



2021 Stormwater Utility Report

Prepared by Public Works

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EXECUTIVE SUMMARY

The year 2021 was the third complete calendar year of the City of Peoria Stormwater Utility (SWU). The COVID 19 pandemic, beginning in 2020, continued to affect the budget, staffing, operations, communications, public outreach, and public involvement, and many more of the day-to-day stormwater activities through 2021.

On December 5, 2017, City Council amended Chapter 31 of the Municipal Code of Peoria to create the SWU to funding 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 organizes the various activities that are essential to operating Peoria’s stormwater utility.

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 person(s) with expertise in mechanical equipment, software systems, engineering, surveying, construction, public administration, finance, communications, and legal matters. All are essential in delivering the stormwater management program. In the past, the City’s ability to deliver these services has been limited because funds dedicated to stormwater management have not been 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 2021 year with a fund balance (net position) of \$19,612,615.

SWU revenues (including interest) from approximately 46,300 customers was \$16,685,423. 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 \$5,405,061. Unaudited SWU expenses includes 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 2021 year hasn't been closed out and encumbrances (expenses that have been planned for and approved but have not yet been spent) are still held in that year. Below are the unaudited SWU expenses including encumbrance amounts. Actual expenses at the time the report was generated would be the total below minus the encumbrance amount.

Administrative expenses were \$2,381,717 (\$103,344 encumbrances)
 Maintenance expenses were \$851,525 (\$31,581 encumbrances)
 Capital Improvement expenses were \$2,171,819 (\$574,795 encumbrances)

January 1, 2021, Fund Balance	\$19,612,615	
	Revenue	Expense
2021 SWU Revenues	\$16,685,423	
Administrative Expenses		\$2,381,717
Maintenance Expenses (see notes)		\$ 851,525
Capital Improvement Expenses (see note)		\$2,171,819
December 31, 2021, Fund Balance	\$30,892,977	
Note: The Community Improvement Plan (CIP) includes all the Capital Expenses and some of the Maintenance Expenses		

Table 2: SWU Revenues and Expenses

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 the stormwater utility, determining Community Investment Plan (CIP) and operational budget funding levels and guiding Departments as they perform their duties related to the stormwater utility. The Finance Director 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 responsible for billing and receiving the stormwater utility fees, paying invoices, and tracking revenues and expense for the SWU fund. The Treasurer's office is responsible for collecting payments of the stormwater utility bills. The Legal Department handles legal questions about the utility structure relative to state and federal laws and regulatory policies.

The Public Works Department is responsible for public education about environmental impacts of stormwater runoff, appeals, credits, grant funding, and asset management of drainage infrastructure. Asset Management includes data management, maintenance, repairs, and construction of storm drainage infrastructure.

ADMINISTRATION

Administrative efforts to manage the City's Stormwater Program require engineering, maintenance, fiscal, and administrative staff to perform a variety of services. Staff billed customers, assisted customers with questions about their bills, reviewed appeals requesting changes to the impervious area measurements, processed credit, and grant applications, expanded the GIS database with information from maintenance staff and contractors, responded to storm-related problems, managed contractors, and consultants, and took steps to create a comprehensive asset management system.

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. AR create final bills for the original owner and updates with the new owner information for property deed transfers (property sale). AR updates accounts when parcels are combined or changed. 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 an error with the impervious surface map. In 2021 the department received approximately 76 appeals. Public Works also maintains an impervious area map where customers can look up the impervious areas that are charged. It is available on the City's peoriastormwater.com 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 SWU credit and grant programs if applicable.

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. The credit renewal includes an inspection by technical staff to verify that the systems are functioning. Credit applications received 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 J** provides a map of approved 2021

Credits. The Credit and Grant Manual is available to the public on the website peoriastormwater.com.

Volume Control Credit

Public Works received two applications for the Volume Control Credit in 2021 and both applications were approved. 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 10% volume control credit. Capturing the Combined Sewer Overflow (CSO) design storm event of 2.61" of rainfall earns a 25% volume control credit. These reductions apply to the impervious area that contributes flow to the infiltration basin.

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. Public Works did not receive any applications during 2021.

Rate Reduction Credit

Public Works received zero applications for the Rate Reduction Credit in 2021. The rate reduction credit offers two different levels of credits depending on the level of control. Bills will be reduced 10% for a detention pond that complies with the City's current stormwater management standard to detain runoff from a 25-year rainfall event. Bills will be reduced 25% for a detention pond that manages runoff produced by a 100-year rainfall event.

Direct Discharge Credit

Credits are available to applicants that demonstrate that their impervious area drains directly to the Illinois River. Public Works received three applications for the direct discharge credit in 2021 that encompass 10 properties. Seven of the ten properties qualified and were approved, two properties were denied, and one property is providing more information.

