in 2023. For illustrative purposes, values reported as ND in the Figures are shown at the laboratory RL

There was a slight increase in the phosphorous concentration (Figure 5) in 2023 when compared to historical concentrations. The total phosphorus concentration will be studied to determine if this upward trend in concentration continues, or if the concentration returns to historic concentration levels.

Total nitrate (Figures 7 through 7D) is being detected at all four sampling locations. However, as shown in Figure 7, the overall total nitrate concentration is exhibiting a decreasing trend at all four sampling locations. Figures 7A through 7D illustrate the total nitrate concentrations at each individual sampling point. In 2023, Sampling Points P1 and P2 exhibited similar trends, with the highest concentration being reported during the second quarter event. Sampling Points P3 and P4 exhibited a different trend, with the highest concentration being reported during the third quarter 2023 event. The total nitrate concentration decreased during the fourth quarter event at all four locations. Concentration levels are considerably below the Class I Groundwater Quality Standard (Potable Resource Groundwater) of 10 milligrams per liter (mg/L). The concentrations detected above the RL could be related to runoff from the application of fertilizers, herbicides, and insecticides at residences and businesses.

As shown in Figure 8, the fecal coliform concentrations for quarters 1 through 3 in 2023 were consistent with historical concentrations across all four sampling points. The fourth quarter 2023 fecal coliform samples were analyzed by a different Method (Method SM 9222D). Prior to the fourth quarter 2023 sampling event, the fecal coliforms samples were analyzed by the Colilert-18 Method. With the Colilert-18 Method, any total coliform results above 2,420 most probable number per 100 milliliters (MPN/100 mL) were reported as greater than (>) 2,420 MPN/100 mL. Method SM 9222D allows for reporting of greater concentration levels, which is why concentrations were reported from 3,600 colony forming units per 100 mL (CFU/100 mL) to 65,000 CFU/100 mL for the fourth quarter of 2023. In 2024, all fecal coliform samples will be analyzed by Method SM9222D.

In 2024 we will have an actual fecal concentration value, as opposed to a > 2,420 MPN/100 mL value. This allows for a better comparison of concentrations from quarter to quarter, analyzing for seasonal effects, comparisons between sampling locations, and the affects precipitation and snowfall amounts events might have on the fecal coliform concentration at that sampling point. The units MPN/100 mL and CFU/100 mL are equivalent. The only difference is the method used to detect bacteria, and both methods are valid measures of bacteria density.

The historical fecal coliform concentrations are shown on attached Figure 8. Since we will have actual fecal coliform concentrations reported in 2024, Foth will complete a graphical trend analysis graph for each location in the next summary report, which will help identify seasonal effects.

On Figures 9 through 11, the concentrations of total chloride, total nitrate, TSS were compared to precipitation levels. Total precipitation amounts measured 48 hours prior to collection of the quarterly samples from 2019 through 2023 were analyzed, looking for trends. As shown on the figures in general, the precipitation amount does appear to affect the chloride, nitrate, and TSS concentrations. Figures 9 through 11 will be updated each year for trends.

The following actions could be used to further investigate the fecal coliform and the other parameter concentrations:

- ◆ Collecting background samples from upgradient watersheds that flow into the City's creeks and streams to determine a background value prior to entering the City's waterways.
- ◆ Collecting periodic samples during non-precipitation events to check "normal" flow background concentrations (not affected by precipitation) for all parameters.

- ◆ Collecting grab samples during a storm event to evaluate concentration levels across time.
- ◆ Increasing the number of sampling locations and considering timed collection of storm samples to evaluate concentrations across a storm event, such as the total maximum daily load (TMDL) study.
- ◆ Continuing to track snowfall totals and whether winter precipitation corresponds to increased concentrations in water samples. The higher the total snowfall amount, the more salt or other deicer products would be used by the City/County and the public.
- ◆ Continuing to track, by date, monthly precipitation amounts and comparing them to samples collected, looking for indications of runoff from erosion or application of landscaping chemicals.
- ◆ Identifying high fecal watershed and sampling multiple points along streams at the same time to narrow potential pollutant sources.

Some general assumptions are.

1. The overall total chloride and total nitrate concentrations have been exhibiting a decreasing trend since 2019.
2. The periodic detection of concentrations of nitrogen, phosphorous, and TKN ammonia, could be related to the application of deicing chemicals and runoff from the application of landscaping chemicals.
3. The total chloride, total nitrate, and TSS concentrations do not appear to be affected by precipitation amounts, but the total chloride concentration does appear to be affected by the application of road salt and deicer products during the first quarter event. These trends will continue to be investigated in 2024.
4. Grease and oil concentrations have been reported as ND, below the laboratory RL.

In 2024 actual concentrations for the fecal coliform test will be reported. Actual concentrations will allow for better comparison between sampling points and an analysis of the effects of seasonality and precipitation amounts, if any, on the fecal coliform concentration.

In 2024 background concentrations will be collected periodically during non-storm events to expand the non-storm events background value database.

At this time, the water quality appears to either be improving or remaining stable. The concentrations of parameters that have been analyzed do not appear to be trending upward. The total phosphorous concentration in 2023 was up slightly when compared to historical concentrations and will be studied in 2024.

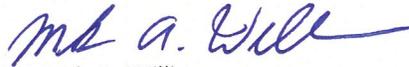
If you have any questions about this Summary Report, please contact the undersigned at [josh.gabehart@foth.com](mailto:josh.gabehart@foth.com), [mark.williams@foth.com](mailto:mark.williams@foth.com), or (309) 691-5300.

Sincerely,

Foth Infrastructure & Environment, LLC



Joshua C. Gabehart, P.E.  
Client Team Leader  
Licensed in IL, IA, AR, & GA



Mark A. Williams  
Lead Environmental Scientist

Enclosures

Figures

Tables

Attachment 1

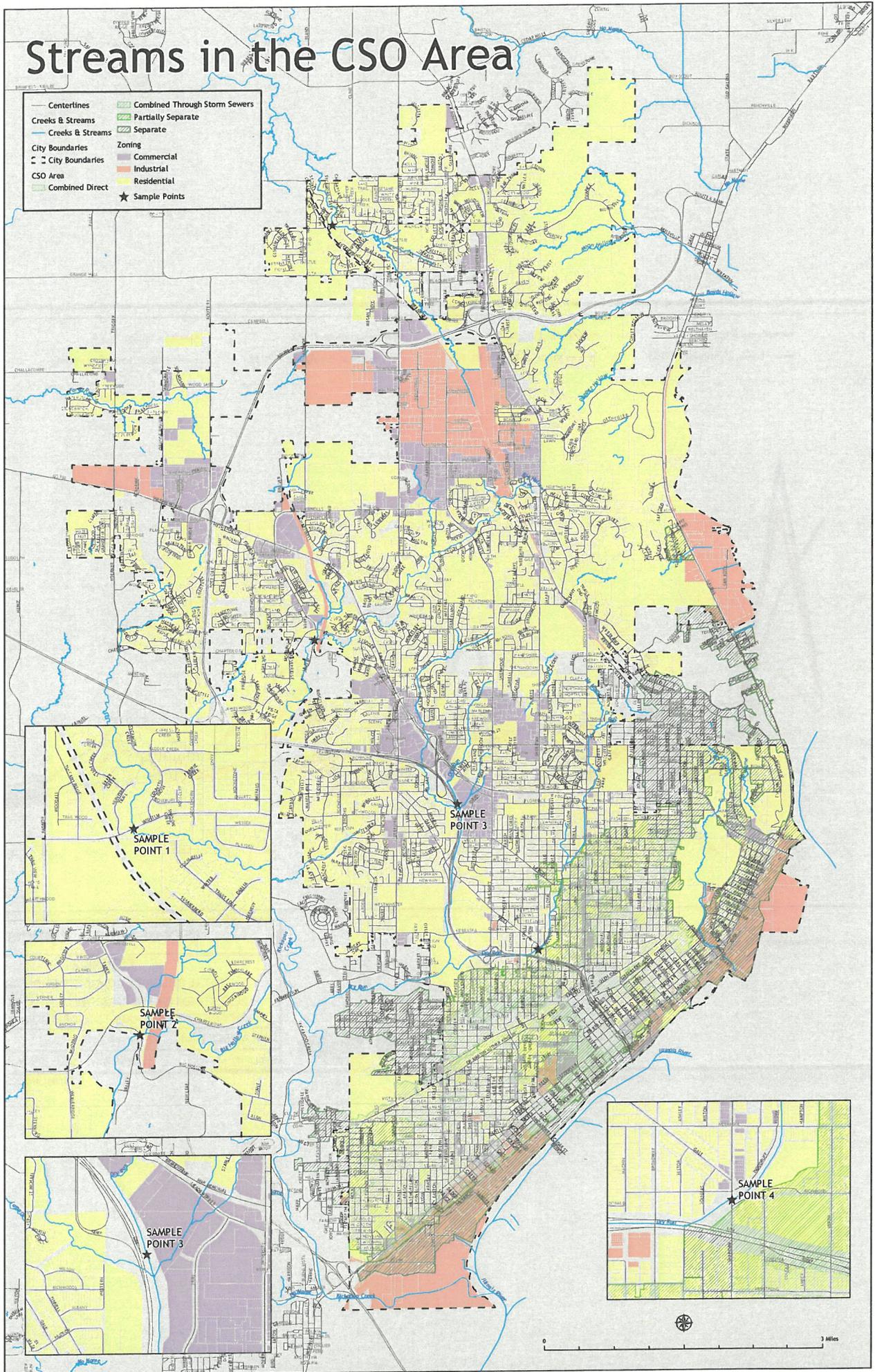
Field Observation Sheets

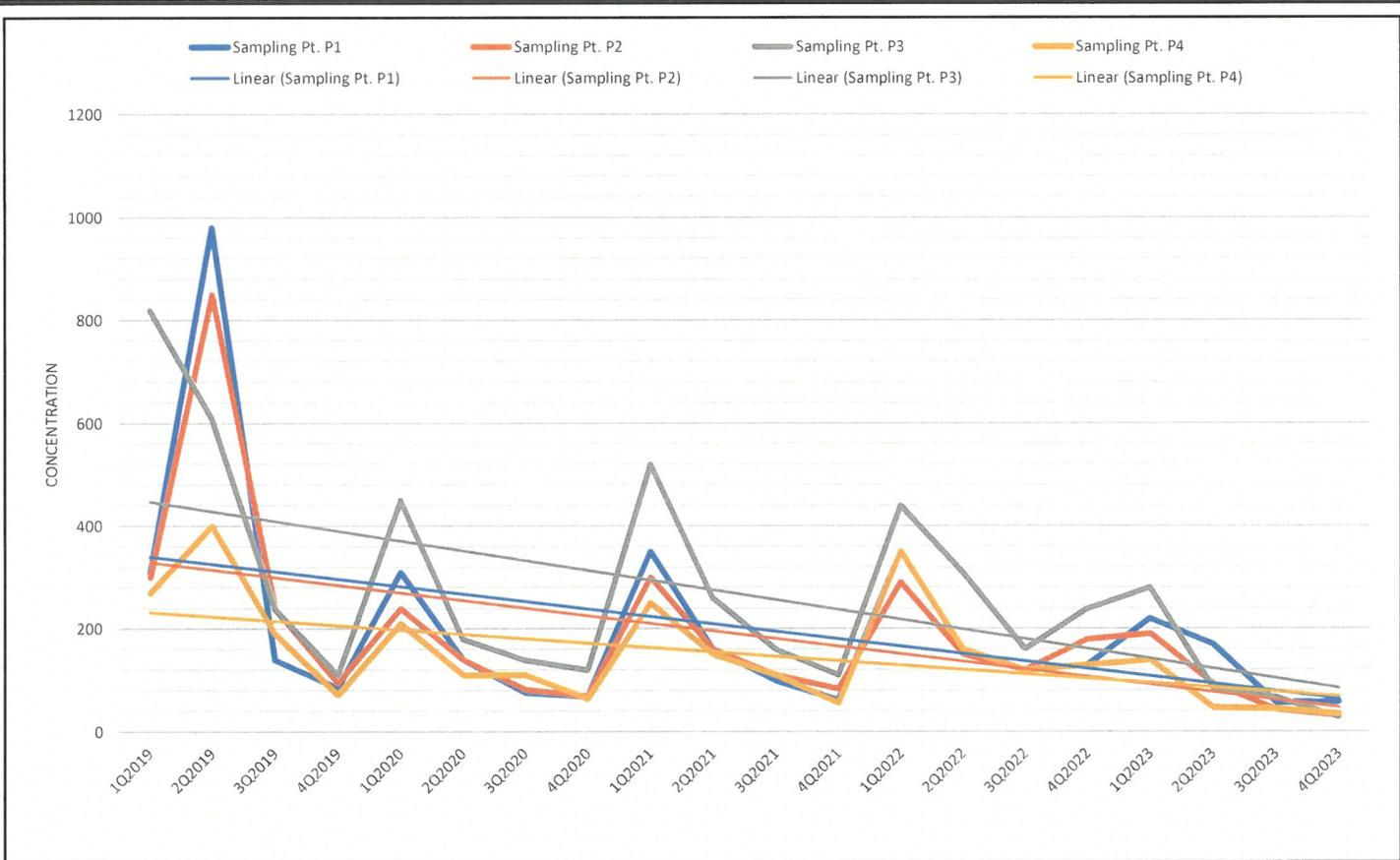
## **Figures**

- Figure 1 – Map of Sampling Point Locations
- Figure 2 – Total Chloride Concentration Graph
- Figure 3 – Total Suspended Solids Concentration Graph
- Figure 4 – Total Nitrogen Concentration Graph
- Figure 5 – Total Phosphorous Concentration Graph
- Figure 6 – TKN Ammonia Concentration Graph
- Figure 7 – Total Nitrate Concentration Graph
- Figure 7A – Total Nitrate Concentrations at P1
- Figure 7B – Total Nitrate Concentrations at P2
- Figure 7C – Total Nitrate Concentrations at P3
- Figure 7D – Total Nitrate Concentrations at P4
- Figure 8 – Total Fecal Coliform Concentration Graph
- Figure 9 – Total Chloride Concentrations and Precipitation Amounts
- Figure 10 – Total Nitrate Concentrations and Precipitation Amounts
- Figure 11 – Total Suspended Solids and Precipitation Amounts

# Streams in the CSO Area

- Centerlines
- Creeks & Streams
- Creeks & Streams
- City Boundaries
- City Boundaries
- CSO Area
- Combined Through Storm Sewers
- Partially Separate
- Separate
- Zoning
- Commercial
- Industrial
- Residential
- Combined Direct
- ★ Sample Points





**NOTES:**

Concentrations in milligrams per liter (mg/L)

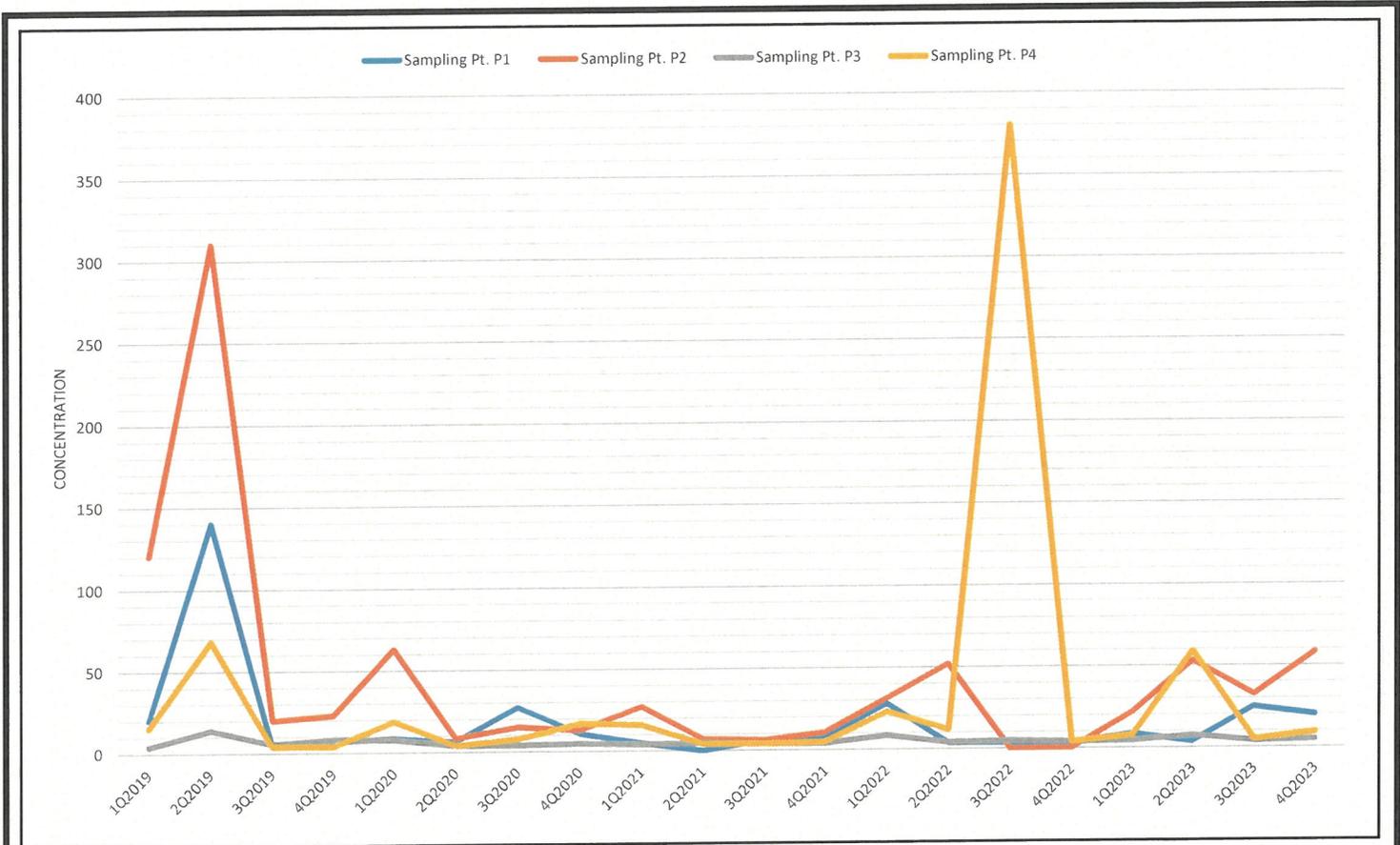
**CITY OF PEORIA, ILLINOIS**

**FIGURE 2**

**TOTAL CHLORIDE CONCENTRATION GRAPH**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM



Date: MARCH 2024	Revision Date:
Drawn By: MAW	Checked By: JCG1   Project: 23P150.00



**NOTES:**

Concentrations in milligrams per liter (mg/L)

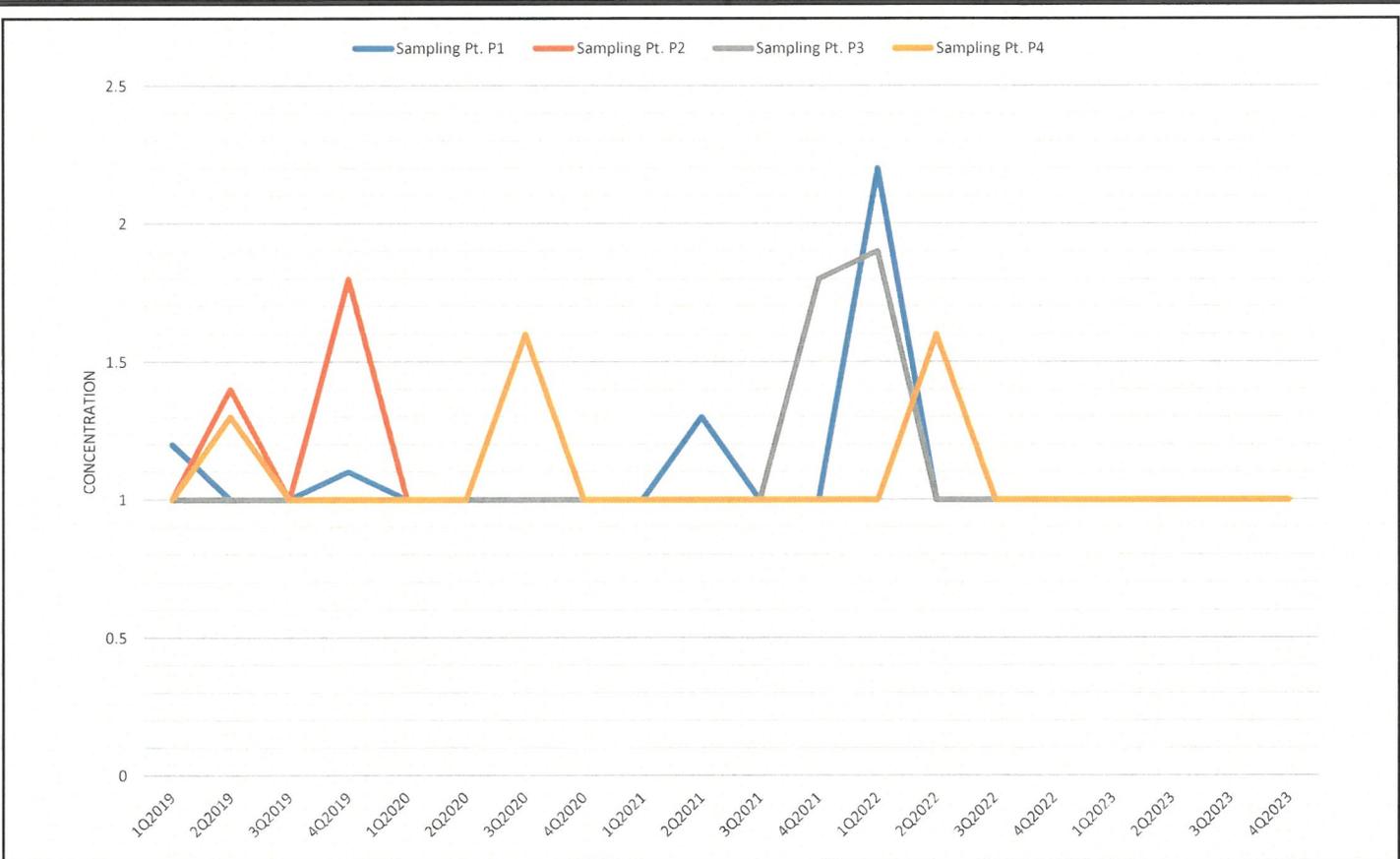
**CITY OF PEORIA, ILLINOIS**

**FIGURE 3**

**TOTAL SUSPENDED SOLIDS CONCENTRATION GRAPH**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM

Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00





**NOTES:**

Concentrations in milligrams per liter (mg/L)