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, 2022.

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.

Following permit requirements, Peoria submitted an annual report to the IEPA for the period of March 2020 to March 2021 by June 1, 2021. See **Appendix A** for the Annual report. The annual report for March 2021 to March 2022 is due on June 1, 2022. The annual reports describe 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 peoriastormwater.com website. See **Appendix E** for the flyers.

The Peoria Stormwater website contains public education materials on stormwater issues as well as gives customers tools to review their impervious area, learn about the appeals process, download the credit, and grant manual, and contact City staff.

Due to COVID 19 the Clean Water Celebration, Party for the Plant and Public Works Open House were cancelled. In the past, the City regularly attended these three booth events. COVID also eliminated the opportunity to provide public education at public meetings, neighborhood group meetings and other public events.

POLLUTANT CONTROL MEASURES

The Public works contracts with consulting engineers to perform the mapping and dry weather screening required by the IEPA permit. In 2021, the project documented 464 outfalls bringing the total to 922 outfalls mapped during this mapping effort. The City did not receive any illicit discharge complaints.

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.

The City requires volume control of the first inch of rainfall; this complies with the post construction stormwater control requirements.

The APWA conference, where Public Works staff typically attends training to learn how to provide good housekeeping for municipal operations, was online due to COVID. Two engineers and several operations staff attended the 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 purchased water quality sampling equipment and additional rain gauges in 2021 that will be used in 2022 and successive years as described in the plan provided in **Appendix B**.

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 stormwater 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.

GIS DATABASE

The 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. In 2021, the project mapped 9.3 miles of storm sewer within 1.4 square miles of the City. Since the start of the mapping project, this effort has mapped 153.5 miles of storm sewer over 36.2 square miles of the City. The CSO area is eight square miles. This mapping effort to date has identified 922 locations where a storm sewer pipe discharges runoff into a natural drainage path such as a creek. These are commonly referred to as outfalls. Public Works uses this information to determine maintenance and capital investment priorities.

Public Works staff maintains and manages the GIS storm water data. GIS is the system of record for Public Works' asset data.

INSPECTIONS AND CONDITION ASSESSMENT

Public Works staff maintains a database of storm sewer condition data collected by televising crews. In 2021, City staff inspected and rated (by TV inspection) approximately 10,000 feet of storm sewers. Public Works uses this information, along with other data, to determine maintenance and capital investment priorities for storm sewer pipe projects. In the future, the City will expand the asset location mapping and condition assessment to include other storm sewer system assets such as manholes, ditches, outfalls, etc. Work will switch to asset maintenance mode once all the assets are located and assessed. The engineer technician responsible for televising left the city in October 2021. The City is working to hire a replacement.

RECORD DRAWINGS

It is a significant effort to create and manage records also known as "as-built" or "record" drawing. 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.

SYSTEM MAINTENANCE

The City used the SWU funds to maintain and repair the City's storm drainage infrastructure in 2021. During 2021, the City used contracted services to perform mowing, tree removal, and other routine maintenance activities. City staff provided a bulk of the storm drainage related maintenance activities in 2021.

ASSET CLEANING AND MAINTENANCE

Public Works maintenance crews were busy in 2021 inspecting, cleaning, and maintaining the storm sewers. Cleaning and repairing inlets, culverts, and storm sewers are priorities for city maintenance staff. **Appendix K** provides details about the work performed and labor costs reported to these activities. The following is a summary of the maintenance work performed:

- 210 Hours of staff time spent cleaning inlet tops
- 15 Hours of staff time spent cleaning headwalls
- 1,499 Hours of concrete and concrete work
- 70 Hours of Inlet Inspection
- 529 Hours of Inspection of Pipes
- 2,056 Hours of staff time spent on storm sewer repairs
- 554 Hours of staff time spent on storm sewer cleaning
- 8,629 Hours of street sweeping

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 provides ash or dead tree removal, tree uplifting, tree planting, and tree pruning.

SWU funds pay for mowing and weed control on approximately 1,100 vacant lots. The city hires multiple contractors to mow these lots. The contractors mowed the vacant lots approximately 18 times.

The total costs of these services as tabulated in **Appendix K** is \$1,118,731.

EQUIPMENT MAINTENANCE

The Public Works crews use street sweepers, work trucks, jetting and vacuuming trucks, excavators, and many more pieces of equipment and tools. Public Works fleet staff maintain the tools and equipment used by Public Works crews. Having the right equipment makes it safer and more efficient to complete the work. Costs for stormwater equipment maintenance in 2021 were relatively low at \$11,173.

WORKFORCE DEVELOPMENT

PEORACORPS

The training program focuses on job skills required to maintain green infrastructure; that is designed to replicate natural conditions within the urban environment to reduce the amount of

rainfall that becomes runoff and enters the storm sewer pipes. **Appendix L** provides additional details about the 2021 PeoriaCorps program.

Seventeen persons completed the 2021 PeoriaCorps program. 2021 included two cohorts, the fifth and sixth groups to complete the AmeriCorps job training program in Peoria. The first cohort included six members from March to September and the second cohort included one member from August to October. Since its inception in 2017, PeoriaCorps has had 52 participants graduate from the program. *In the first half of 2021 PeoriaCorps participants recorded approximately 300 hours of litter removal, plant maintenance (Invasive Species Removal/Weeding, Organic Material removal) of green infrastructure worksites within the city. The second half of 2021 PeoriaCorps participants recorded approximately 490 hours of litter removal, plant maintenance (invasive species removal/weeding, tree/bush trimming, planting of pollinating flowers and prairie grass, deadheading of flowers), and watering of green infrastructure worksites within the city. In all the 2021 PeoriaCorps program accumulated 180 acres of maintained green space and 800 hours of service within the city.

After receiving hands-on instruction about maintaining plants in landscaped areas and their importance to stormwater management, students are also provided communication, time management, and self-efficacy skills. Upon successfully completing the job training program, applicants are eligible and encouraged to take an exam to become certified by the National Green Infrastructure Certification Program. As of the publication of this report, PeoriaCorps has had three graduates to complete the certification process.

MAYOR'S YOUTH PROGRAM

The Mayor's Youth Program is an eight-week program summer program. The Mayor's Youth Program is a paid summer program for high school juniors and seniors in the Peoria school systems. The students perform tasks such as, weeding and mulching, litter pick up, tire pick up and other tasks as assigned. On Fridays, students attend career exploration presentations. In 2021, there were twelve student participants and the program operated for six weeks instead of the usual eight weeks. The total amount spent through the program for 2021 was \$60,000, which came out of 101 funds, not the stormwater utility, because the City anticipated receiving a grant.

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 2021 budget year saw \$2,746,615 of SWU funds spent in delivering the Capital Improvement Plan. This amount is less than the 2021 budget. The work and spending limitation of the COVID-19 pandemic that started in 2020 carried over to 2021. Capital improvements require significant time to gather information and design improvements before actual construction can begin. The work restrictions of the pandemic significantly delayed this process and resulted in a significant reduction in the number of projects completed in 2021.

CAPITAL PROJECTS

During 2021, the City used contracted services to perform mowing, tree removal, and other routine maintenance activities. **Appendix F** provides a tabulation of project work in 2021.

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 to the neighborhood and streets than the traditional open trench excavation type of construction. In 2021, the City spent \$1,272,383 at thirty-three different locations throughout the city repairing and reconstructing existing storm sewer infrastructure. An additional \$280,111 was spent for engineering related services.

Appendix G provides a detailed report of the improvements.

GREEN INFRASTRUCTURE MAINTENANCE

This item provides funding to replant and maintain existing city -owned green infrastructure sites throughout the city. \$8,722 was spent on this activity in 2021.

DRAINAGE ANALYSIS ENGINEERING

A variety of engineering investigations, studies, design, and program management efforts falls under this project description. Drainage studies of specific areas such as the area bounded by Sheridan, Knoxville, Glen, and War Memorial were initiated in 2021. Another study area near the Lake and University intersection was initiated in 2021. This CIP project also included efforts to establish guidelines for how drainage studies will be completed and established standard processes for reporting data. \$200,738 was spent for engineering studies in 2021.

MERLE DRIVE CULVERT REPLACEMENT AT KNOXVILLE

This project will replace the deteriorated pipe under Merle Lane at Knoxville Avenue. The project has been coordinating with property owners and working on obtaining all required permits for starting construction in 2022. \$115,722 was spent on professional engineering and land acquisition fees in 2021. \$600,000 is programed for construction in 2022.

GLEN AND SHERIDAN CULVERT

Final payments in 2021 for the construction of the 72" concrete pipe at the northwest corner of Sheridan and Glen amounted to \$116,732. This project was added to the 2020 capital project list when an existing culvert carrying Tributary C of Dry Run Creek under the Red Carpet Car Wash building had collapsed and threatened to cause extensive flooding damage to the area.

STORMWATER CLEAN WATER ACT

This project funds the efforts for the City to comply with the requirements of the Clean Water Act National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Water System (MS4). See section Permit Compliance for more information on the work completed. \$247,683 of SWU funds were spent on these efforts in 2021. Most of the cost is attributed to the surveying, inspection, and mapping of the drainage infrastructure. **Appendix D** identifies the area that was mapped in 2021.

SPRING LANE & ORCHARD LANE SUBDIVISION DRAINAGE

Final Design and easement acquisition was completed in 2021 and the project was put out to bid in November 2021. A contract was awarded to Knapp Concrete for \$461,000 to construct

the improvements in 2022. The 2021 expenses against this project number is \$241,435. Additional funds will be spent in 2022 to complete the project.