Non-detect values are shown at the laboratory reporting limit of 1.0 mg/L

**CITY OF PEORIA, ILLINOIS**

**FIGURE 4**

**TOTAL NITROGEN CONCENTRATION GRAPH**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM

Date: MARCH 2024

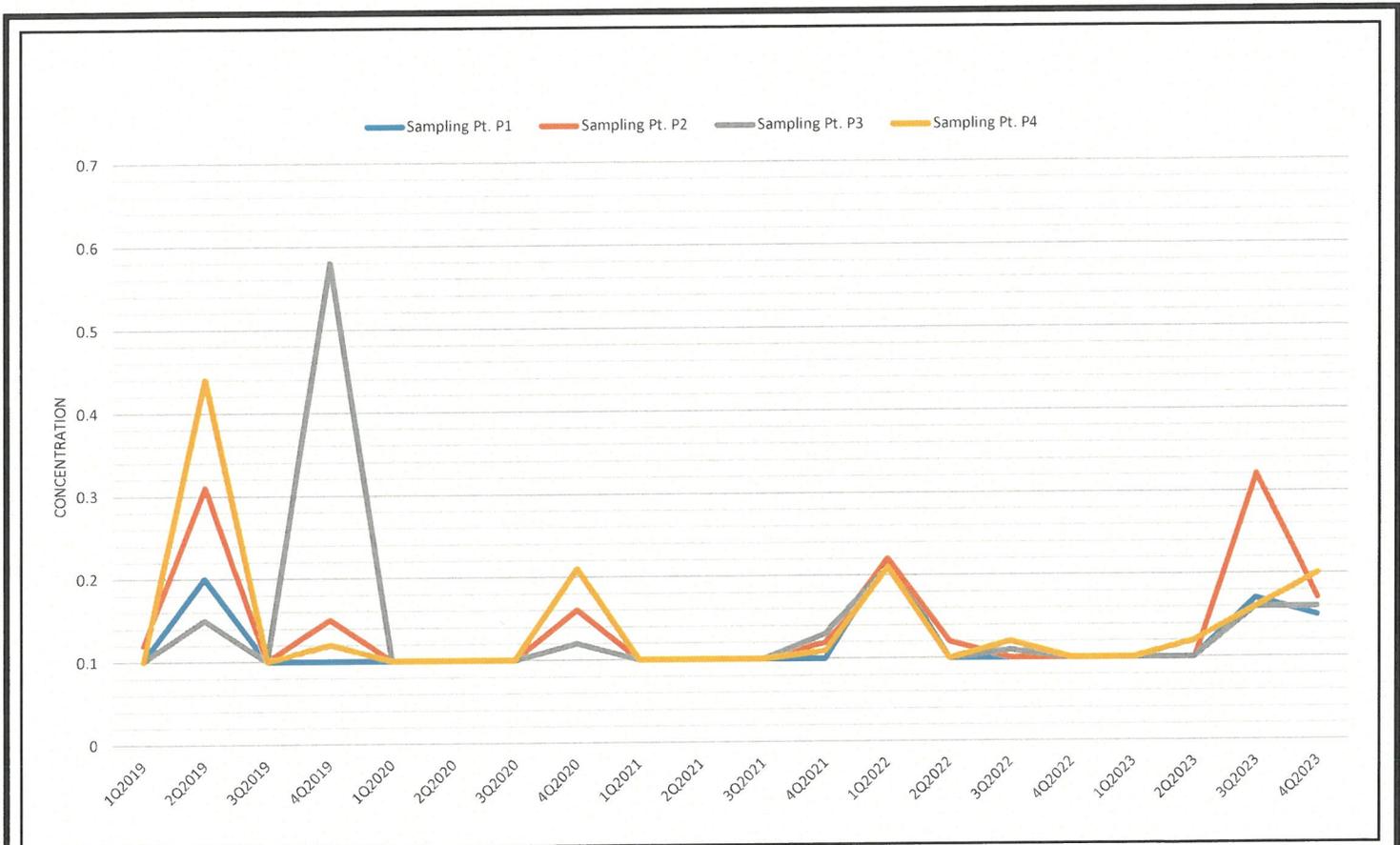
Revision Date:

Drawn By: MAW

Checked By: JCG1

Project: 23P150.00



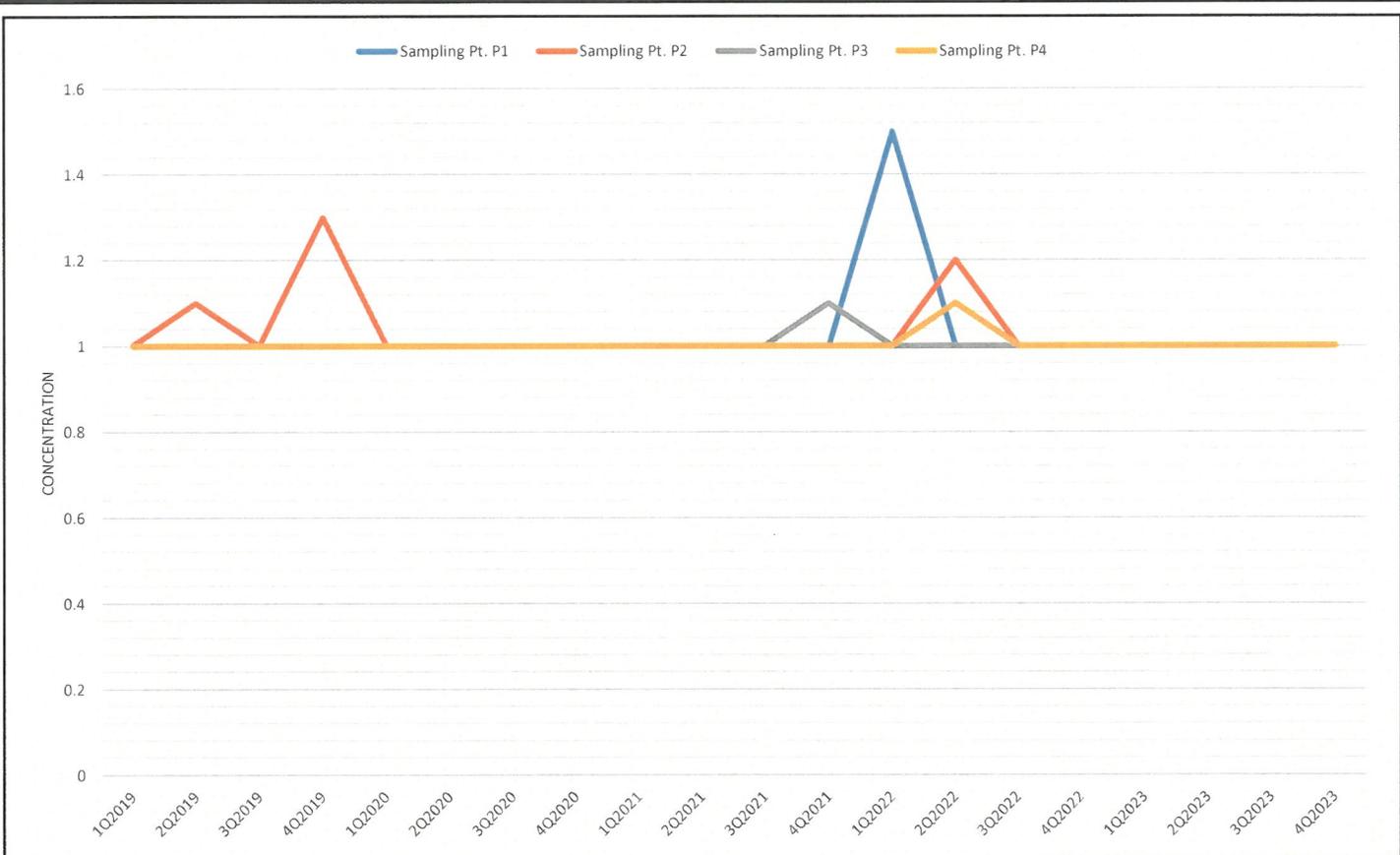


**NOTES:**

Concentrations in milligrams per liter (mg/L)  
 Non-detect values are shown at the laboratory reporting limit of 0.1 mg/L



<b>CITY OF PEORIA, ILLINOIS</b>		
<b>FIGURE 5</b>		
TOTAL PHOSPHOROUS CONCENTRATION GRAPH 2023 STORM WATER SAMPLING SUMMARY REPORT CITY OF PEORIA SEPARATE STORM SEWER SYSTEM		
Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00

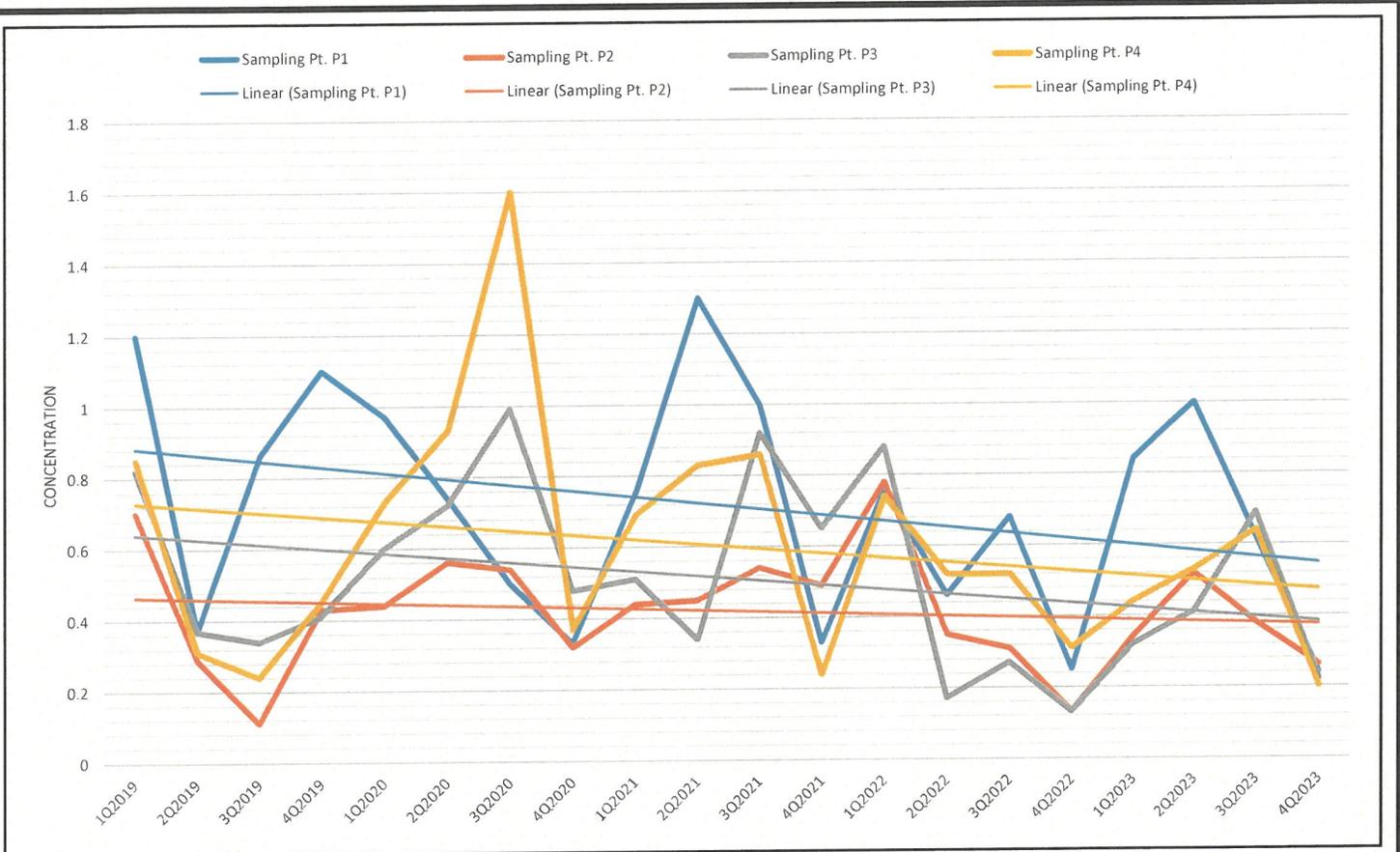


**NOTES:**

TKN = Total Kjeldahl Nitrogen  
 Concentrations in milligrams per liter (mg/L)  
 Non-detect values are shown at the laboratory reporting limit of 1.0 mg/L



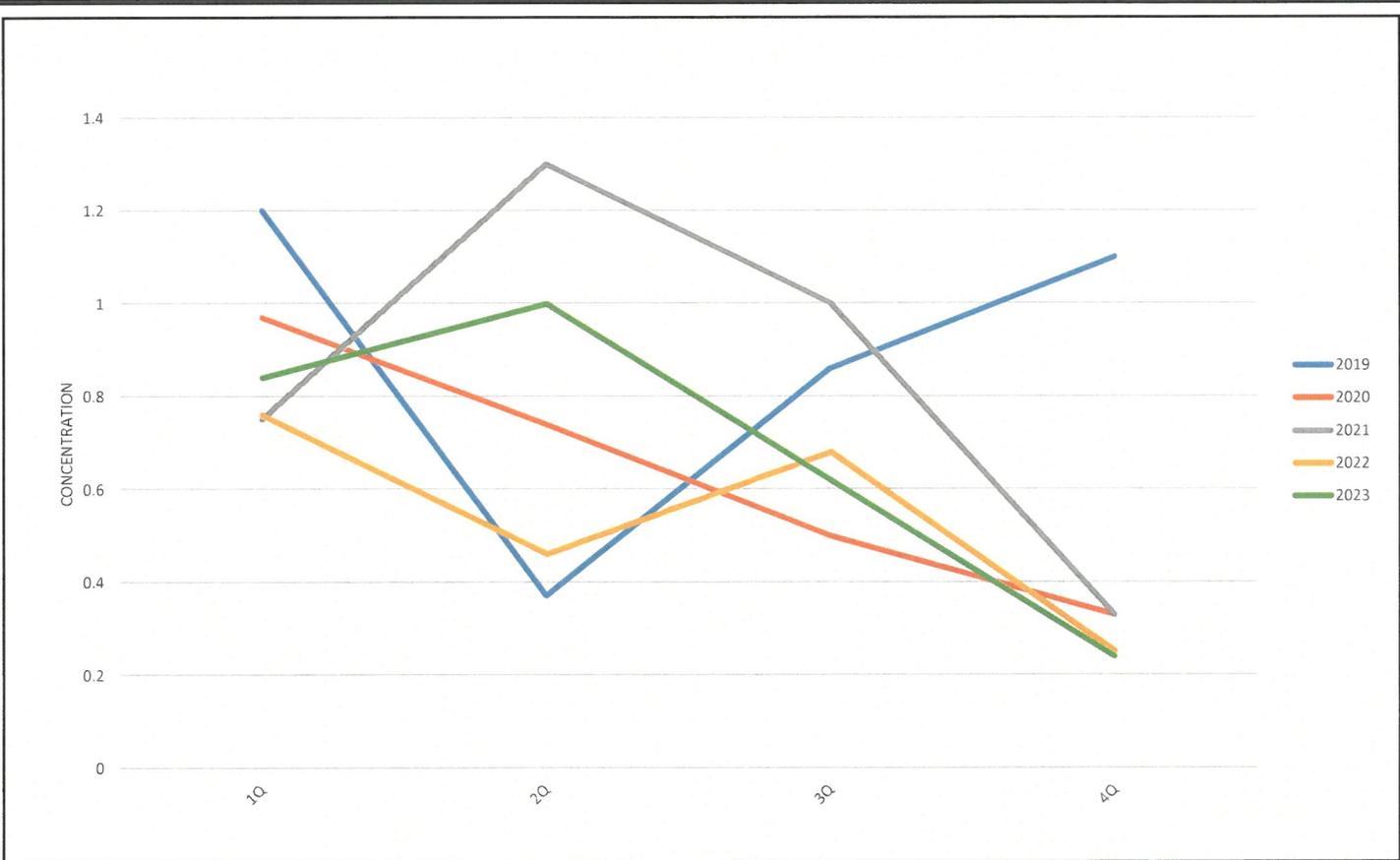
<b>CITY OF PEORIA, ILLINOIS</b>		
<b>FIGURE 6</b>		
<b>TKN AMMONIA CONCENTRATION GRAPH</b>		
2023 STORM WATER SAMPLING SUMMARY REPORT		
CITY OF PEORIA SEPARATE STORM SEWER SYSTEM		
Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00



**NOTES:**  
Concentrations in milligrams per liter (mg/L)



<b>CITY OF PEORIA, ILLINOIS</b>		
<b>FIGURE 7</b>		
<b>TOTAL NITRATE CONCENTRATION GRAPH</b>		
2023 STORM WATER SAMPLING SUMMARY REPORT		
CITY OF PEORIA SEPARATE STORM SEWER SYSTEM		
Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00



**NOTES:**

Concentrations in milligrams per liter (mg/L)

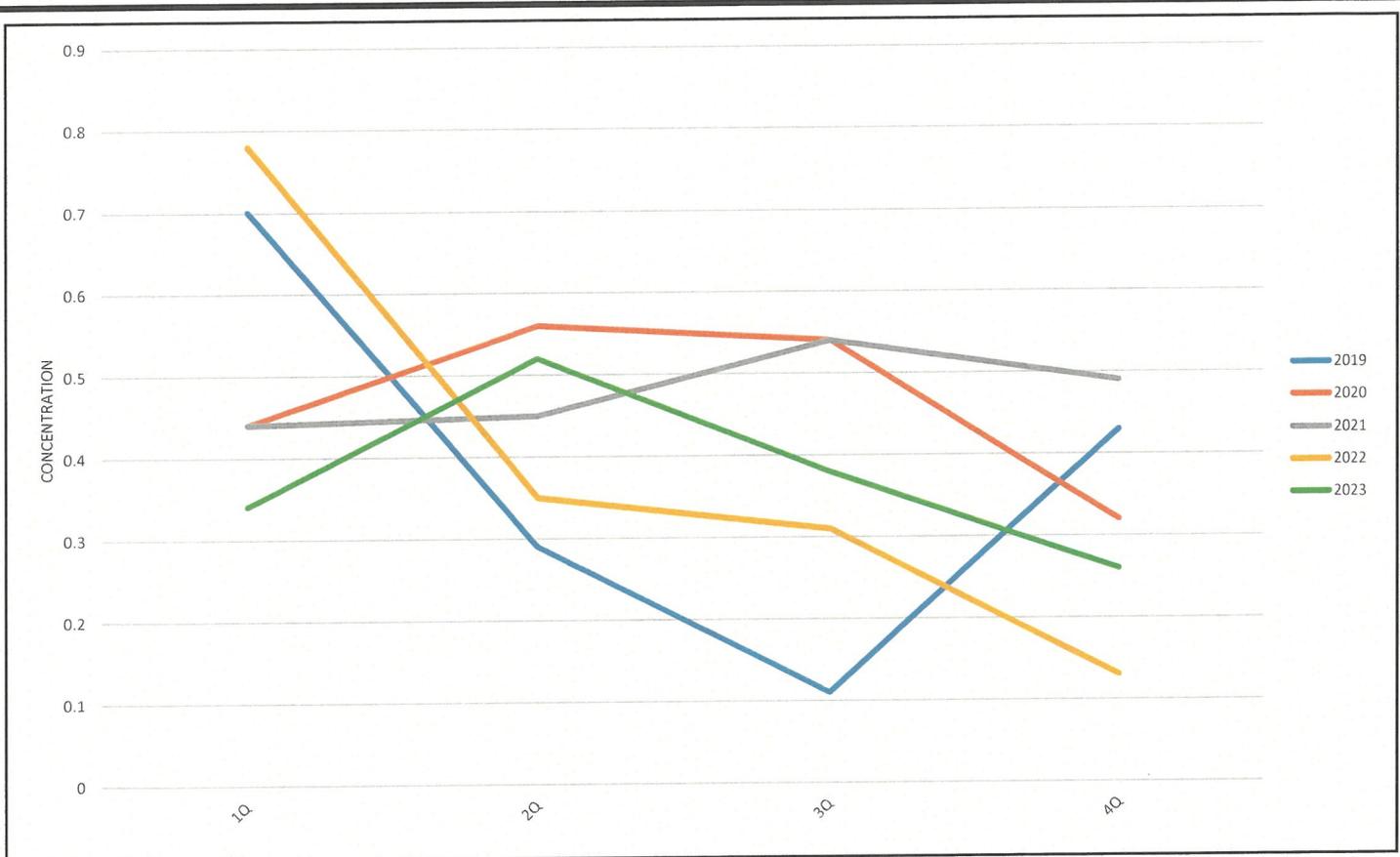
**CITY OF PEORIA, ILLINOIS**

**FIGURE 7A**

**TOTAL NITRATE CONCENTRATIONS AT P1**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM



Date: MARCH 2024	Revision Date:
Drawn By: MAW	Checked By: JCG1 Project: 23P150.00



**NOTES:**

Concentrations in milligrams per liter (mg/L)

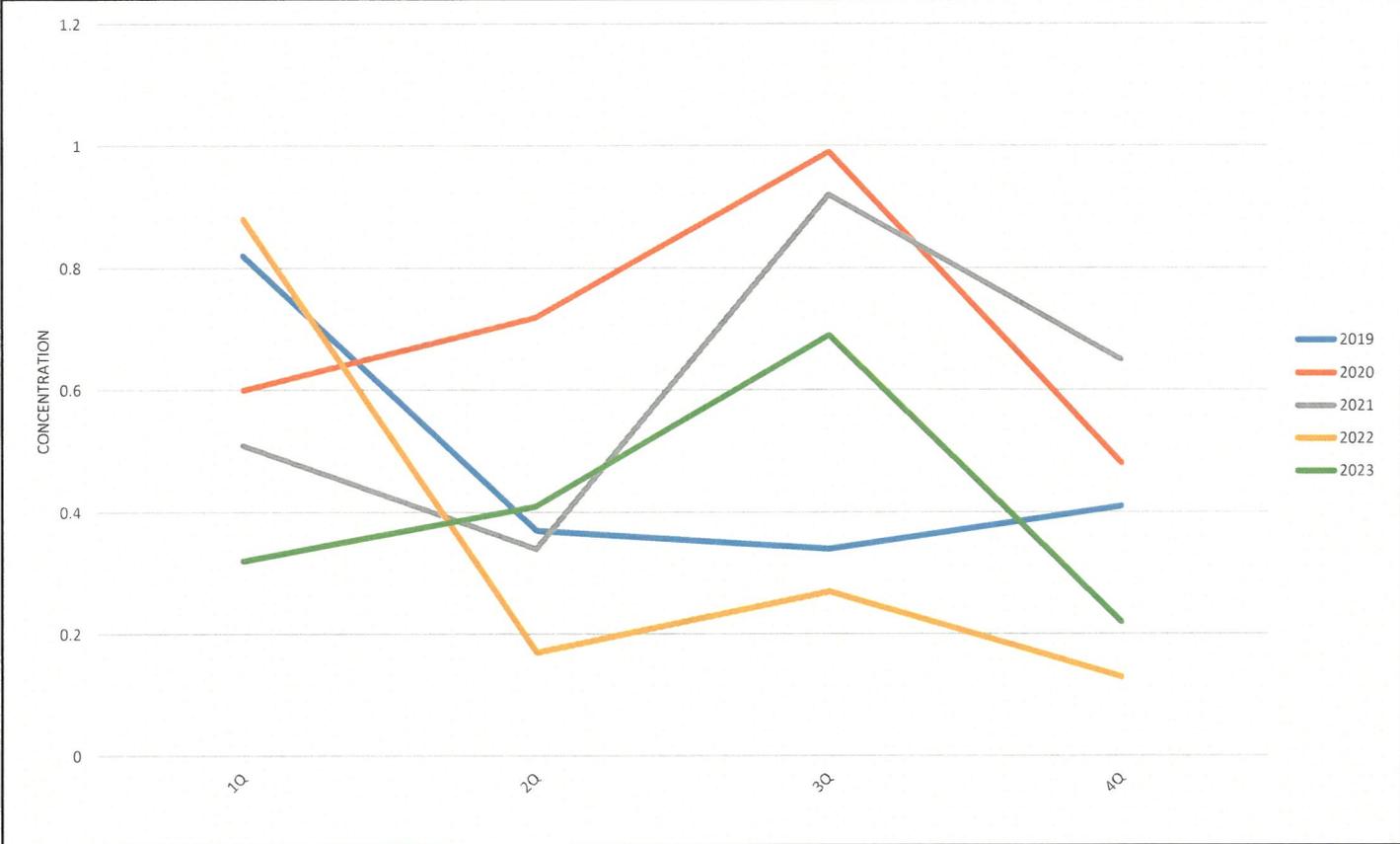
**CITY OF PEORIA, ILLINOIS**

**FIGURE 7B**

**TOTAL NITRATE CONCENTRATIONS AT P2**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM

Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00

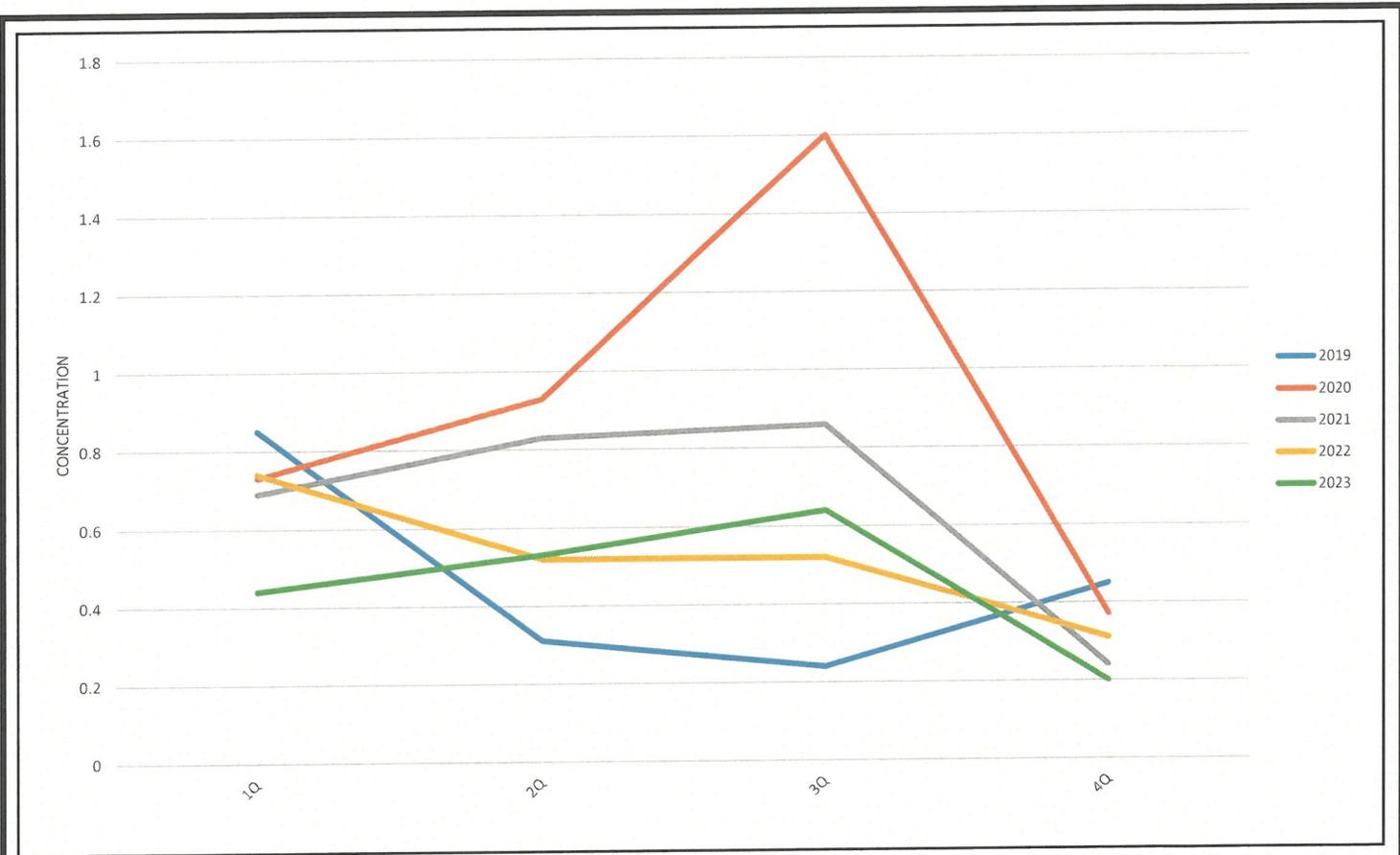




**NOTES:**  
Concentrations in milligrams per liter (mg/L)



<b>CITY OF PEORIA, ILLINOIS</b>		
<b>FIGURE 7C</b>		
TOTAL NITRATE CONCENTRATIONS AT P3		
2023 STORM WATER SAMPLING SUMMARY REPORT		
CITY OF PEORIA SEPARATE STORM SEWER SYSTEM		
Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00