ASSET MANAGEMENT

The City has begun the process of implementing a comprehensive asset management program to guide city capital and maintenance funding investments in future years. This process relies on a comprehensive database of city infrastructure. The city spent \$40,000 of SWU funds in 2021 in preparation for this transition to an asset management approach to budgeting and delivering services.

MISCELLANEOUS PURCHASES

Minor equipment and software purchases in 2021 amounted to \$28,480.

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 two of the four grant programs. During 2021, the City awarded \$212,4188 of SWU funds as grants for stormwater improvements on private property.

RAIN BARREL GRANT

Nine property owners applied to the Rain Barrel Grant program to purchase 12 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.

GREEN INFRASTRUCTURE GRANT

Public Works uses a consultant to review the Green Infrastructure Grant applications. The consultant reviewed and approved five grant applications in 2021. These projects were completed and reimbursed for a total reimbursement of \$46,967.00. One project installed 13,440 square feet of Permeable pavers that will be managing 15,790 square feet of impervious area. The other four projects were rain gardens that are managing 7,366 square feet of impervious area. **Appendix I** provides a map of these project locations.

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 is \$7,500. Public Works uses a consultant to run the Private Property Drainage Assistance (PPDA) grant program. Out of the twenty-six received PPDA applications, the consultant approved twenty-four PPDA applications. The approved projects were reimbursed a total of \$174,961. **Appendix H** provides a report of these project locations.

STORMWATER INFRASTRUCTURE INVESTMENT GRANT

Stormwater Infrastructure Grants Investment Grants will fund large and complicated projects such as stream restoration and stabilization. Public Works staff answers questions about project eligibility and anticipates receiving applications in future years. No projects were submitted for this grant.

APPENDIX A



Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2020 To March, 2021

Permit No. ILR40 <u>0424</u>

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: City of Peoria Mailing Address 1: 419 Fulton
 Mailing Address 2: _____ County: Peoria
 City: Peoria State: IL Zip: 61604 Telephone: 309-494-8800
 Contact Person: Andrea Klopfenstein Email Address: aklopfenstein@peoriagov.org
 (Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

City of Peoria

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- | | | | |
|--|-------------------------------------|---|-------------------------------------|
| 1. Public Education and Outreach | <input checked="" type="checkbox"/> | 4. Construction Site Runoff Control | <input checked="" type="checkbox"/> |
| 2. Public Participation/Involvement | <input checked="" type="checkbox"/> | 5. Post-Construction Runoff Control | <input checked="" type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination | <input checked="" type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping | <input checked="" type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Andrea Klopfenstein
 Owner Signature:
Andrea Klopfenstein
 Printed Name:

05/27/21
 Date:
City Engineer
 Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 WATER POLLUTION CONTROL
 COMPLIANCE ASSURANCE SECTION #19
 1021 NORTH GRAND AVENUE EAST
 POST OFFICE BOX 19276
 SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Attachments to Annual Facility Inspection Report
 General NPDES Permit for Discharges
 from Small Municipal Separate Storm Sewer Systems (MS4)
 City of Peoria, IL
 YEAR 5– MARCH 1, 2020 – FEBRUARY 28, 2021
 For Permit #ILR40-0424

Best Management Practices are derived from the Notice Intent for the March 1, 2016 - February 28, 2021 permit.

Attachment A. Changes to Best Management Practices

1. Public Education and Outreach
 - Due to COVID the public events that the City normally attends to host a booth and provide public education and outreach were cancelled.
 - See attachment B.
2. Public Participation/Involvement
 - Due to COVID in person public meetings and events were cancelled.
 - 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
 - Due to COVID the APWA conference where staff training normally occurs was cancelled.
 - 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 measureable 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 3

The status of progress towards achieving identified measureable 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, approximately 50 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. Approximately 50 were distributed at meetings, 50 at booth events, and an unknown number downloaded.
- The City distributed the Credit and Grant manual which describes the stormwater utility Credits and Grants available and includes some basic stormwater education. Approximately 3 copies of the manual were distributed and an unknown number downloaded.

- The City notified developers of NPDES requirements for approximately 23 potential projects, with permits issued for of those 16 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
- “Party for The Planet” event normally held at the Peoria Zoo was 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 maintains the PeoriaStormwater.com website which has educational materials on stormwater related topics.

A Additional BMP completed

- The City’s Mayor’s Youth Program performed maintenance of some stormwater planters, and placing mulch, they also participated in neighborhood cleanups (litter pickup). There were approximately 12 student workers at the start of the program. The program was shortened and there were less students due to COVID.
- Peoria Corps is a program intended for disadvantaged persons and is a group of 7-10 people for each cohort. The PeoriaCorps members were taught job training for maintenance of green infrastructure and maintained the public works rain garden, the Washington Street planter boxes

BMP B. Public Participation/Involvement

B.3 Stakeholder Meeting

- Public Presentations were cancelled due to COVID

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 are mostly in the City's CSO area. There are a couple of environmental justice areas north of Nebraska and east of I 74 that are in the MS4 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. Nineteen (19) 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, 21 rain barrels for 15 properties were funded with this program.
- The City continued funding the Green Infrastructure grant program in January 2019. Ten projects were approved during the reporting period but only one built in 2020.
- The City funded Great American Clean Up, was cancelled due to COVID.
- The City supports the Mayor's litter Commission which is a litter pickup group with approximately 100 people.
- According to PubWorks 319 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. A total of 36.6 square miles of the City has been mapped, with 147 miles of pipe, and 10,399 storm sewer structures mapped through this effort.
- 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. Records on file. Below are the illicit discharges that were reported to Public Work during the reporting period.
- November 11, 2020, the city received a complaint from the IEPA about a car leaking fluid. The City performed two site visits and did not find the car.

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.
- 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. Approximately 50 were distributed at meetings, 50 at booth events, and an unknown number downloaded.

- The city maintains the PeoriaStormwater.com website, Learn the Issues section/Pollution Overview, 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.

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.

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.

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 enforcements by complaint.
- The city

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 APWA conference at the Peoria Civic Center was cancelled due to COVID.

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 put together a water quality monitoring plan. The consultant took the first set of quarterly samples on February 6, 2019. The 2019 data is posted on our website. The city is working on setting up TMDL sampling in the future, as resources allows.

BMP F. Pollution Prevention/Good Housekeeping

F.1 Employee Training Program

- The ICAT conference was cancelled due to COVID.
- The APWA conference at the Peoria Civic Center was cancelled due to COVID.
- Training specifically for contractors was not completed by the City of Peoria.

F1.1 Develop and provide annual employee training

- Additional training material and topics will be covered in future years. The City was on the American Public Works Association (APWA) local chapter conference committee helping to line up speakers on stormwater issues for the May 2020 conference. The conference was canceled due to COVID-19.

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 continue to store deicing materials in permanent or temporary structures or under tarps and as far from storm drains as possible.

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

- In 2018 the City hired a consultant to put together a water quality monitoring plan. The consultant took the quarterly samples in 2020. The 2020 sampling report will be available on the peoriastormwater.com website in the near future. The city is working on setting up TMDL sampling in the future, as resources allows.
- We have installed green infrastructure BMPs for the Adams St Pilot project and will have monitors in place. We also have been creating maps of green infrastructure BMPs.
- 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, 2021 – February 28, 2022

BMP A. Public Education and Outreach

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

BMP B. Public Participation/Involvement

- Continue program.
- Hold stakeholders meeting including environmental justice.
- 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.
- 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.

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.

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 employees and contractors.

Results of Information of Collected and Analyzed, Including Monitoring Data

- In 2018 the City hired a consultant to put together a water quality monitoring plan. The consultant took the first set of quarterly samples on February 6, 2019 and continued sampling through 2020. The 2020 sampling report will be available on the peoriastormwater.com website. The city is working on setting up TMDL sampling in the future, as resources allows.

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) Projects (many projects were delayed due to COVID):

- Sidewalk programs- various locations (multiple sites less than 1 ac each)
- Greater Peoria Sanitary District (GPSD) Capital Sewer Maintenance (multiple sites less than 1 ac each)

Attachments to Annual Facility Inspection Report NPDES MS4
 City of Peoria, Permit ILR400424
 Year 5: MARCH 1, 2020 – FEBRUARY 28, 2021
 Page 10

- North University Street (Pioneer Parkway to Townline Road)
- Western Ave from Adams St to Lincoln Ave
- Annual Storm Sewer Repair Projects (sites less than 1 ac each)

Project List

Sheridan and Glen televise
Knoxville and Lake televise
Greenleaf & Caroline
Reservoir and Harmon
Gerald & Geneva
Abington and Madison
906 Oak Glen Ave
4611 W Sable Way
5518 Barberry Ct
5916 Tampico Dr
Barberry Ct
W Pendleton Place
Imperial Outfalls
7121 N Manning Dr

- Private Property Program 19 projects approved (sites less than 1 ac each)

PIN	Address Name
1418376017	2609 Huntington Dr
0919251009	2204 W Augusta Dr
1421251001	5250 N Knoxville Ave
1428482009	725 E Forrest Hill Ave
1325333006	3851 W Palmyra Ct
1325333015	3873 W Palmyra Ct
1325333010	3863 W Palmyra Ct
1325333016	3875 W Palmyra Ct
1325333017	3877 W Palmyra Ct
1325333018	3881 W Palmyra Ct
1431251016	2807 N Renwood Ave
0930226032	N Rhonda Way
930451016	2309 W Chandler Ct
1428182015	219 W Stratford Dr
1421377019	323 W Stonegate Way
1420276026	718 W Shenandoah Dr