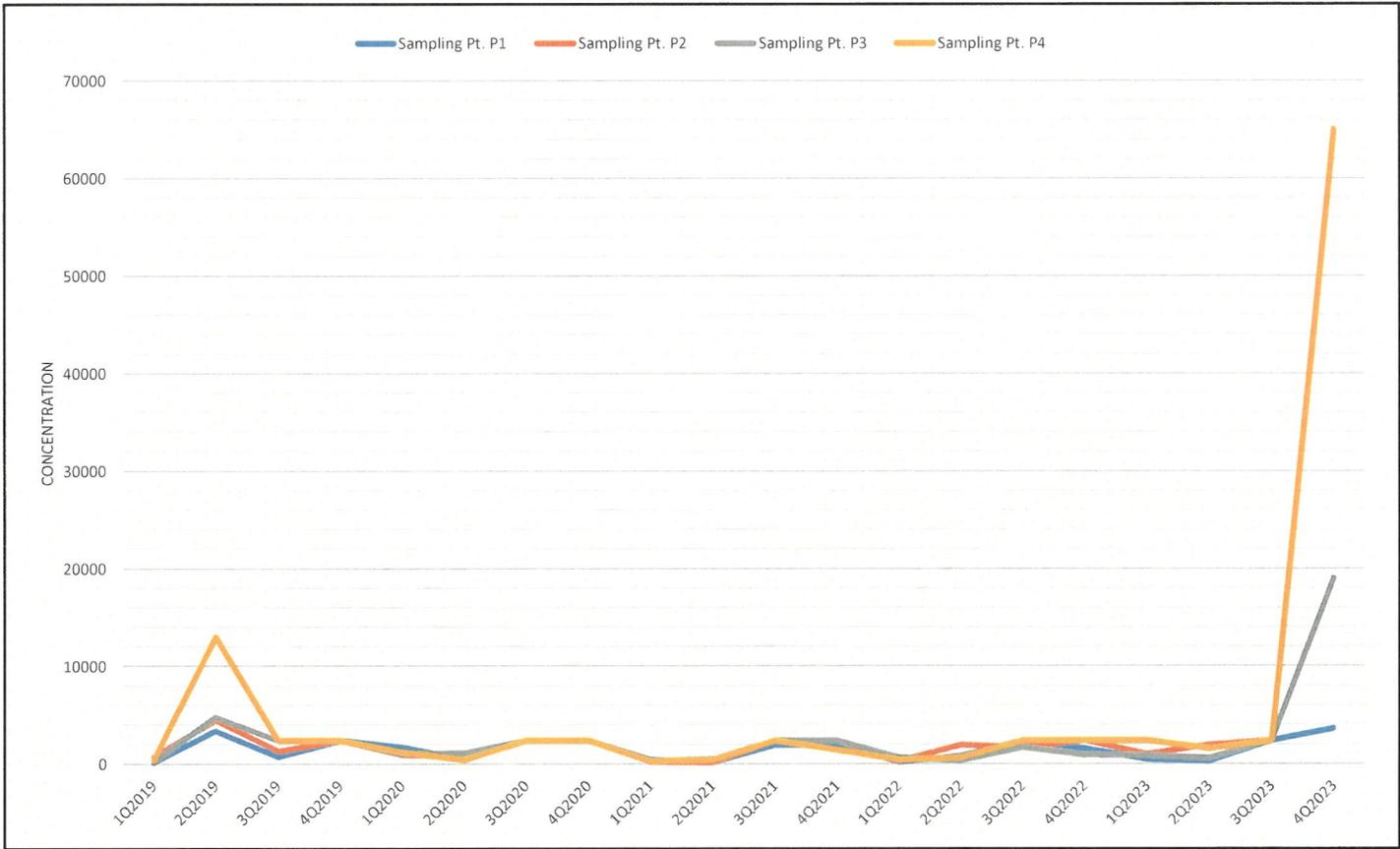


**NOTES:**

Concentrations in milligrams per liter (mg/L)



<b>CITY OF PEORIA, ILLINOIS</b>		
<b>FIGURE 7D</b>		
TOTAL NITRATE CONCENTRATIONS AT P4		
2023 STORM WATER SAMPLING SUMMARY REPORT		
CITY OF PEORIA SEPARATE STORM SEWER SYSTEM		
Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00

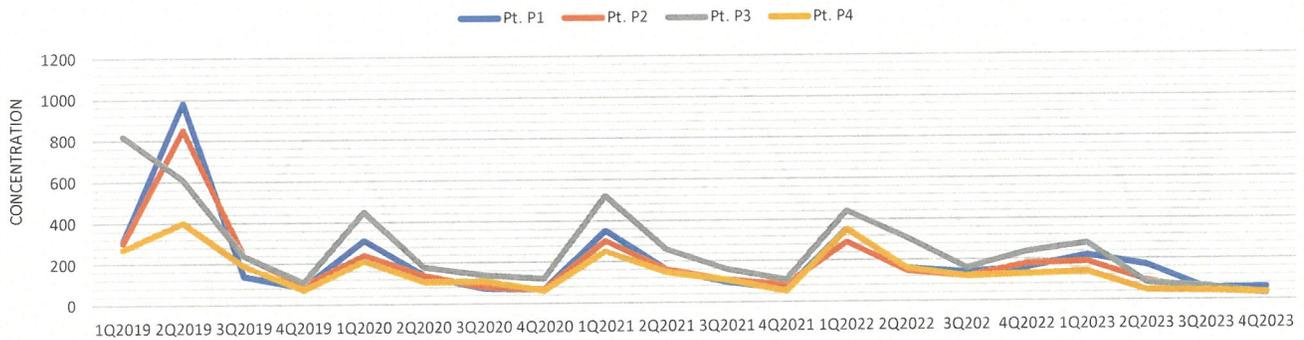


**NOTES:**  
Concentrations in colony forming units per 100 mL (CFU/100 mL)

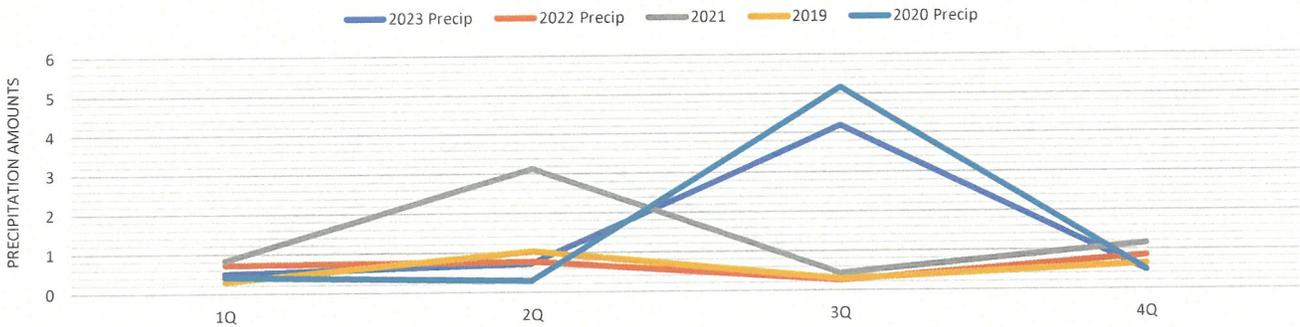


<b>CITY OF PEORIA, ILLINOIS</b>		
<b>FIGURE 8</b>		
<b>TOTAL FECAL COLIFORM CONCENTRATION GRAPH</b>		
<b>2023 STORM WATER SAMPLING SUMMARY REPORT</b>		
<b>CITY OF PEORIA SEPARATE STORM SEWER SYSTEM</b>		
Date: MARCH 2024	Revision Date:	
Drawn By: MAW	Checked By: JCG1	Project: 23P150.00

### Total Chloride



### Total Precipitation



**NOTES:**

Chloride concentrations in milligrams per liter (mg/L).

Precipitation amounts in inches.

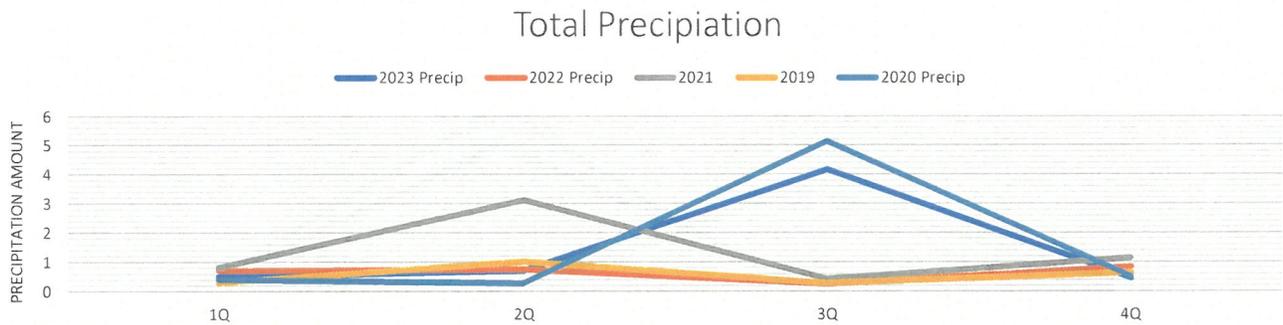
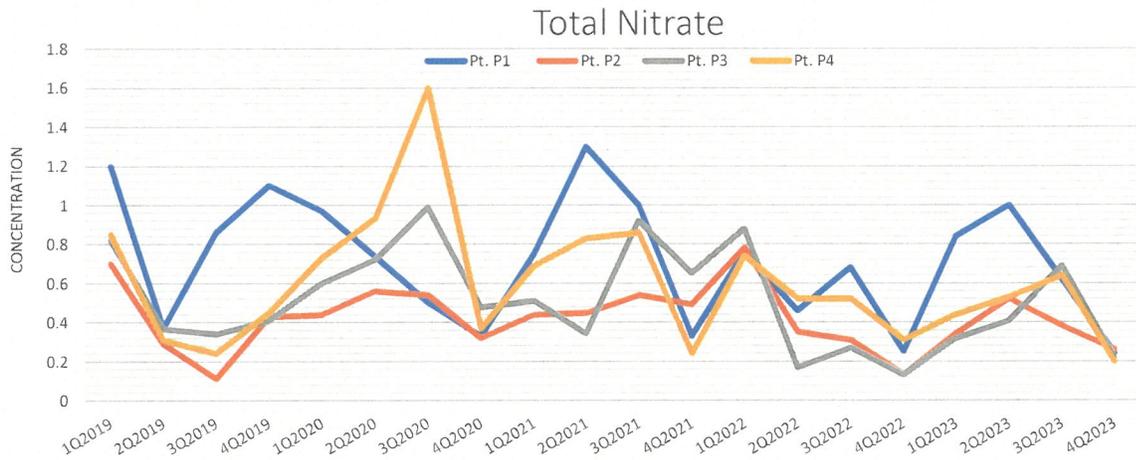
**CITY OF PEORIA, ILLINOIS**

**FIGURE 9**

**TOTAL CHLORIDE CONCENTRATIONS AND PRECIPITATION AMOUNTS  
2023 STORM WATER SAMPLING SUMMARY REPORT  
CITY OF PEORIA SEPARATE STORM SEWER SYSTEM**

Date: MARCH 2024	Revision Date:
Drawn By: MAW	Checked By: JCG1 Project: 23P150.00





**NOTES:**

Nitrate concentrations in milligrams per liter (mg/L).

Precipitation amounts in inches.

**CITY OF PEORIA, ILLINOIS**

**FIGURE 10**

**TOTAL NITRATE CONCENTRATIONS AND PRECIPITATION AMOUNTS**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM

Date: MARCH 2024

Revision Date:

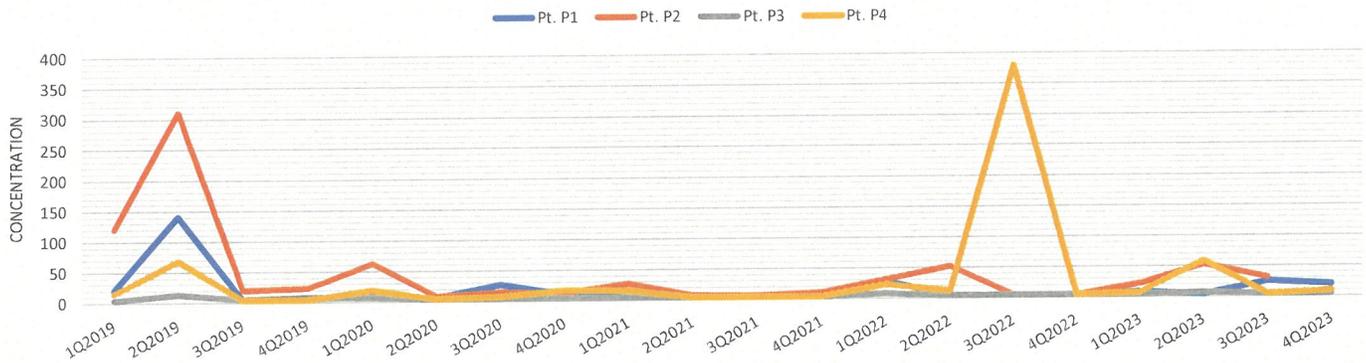
Drawn By: MAW

Checked By: JCG1

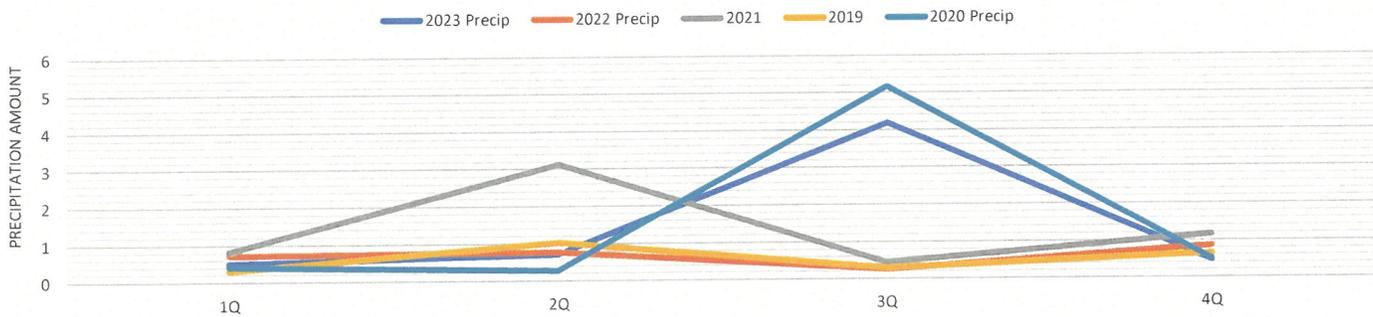
Project: 23P150.00



### Total Suspended Solids



### Total Precipitation



**NOTES:**

TSS concentrations in milligrams per liter (mg/L).

Precipitation amounts in inches.

**CITY OF PEORIA, ILLINOIS**

**FIGURE 11**

**TOTAL SUSPENDED SOLIDS AND PRECIPITATION AMOUNTS**  
 2023 STORM WATER SAMPLING SUMMARY REPORT  
 CITY OF PEORIA SEPARATE STORM SEWER SYSTEM

Date: MARCH 2024	Revision Date:
Drawn By: MAW	Checked By: JCG1   Project: 23P150.00



## **Tables**

Table 1 – Sampling Point P1 Laboratory Analytical Results

Table 2 – Sampling Point P2 Laboratory Analytical Results

Table 3 – Sampling Point P3 Laboratory Analytical Results

Table 4 – Sampling Point P4 Laboratory Analytical Results

**Table 1**  
**Sampling Point P1 Laboratory Analytical Results**  
**First through Fourth Quarters 2023**

Parameters	Units	1Q2023	2Q2023	3Q2023	4Q2023
Chloride	mg/L	220	170	57	58
Oil and Grease	mg/L	< 5	< 5	< 5.1	<5
Total Suspended Solids (TSS)	mg/L	8.8	<4	25	20
Total Nitrogen	mg/L	< 1	1	< 1.0	<1.0
Fecal Coliform	MPN/100 mL	488	326	> 2,420	3,600 CFU/100 mL
Nitrate/Nitrite	mg/L	0.84	1	0.62	0.24
Phosphorous Total as P	mg/L	< 0.1	< 0.1	0.17	0.15
Total Kjeldahl-Nitrogen (TKN)	mg/L	< 1.0	< 1.0	< 1.0	< 1.0
<b>Precipitation</b>					
Last 24 hours	inch	0.67	0.25	1.93	0.56
Last 48 hours	inch	0.68	0.36	4.82	0.56

Notes:

< = less than

> = greater than

CFU/100 mL = colony forming units per 100 milliliters

mg/L = milligrams per liter

MPN/100 mL = most probable number per 100 milliliters

Prepared by: MAW

Checked by: JCG1

**Table 2**  
**Sampling Point P2 Laboratory Analytical Results**  
**First through Fourth Quarters 2023**

Parameters	Units	1Q2023	2Q2023	3Q2023	4Q2023
Chloride	mg/L	190	93	44	31
Oil and Grease	mg/L	< 5.1	< 5.1	< 5.1	< 5.1
Total Suspended Solids (TSS)	mg/L	22	53	32	58
Total Nitrogen	mg/L	< 1.0	< 1.0	< 1.0	< 1.0
Fecal Coliform	MPN/100 mL	980	1,990	> 2,420	19,000 CFU/100 mL
Nitrate/Nitrite	mg/L	0.34	0.52	0.38	0.26
Phosphorous Total as P	mg/L	< 0.1	< 0.1	0.32	0.17
Total Kjeldahl-Nitrogen (TKN)	mg/L	< 1.0	< 1.0	< 1.0	< 1.0
<b>Precipitation</b>					
Last 24 hours	inch	0.5	0.67	1.43	0.45
Last 48 hours	inch	0.5	0.73	4.19	0.45

Notes:

> = greater than

< = less than

CFU/100 mL = colony forming units per 100 milliliters

mg/L = milligrams per liter

MPN/100 mL = most probable number per 100 milliliters

Prepared by: MAW

Checked by: JCG1

**Table 3**  
**Sampling Point P3 Laboratory Analytical Results**  
**First through Fourth Quarters 2023**

Parameters	Units	1Q2023	2Q2023	3Q2023	4Q2023
Chloride	mg/L	280	86	67	29
Oil and Grease	mg/L	< 5.0	< 5.0	< 5.1	< 5.1
Total Suspended Solids (TSS)	mg/L	4.4	7.6	< 4	4.8
Total Nitrogen	mg/L	< 1.0	< 1.0	< 1.0	< 1.0
Fecal Coliform	MPN/100 mL	866	579	> 2,420	19,000 CFU/100 mL
Nitrate/Nitrite	mg/L	0.32	0.41	0.69	0.22
Phosphorous Total as P	mg/L	< 0.1	< 0.1	0.16	0.16
Total Kjeldahl-Nitrogen (TKN)	mg/L	< 1.0	< 1.0Q2	< 1.0	< 1.0
<b>Precipitation</b>					
Last 24 hours	inch	0.5	0.67	1.43	0.45
Last 48 hours	inch	0.5	0.73	4.19	0.45

Notes:

> = greater than

< = less than

CFU/100 mL = colony forming units per 100 milliliters

mg/L = milligrams per liter

MPN/100 mL = most probable number per 100 milliliters

Prepared by: MAW

Checked by: JCG1

**Table 4**  
**Sampling Point P4 Laboratory Analytical Results**  
**First through Fourth Quarters 2023**

Parameters	Units	1Q2023	2Q23023	3Q2023	4Q2023
Chloride	mg/L	140	47	45	35
Oil and Grease	mg/L	< 5.1	< 5.1	< 5.0	< 5.0
Total Suspended Solids (TSS)	mg/L	8	59	4.8	9.2
Total Nitrogen	mg/L	< 1.0	< 1.0	< 1.0	< 1.0
Fecal Coliform	MPN/100 mL	> 2,420	1,550	> 2,420	65,000 CFU/100 mL
Nitrate/Nitrite	mg/L	0.44	0.53	0.64	0.2
Phosphorous Total as P	mg/L	< 0.1	0.12	0.16	0.2
Total Kjeldahl-Nitrogen (TKN)	mg/L	< 1.0	< 1.0	< 1.0	< 1.0
<b>Precipitation</b>					
Last 24 hours	inch	0.4	0.65	1.09	0.42
Last 48 hours	inch	0.4	0.71	3.59	0.42

Notes:

> = greater than

< = less than

CFU/100 mL = colony forming units per 100 milliliters

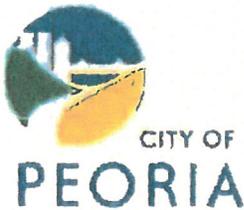
mg/L = milligrams per liter

MPN/100 mL = most probable number per 100 milliliters

Prepared by: MAW

Checked by: JCG1

**Attachment 1**  
**Field Observation Sheets**



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	01/19/2023	
<b>Sampling Location Point:</b>	Sample Pt 1	
<b>Sampling Personnel:</b>	Dakota Ladwig ; Mark Williams	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Clear upstream	
	elevated water level	
	moderate flow	
<b>Precipitation:</b>	Last 24 hours	Last 48 hours
	0.67"	0.68"
<b>Current Outdoor Air Temperature:</b>	43°F	
<b>Current Weather Conditions:</b>	Cloudy / Fog	

### Water Sample Observations

<b>Odor:</b>	Earthy
<b>Appearance:</b>	lk brown
<b>Color:</b>	" "
<b>Turbidity:</b>	moderate
<b>Other:</b>	

<b>Additional Information/Comments</b>	Weather Station: PRISM "Peoria-RGHAWLEY"
	TOS: 10:10



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	01/19/2023	
<b>Sampling Location Point:</b>	Sample Pt 2	
<b>Sampling Personnel:</b>	Dakota Ladwig & Mark Williams	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Clear upstream	
	higher level	
	swift flow	
<b>Precipitation:</b>	Last 24 hours 0.50"	Last 48 hours 0.50"
<b>Current Outdoor Air Temperature:</b>	43°f	
<b>Current Weather Conditions:</b>	Cloudy/Fog	

### Water Sample Observations

<b>Odor:</b>	earthy
<b>Appearance:</b>	-
<b>Color:</b>	lt brown
<b>Turbidity:</b>	moderate
<b>Other:</b>	

<b>Additional Information/Comments</b>	Weather Station: PRISM " Peoria - AGPWF "
	TOS: 09:50



## Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	01/19/2023	
Sampling Location Point:	Sample Pt 3	
Sampling Personnel:	Dakota Ladwig & Mark Williams	

### Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	fairly clear upstream	
	slightly higher level	
	moderate flow	
Precipitation:	Last 24 hours	Last 48 hours
	0.50"	0.50"
Current Outdoor Air Temperature:	43°F	
Current Weather Conditions:	cloudy / fog	

### Water Sample Observations

Odor:	earthy
Appearance:	—
Color:	lt brn / green
Turbidity:	moderate
Other:	

Additional Information/Comments	Weather Station: PRISM "Peoria-RG PWF"
	TOS: 09:30



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling		
<b>Date:</b>	01/19/2023		
<b>Sampling Location Point:</b>	Sample Pt 4		
<b>Sampling Personnel:</b>	Dakota Ladwig		

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Usual debris upstream	
	higher water level	
	swift flow	
<b>Precipitation:</b>	Last 24 hours 0.40"	Last 48 hours 0.40"
<b>Current Outdoor Air Temperature:</b>		
<b>Current Weather Conditions:</b>		

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	—
<b>Color:</b>	lt brn
<b>Turbidity:</b>	mod
<b>Other:</b>	

<b>Additional Information/Comments</b>	Weather Station: PRISM "Peoria - RG BRADLEY"
	TOS: 09:15



## Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	04/05/2023	
Sampling Location Point:	Sample Pt 1	
Sampling Personnel:	Dakota Ladwig & Mark Williams	

### Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Water level is high	
	Swift flow	
	Normal debris	
Precipitation:	Last 24 hours	Last 48 hours
	0.25"	<del>0.25"</del> 0.36"
Current Outdoor Air Temperature:	50°F	
Current Weather Conditions:	Cloudy & windy	

### Water Sample Observations

Odor:	None	
Appearance:	v. light brown & clear	
Color:	"	
Turbidity:	low	
Other:	N/A	

**Additional Information/Comments**

PRISM " PEORIA - RG HAWLEY "

---

TOS : 12:35 PM



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	04/05/2023	
<b>Sampling Location Point:</b>	Sample Pt 2	
<b>Sampling Personnel:</b>	Dakota Ladwig & Mark Williams	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	High water level	
	Swift flow	
	normal debris	
<b>Precipitation:</b>	Last 24 hours 0.67"	Last 48 hours 0.73"
<b>Current Outdoor Air Temperature:</b>	53°F	
<b>Current Weather Conditions:</b>	Cloudy & Windy	

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	Murky brown
<b>Color:</b>	Brown
<b>Turbidity:</b>	Moderate
<b>Other:</b>	None

**Additional Information/Comments**

PRISM " PEORIA - RG PWF "

---

TOS : 12:10 PM



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	04/05/2023	
<b>Sampling Location Point:</b>	Sample Pt 3	
<b>Sampling Personnel:</b>	Dakota Ladwig & Mark Williams	
<b>Conditions of Sampling Point Location</b>		
<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Medium water level, higher on bank	
	Swift flow,	
	No observed debris	
<b>Precipitation:</b>	Last 24 hours 0.67"	Last 48 hours 0.73"
<b>Current Outdoor Air Temperature:</b>	57° F	
<b>Current Weather Conditions:</b>	Cloudy / Windy	
<b>Water Sample Observations</b>		
<b>Odor:</b>	None	
<b>Appearance:</b>	Murky	
<b>Color:</b>	Olive green	
<b>Turbidity:</b>	Moderate	
<b>Other:</b>	N/A	
<b>Additional Information/Comments</b>	PRISM " PEORIA - RG DWF "	
	TOS: 11:55 AM	



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	04/05/2023	
<b>Sampling Location Point:</b>	Sample Pt 4	
<b>Sampling Personnel:</b>	Dakota Ladwig & Mark Williams	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	High water level	
	v. swift flow	
	Normal debris	
<b>Precipitation:</b>	Last 24 hours	Last 48 hours
	0.65"	0.71"
<b>Current Outdoor Air Temperature:</b>	65°F	
<b>Current Weather Conditions:</b>	Cloudy / Windy	

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	Murky brown
<b>Color:</b>	Brown
<b>Turbidity:</b>	High
<b>Other:</b>	N/A

**Additional Information/Comments**

PRISM: "PEORIA-RGBRADLEY"

TOS: 11:30 AM



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	08/07/2023	
<b>Sampling Location Point:</b>	Sample Pt 1	
<b>Sampling Personnel:</b>	Dakota Ladwig & David Schumacher	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Normal debris	
	Swift flow	
	Higher Level	
<b>Precipitation:</b>	Last 24 hours 1.93	Last 48 hours 4.82
<b>Current Outdoor Air Temperature:</b>	70°F	
<b>Current Weather Conditions:</b>	Cloudy, wind N 9 mph	

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	light brown
<b>Color:</b>	"
<b>Turbidity:</b>	Medium
<b>Other:</b>	

<b>Additional Information/Comments</b>	Prism "Peoria - BIGHAWLEY"
	TOS: 11:05



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	08/07/2023	
<b>Sampling Location Point:</b>	Sample Pt 2	
<b>Sampling Personnel:</b>	Dakota Ladwig ; David Schumacher	
<b>Conditions of Sampling Point Location</b>		
<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Normal debris	
	Swift flow	
	High level	
<b>Precipitation:</b>	Last 24 hours 1.43"	Last 48 hours 4.19"
<b>Current Outdoor Air Temperature:</b>	69° F	
<b>Current Weather Conditions:</b>	Cloudy, wind N @ 8 mph	
<b>Water Sample Observations</b>		
<b>Odor:</b>	None	
<b>Appearance:</b>	light brown	
<b>Color:</b>	"	
<b>Turbidity:</b>	Medium	
<b>Other:</b>	Construction on bridge	
<b>Additional Information/Comments</b>	Prism " Peoria - RGPWF "	
	TOS 10:45	



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling
<b>Date:</b>	08/07/2023
<b>Sampling Location Point:</b>	Sample Pt 3
<b>Sampling Personnel:</b>	Dakota Ladwig & David Schomacher

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Fairly clear upstream	
	Swift flow	
	Higher level	
<b>Precipitation:</b>	Last 24 hours 1.43"	Last 48 hours 4.19"
<b>Current Outdoor Air Temperature:</b>	69°F	
<b>Current Weather Conditions:</b>	Cloudy, wind N 8 mph	

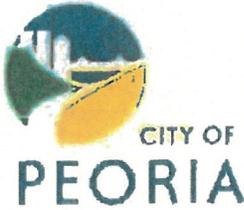
### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	light brown
<b>Color:</b>	"
<b>Turbidity:</b>	Medium
<b>Other:</b>	

**Additional Information/Comments**

Prism "Peoria - RG PWF"

TOS: 10:30



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	08/07/2023	
<b>Sampling Location Point:</b>	Sample Pt 4	
<b>Sampling Personnel:</b>	Dakota Ladwig & David Schumacher	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Normal debris (concrete, tires, etc)	
	Swift flow	
	higher levels	
<b>Precipitation:</b>	Last 24 hours	Last 48 hours
	1.09"	3.59"
<b>Current Outdoor Air Temperature:</b>	68°F	
<b>Current Weather Conditions:</b>	Cloudy, Wind N Tmph	

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	light brown
<b>Color:</b>	''
<b>Turbidity:</b>	Medium
<b>Other:</b>	

<b>Additional Information/Comments</b>	Prism "Peoria - RG Bradley"
	TOS 10:15



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	10/25/2023	
<b>Sampling Location Point:</b>	Sample Pt 1	
<b>Sampling Personnel:</b>	Dakota Ladwig	

### Conditions of Sampling Point Location

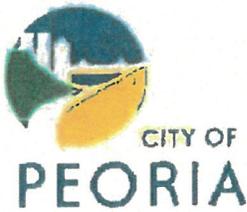
<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	High level	
	Swift flow	
<b>Precipitation:</b>	Last 24 hours	Last 48 hours
	0.56"	0.56"
<b>Current Outdoor Air Temperature:</b>	64°F	
<b>Current Weather Conditions:</b>	Cloudy	

### Water Sample Observations

<b>Odor:</b>	earthy
<b>Appearance:</b>	brown
<b>Color:</b>	"
<b>Turbidity:</b>	Moderate
<b>Other:</b>	

**Additional Information/Comments**

PRISM " Hawley "



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling		
<b>Date:</b>	10/25/2023		
<b>Sampling Location Point:</b>	Sample Pt 2		
<b>Sampling Personnel:</b>	Dakota Ladwig		

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	High level	
	Swift flow	
	<b>Last 24 hours</b>	<b>Last 48 hours</b>
<b>Precipitation:</b>	0.45"	0.45"
<b>Current Outdoor Air Temperature:</b>	63° F	
<b>Current Weather Conditions:</b>	Cloudy	

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	brown
<b>Color:</b>	"
<b>Turbidity:</b>	Moderate
<b>Other:</b>	

**Additional Information/Comments**

Prism "PW"

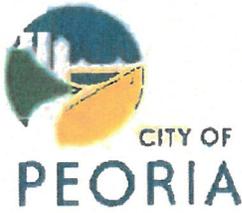
---



---



---



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	10/25/2023	
<b>Sampling Location Point:</b>	Sample Pt 3	
<b>Sampling Personnel:</b>	Dakota Ladwig	

### Conditions of Sampling Point Location

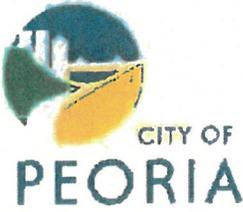
<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	High Level	
	Swift flow	
	<b>Last 24 hours</b>	<b>Last 48 hours</b>
<b>Precipitation:</b>	0.45"	0.45"
<b>Current Outdoor Air Temperature:</b>	62°F	
<b>Current Weather Conditions:</b>	Cloudy	

### Water Sample Observations

<b>Odor:</b>	Earthy
<b>Appearance:</b>	light brown
<b>Color:</b>	"
<b>Turbidity:</b>	Moderate
<b>Other:</b>	

**Additional Information/Comments**

PRISM "PW"



## Storm Water Sample Collection Form

<b>Proj. Name:</b>	City of Peoria, IL - Storm Water Sampling	
<b>Date:</b>	10/25/2023	
<b>Sampling Location Point:</b>	Sample Pt 4	
<b>Sampling Personnel:</b>	Dakota Ladwig	

### Conditions of Sampling Point Location

<b>Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):</b>	Swift flow	
<b>Precipitation:</b>	Last 24 hours 0.42"	Last 48 hours 0.42"
<b>Current Outdoor Air Temperature:</b>	61° F	
<b>Current Weather Conditions:</b>	Cloudy	

### Water Sample Observations

<b>Odor:</b>	None
<b>Appearance:</b>	Brown
<b>Color:</b>	"
<b>Turbidity:</b>	Moderate
<b>Other:</b>	

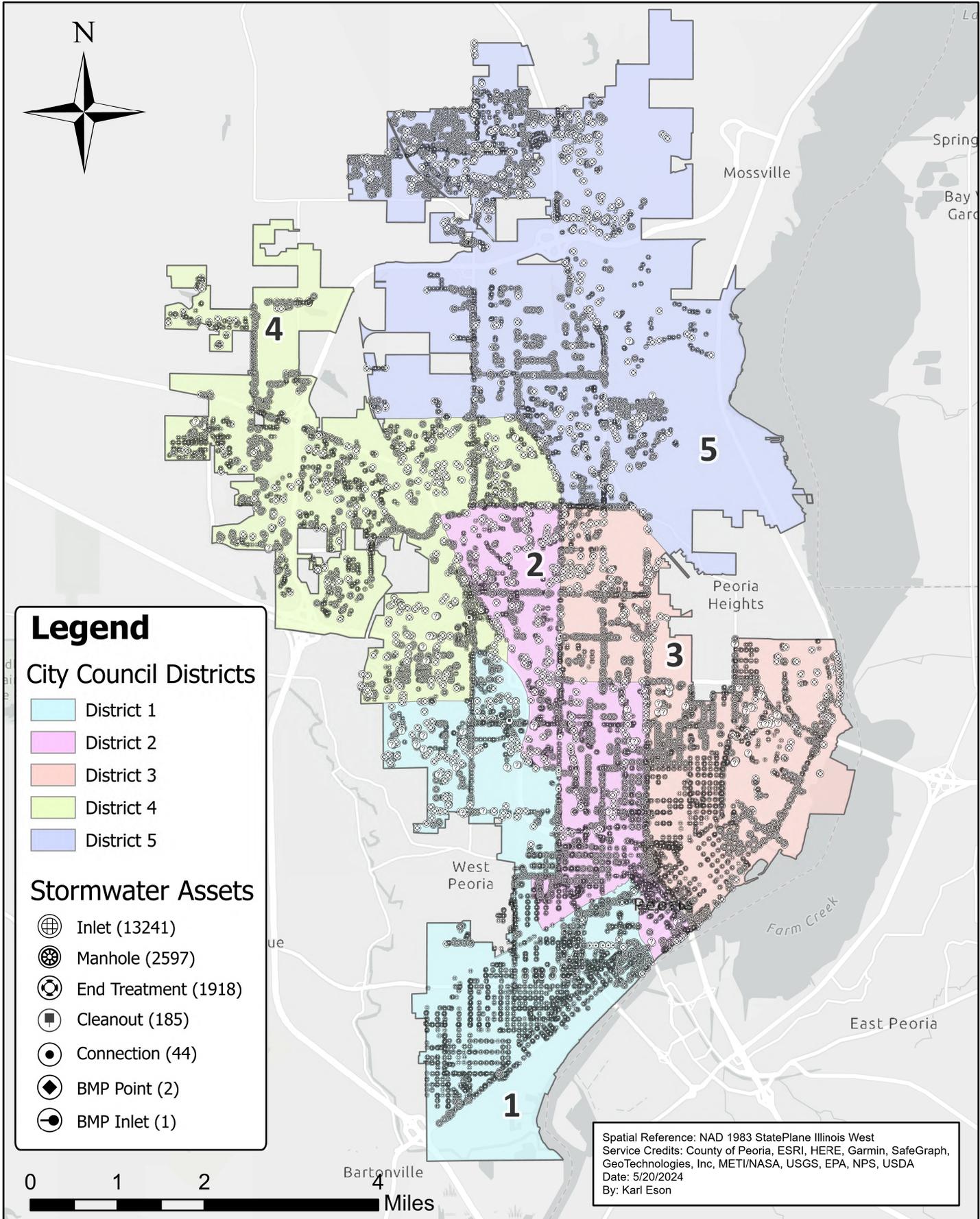
**Additional Information/Comments**

PRISM "Bradley"



**APPENDIX D - DRAINAGE SYSTEM MAPPING**

# Mapped Stormwater Assets



**APPENDIX E - OUR WATER, OUR WAY**

2018

# OUR WATER, OUR WAY

Peoria must address problems caused by wet weather.  
Let's choose solutions that add beauty, save money and  
protect our beloved waterways.



## LEARN THE ISSUES

After a storm or snowmelt, where does the water go? Peoria is facing major problems as a result of how the water currently drains.

### AGING INFRASTRUCTURE

When infrastructure fails, it can pose a major safety threat to citizens. Due to funding constraints, the city does not know the safety condition of miles of underground storm sewers.

To save taxpayers money and keep citizens safe, we must extend the life of our existing infrastructure and make repairs before they become costly emergencies.

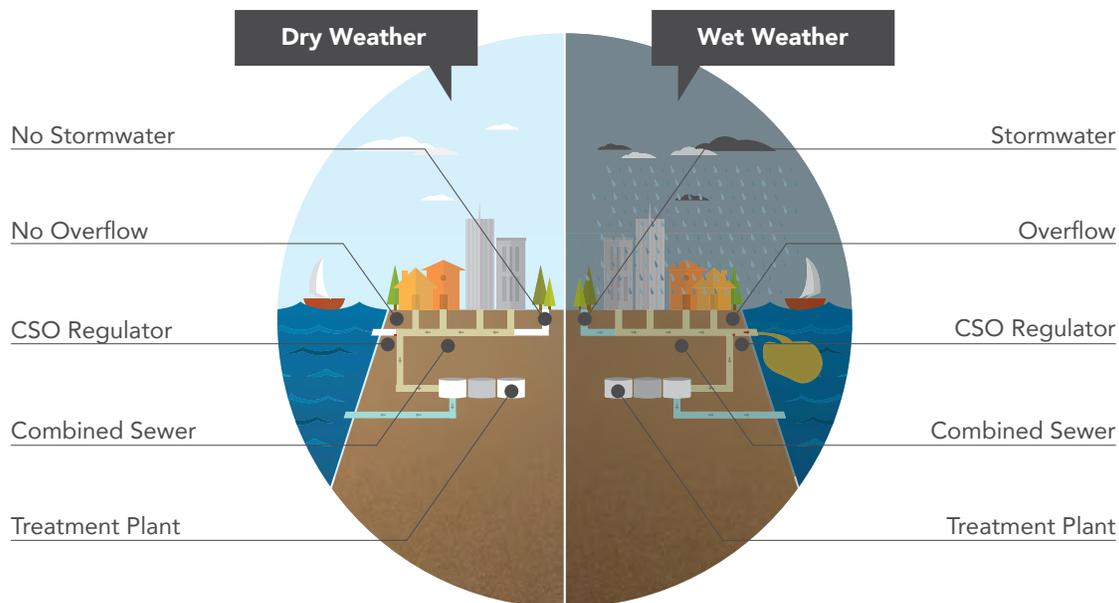
### GROWING LIST OF PROBLEMS TO FIX

Public Works has received nearly **1,250 citizen service requests** for drainage related issues since 2014. Due to funding constraints, Peoria has not been able to keep up with maintenance and upgrades.

As of October 2017, the total backlog of 400+ stormwater-related projects included 19 high-severity capital projects. The actual funding needed would be up over **\$17 million** if all issues were addressed.

### COMBINED SEWER OVERFLOWS (CSOs)

Peoria has combined sewers located in older parts of town carrying both sanitary wastewater and stormwater. While fine in dry weather, combined sewers present risks during wet weather.



#### During dry weather

All sewage from homes and businesses is sent to the treatment plant by a "regulator," or small dam.

#### During wet weather

Between 20 & 30 times a year, rain/snow overloads these sewers. They don't have enough capacity to carry wastewater to the treatment plant, so untreated sewage flows into the Illinois River.

CSOs aren't just gross, they are no longer acceptable. Peoria has an unfunded mandate from the U.S. Environmental Protection Agency to dramatically reduce CSOs. We will face major punitive costs if we do not comply.



## RETURNING TO NATURE'S WAY

We are forced to address our CSOs and stormwater issues. But this is a great chance as a community to explore solutions and funding streams that are right for us. Let's be trend-setters, go-getters and make a splash as we find innovative solutions for our city.

### GOING GREEN

Peoria has a lot of "impervious" surfaces: parking lots, roofs, patios, driveways, etc. These surfaces don't allow rain and snow to easily soak into the ground. With less land available to allow infiltration, more rain and snow runs off into the sewer system or elsewhere.

To reduce combined sewer overflows and slow down the rate at which stormwater rushes to nearby channels, Peoria plans to use more green infrastructure throughout our city. In fact, we want to address CSOs using 100%

green! Rather than building more "gray" infrastructure (like pipes, tanks or tunnels), the city would install features like pervious pavement and rain gardens to prevent stormwater from entering combined sewers in the first place. This would also lessen the stress placed on aging infrastructure.

Other cities are using green infrastructure as part of their CSO plans. Peoria can do even more.

PEORIA COULD BE THE FIRST CITY IN THE NATION TO USE A 100% GREEN SOLUTION TO COMBAT CSOs. GREEN SOLUTIONS INCLUDE:



Rain Gardens



Bumpouts



Green Alleys

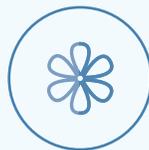
### WHY GREEN WORKS



SAVES  
MONEY



INVOLVES LOCAL  
BUSINESSES



BEAUTIFIES  
PUBLIC SPACES



DECREASES  
POLLUTANTS

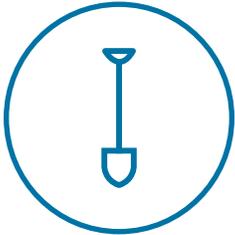


IMPROVES  
AIR QUALITY



## HOW CAN WE REDUCE POLLUTION IN OUR WATERS?

Stormwater runoff is not treated before it makes its way into local creeks and streams. Rather, rainfall and snowfall pick up whatever chemical compounds and/or trash lie on developed land.



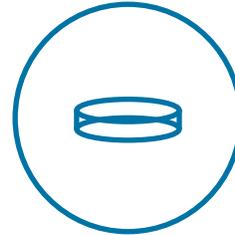
SEDIMENT



CHEMICALS



VEHICLE WASTE



BACTERIA



LITTER

### DO YOUR PART

Together we can reduce stormwater runoff and prevent pollution from entering our streams and rivers.

#### Keep contaminants out of drains, sewers and streams.

NEVER POUR CHEMICALS, cleaning supplies, fats, oils, grease or medicines down the toilet. Small items like bandages or dental floss can also clog pipes.

SWEEP GRASS CLIPPINGS back onto your lawn so they do not get washed into storm drains. Never dump excess dirt or other yard waste into ravines, creek beds or streams.

BE CONSERVATIVE when using pesticides and fertilizer. You can prevent polluted runoff into nearby water resources by opting for greener landscaping maintenance methods.

#### Capture rainwater.

The more water that runs off your property, the more water the city must divert and manage. Capture rainwater and use it on your lawn by installing rain barrels. You can also direct downspouts and gutters onto your lawn/plant beds. Make your yard thirstier—and prettier—by installing native plants with deep root systems, which hold soil in place.

#### Minimize impervious surfaces.

Reduce your personal runoff impact and beautify your home by opting for:

PAVERS/BRICKS

POROUS/PERMEABLE CONCRETE

MULCH

GREEN ROOFS

OTHER SUSTAINABLE FEATURES

# FUNDING PEORIA'S SUSTAINABLE FUTURE

## STORMWATER UTILITY OVERVIEW

A stormwater utility is:



an enterprise fund created to finance wet weather management.



only applicable to wet weather needs.



like a water or electric utility, based on usage (in this case, of the stormwater system).



common – other Illinois cities, like Morton, Bloomington, Champaign and others, also have a stormwater utility.



important for our community to fix and maintain critical infrastructure that could impact public safety.