1420276045	724 W Shenandoah Dr
1404326044	255 W Detweiller Dr
0930252023	2224 W Brooklyn Pl

Prepared by:
Engineering Division
Public Works Department
City of Peoria
3505 N. Dries Lane
Peoria, IL 61604
May 2021

APPENDIX B

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 ⁽¹⁾. 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

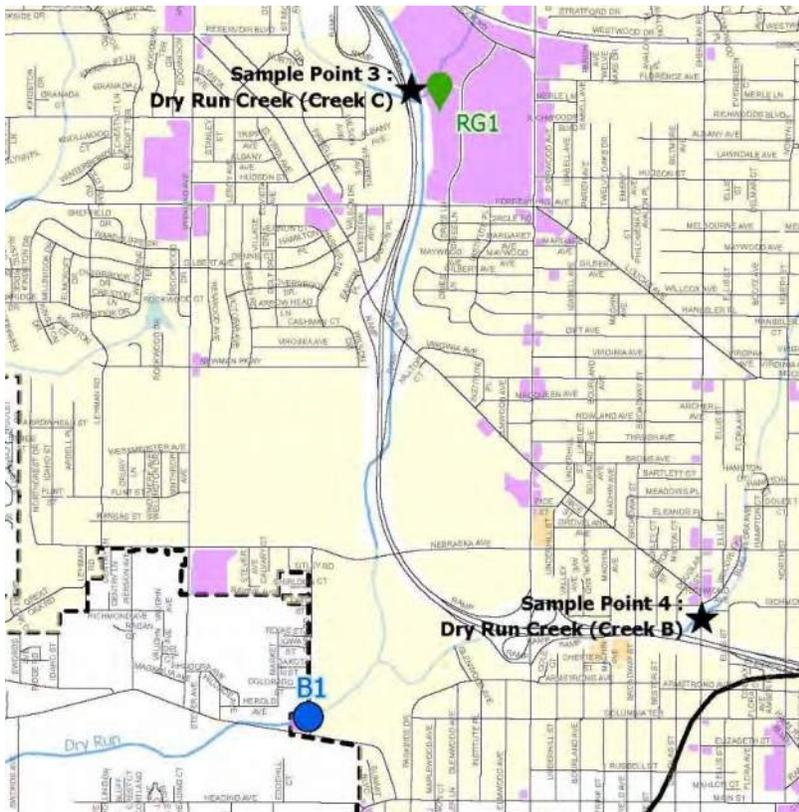
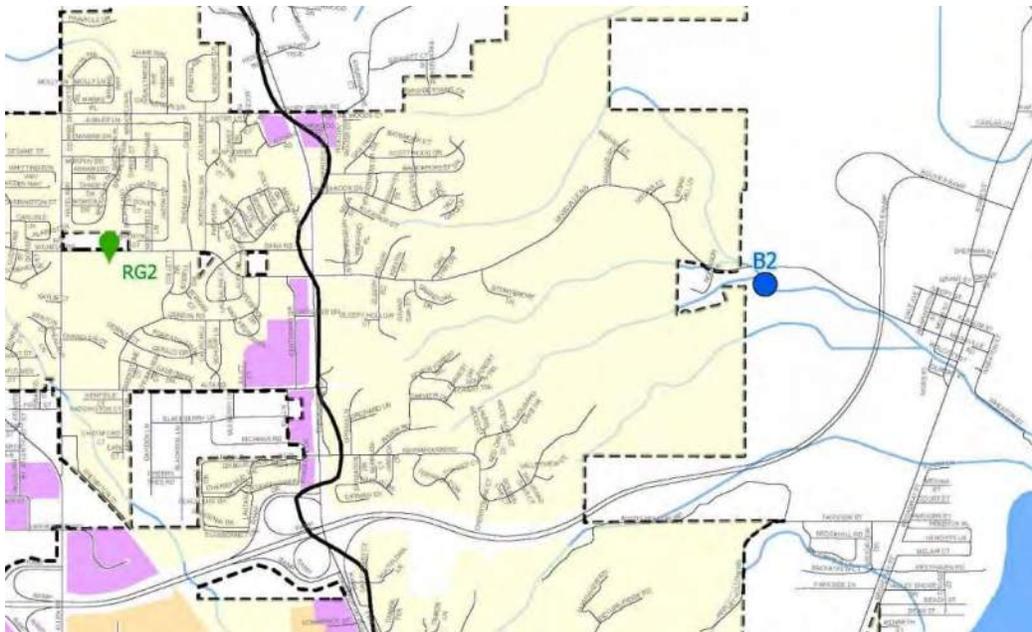


Figure 2 – Illinois River Main Stem Sampling Location and Associated Rain Gauge



APPENDIX C



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(309) 691-5300
foth.com

February 10, 2022

Ms. Andrea Klopenstein, P.E.
Assistant Director, Storm Water 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 the calendar year 2021.