## FAIR & EQUITABLE SOLUTION

A stormwater utility is fair and equitable because:



The fee is based on the amount of stormwater runoff a property contributes to the system.



Property owners may lower their fees by reducing runoff.



Every property, from businesses to schools, churches to homes, participates. All properties contribute runoff, so all properties help fund a responsible solution.



## BENEFITS FOR PEORIA

### HEALTHIER WATERWAYS & WILDLIFE

Helps Peoria slow, cleanse and recharge groundwater, benefitting people, animals and water sources.

### MAINTAIN OUR SYSTEM

Helps Peoria maintain over 150 miles of underground pipes and inlets.

### LESS FLOODING

More street sweeping, preventing flooding from pollution-clogged inlets.

### EMPLOYMENT OPPORTUNITIES

Will create jobs in construction, design and maintenance.

### COMPLETE STREETS

Adding green infrastructure to roads will allow for better water infiltration and can provide a buffer between cars and bike/pedestrian traffic.

### FREED UP GENERAL FUND

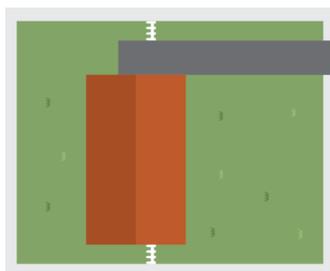
One less competing funding priority lets our city focus on other essentials, such as street repair, fire and police.

## HOW THE STORMWATER UTILITY IS CALCULATED

Impervious surface areas, like rooftops, sidewalks, walkways, patio areas, driveways, parking lots and sheds, prevent stormwater from soaking into the ground. Instead, the water flows over the ground as stormwater runoff, which can be very damaging.

The stormwater utility fee is based on the amount of impervious surface area on a property. Each billing unit will be set per 1,000 square feet of impervious area.

Homeowners will also be able to apply for credit and incentives to lessen their bills. Public Works will share details about credits and incentives soon.



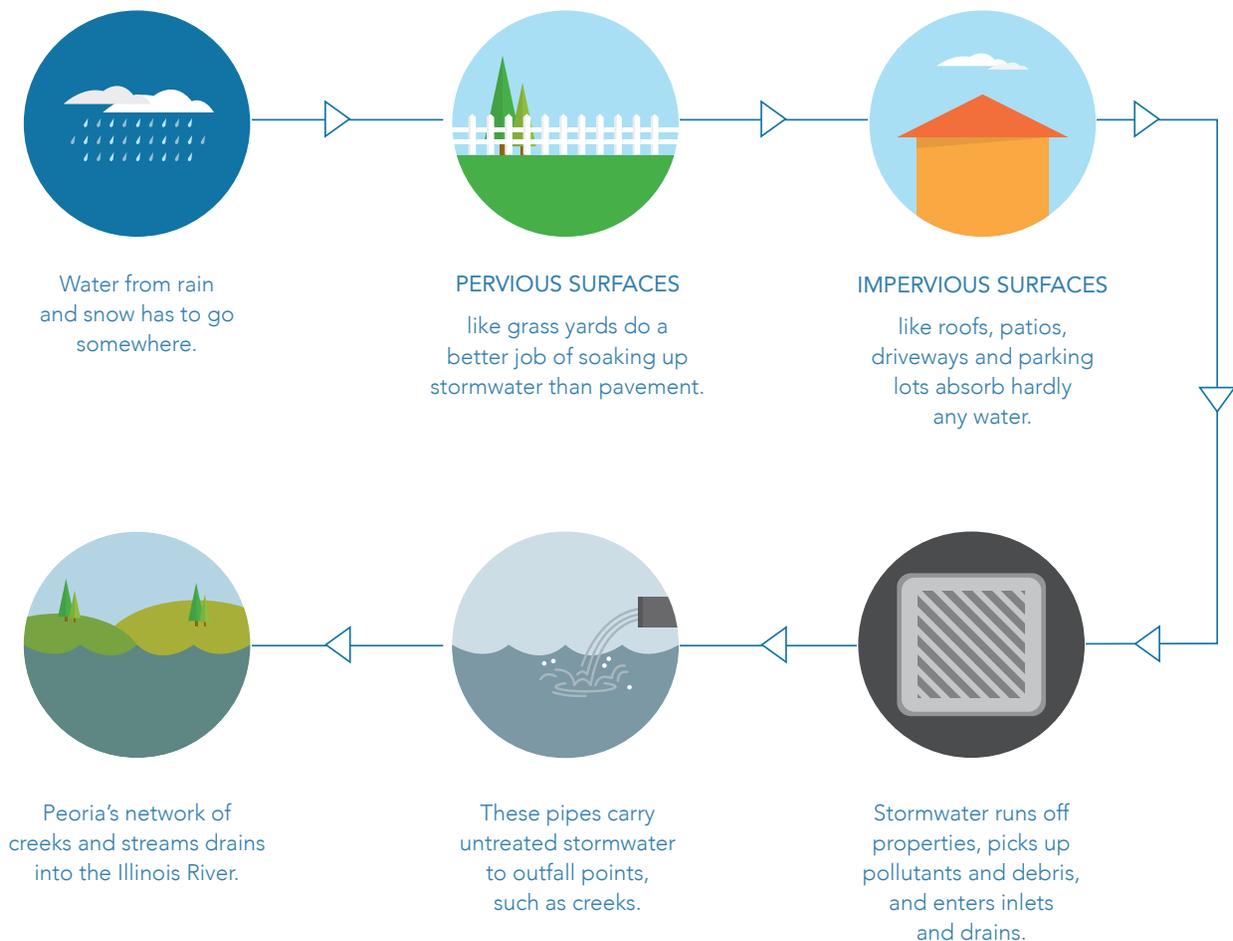
$$\begin{aligned} & \text{Brown rectangle} + \text{Grey rectangle} = 2,600 \text{ SF Impervious} \\ & = 2.6 \text{ Billing Units} \times \$3 \text{ per Billing Unit} \\ & = \$7.80 \text{ per Month (Average Home)} \end{aligned}$$

## WILL THIS PAY FOR THE COMBINED SEWER OVERFLOW (CSO) FIX?

The total CSO fix will cost Peoria \$200-250 million. That would be a BIG monthly bill. The stormwater utility will instead pay for a portion of the CSO solution, namely the maintenance of green infrastructure. Green infrastructure is not only good for the combined sewer area, it benefits our whole community. The rest of the CSO funding will likely come from sewer rate increases or tax increases.

# PATH OF STORMWATER

Stormwater can take quite the route from the sky to the ground and eventually to the Illinois River. Where the water travels can make a big difference to homeowners and local wildlife alike.



To learn more about the impact of stormwater, please visit [peoriastormwater.com](http://peoriastormwater.com)

# WHAT IS STORMWATER INFRASTRUCTURE?

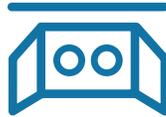
You probably use Peoria's stormwater infrastructure and not even realize it. Stormwater infrastructure is the engineered collection system that drains wet weather, like rain and snowmelt, to nearby waterbodies.



DITCHES



CREEKS

PIPES &  
CULVERTSPONDS &  
LAKESCURBS &  
GUTTERSINLETS &  
MANHOLES

WETLANDS



OCEANS

RAIN  
GARDENS

BIOSWALES

To learn more about the impact of stormwater, please visit [peoriastormwater.com](https://www.peoriastormwater.com)

# PROTECTING PEORIA

*from* POLLUTION

Maybe you're not an engineer just yet.  
But you can still do things to help keep our water clean!



**DON'T LITTER.**

Always remember to "can it" before it goes into the Illinois River. Keeping trash in the garbage can is one of the simplest things you can do to help keep our river clean. Recycle whatever plastics, metal and paper you can.



**CLEAN UP  
AFTER PETS.**

When Fido and Fluffy go outside, their waste adds to the problem of stormwater pollution.



**PLANT VEGETATION  
ALONG STREAM BANKS.**

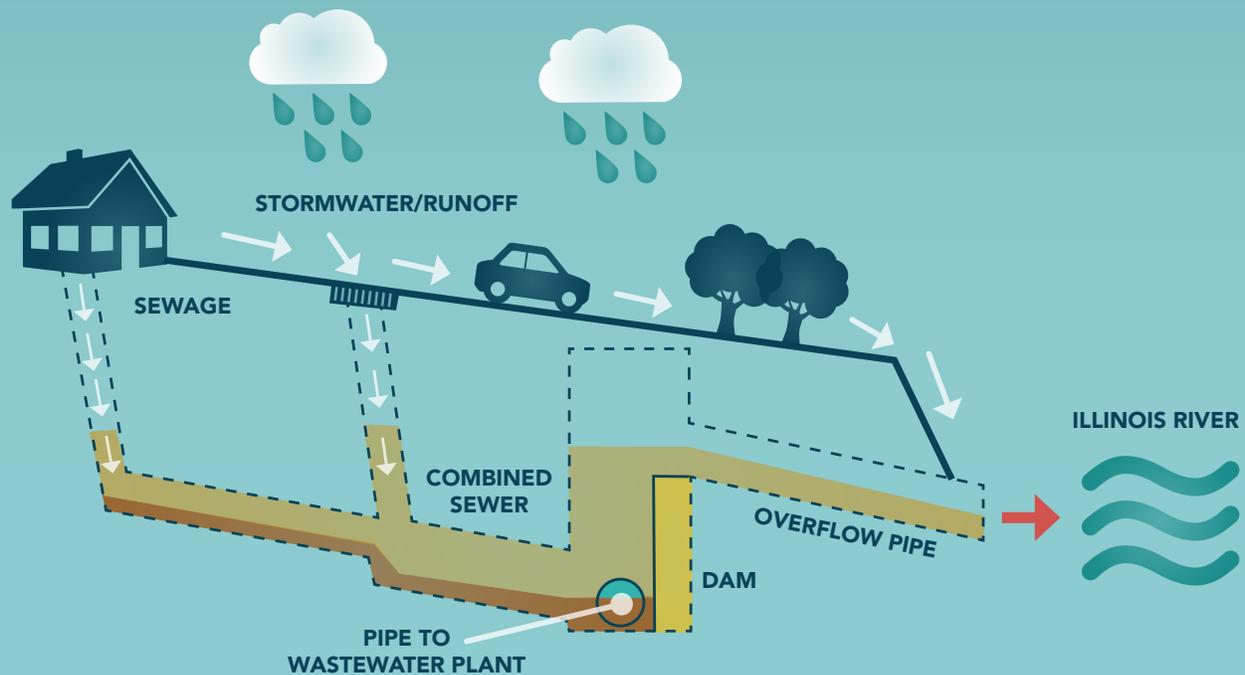
You can ask to organize a project with your school, Scout troop or church to plant things like native grasses and shrubs. The roots from plants keep the soil in place, so it doesn't erode and dirty up the water. Animals like this, too!



**KEEP IT OUT OF  
THE DRAIN.**

Never pour chemicals, cleaning supplies or medicines down the toilet. Same thing goes for small items like bandages or dental floss. They can clog pipes and they really add up!

# WHERE DOES IT GO WHEN IT OVERFLOWS?



Like many other cities, Peoria built storm sewers in the late 1800s and early 1900s to carry rainwater and melting snow away from homes, businesses and streets. In those horse-and-buggy days, cities didn't have sewage treatment or even indoor plumbing!

When indoor plumbing came later, homeowners and business owners hooked their sewage lines to the existing storm sewers. This combined stormwater/runoff and raw sewage into one pipe. The pipes emptied directly into the Illinois River until the 1930s, when Peoria's sewage treatment plant was built.

During dry weather, a combined sewer system works much like a separate sewer—carrying all sewage including litter to the treatment plant for treatment. However, when it rains or snow melts, the sewers can be overloaded with incoming stormwater.

When rainfall is heavy enough, the sewers don't have enough capacity to carry wastewater to the treatment plant. In these cases, they are designed to overflow into the Illinois River without treatment. (If sewers didn't have this release valve, raw sewage would back up into basements and streets. Gross!)

Today, when building new sewer systems, we build separate sewers for stormwater and sewage. Yet these older combined sewers remain in Peoria and in many older cities throughout the country.

Right now, engineers are coming up with solutions—like using green infrastructure—to help Peoria soak up more rain so it doesn't go down the storm drain.

**[DROP BY PEORIALOGV.ORG/PUBLIC-WORKS/COMBINED-SEWER-OVERFLOW](https://www.peoriagov.org/public-works/combined-sewer-overflow) TO LEARN MORE.**

== NATURE'S WATER FILTER ==

# THE RAIN GARDEN

SOAKS UP AND CLEANS OUR WATER



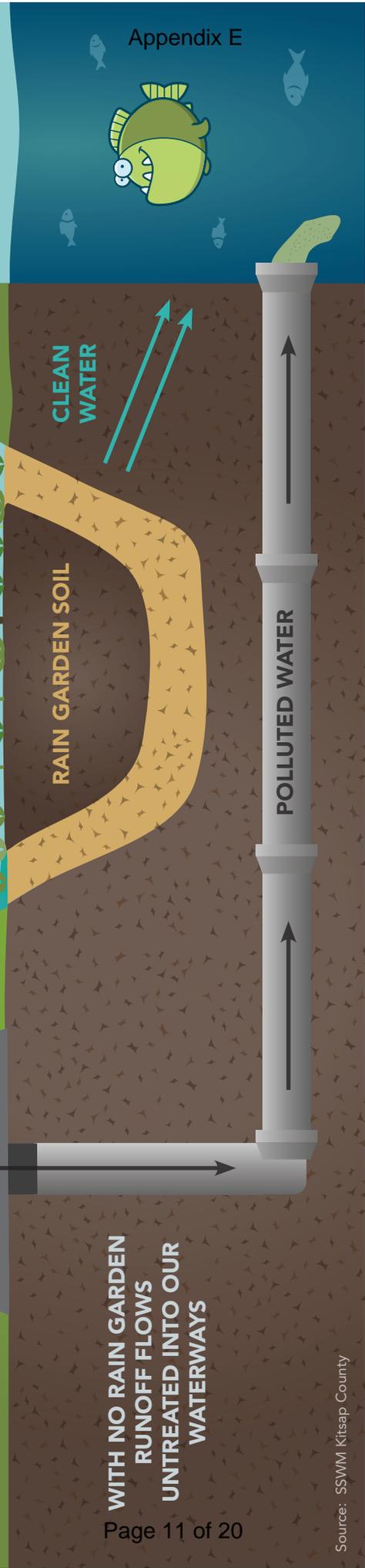
## WHAT IS A RAIN GARDEN?

A planted depression that can collect, soak up and filter stormwater runoff from roofs, driveways, streets and parking lots

## WHAT ARE THE BENEFITS?

- Reduce flooding
- remove pollutants
- Replenish ground water
- Provide native plants for wildlife

For instructions on how to build your own rain garden please visit: <http://goo.gl/7GZQuM>



WITH NO RAIN GARDEN  
RUNOFF FLOWS  
UNTREATED INTO OUR  
WATERWAYS

## CO-BENEFITS OF GREEN INFRASTRUCTURE



### Connections Between People and Places

- Creating physical connections between social infrastructure and public amenities such as schools, museums, community centers, places of worship, grocery stores, medical offices, fitness centers, restaurants and parks
- Creating spaces that foster meaningful contact, provide community identity and draw a diverse population



### Safe and Accessible Transportation Infrastructure

- Creating SAFE, ACCESSIBLE AND COMFORTABLE routes for getting from place to place (e.g., safe routes to school, complete streets)
- Creating public spaces that manage stormwater while beautifying streets and neighborhoods



### Crime Mitigation

- Creating landscape designs that maintain sight lines, define public and private spaces, control access and calm
- Encouraging residents to spend time outside interacting and building stronger community ties (e.g., pocket parks, community gardens)



### Public Health and Wellness

- Creating spaces to promote recreation, fitness and healthy lifestyle choices
- Providing opportunity for improved access to healthy, fresh and whole foods through local production (e.g., community gardens)
- Strengthening community social bonds and associated health outcomes



### Ecological Health and Productivity

- Improving air and water quality and providing wildlife habitat and migratory corridors
- Restoring natural hydrologic function (slows, cools, cleanses and recharges groundwater)



### Local Jobs and Workforce Training

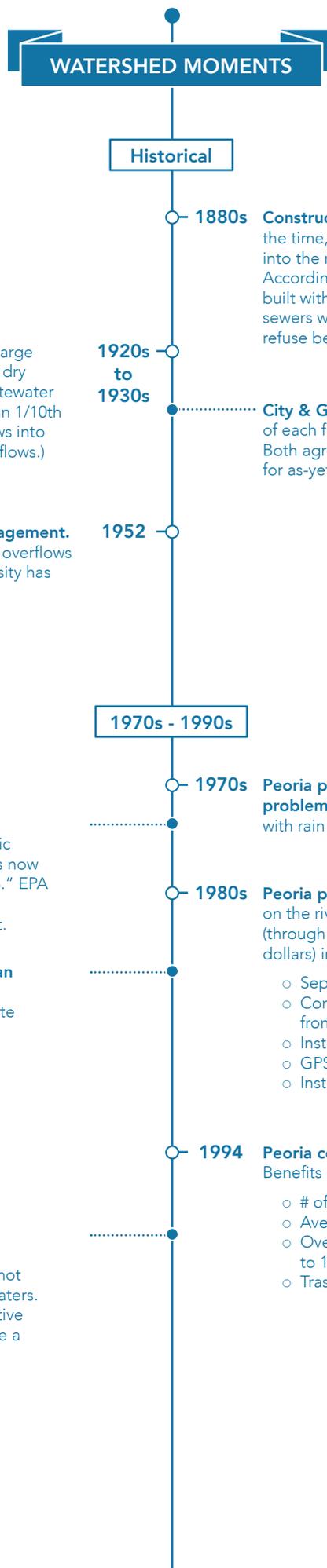
- Providing a scale and scope of design and construction work that can be met by local companies
- Creating a demand for workforce training and education to build capacity for public and private sector jobs



### Neighborhood-Scale Economic Development

- Spurring reinvestment and increasing economic activity, including tourism, for nearby businesses
- Increasing surrounding property values by improving public rights-of-way and repurposing vacant/blighted lots

To learn more about green infrastructure and combined sewer overflows, please visit [peoriastormwater.com](http://peoriastormwater.com)



**WATERSHED MOMENTS**

**Historical**

**1880s** Construction starts on Peoria’s sewer network. Typical for the time, stormwater and sanitary water are discharged directly into the river through the same pipe, called a combined sewer. According to documents, “by 1900, at least 10 sewers had been built with outfalls into the Illinois River. During these early years, sewers were constructed apparently where and when liquid refuse became intolerable.”

**Greater Peoria Sanitary & Sewage District forms.** A large “interceptor” sewer is built along the riverfront. During dry weather, it delivers sewage to the new Darst Street wastewater treatment plant. During wet weather periods of less than 1/10th of inch of rain, the combined sewer system still overflows into the river at 20 locations. (CSOs = combined sewer overflows.)

**1920s to 1930s**

**City & GPSD sign an agreement** defining the responsibilities of each for existing systems and Peoria’s future expansion. Both agree to only build separate sanitary and storm sewers for as-yet-undeveloped areas.

**Peoria adopts 1st master plan for wet weather management.** It delineates separate storm sewers to relieve flooding, overflows and backups. It explains the effect that impervious density has on runoff.

**1952**

**1970s - 1990s**

**Federal Clean Water Act created** through sweeping amendments to 1948 Water Pollution Control Act. Public awareness of water pollution is growing, and a permit is now required to discharge pollutants into “waters of the U.S.” EPA begins regulating Peoria’s CSOs through a National Pollutant Discharge Elimination System (NPDES) permit.

**1970s** Peoria prepares a facilities plan to address continued CSO problems. Sewer flow monitors are installed at 10 locations along with rain gauges and wastewater samplers.

**A Clean Water Act amendment establishes that urban stormwater** conveyance systems are point sources of pollution. NPDES expands to include Municipal Separate Storm Sewer Systems (MS4 for short).

**1980s** Peoria performs impact study to determine the effect of CSOs on the river and presents findings to Illinois EPA. Starting in 1987 (through 1994), Peoria proactively undertakes about \$10M (in 1980s dollars) in projects to reduce sewer overflows. These include:

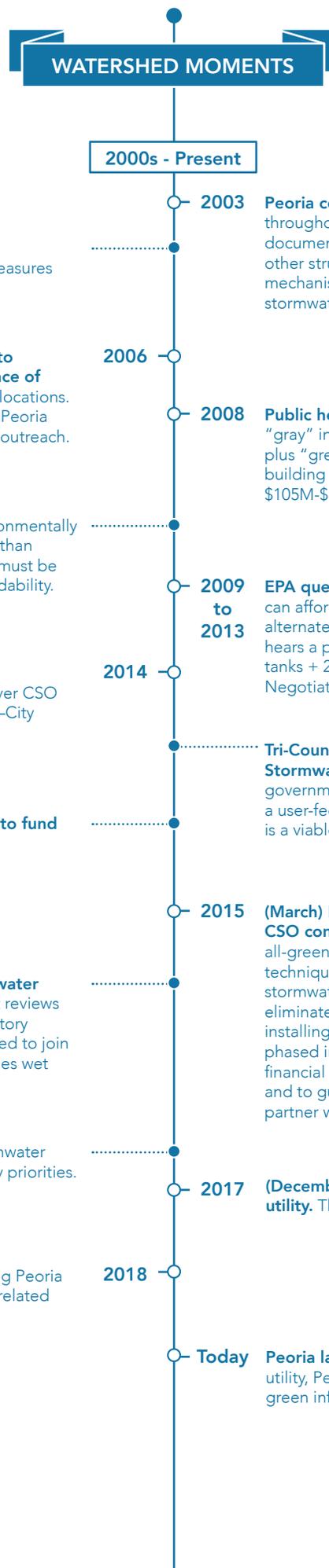
- Separating sewers in drainage basins
- Constructing swirl concentrators to remove trash from overflows
- Installing gates to control flow discharged to interceptor
- GPSD treatment plant improvements
- Installing telemetry to monitor sewer flows

**U.S. EPA establishes a CSO control policy.** This framework compels U.S. municipalities to develop Long-Term Control Plans to ensure that their CSOs do not prevent meeting water quality standards of receiving waters. The policy’s stated principles include finding cost-effective controls, with phased implementation, to accommodate a community’s financial capability.

**1994** Peoria completes CSO project improvements. Benefits include reducing:

- # of CSO locations from 20 to 16
- Average days of overflows from 40/year to 28/year
- Overflow volume from estimated 840 million gallon avg. to 160 million gallon avg. in a typical year
- Trash discharging to the Illinois River





**NPDES Phase II permit for MS4s applies to Peoria.** City submits plan to comply with 6 minimum control measures for storm sewer system O&M.

**Peoria's NPDES sanitary sewer permit requires city to develop a Long-Term Control Plan to reduce incidence of CSOs.** 20-30 CSO events occur per year, on avg., at 16 locations. Non-compliance will lead to major fines and penalties. Peoria begins developing control plan and performing public outreach.

**November.** EPA determines Peoria's CSO area is environmentally "sensitive." This mandates a higher level of protection than included in normal CSO control policy. It means CSOs must be eliminated/relocated, to the extent of community affordability.

**Peoria explores CSO control plan using all-green infrastructure.** With EPA's designation of the Illinois River CSO area as "sensitive"—requiring higher levels of control—City estimates green infrastructure installation could be approx. 2/3 cost of gray.

**(December) City Council authorizes a study of ways to fund & manage stormwater infrastructure.**

**(Spring-Summer) Study of managing Peoria's stormwater infrastructure gets under way.** Among other things, it reviews capital improvements, O&M, administrative and regulatory compliance needs. A diverse stakeholder group is invited to join new OneWater Committee; this advisory group examines wet weather system needs and funding options.

**(June) City Council begins budget discussions.** Stormwater infrastructure and CSO funding needs are among many priorities.

**(June 1) Stormwater utility goes into effect,** providing Peoria dedicated funding to proactively address wet weather related issues.

2000s - Present

**2003** **Peoria compiles stormwater master plan** identifying needs throughout whole city. Nearly 1,000 citizen complaints are documented. It says erosion is threatening houses and other structures. It recommends exploring alternate funding mechanisms to adequately improve and maintain a sustainable stormwater infrastructure.

**2006**

**2008** **Public hears 3 options to reduce CSOs.** These all involve "gray" infrastructure—building one or more treatment tanks—plus "green" solutions / litter control. At the time, public prefers building 4 tanks along the river at a cost of (in 2008 dollars) \$105M-\$127M. Draft control plan is submitted to EPA.

**2009 to 2013** **EPA questions Peoria on affordability,** saying citizens can afford a control plan of \$500M or more. City analyzes 19 alternate solutions, including sewer separation; City Council hears a preferred option of building 4 storage/treatment tanks + 2 long pipes to the wastewater treatment plant. Negotiations continue in earnest.

**2014**

**Tri-County Regional Planning Commission publishes Stormwater Utility Feasibility Study** for 13 participating governmental bodies, including Peoria. The study concludes a user-fee utility approach for funding stormwater management is a viable option for Central Illinois.

**2015** **(March) Peoria submits draft of 100% green infrastructure CSO control plan to EPA.** If approved, it may be nation's 1st all-green solution. The City seeks to employ cost-effective techniques like pervious pavers and natural plantings to keep stormwater from entering combined sewers. This would virtually eliminate CSOs and beautify streetscapes. Current estimate for installing green infrastructure is around \$200M (in 2015 dollars), phased in over a period TBD. The City continues work on a financial model to understand the impacts of the CSO program and to guide planning for anticipated costs. Peoria hopes to partner with EPA on a workable, long-term solution.

**2017** **(December 5) Peoria City Council approves a stormwater utility.** The funding will support wet weather needs.

**2018**

**Today** **Peoria launches citywide approach.** Thanks to the stormwater utility, Peoria responsibly addresses the project backlog and uses green infrastructure to manage stormwater where it falls.



## FUNDING A BETTER TOMORROW

### Frequently Asked Questions: Stormwater Utility

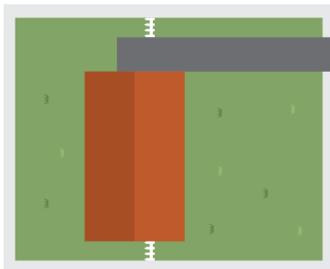
By investing in smart, natural stormwater solutions, we will create a beautiful, sustainable future for Peoria. Learn about the stormwater utility and how it will improve our community.

#### What is a stormwater utility?

A stormwater utility is an enterprise fund created to finance wet weather management. Similar utilities exist for water, sewer, electricity and other services. Funds raised by the stormwater utility will only apply to wet weather needs and may not be used for any unrelated purposes.

#### How is the stormwater utility fee calculated?

Impervious surface areas, like rooftops, sidewalks, walkways, patio areas, driveways, parking lots, sheds and more, don't allow stormwater to do what it normally does—soak into the ground. The stormwater utility fee is based on the amount of impervious surface area on a property. Each billing unit will be initially set at \$3 per 1,000 square feet of impervious area.



$$\begin{aligned}
 & \text{Brown rectangle} + \text{Grey rectangle} = 2,600 \text{ SF Impervious} \\
 & = 2.6 \text{ Billing Units} \times \$3 \text{ per Billing Unit} \\
 & = \$7.80 \text{ per Month (Average Home)}
 \end{aligned}$$

Homeowners will be able to apply for credits if they are able to successfully manage runoff on their property. More details about credits will come soon.

#### Why is the stormwater utility based on impervious surface area?

Stormwater runoff directly correlates to the amount of impervious surfaces on a property. Impervious surfaces allow the water to fill up our pipes and streams faster, increasing the potential for street and/or storm system flooding during heavy rains and increasing maintenance and repair requirements of the storm sewer system. Each property owner will pay for the water their property contributes to the system.

#### How is this fee different from a tax?

Unlike a tax, a utility is a fee for service. Just like we pay water bills for the amount of water we use, or electricity fees for the amount of electricity we use, the stormwater utility fee is based on the impact that a property owner's impervious surface has on the community's stormwater system as a whole. All properties participate. Everyone who uses the system contributes financially.

### What do you mean by “stormwater system”?

Many elements make up our stormwater infrastructure, including ditches, creeks, pipes and culverts, ponds and lakes, curbs and gutters, inlets and manholes, wetlands, rain gardens and bioswales. Almost all properties use the stormwater system.

### Why was a stormwater utility chosen as the right funding solution?

A stormwater utility fee is the right option for Peoria for a number of reasons:

- » A fair solution: The stormwater utility fee is based on the amount of runoff you contribute to the system. This approach, rather than increasing property or sales tax (which has no relation to the runoff that a property contributes), is the most equitable way to fund the stormwater program.
- » Competition for funds: The City currently funds a portion of stormwater management through the General Fund. The problem is that a lot of important programs are funded through the General Fund, and these different priorities—roads, fire, police—compete with one another. With this dedicated funding stream, we will ensure that the appropriate amount of monetary support and attention is given to our wet weather needs.
- » Accountability and transparency: Because user fees are dedicated to funding specific programs, citizens can see exactly how the City is using the revenues that are collected.

### What does the stormwater utility fund?

The stormwater utility will fund the following:

- » System planning and asset management
- » Infrastructure maintenance and replacement
- » Runoff and pollution reduction
- » Stream/channel improvements
- » Public Works equipment
- » Private property drainage program
- » Total capital and maintenance expenses
- » Green infrastructure maintenance

### Will this pay for the combined sewer overflow (CSO) fix?

The total CSO fix will cost Peoria \$200-250 million. The City Council will ultimately decide how this will be funded. The stormwater utility will pay for a portion of the CSO solution, namely the maintenance of green infrastructure. Green infrastructure is not only good for the combined sewer area, it benefits our whole community.

### Why now?

We must address the ever-growing backlog of stormwater projects (like erosion, failing culverts and blocked inlets) now before they worsen into emergencies. We need to reduce pollution in our streets and streams, and we must address the outdated and decaying pipes that pose a risk to public safety. By making positive changes now, we can stop responding to these issues reactively and become proactive in protecting our river and bettering the health of our community.

The U.S. EPA has mandated that we eliminate combined sewer overflows, which is when raw sewage is dumped into the Illinois River after heavy rain or snowmelt. The stormwater utility will help fund the maintenance of green infrastructure that will not only help us address CSOs, but alleviate the burden on our stormwater system.

### How will the stormwater utility benefit our community?

There are many benefits of the stormwater utility. Not only will we have the funding needed to repair crucial infrastructure, we will be able to beautify and strengthen our community. The stormwater utility will help us maintain green infrastructure, like rain gardens, permeable pavers, bioswales and more. These elements have co-benefits, including:

#### HEALTHIER STREAMS, RIVER AND WILDLIFE

Rainfall and snowmelt pick up whatever chemical compounds and/or trash lie on pavement and flow directly into our creeks, streams and river. The stormwater utility will help us restore the natural hydrologic function we disrupted with pavement and other impervious surfaces, and would slow, cleanse and recharge groundwater once again. This reversal would not only benefit people, but also the animals and fish that rely on those water sources.

#### LESS FLOODING

The stormwater utility will help Peoria afford more street sweeping, preventing flooding from pollution-clogged inlets. Also, green infrastructure will help absorb and retain water, lessening the occurrence of flooding.

#### POSITIVE ECONOMIC IMPACT

We will increase surrounding property values by improving public rights-of-way and repurposing vacant/blighted lots. We will also spur reinvestment and increase economic activity, including tourism, for nearby businesses by creating green spaces and roads that encourage multiple types of transportation.

#### EMPLOYMENT OPPORTUNITIES

A portion of the stormwater utility will be used for green infrastructure maintenance, which would provide a scale and scope of design and construction work that could be met by local companies. Green infrastructure could create a demand for workforce training and education to build capacity for these public and private jobs.

#### PEACEFUL GREEN SPACES

Using green infrastructure (bump-outs, bioswales, green streets, rain gardens) to address CSOs and stormwater runoff will beautify areas of town, especially parts of older neighborhoods. Studies have shown that green spaces are linked to improvements in mental health, stress reduction and can foster community.

#### CRIME MITIGATION

We can create landscape designs that maintain sight lines, define public and private spaces, control access and encourage residents to spend time outside interacting and building stronger community ties.

### Do other Illinois communities charge stormwater utility fees?

There are at least 16 other cities in Illinois that have adopted similar fees, including:

- » Morton
- » Eureka
- » Bloomington
- » Normal
- » Champaign
- » Urbana
- » Moline
- » Rock Island
- » Rolling Meadows
- » And more

### **How do I calculate the amount of impervious surface on my property?**

We will calculate the amount of impervious surface on properties using geographic information system, or GIS, data. This information will be available online soon.

### **Are any properties exempt from the stormwater utility fee?**

All properties are subject to the stormwater utility fee except the public right-of-way. Public streets are designed to be part of the stormwater system and therefore are exempt from the fee.

### **When and how will I receive my bill?**

The utility will go into effect June 1, with the first billing being mailed out summer 2018. There will be an option to pay your stormwater utility bill online.

Nobody likes new fees, but the cost of ignoring our wet weather issues will be much higher for our community—and far less equitable or predictable.

### **How can I reduce my fee?**

We are currently exploring credits and incentives that make sense for our community. These fee reductions will be given to property owners who lessen their properties' runoff by making positive changes, like installing a rain garden or using permeable pavers.

Do you have ideas for possible credits and incentives? Please contact Public Works; we are open to suggestions.

### **How can I get involved?**

There are many ways you can make a difference. Take steps to reduce runoff and pollution on your property by exploring sustainable solutions, like rain gardens, permeable pavers, porous concrete, green roofs and other options.

### **Where can I learn more?**

To discuss specifics related to your property and its stormwater contribution, please contact Public Works at [stormwater@peoriagov.org](mailto:stormwater@peoriagov.org). To learn more about these wet weather issues, please visit [PeoriaStormwater.com](http://PeoriaStormwater.com).

## FREQUENTLY ASKED QUESTIONS

### Stormwater Utility Credits and Grants

Stormwater management is a community-wide responsibility. The credits and grants reward property owners for managing stormwater and maintaining stormwater infrastructure on properties not owned by the City. To learn more about credits and grants, please read the draft of the Credit Manual available at <http://www.peoriagov.org/wetweather/library/> under “Stormwater Utility.”

---

**1. Can my existing best management practice (rain garden, detention pond, permeable pavement, etc.) be used?**

Your existing best management practice may qualify for a credit if it was built to the required credit design standards, has been properly maintained and functions as it was designed to function. Your existing best management practice must have its original capacity to qualify.

**2. Can brick or gravel be considered permeable?**

Both brick and gravel are considered impervious surfaces as they are typically not designed for stormwater infiltration. However, in the rare instance that these materials are used in a way designed for stormwater infiltration, the project may qualify for a green infrastructure or rate reduction credit.

**3. Do cisterns qualify for credits?**

Most cisterns will not qualify for credits. Cisterns are underground tanks that can hold stormwater. Many cisterns are old and filled with rock (which is challenging to see as they are underground). Cisterns must have a pump in order to drain the water to have the capacity to hold more water. Most cisterns do not have a pump and a mere hand/manual pump wouldn't be sufficient for the amount of water the cistern holds. It might take a person hours to pump out all of that water, which isn't realistic. If an automatic pump was installed, the project may qualify for an innovation credit.

**4. If I drain my downspouts to grass, do I need to pay the utility fee?**

You would still need to pay the utility fee because most surfaces, including grass, generate stormwater runoff. Native prairies and woodlands still generate runoff. Grass just generates less runoff than impervious surfaces. The City is using impervious area to determine each property's use of the system. This methodology is used by many other cities for their stormwater utilities.

If the City were to do an actual drainage analysis of every property (that would be over 46,800 properties!), the administrative cost would be high and the general outcome of that effort would result in a cost distribution similar to using impervious area information.

**5. Are there options for residents with low or fixed income?**

The City is exploring solutions to lessen the impact of the stormwater utility on residents who have low income. We have discovered that most stormwater utilities do not offer a low or fixed income program.

**6. If I drain to a creek, ravine, pond or lake, am I exempt from paying or would I qualify for a credit/grant?**

Property owners who drain to a creek, ravine, pond or lake still must pay the stormwater utility fee. These waterbodies are important parts of the stormwater infrastructure system. Lakes often feature overflow structures that drain water into the stormwater system when the level rises too high.

The stormwater system is made up of City-owned and privately-owned infrastructure and the utility will provide funds to help maintain that infrastructure. The Private Property Drainage Assistance Program and Stormwater Infrastructure Investment Grant are two programs to help private infrastructure maintenance.

**7. If I drain to the County/Peoria Heights/etc., do I pay?**

Property owners who drain to the County or Peoria Heights will still pay a stormwater utility fee because their property has access to the stormwater system. Everyone benefits from good stormwater infrastructure and drainage even if their property drains elsewhere. Their property would be impacted if the stormwater infrastructure failed. The City of Peoria is following industry standard and is charging everyone who is within city limits.

**8. If I construct a best management practice because it's mandated by ordinance, can I receive a grant or credit?**

If you are required to construct something by ordinance, you cannot receive a grant but you may be eligible for a credit. Grants reward green infrastructure construction when it isn't mandated, but rather the property owner is taking extra steps to improve their property.

Learn more at [OneWaterPeoria.com](http://OneWaterPeoria.com)

**APPENDIX F - CAPITAL EXPENSES**

**City Of Peoria**  
**COMMUNITY INVESTMENT PLAN - ALL ACTIVE PROJECTS**

<b>PROJECT NAME</b>	<b>PROJECT #</b>	<b>Open</b>	
		<b>2023 Actual</b>	<b>Purchase Order</b>
Channel Stabilization - Springdale Cemetery Supplemental Environmental Project (SEP)	O2201	6,000.00	-
Culvert at Abington St. and Madison Ave.	O2203	908,788.08	87,774.42
Culvert at Glen and Sheridan	O2204	641,301.55	34,805.05
Culvert Improvements - Dry Run Creek Tributary A at Gift to MacQueen	O2303	40,637.84	89,402.16
Deerbook Drive Green Street	O2205	478,647.48	269,343.25
Drainage Analysis Engineering	O2102	18,383.00	24,841.58
Drainage Analysis Engineering	O2206	65,102.02	21,541.27
Drainage Improvement - Kickapoo Terrace Access Road	O2308	411,600.64	212,467.03
Drainage Improvements - Donald Street	O2310	45,721.18	6,381.55
Drainage Improvements - Engineering and Modeling	O2306	164,269.96	164,330.04
Drainage Improvements - Kinsey St	O2402	-	82,300.00
Drainage Improvements - North Street and Stonegate Storm Sewer	O2311	54,836.67	286,163.33
Drainage Improvements - Roadside Ditches	O2316	129,515.75	47,384.25
Drainage Improvements - Sheridan Rd between Northmoor and Knoxville	O2317	93,850.00	-
Drainage Repair Program	O2207	801,567.09	80,034.74
Drainage Repair Program	O2307	229,112.72	33,748.78
Drainage Repair Program	O2407	173,522.57	1,933,548.03
Drainage Study - Modeling Big Hollow Creek	O2408	-	200,000.00
Flood Wall Protection at Riverfront	O2208	5,049.13	306,774.87
Green Infrastructure Maintenance and Performance Testing for CSO Control	O2318	89,216.32	13,198.81
Merle & Knoxville Culvert	O2106	1,335,959.08	139,513.36
Moss Avenue from Western Avenue to Sheridan Road	O2325	213,130.52	131,269.48
Native Planting - City Facilities	O2210	1,001,400.22	328,860.00
NPDES MS4 Permit - Records, Mapping, Reporting, Water Quality Monitoring, & Control Measures	O2212	241,515.75	-
NPDES MS4 Permit - Records, Mapping, Reporting, Water Quality Monitoring, & Control Measures	O2312	48,603.96	72,696.04
NPDES MS4 Permit - Records, Mapping, Reporting, Water Quality Monitoring, & Control Measures	O2412	-	8,128.00

Outfall Improvements	O2321	51,053.33	50,208.42
Outfall Repair - Dry Run Creek Tributary C at University	O2322	13,008.02	170,672.98
Outfall Repair - Springdale Creek at Lake Ave.	O2323	5,712.47	144,915.53
Storm Sewer Lining & Repairs	O2213	32,542.24	2,421.76
Storm Water Infrastructure Improvements	O2107	49,693.91	27,266.90
Stormwater Asset Management	O2110	221,427.77	92,972.23
Stormwater Asset Management	O2214	85,033.28	42,092.50
Stormwater Infrastructure Improvements	O2215	637,914.60	132,059.07
Stormwater Utility Grant Program	O2216	183,867.47	203,657.91
Glen Ave - War Memorial Drive to University	R2104	12,237.04	1,234.66
Glen Ave - War Memorial Drive to University	R2208	991,593.25	508,406.75
Big Hollow Bridge Repairs	B2301	37,556.37	-
		<u>9,519,371.28</u>	<u>5,950,414.75</u>

**APPENDIX G - DRAINAGE REPAIR ANNUAL CONTRACT WORK**



# Memorandum

2314 West Altorfer Drive  
Peoria, IL 61615  
(309) 691-5300  
foth.com

April 30, 2024

TO: Eric J. Hansen, Vice President, Crawford, Murphy & Tilly  
CC: Andrea Klopfenstein, City Engineer, City of Peoria, Illinois  
FR: Dixit Solanki, Foth Infrastructure & Environment, LLC (Foth)  
Josh Gabehart, Foth Infrastructure & Environment, LLC (Foth)  
RE: 2023 Drainage Repair Contract Annual Report

Foth Infrastructure & Environment, LLC (Foth) is contracted by the City of Peoria to assist with administering the Drainage Repair Annual Contract (DRAC). Foth’s efforts in 2023 included site investigations, program management, construction observation, and end-of-year reporting.

In 2023, J.C. Dillon, Inc. (Dillon) was contracted to complete the year's construction work under the Drainage Repair Annual Contract (DRAC), extending through to the end of the year.

Funding for the Drainage Repair Annual Contract (DRAC) is sourced from the City of Peoria’s Storm Water Utility (SWU), which allocates resources for engineering, administration, and construction expenses associated with stormwater repairs citywide. The scope of DRAC typically involves projects that are too extensive for City crews to handle but not extensive enough to be included in the Capital Improvement Plan. These projects include a variety of tasks, such as outfall repairs and maintenance, CCTV inspections and cleaning, cured-in-place pipe lining, and structural and piping repairs, among other stormwater-related infrastructure enhancements.

The budget for 2023 was as follows:

2023 DRAC initial Contract	\$1,000,000
2022 DRAC Shortfall	(\$101,773.13)
2023 DRAC Change Order	\$460,000
<b>TOTAL 2023 BUDGET</b>	<b>\$1,358,226.87</b>

On December 14, 2022, the City Council approved a change order extending Dillon's contract for the DRAC through 2023, with the 2023 construction costs budgeted at \$1,000,000, bringing the total contract value to \$2,350,000 through December 31, 2023. In 2022, expenditures totaled \$1,451,773.13, resulting in a budget shortfall of \$101,773.13 for the initial 2023 contract, leaving a remaining budget of \$898,226.87. On June 19, 2023, an additional change order authorized an

increase of \$460,000, raising the 2023 contract limit by \$460,000 and revising the total budget to \$1,358,226.87.

In 2023, \$1,271,539.90 of the \$1,358,226.87 budget was invoiced for various work orders. Of the remaining \$86,686.97, \$75,488.18 has been allocated for emergency environmental remediation due to a diesel spill discovered in the creek during Work Order 23 ARC-06. This reserved amount ensures that we are prepared to cover the costs of the cleanup.

## **1. Annual Repair Contract Work Completed in 2023**

The following work orders (WO) were completed through the 2023 DRAC: video inspection, repairs, and lining projects. Project summaries are included in the work order description.

### **1.1 WO 22 ARC-14, 5019 N. Mansfield Dr. 02 Kennard—Sussex.**

Cost: \$850.06

- ◆ The manhole located in the backyard of 5019 N Mansfield Drive underwent a significant inspection after a crack was identified. The evaluation included televising the manhole to assess the damage's extent and determine the necessity of lining it from the backyard to the outfall. During the inspection, a notably shallow sinkhole was also discovered near the stormwater access point. In response to this issue, the homeowner proactively filled the sinkhole with rock and topped it off with topsoil, effectively stabilizing the area and mitigating the risk of further erosion before the arrival of the inspection team.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$237.50
  - Equipment: \$612.56

### **1.2 WO 22 ARC-25, 256 W. Detweiler Dr.**

Cost: \$10,521.50

- ◆ A thorough CCTV inspection was conducted to assess the condition of the existing drainage infrastructure. The inspection revealed that a 30-foot section of the pipe was compromised and required immediate attention. Based on these findings, a Cured-in-Place Pipe (CIPP) lining process was implemented to address the issue. A 12-inch diameter lining was successfully installed over the identified 30-foot section, effectively restoring the integrity of the pipe. Additionally, adjustments were made to the drainage structure to accommodate the newly lined section better and enhance overall functionality.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$4,117.00
  - Equipment: \$4,689.00
  - Material: \$ 1,715.50

### **1.3 WO 22 ARC-28, 906 W. Oak Glen Dr.**

Cost: \$102,131.41

- ◆ A comprehensive infrastructure improvement project was executed, focusing on a critical section of CMP pipe located underneath a road. This involved lining approximately 70 feet of the pipe to ensure its durability and function. In addition, gabions were installed on the north side of the nearby hill adjacent to the creek to enhance structural stability and control water flow.
- ◆ Vegetation clearance was necessary and carried out over an area of approximately 25 feet to facilitate the project. A sinkhole that had developed as a result of ongoing erosion in the area was also addressed; it was filled in, and the surrounding slope was graded. To further prevent erosion and secure the soil, riprap was strategically placed in the affected areas.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$49,627.50
  - Equipment: \$12,379.40
  - Material: \$ 40,124.51

### **1.4 WO 22 ARC-29,616 Sloan St.**

Cost: \$110,065.31

- ◆ A significant drainage improvement project was undertaken on Sloan Street, involving the installation of a new manhole and two dry wells as specified in the project plans. The construction included trenching and laying 160 feet of 12-inch PVC pipe along with 100 feet of 12-inch perforated PVC pipe to enhance the area's stormwater management capabilities.
- ◆ The trenching work necessary for the pipe installation was conducted directly within Sloan Street, leading to disruptions in the asphalt surface. Consequently, comprehensive asphalt repairs were carried out post-installation to restore the roadway to its original condition, ensuring smooth and safe travel for vehicles and pedestrians alike.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$53,488.00
  - Equipment: \$25,281.70
  - Material: \$31,295.61

### **1.5 WO 22 ARC-38, University Street and Brons Ave**

Cost: \$66,824.27

- ◆ The pipe lining project at University St and Brons Ave involved work on various segments beneath the street. The project specifics included: Lining approximately 50 feet of piping running from catch basin 9875 to catch basin 9874, addressing immediate issues in this short stretch. A more extensive lining job of over 465 feet between catch basin 9881 and catch basin 9874 ensures integrity and flow efficiency over this significant distance. An additional 75 feet of piping was lined from catch basin 9880 to a nearby manhole, securing the connectivity and functionality of this crucial segment.
- ◆ A new manhole with a 4-foot diameter and flat slab top was installed to a maximum depth of 5 feet. To reinforce the existing pipes, a CIPP lining with a 12-inch diameter was applied surrounding this installation. Flowable and porous backfill was utilized around the new structure to ensure stability and proper bedding. After the structural work was completed, the area was paved with new asphalt.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$15,841.00
  - Equipment: \$18,213.63
  - Material: \$ 32,769.64

## **1.6 WO 22 ARC-40, 6135 N. Pin Oak**

Cost: \$15,337.16

- ◆ Approximately 162 feet of pipe leading from catch basin 5378 in front of the property at 6135 N Pin Oak Circle to structure 5378a located behind the house was lined to enhance the durability and functionality of the stormwater system. A CIPP lining with a 15-inch diameter was applied.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$1,275.00
  - Equipment: \$5,132.80
  - Material: \$8,929.36

## **1.7 WO 22 ARC-44, 406 W. Glen Ave.**

Cost: \$33,551.04

- ◆ At 406 W Glen Ave, a critical issue was identified where a pipe joint separation was causing soil and rock to infiltrate through the joint, resulting in a void beneath the road. Additionally, it was discovered that a cable was obstructing through the pipe joints, exacerbating the problem. In response to these issues, a thorough CCTV inspection was conducted to assess the full extent of the damage and pinpoint the specific areas needing attention. Following the

inspection, the affected pipe was lined to seal and reinforce the joint, effectively preventing further material loss and stabilizing the surrounding infrastructure. This repair resolved the immediate void issue and ensured the long-term integrity of the roadway at this location.