Dear Ms. Klopenstein:

The following is a summary report for storm water samples collected in 2021 from sample points P1 through P4. Included in this summary report are:

- ◆ Goals of the MS4 Permit, Sample 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 Sample Point Locations
- ◆ Laboratory Analytical Data

Goals of the MS4 Permit, Sample Point Location and Descriptions

Four sample 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 sample point locations are located outside of the known Combined Sewer System (CSO) system and should be storm water flowing within the City of Peoria boundaries. Sampling point 1 is located the farthest to the north and encompasses a mix of residential, industrial, and commercial properties. Sampling point 2 covers the northwest and some of the middle parts of the city with a mix of residential, commercial, and industrial properties. Sampling point 3 is a mix of residential and commercial properties, and sample point 4 encompasses the eastern portions of the city and is predominately residential. The four sample point locations are shown on attached Figure 1.

Summary of Procedures Utilized to Collect Storm Water Samples

Per General NPDES Permit ILR40, storm water samples must be collected within 48 hours of a precipitation event greater than or equal to one quarter 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 would not be collected. Storm water samples were collected every quarter in 2021.

Analytical Data Summary Including Trends and Potential Areas of Concern

Storm water samples were grab samples and were collected directly from the stream. Flow rate is not factored in sample collection as flow monitoring devices are not installed at the sampling point. Field observation sheets noting precipitation amount, weather conditions, sample appearance, etc. were completed at each sampling point every quarter, and are attached 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 carcass/feces, etc. The parameters analyzed are required under General NPDES Permit ILR40 Part V.(A)(2)(c) and are shown in the attached Tables 1 through 4 (2021 laboratory results) and graphically on Figures 2 through 8 (all data). We now have three years of background data to analyze and can start to make some general assumptions and potential trends regarding concentration levels. A graph was not generated for the parameter grease and oil since all grease and oil concentrations in 2021 were reported as non-detected below the laboratory reporting limit (RL). Since the inception of storm water sampling in 2019, the grease and oil concentration has only been detected once above the RL at a concentration of 5.9 mg/L just above the RL of 5.1 mg/L.

As shown on Figure 2, the highest chloride concentration reported at all four sample locations is occurring during the 1st quarter event (except for the 2nd quarter event in 2019) and then decreases each subsequent quarter. 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 check of historical snowfall amounts showed on April 14, 2019, the Peoria area received 5.0 inches of snow. The second quarter 2019 stormwater sample was collected on April 29, 2019, which could explain the high chloride concentration for the 2nd quarter 2019 event.

A total suspended solid (TSS) is a waterborne particle that exceeds 2 microns in size, micron thickness is 0.001mm. A particle smaller than 2 microns is considered a total dissolved solid (TDS). 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 snow melting. Excluding the 2nd quarter 2019 event, TSS concentrations have been consistent with an occasional spike in concentrations mostly occurring at Sampling Point 2. The EPA secondary drinking water standard for a TDS concentration is 500 ppm which is considerably higher than the TSS concentrations currently being reported at Sampling Points 1-4.

The majority of total nitrogen (Figure 4), phosphorous (Figure 5), and TKN ammonia (Figure 6) concentrations reported at all four sampling points are below the RL with an occasional concentration reported above the RL. The nitrate concentration (Figure 7) is being detected at all four sample locations, but at concentration levels considerably below the Class I Groundwater Quality Standard (Potable Resource Groundwater) of 10 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. Typical application of these chemicals usually take place in the 2nd and 4th quarters (spring and fall) which corresponds when most of the higher concentrations for these parameters are reported.

The fecal coliform concentrations in 2021 for each quarter were consistent across all four sampling points. There does not appear to be a disparity in fecal coliform concentrations between the sampling locations. For the last three years the trend has been when the fecal coliform concentration is high, they are high across all four sample locations, likewise when fecal concentrations are lower, they are low across all four sample locations. There does appear to be a trend that the higher fecal coliform concentrations are occurring during the 3rd and 4th quarter sampling events and this trend continued in 2021. The first two quarters of 2021, the fecal coliform concentration ranged between 162 and 488 CFU/100 ml while the third and fourth quarter concentrations ranged from 1410 to >2420 CFU/100 ml. The average fecal coliform concentration across all four sample locations for the 1st and 2nd quarters of 2021 were the lowest for the three years samples have been collected at these locations. In the graphical trend analysis (Figure 8) concentration levels reported at >2420 are shown at a concentration level of 2420 CFU/100 ml. There does not appear to be a clear trend for the fecal coliform concentrations in relation to location, precipitation amount, visible turbidity, or flow. Currently the only trend appears to be higher fecal coliform concentrations are reported during the 3rd and 4th quarter events.