- ◆ Breakdown of materials and labor costs:
  - Labor: \$10,983.00
  - Equipment: \$12,528.51
  - Material: \$10,039.53

### **1.8 WO 23 ARC-01, Persimmon Street.**

Cost: \$2,847.08

- ◆ The inlet was inspected and underwent light cleaning. A blockage was identified and subsequently removed. A follow-up CCTV inspection was also conducted to assess the inlet's connectivity, ensuring that the drainage system was fully operational and free of obstructions.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$905.00
  - Equipment: \$1,942.08

### **1.9 WO 23 ARC-02, 1421 W. Daytona Street.**

Cost: \$0.00

- ◆ This Work Order authorized JC Dillon to remove driftwood, fallen trees, and sawed-off branches from the immediate area, where a significant accumulation of debris was noted. The objective was to clear these obstructions to ensure that stormwater flow could resume as intended. However, the completion of this work has been rescheduled for 2024 due to unsuitable weather conditions that prevented the necessary cleaning and delays in obtaining permission to access the site from the backyards of two homeowners.

### **1.10 WO 23 ARC-03, 1903 N. Idaho Street.**

Cost: \$123,831.68

- ◆ Residents on N Idaho St. expressed concerns about a faulty storm drain system that was causing downstream erosion. The system is believed to be comprised of a storm inlet, a culvert connected to the drainage network, and a manhole with a pipe that directs water across Nebraska St. to the outfall. A Work Order was issued to televise the drainage network to diagnose the underlying issues.
- ◆ After a CCTV inspection, it was determined that the system required replacement. This replacement involved excavating the buried pipe, partially

closing the street for safety, and replacing the existing manhole. New piping and lining were installed leading to the outfall. Additionally, geofabric and Rip Rap were installed at the outfall to address the erosion problems. The entire project was carried out in two phases, successfully restoring, and enhancing the functionality of the stormwater management system.

- ◆ Breakdown of materials and labor costs:
  - Labor: \$63,783.10
  - Equipment: \$18,700.50
  - Material: \$41,348.08

### **1.11 WO 23 ARC-06, 114 W. Forest Hill Ave.**

Cost: \$22,537.89

- ◆ The ditch/channel located along the eastern edge of St. Paul Baptist Church was addressed due to blockage caused by a downed tree. The necessary work involved removing this obstruction to restore the channel to its intended flow. Additionally, to prevent further erosion, the side slope from the road to the ditch/channel was stabilized using geofabric and Rip Rap 6 to prevent further erosion.
- ◆ During the initial site visit, a significant diesel spill was detected in the creek, prompting immediate environmental remediation. EnviroServe was contracted to manage the spill cleanup effectively. Currently, efforts are underway to determine liability for the cleanup costs, as the city has not yet identified the individual or party responsible for the spill. Consequently, an amount of \$75,488.18 has been earmarked within the total budget to cover potential expenses, ensuring that funds are available should the city need to absorb these costs.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$10,368.00
  - Equipment: \$8,179.00
  - Material: \$3,990.89

### **1.12 WO 23 ARC-07, 11211 N Greenview Ln.**

Cost: \$4281.78

- ◆ Concern was raised by the residents at 11211 N Greenview Ln regarding a sump pump drain line unable to pump to the city-owned storm sewer. The work order involved televising the storm sewer in the area to check for any blockages and inspecting the drain line valves within the pipe for signs of failure.
- ◆ Breakdown of materials and labor costs:

- Labor: \$1,318.50
- Equipment: \$2,963.28

### **1.13 WO 23 ARC-09, 123 N Kickapoo Terrace.**

Cost: \$18,260.36

- ◆ Inspected all storm sewers at the location. CCTV and light cleaning were completed.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$5,768.12
  - Equipment: \$12,492.24

### **1.14 WO 23 ARC-10, City of Peoria (2022 CCTV Carryover).**

Cost: \$43,193.33

- ◆ Inspected all storm sewers at the location remaining from 2022. The list provided by CMT included areas 1 to 5 in 2022. CCTV and light cleaning were completed.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$4,993.33
  - Equipment: \$38,200.00

### **1.15 WO 23 ARC-11, Nebraska and Lehman Intersection.**

Cost: \$1,722.96

- ◆ In response to complaints about a malfunctioning storm drain, an inspection was carried out. It was initially suspected that the outfall might be buried, prompting a thorough investigation. CCTV surveillance was conducted to determine the condition and functionality of the drain. The resulting report indicated that the storm drain system was operating effectively, and no immediate interventions were necessary at the time.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$397.50
  - Equipment: \$1,325.46

### **1.16 WO 23 ARC-12, Near Nebraska and I74 Overpass.**

Cost: \$16,271.10

- ◆ Previous construction activities had removed a portion of the concrete rip-rap, leading to erosion that cut off vehicle access to Dry Run Creek. The restoration of

this access has been completed; the path was cleared 2 feet beyond the existing concrete edges, spanning an estimated 620 linear feet. The areas where the concrete was removed have been successfully repaired and reinforced with hard-fill materials such as rock, stone, asphalt, or concrete.

- ◆ Breakdown of materials and labor costs:
  - Labor: \$10,145.50
  - Equipment: \$4,842.50
  - Material: \$1,283.10

### **1.17 WO 23 ARC-13, 2401 N. Gale Ave.**

Cost: \$4,039.70

- ◆ The outfall at 2401 N Gale Ave had silted in, prompting an evaluation to determine if any issues were present within the storm sewer. The work order involved CCTV inspection of the stormwater pipe network from N Gale Ave and Elmwood Ave intersection to the outfall near the multi-unit residential dwellings.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$680.00
  - Equipment: \$3,359.70

### **1.18 WO 23 ARC-14, Peoria City Limits (Manhole Access/Maintainance).**

Cost: \$6,978.22

- ◆ As of the end of 2022, over 300 manhole covers throughout the City of Peoria were identified as immovable, obstructed by asphalt overlays or chip seals. To address this issue, a work order was issued authorizing JC Dillon to begin maintenance operations aimed at dislodging these manhole covers to restore access and ensure the functionality and accessibility of the city's underground infrastructure. JC Dillon started the work in North Peoria but stopped due to budgetary constraints.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$3,700.00
  - Equipment: \$1362.02
  - Material: \$1,916.20

### **1.19 WO 23 ARC-15, 2915 W Cambridge Ct.**

Cost: \$593.78

- ◆ This property has submitted two service requests since 2020 to address storm sewer issues. The Work Order was to televise and assess the system, determining necessary measures to stabilize it.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$185.00
  - Equipment: \$408.78

### **1.20 WO 23 ARC-15A, 2915 W Cambridge Ct.**

Cost: \$29,896.72

- ◆ Identified multiple defects and corrosion along the flow line of the CMP (15" dia). Observed a joint separation approximately 74 feet from the inlet and a significant void at 92 feet. Noted frequent smaller voids due to corrosion along the flow line. Settlement along the driveway apron and concrete gutter at 2915 W Cambridge Ct. is linked to the deteriorating condition of the drainage structure.
- ◆ To address the integrity issues, a 15" CIP liner was installed throughout the length of the CMP. Point repairs were conducted at major problem spots identified at 74 feet and 92 feet from the inlet. A new inlet was installed along the concrete gutter at the driveway of 2915 W Cambridge Ct. A 12" RCP from the new inlet to Structure #4225 was laid down. The concrete apron at 2915 W Cambridge was reshaped to route water to the new inlet efficiently.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$18,270.50
  - Equipment: \$5,800.00
  - Material: \$5,826.22

### **1.21 WO 23 ARC-17, N. 1800 Knoxville Rd.**

Cost: \$13,171.11

- ◆ A sinkhole forming near the intersection with Nebraska Rd led to a lane closure. Site investigation revealed a manhole and RCP storm sewer piping at the bottom. The Work Order addressed the repair and reestablished the road base and pavement to IDOT standards.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$4,820.50
  - Equipment: \$3,050.00
  - Material: \$5,300.61

## **1.22 WO 23 ARC-18 & 19, North and McClure (Stabilization & Fence)**

Cost: \$144,592.32

- ◆ In previous years, Significant progress was made in grading and filling the work area. Erosion control measures stabilized the site, including installing a gabion wall and seeding with appropriate erosion control materials like straw matting, Curlex, or Geomat. This work marks the final phase in bringing this location to completion.
- ◆ Completed installation of 364 linear feet of black aluminum fencing and a 6 ft chain link fence, approximately 296 ft in length, including a gate for future equipment access on a structural concrete wall. This was part of the three-year plan to improve this location.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$47,944.20
  - Equipment: \$28,150.00
  - Material: \$68,498.12

## **1.23 WO 23 ARC-20, University Near Kenwick**

Cost: \$38,231.78

- ◆ JC Dillon was authorized and has successfully completed CCTV inspections and repairs near structure #5844 after a sinkhole was discovered approximately 150 feet south of the intersection. The site included a manhole/junction structure equipped with 60-inch and 48-inch pipes at the inlet and a 60-inch pipe at the outlet. This work was crucial in identifying and resolving the source of the issue, forming a key part of the ongoing infrastructure maintenance efforts to ensure the continued safety and functionality of the area.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$23,063.00
  - Equipment: \$11,760.00
  - Material: \$3,408.78

## **1.24 WO 23 ARC-21, CSO Year 3 CCTV and Maintenance**

Cost: \$96,564.76

- ◆ Video inspections and cleanouts were conducted for storm chamber sections beneath permeable pavers at multiple locations.
- ◆ Breakdown of materials and labor costs:

- Labor: \$13,562.44
- Equipment: \$71,320.38
- Material: \$11,681.94

### **1.25 WO 23 ARC-25, 5022 N Circle Ct.**

Cost: \$22,128.36

- ◆ JC Dillon was authorized to conduct CCTV inspections on a deteriorated culvert near 5022 N Circle Ct. The City of Peoria had previously placed a barrel over a void that developed along the culvert, indicating a need for urgent attention. The CCTV inspection revealed that the existing 24" CMP was in a state of deterioration and unsuitable for repair. Based on these findings, JC Dillon was tasked with comprehensive repair work. This included the removal and disposal of the old CMP, the installation of a new CMP culvert, and the restoration of the affected pavement. This work has been performed to ensure the integrity and functionality of the infrastructure at this location.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$9,315.80
  - Equipment: \$5,155.00
  - Material: \$7,657.56

### **1.26 WO 23 ARC-26, 6300 Tamarack Lane.**

Cost: \$1,725.50

- ◆ The property owner submitted a service request due to a depression along a storm sewer line. A site investigation revealed that the depression had been backfilled, but further repairs might still be necessary. A CCTV inspection from the inlet to the outfall has been requested to understand the extent of the required repairs fully. This comprehensive assessment is crucial for determining the complete scope of repairs to ensure the long-term functionality of the storm sewer line.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$200.00
  - Equipment: \$1,525.50

### **1.27 WO 23 ARC-26A, 6300 Tamarack Lane.**

Cost: \$17,492.90

- ◆ A CCTV inspection revealed multiple issues within the pipe run, including intruded sealant rings, a visible void, cracks, and signs of sediment infiltration.

Notably, the last section of RCP at the outfall has shifted. To address these issues, a 12" cured-in-place (CIP) liner was installed along the entire length of the 12" RCP pipe. Point repair was performed for the void located approximately 26 feet from the inlet (PT 4768).

- ◆ Breakdown of materials and labor costs:
  - Labor: \$10,622.50
  - Equipment: \$4,582.62
  - Material: \$2,287.78

### **1.28 WO 23 ARC-27, 1533 Holly Hedges Rd.**

Cost: \$2,070.60

- ◆ A homeowner reported a significant settlement of the sidewalk near PT 6658, an inlet located at 1533 Holly Hedges. An investigation has been initiated to determine the source of the settlement. A CCTV inspection was carried out both ways from the inlet to assess if there were any issues within the storm sewer that required repairs.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$340.00
  - Equipment: \$1,730.60

### **1.29 WO 23 ARC-27A, 1533 Holly Hedges Rd.**

Cost: \$17,849.27

- ◆ Replaced 20 feet of CMP near the inlet at PT 6658, where large voids were identified. Installed a 15" CIP liner across two segments: approximately 77 linear feet from the inlet to a newly adjusted manhole and another 77 linear feet from the manhole to the outfall. The sidewalk near the inlet was also removed and replaced for enhanced safety and accessibility. Seeding restoration was conducted around the repaired areas to stabilize the soil and promote vegetation growth. Point repairs were also made 27 feet from the manhole in Pipe B to address localized deterioration.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$6,475.00
  - Equipment: \$5,893.60
  - Material: \$5,480.67

### **1.30 WO 23 ARC-28, 2322 and 2318 Idaho St.**

Cost: \$1,984.33

- ◆ The homeowners at 2318 N Idaho have raised concerns about driveway settlement and by 2322 N Idaho regarding new erosion in the area, prompting the CCTV inspection to identify any related issues with the stormwater system.
- ◆ During the site inspection, it was determined that a manhole at PT 9155, which had been paved over, needs to be reopened to facilitate the required video collection.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$255.00
  - Equipment: \$1,729.33

### **1.31 WO 23 ARC-29, CSO Storm Sewer Cleaning**

Cost: \$65,706.43

- ◆ The cleaning activities are generally expected to be carried out following any rainfall event that accumulates 1 inch or more, ensuring efficient management and maintenance of the stormwater system. This Work Order authorizes JC Dillon to provide ongoing support to the City of Peoria Public Works department for tasks related to cleaning storm inlets within the Combined Sewer Overflow (CSO) area.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$21,355.00
  - Equipment: \$36,834.18
  - Material: \$7,519.25

### **1.32 WO 23 ARC-30, University and Pioneer Pkwy.**

Cost: \$1522.50

- ◆ The transportation design team had requested CCTV inspections and evaluations of stormwater structures near the intersection of the University and Pioneer Parkway. These inspections were conducted to determine whether the structures needed to be repaired or replaced. Foth identified two locations requiring CCTV inspection efforts. The storm sewer line runs from the entrance of Mike Miller Hyundai to the outfall/inlet on the south side of W Pioneer Parkway. The trunk line and associated inlets along the south side of W Pioneer Parkway near BMW of Peoria.
- ◆ Breakdown of materials and labor costs:

- Labor: \$200.00
- Equipment: \$1,322.50

### **1.33 WO 23 ARC-31, 4606 Sable Tree Cleanup**

Cost: \$1,794.01

- ◆ The 4606 W Sable Way residents reported that a tree was damaged during previous ARC work at their location. In response, a work order was issued to remove and dispose of any damaged trees.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$600.00
  - Equipment: \$1,194.01

### **1.34 WO 23 ARC-32, Frostwood and Courtland.**

Cost: \$1,725.50

- ◆ The sinkhole developed at the southeast corner of Frostweed Parkway and West Courtland Street. A provided photo indicated that the culvert along the flowline had rusted out, which is believed to have caused the sinkhole. A CCTV inspection was requested to investigate the condition of the stormwater pipe further and determine the necessary corrective actions.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$200.00
  - Equipment: \$1,525.50

### **1.35 WO 23 ARC-33, 8748 Picture Ridge**

Cost: \$16,770.94

- ◆ Per the City of Peoria's request, a Type A Structure with a 2-foot diameter Type 8 inlet was installed along the flowline of the south Picture Ridge Road roadside ditch, fronting the property at 8748 Picture Ridge Road.
- ◆ The newly installed structure featured a 12-inch RCP, which was field-fitted with 5 sticks of pipe. This piping was trenched across Picture Ridge Road and successfully connected to an existing structure (#3125) on the north side of the road. This project was undertaken to enhance stormwater management and address water accumulation issues along Picture Ridge Road
- ◆ Breakdown of materials and labor costs:
  - Labor: \$10,818.00

- Equipment: \$3,470.40
- Material: \$2482.54

### **1.36 WO 23 ARC-34, Moss Ave**

Cost: \$8,059.10

- ◆ At the request of the design team, CCTV inspections, cleaning, and maintenance were conducted on the existing stormwater infrastructure along W Moss Ave, spanning from N Western Ave to N Sheridan Rd. The project focused on four key intersections, which were identified as needing thorough inspections and cleaning. These intersections included N Western Ave, N Duryea Pl, N University St/MacArthur Hwy, and N Sheridan Rd. This maintenance work was successfully completed to ensure the optimal functioning of the stormwater system along this critical stretch of W Moss Av
- ◆ Breakdown of materials and labor costs:
  - Labor: \$440.00
  - Equipment: \$7,619.10

### **1.37 WO 23 ARC-35, CCTV & Cleaning Multiple Locations.**

Cost: \$37,030.25

- ◆ CCTV inspections and light cleaning were successfully conducted at multiple locations in Peoria as part of ongoing maintenance efforts. The specific sites addressed included 4808 W Pendleton Place, the stretch from Oak Street to MLK Drive in Peoria, and Various covered manholes along Dry Run Creek, which were uncovered for inspection and cleaning. These activities were carried out to ensure the continued efficiency and functionality of the stormwater management systems in these areas.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$8,629.50
  - Equipment: \$28,400.75

### **1.38 WO 23 ARC-36, 4808 Pendelton Place.**

Cost: \$18,294.89

- ◆ The existing 12" flared end section was removed, and the outfall was extended by approximately 20 feet. Following the extension, the 12" flared end section was reinstalled. Additional work included installing RR-4 riprap, filling the area, and finishing the surface with seeding and straw mulch.
- ◆ Breakdown of materials and labor costs:

- Labor: \$12,539.00
- Equipment: \$2,779.06
- Material: \$2,976.83

### **1.39 WO 23 ARC-37, 2319 E War Memorial Dr. & 818 W Hurlburt St.**

Cost: \$18,294.89

- ◆ 2319 E War Memorial Dr.: Focused repairs were carried out at MH 12909 where the inlet tub and pipe (24415) were removed. The existing setup was only about 5 feet upstream, necessitating a full replacement. A new inlet tube and pipe were installed with a proper seal to ensure connectivity to the rebuilt inlet and MH 12909. Additionally, MH 12909 was inspected to determine its condition, leading to necessary rebuilding efforts.
- ◆ 818 W Hurlburt St / 709 W Johnson Ct. / 135 S. Merriam Ct: At these locations, attention was given to two marked open grates that were replaced with closed lids to enhance safety and functionality. Additionally, a catch basin with a trap was added to improve drainage efficiency and prevent debris entry.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$12,539.00
  - Equipment: \$2,779.06
  - Material: \$2,976.83

### **1.40 WO 23 ARC-38, 1004 Oak Glen.**

Cost: \$9,158.54

- ◆ During a recent inspection, a sinkhole was observed in front of residential homes, temporarily covered with a COP barrel and plywood. It was suspected that the issue stemmed from a joint behind the structure. CCTV inspection confirmed this, leading to immediate action. Point repairs were efficiently executed, replacing a 10-foot section of the old pipe with new HDPE piping. The area was then backfilled, seeded, and mulched to restore the site's condition and prevent further erosion.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$5,856.00
  - Equipment: \$1,800.17
  - Material: \$1,377.37

#### **1.41 WO 23 ARC-39, CCTV Year 1 CSO Locations.**

Cost: \$10,375.34

- ◆ video inspections and cleanouts were conducted for storm chamber sections beneath permeable pavers at the following locations:
  - Leveille and Madison:
    - Inspection from inlet Y1\_S-22 to storm chamber section under permeable paver section Y1\_PP-10.
  - Caroline and Perry:
    - Inspection from inlet Y1\_S32 to storm chamber section under permeable paver section Y1\_PP-14.
  - Caroline and Monroe:
    - Inspection from inlet Y1\_S43 to storm chamber section under permeable paver section Y1\_PP-17.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$6,622.00
  - Equipment: \$3,753.34

#### **1.42 WO 23 ARC-40, Glen Oak Ave.**

Cost: \$15,511.23

- ◆ For the segment of NE Glen Oak Ave stretching from N Berkley Ave to E Pennsylvania Ave, the storm sewer system was televised to assess its condition and determine any necessary interventions for the capital project. Cleaning operations were performed as needed to facilitate a thorough and effective inspection of the infrastructure.
- ◆ Breakdown of materials and labor costs:
  - Labor: \$5,276.00
  - Equipment: \$10,235.23

#### **1.43 WO 23 ARC-41, Big Hollow Creek Stabilization.**

Cost: \$64,277.28

- ◆ Efforts to stabilize the channel included assessing the condition and suitability of existing geofabric and materials for reuse, developing a strategy for moving and repurposing these materials to maintain stability and integrity, adding new crushed stone bedding and Rip Rap R6 material per IDOT specifications for

enhanced scour protection, conducting necessary work on the inlet and outfall structures to prevent erosion.

- ◆ Breakdown of materials and labor costs:
  - Labor: \$5,276.00
  - Equipment: \$10,235.23

## **2. Conclusion**

In reflection of the 2023 fiscal year, substantial improvements to Peoria's stormwater infrastructure were observed through DRAC. The collaboration with J.C. Dillon, Inc. has been instrumental in executing the necessary repairs and enhancements, firmly supported by the dedicated funding from the City of Peoria's Storm Water Utility.

The work orders completed throughout the year reflect a broad spectrum of essential maintenance and improvements that address both emergent needs and long-term sustainability of the infrastructure. From resolving critical pipe separations to enhancing stormwater channels and maintaining essential access through manhole cover adjustments, each project has been carried out with precision and accountability.

As we move forward, Foth remains committed to maintaining a robust project backlog, ensuring timely progress billings, and facilitating ongoing collaboration with JC Dillon to meet the city's infrastructure needs. Our focus will continue to be on delivering high-quality, cost-effective solutions that enhance Peoria's stormwater management systems' safety, functionality, and resilience.

We are grateful for the opportunity to contribute to these vital civic improvements and look forward to continuing our partnership with the City of Peoria, ensuring that our joint efforts in stormwater management yield positive impacts for the community.

### **Attachments**

- Attachment 1: 2023 DRAC Contract & Billing Summary
- Attachment 2: Work Order Summary

**Attachment 1**  
**2023 DRAC Contract & Billing Summary**

### 2023 DRAC Contract & Billing Summary

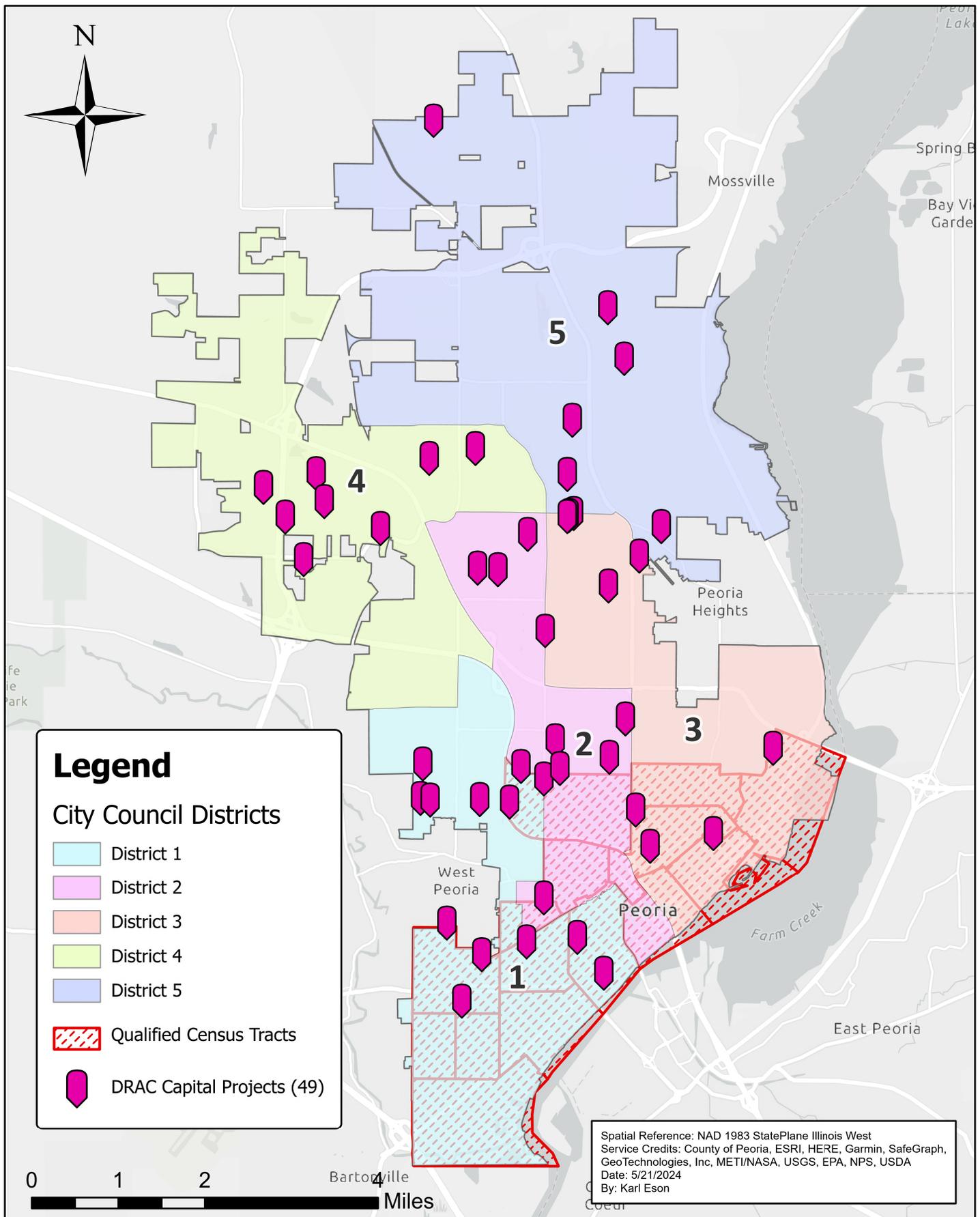
Item	Description	Amount (\$)
Pay App 10		110,850.23
Pay App 11		114,402.85
Pay App 12		288,421.22
Pay App 13		140,221.32
Pay App 14		119,411.51
Pay App 15		129,616.66
Pay App 16		60,005.38
Pay App 17		145,660.32
Pay App 18		55,724.49
Pay App 19		107,225.92
<b>Total Invoiced</b>		<b>1,271,539.90</b>
Initial Contract	2023 DRAC	1,000,000.00
Shortfall	2022 DRAC	-101,773.13
Change Order	2023 DRAC	460,000.00
<b>Total 2023 Budget</b>		<b>1,358,226.87</b>
Remaining Amount	Post Invoices	86,686.97

**Attachment 2**  
**Work Order Summary**

### DRAC Work Order Summary

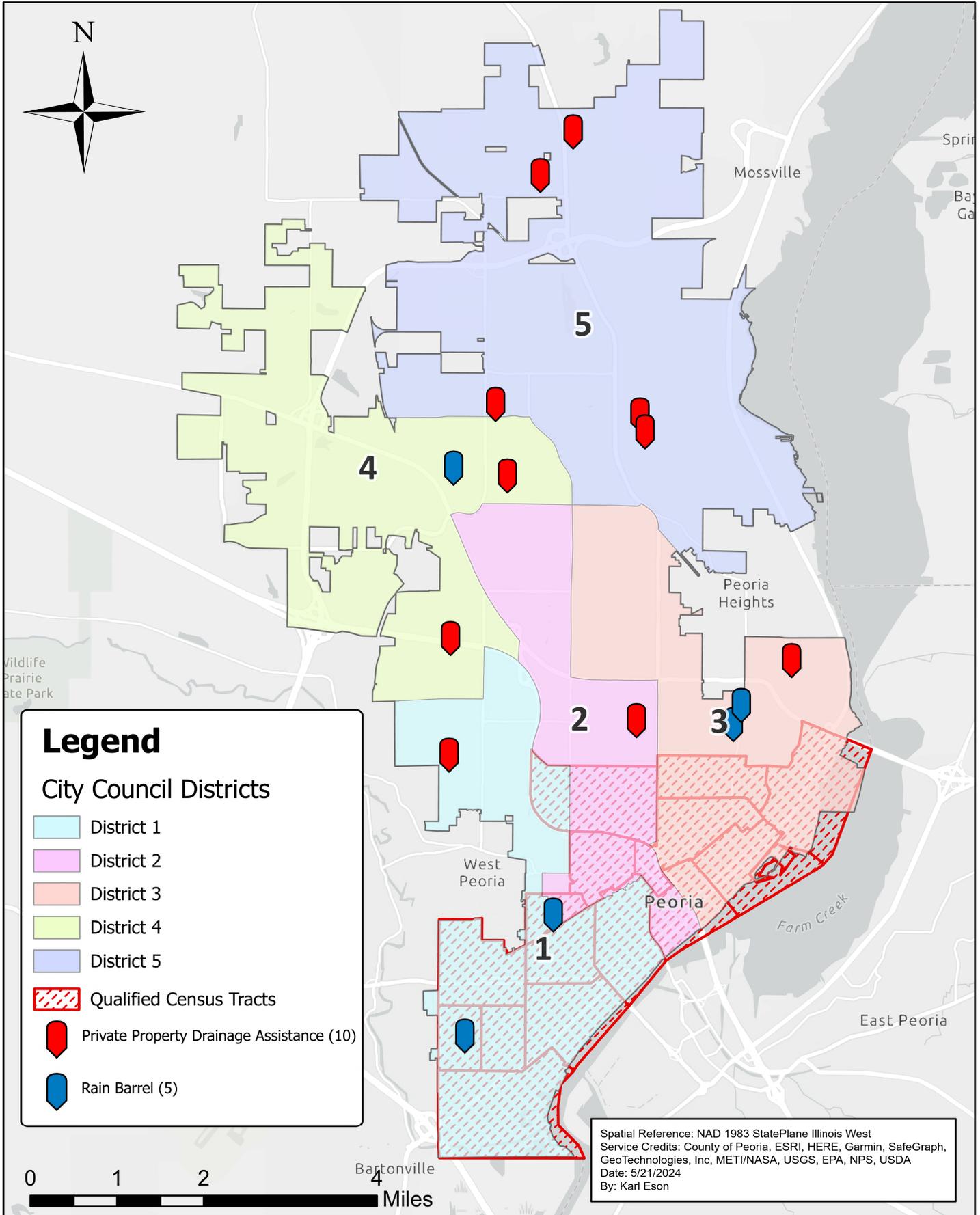
WO#	Location	Status	Invoice	Project Cost
22 ARC 14	5019 N Mansfield Dr. 02 Kennard-Sussex	Completed	Pay App 11	\$ 850.06
22 ARC 25	256 W Detweiler Dr.	Completed	Pay App 11 and 12	\$ 10,521.50
22 ARC 28	906 W Oakglen Dr.	Completed	Pay App 10, 11 and 12	\$ 102,131.41
22 ARC 29	616 Sloan St	Completed	Pay App 10 and 12	\$ 110,065.31
22 ARC 38	University Street and Brons Ave	Completed	Pay App 12 and 13	\$ 66,824.27
22 ARC 40	6135 N Pin Oak Circle	Completed	Pay App 12	\$ 15,337.16
22 ARC 44	406 W Glen Ave.	Completed	Pay App 11, 12, 13 and 14	\$ 33,551.04
22 ARC 46	Prospect Rd (Knoxville to Belmont)	Completed		\$ -
23 ARC 1	Persimmon St.	Completed	Pay App 12	\$ 2,847.08
23 ARC 2	1421/23 W. Daytona	Moved to 20224		\$ -
23 ARC 3	1903 N Idaho	Completed	Pay App 10, 12, and 13	\$ 123,831.68
23 ARC 4	W Imperial Dr	Completed		\$ -
23 ARC 5	St. Marys Rd.	Completed		\$ -
23 ARC 6	114 W Forrest Hill Ave	Completed	Pay App 11	\$ 22,537.89
23 ARC 7	11211 N Greenview Lane	Completed	Pay App 10	\$ 4,281.78
23 ARC 8	2112 W Kettelle St	Completed		\$ -
23 ARC 9	123 N Kickapoo Terrace (CCTV)	Completed	Pay App 13	\$ 18,260.36
23 ARC 10	City of Peoria (2022 CCTV Carryover)	Completed	Pay App 12	\$ 43,193.33
23 ARC 11	Nebraska and Lehman Intersection	Completed	Pay App 12	\$ 1,722.96
23 ARC 12	Near Nebraska and I74 Overpass	Completed	Pay App 12	\$ 16,271.10
23 ARC 13	2401 N Gale Ave	Completed	Pay App 17	\$ 4,039.70
23 ARC 14	Peoria City Limits (Manhole Access/Maintenance)	Completed	Pay App 12	\$ 6,978.22
23 ARC 15	2915 W Cambridge Ct	Completed	Pay App 14	\$ 593.78
23 ARC 15A	2915 W Cambridge Ct	Completed	Pay App 18	\$ 29,896.72
23 ARC 16	7102 N Manning Dr	Completed		\$ -
23 ARC 17	1800 Knoxville Rd	Completed	Pay App 13	\$ 37,562.24
23 ARC 18	North and McClure (Stabilization)	Completed		\$ -
23 ARC 19	North and McClure (Fence)	Completed	Pay App 15,16, and 17	\$ 144,592.32
23 ARC 20	University near Kenwick	Completed	Pay App 13	\$ 38,231.78
23 ARC 21	CSO Year 3 CCTV and Maint	Completed	Pay App 13, and 14	\$ 96,564.76
23 ARC 22	Hannslar and Isabelle Maint	Completed		\$ -
23 ARC 23	1020 Nowland Rd Railing Replacement	Completed		\$ -
23 ARC 24	930 Oak Glen	Completed		\$ -
23 ARC 25	5022 N Circle Ct - Culvert Replacement	Completed	Pay App 14,15	\$ 22,128.36
23 ARC 26	6300 Tamarrack Lane	Completed	Pay App 14	\$ 1,725.50
23 ARC 26A	6300 Tamarrack Lane	Completed	Pay App 19	\$ 17,492.00
23 ARC 27	1533 Holly Hedges Rd	Completed	Pay App 14	\$ 2,070.60
23 ARC 27A	1533 Holly Hedges Rd	Completed	Pay App 17 and 19	\$ 17,849.27
23 ARC 28	2322 and 2318 Idaho CCTV	Completed	Pay App 14	\$ 1,984.33
23 ARC 29	CSO Storm Sewer Cleaning	Completed	Pay App 14, 15, and 16	\$ 65,706.43
23 ARC 30	Nebraska CCTV from I74 to Sterling	Completed	Pay App 16	\$ 1,522.50
22 ARC 12	127 E Frances Ave	Completed	Pay App 14	\$ 3,104.85
23 ARC 31	4606 Sable Tree Cleanup	Completed	Pay App 16	\$ 1,794.01
23 ARC 32	Frostwood and Courtland - Sinkhole	Completed	Pay App 16	\$ 1,725.50
23 ARC 33	8748 N Picture Rd	Completed	Pay App 16	\$ 16,770.94
23 ARC 34	Moss Ave CCTV	Completed	Pay App 16	\$ 8,059.10
23 ARC 35	CCTV multiple locations	Completed	Pay App 16, and 17	\$ 37,030.25
23 ARC 36	CCTV & Repair 4808 Pendleton Pl	Completed	Pay App 17	\$ 18,294.89
23 ARC 37	2319 E War memorial Dr. & 818 W Hurlburt St.	Completed	Pay App 18 and 19	\$ 24,272.53
23 ARC 38	1004 W Oakglen	Completed	Pay App 17	\$ 9,158.54
23 ARC 39	CCTV Year 1 CSO Locations	Completed	Pay App 18 and 19	\$ 10,375.34
23 ARC 40	CCTV & light Cleaning Glen Oak	Completed	Pay App 19	\$ 15,511.23
23 ARC 41	Big Hollow Creek Stabilization	Completed	Pay App 19	\$ 64,277.28
Total				\$ 1,271,539.90
2023 Budget				\$ 898,226.87
Change Order				\$ 460,000.00
Remaining				\$ 86,686.97

# Drainage Repair Annual Contract Project Locations



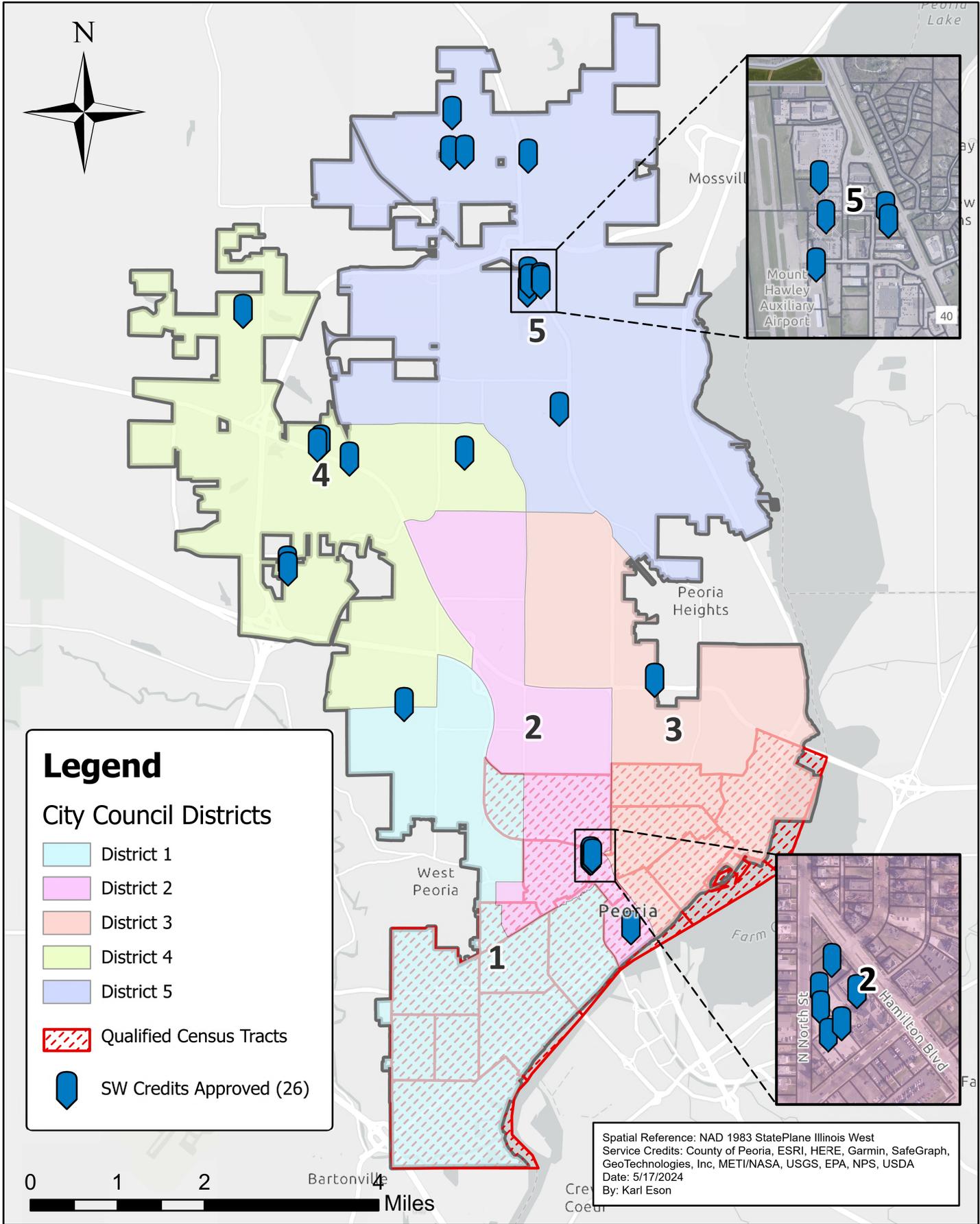
**APPENDIX H - GRANT LOCATIONS**

# PPDA & RB Grants Approved



**APPENDIX I - STORM WATER UTILITY CREDITS**

# Stormwater Credits 2018-2023



Spatial Reference: NAD 1983 StatePlane Illinois West  
Service Credits: County of Peoria, ESRI, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA  
Date: 5/17/2024  
By: Karl Eson

**APPENDIX J - MAINTENANCE EXPENSES**

Cost Summary By Task

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Cleaning Inlet Tops	100	2,667.00	\$95,041.88	\$93,980.82	\$0.00	\$0.00	\$0.00	\$189,022.70
Concrete	78	2,916.00	\$101,865.82	\$161,300.24	\$66,945.16	\$0.00	\$0.00	\$330,111.28
Concrete - Curb Gutter Storm Sewer	1	40.00	\$1,365.92	\$883.76	\$0.00	\$0.00	\$0.00	\$2,249.68
Hauling & Handling Materials / Equipment	140	2,329.50	\$82,346.45	\$118,913.41	\$475.95	\$0.00	\$0.00	\$201,735.81
Headwall Cleaning	1	16.00	\$554.48	\$101.04	\$0.00	\$0.00	\$0.00	\$655.52
Inlet Inspection	15	226.00	\$7,810.20	\$6,948.24	\$84.00	\$0.00	\$0.00	\$14,842.44
Storm Sewer Repair	118	3,339.50	\$114,879.11	\$98,671.53	\$11,700.05	\$0.00	\$0.00	\$225,250.73
Storm Sewers Cleaning	179	4,390.00	\$156,476.34	\$104,490.13	\$1,165.01	\$0.00	\$0.00	\$262,131.49
Street Sweeping	64	8,831.39	\$303,355.59	\$582,564.61	\$0.00	\$0.00	\$0.00	\$885,921.80
<b>Tasks:</b>	<b>9</b>	<b>696</b>	<b>24,755.39</b>	<b>\$1,167,853.78</b>	<b>\$80,370.18</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$2,111,921.46</b>
			<b>\$863,695.78</b>		<b>\$80,370.18</b>		<b>\$0.00</b>	

# City of Peoria

## Cost Summary By Task

Reporting Dates Year 2023

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Tree Planting	1	17.00	\$862.24	\$624.24	\$0.00	\$0.00	\$0.00	\$1,486.48
Tree/Brush Trimming	25	7,235.67	\$270,435.02	\$209,806.36	\$0.00	\$0.00	\$0.00	\$480,244.43
Tree/Brush Trimming/Removal Contract	2	17.50	\$892.64	\$576.44	\$0.00	\$0.00	\$0.00	\$1,469.08
Weed Eat / Trim	2	63.25	\$2,144.48	\$1,496.32	\$0.00	\$0.00	\$0.00	\$3,640.80
<b>Tasks:</b>	<b>4</b>	<b>30</b>	<b>7,333.42</b>	<b>\$212,503.36</b>		<b>\$0.00</b>		<b>\$486,840.79</b>
			<b>\$274,334.38</b>		<b>\$0.00</b>		<b>\$0.00</b>	

**APPENDIX K - PEORIAN CORPS REPORT**

## PeoriaCorps Update for 2023

After a brief interruption in the PeoriaCorps program between October 2021-April 2022 due to program director vacancy and contract transition from IDPH to IDHS funding, the program returned robustly in September of 2022 under new program director, Amelia Ohlrogge and a new crew supervisor. Clara Gonzalez joined in the Fall of 2022, temporarily replacing long term supervisor Darren Graves, who left for military leave. Darren Graves returned from his military leave in November 2023 to another position in the City of Peoria and Clara Gonzalez is still serving as Crew Supervisor.

With a full administrative team in place, at the end of 2022, PeoriaCorps was ramped up to operate at full capacity. Between September 2022 and March 2023, a cohort of five (5) young adults participated in the program. Between March and Summer 2023 a cohort of five (5) adults of diverse ages completed the program. In October 2023 six (6) additional members were recruited and started their service, totaling 16 citizens of Peoria that participated in PeoriaCorps between late fall 2022 and fall 2023.

In September 2023, Amelia Ohlrogge, the previous case manager, and later Director of PeoriaCorps transitioned into another City of Peoria role. A long-term nonprofit administrator with significant experience managing social service programs began as the new Director of the program that same month. As the new director, Yelene Modley's primary goal is build on the unique strengths of PeoriaCorps to deepen its impact on the participants and the greater City of Peoria. Renewed focus is on strengthening PeoriaCorps' job readiness components and better prepare its members to obtain and sustain permanent employment.

In 2023 members recorded a cumulative **5,158** hours of service, including **4,580** program hours of litter removal, seed harvesting, plant maintenance, installation, and watering of green infrastructure landscapes within the City of Peoria, servicing a total of over 66 acres of green space.

Members in each cohort participated in The National Service Opening Day of Service in recognition of their work in assisting with the installation of native plants in the new landscaping at Peoria's Fire Central located on Monroe in Downtown Peoria. Additionally, members supported two community service days including Martin Luther King Jr. Day and Juneteenth.

The MLK community wide service day hosted by PeoriaCorps coordinated roughly 60 volunteers including PeoriaCorps members, in removing debris and waste from a high traffic underserved community area in the City of Peoria. This highly successful event helped to highlight the message of citizens taking responsibility for the continued efforts of keeping our city clean and free of debris that could enter the waterways.

**APPENDIX L - EQUIPMENT MAINTENANCE**

**Fleet Maintenance Work Summary**

Grouped by Employee / Contractor

Work Orders	Equipment Units Worked On	Employee / Contractor	Labor Hours	Labor Cost	Parts Cost	Total Cost
148	31	Brown, Cody	279.00	\$10,277.89	\$16,681.69	\$26,959.58
75	25	Davis, Andrew M	151.75	\$5,639.92	\$2,692.95	\$8,332.87
164	33	Jackson, Terry G	164.50	\$8,482.09	\$19,297.59	\$27,779.68
11	10	Morefield, Christopher	42.75	\$1,549.85	\$459.49	\$2,009.34
223	37	OWEN, CARL	292.75	\$12,267.89	\$28,130.06	\$40,397.95
128	33	Raynor, Cheyne R	290.00	\$15,835.28	\$29,640.91	\$45,476.19
56	23	Spees, Glenn S	50.25	\$2,830.69	\$5,436.66	\$8,267.35
130	52	Weddle, Jonathan S	231.75	\$8,948.48	\$11,621.44	\$20,569.92
1	1	AUTOMOTIVE SPRING	1.00	\$1,131.06	\$0.00	\$1,131.06
6	6	Cady	6.00	\$220.00	\$0.00	\$220.00
1	1	Centre State International Tru	1.00	\$0.00	\$0.00	\$0.00
1	1	CRANES & EQUIP CORP	1.00	\$11,928.77	\$0.00	\$11,928.77
2	2	CUMMINS ONAN/CROSSPOINT	2.00	\$996.14	\$0.00	\$996.14
1	1	Koenig Body & Equipment	1.00	\$445.58	\$0.00	\$445.58
1	1	MARTIN EQUIP. OF IL	1.00	\$931.56	\$0.00	\$931.56
1	1	PEORIA TIRE & VULCANIZING CO.	1.00	\$324.45	\$0.00	\$324.45
1	1	WALZ SCALE CO	1.00	\$222.00	\$0.00	\$222.00
2	2	No Mechanic Assigned	0.00	\$0.00	\$0.00	\$0.00
2	2	No Mechanic Specified				
			<b>19</b>	<b>1,517.75</b>	<b>\$113,960.79</b>	<b>\$195,992.43</b>
				<b>\$82,031.64</b>		
<b>Cost / Unit:</b>			<b>65</b>	<b>23.35</b>	<b>\$1,262.03</b>	<b>\$1,753.24</b>
<b>Cost / WO:</b>			<b>726</b>	<b>2.09</b>	<b>\$112.99</b>	<b>\$156.97</b>