There are options that can be explored to further investigate the fecal coliform and the other parameter concentrations.

- ◆ Increase the number of sample locations and consider timed collection of storms, such as the TMDL study commencing in 2022.
- ◆ Collect samples during non-rain events to establish a normal flow background concentration (not effected by precipitation) for all parameters.
- ◆ At a minimum, collect monthly fecal coliform samples from June to December to try and determine when the increased concentrations occur and compare the sample concentrations between sample locations.
- ◆ Record snowfall total and amount of salt or other deicer products the City/County applied to roads during the month, analyzing whether corresponds with increased chloride concentrations in water samples.
- ◆ Track monthly precipitation amounts with date samples were collected looking for indications of runoff from erosion or application of landscaping chemicals.
- ◆ To explore further whether precipitation amounts are affecting the TSS concentration, a sample could be collected across the storm event not just once per storm event.

A baseline is being established for each individual parameter concentration. However, there are only three years of data (twelve sample events) collected so far. Even with the limited data collected, some general assumptions can be made.

1. The detections of concentrations of chloride, nitrogen, phosphorous, TKN ammonia and nitrate could be related to either deicing chemicals applied after snowfall or runoff from the application of landscaping chemicals.

2. Early indications are it appears precipitation amounts are not affecting the TSS concentration. However, this should be explored further.
3. There is not a disparity between fecal coliform concentration and the four sample point locations. The fecal coliform concentration is consistent across all four sample locations with higher concentrations being reported for the 3rd and 4th quarter sampling events.

Additional data collected will assist in building a better baseline data set and help to determine if the periodic or seasonal spikes in concentrations could be related to the effects of road deicing after a snowfall event or runoff related to the application of landscape chemicals. Baseline data can then be used to determine whether water quality is improving, remaining stable, or decreasing.

Sincerely,

Foth Infrastructure & Environment, LLC



Joshua C. Gabehart, P.E.
 Lead Environmental Engineer
 Licensed in IL, IA, AR, GA



Mark A. Williams
 Lead Environmental Scientist

Enclosures:

- Figure 1: Map of Sample 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: Total TKN Ammonia Concentration Graph
- Figure 7: Total Nitrate Concentration Graph
- Figure 8: Total Fecal Coliform Concentration Graph
- Table 1 – Sampling Point 1 Laboratory Analytical Results
- Table 2 – Sampling Point 2 Laboratory Analytical Results
- Table 3 – Sampling Point 3 Laboratory Analytical Results
- Table 4 – Sampling Point 4 Laboratory Analytical Results
- Attachment 1 – Field Observation Sheets

Figures

Streams in the CSO Area

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

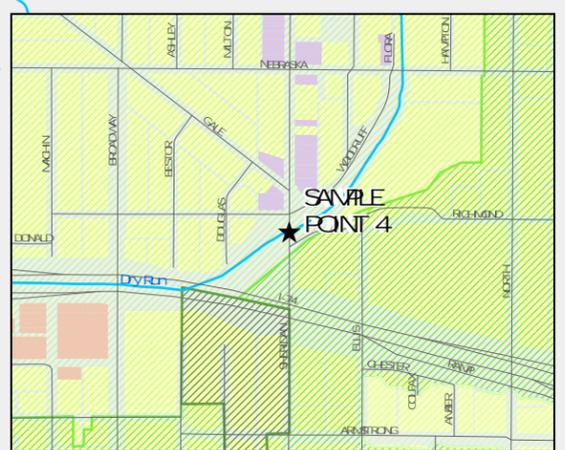
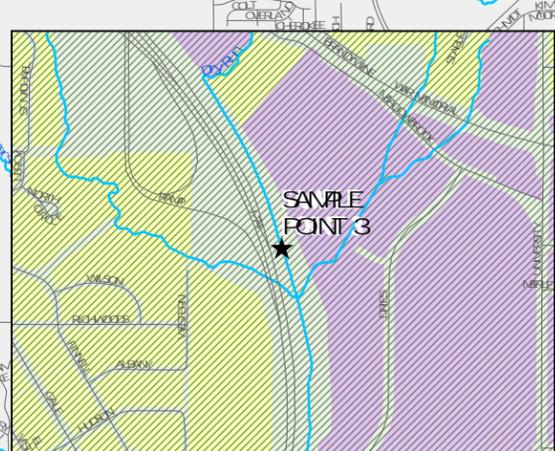
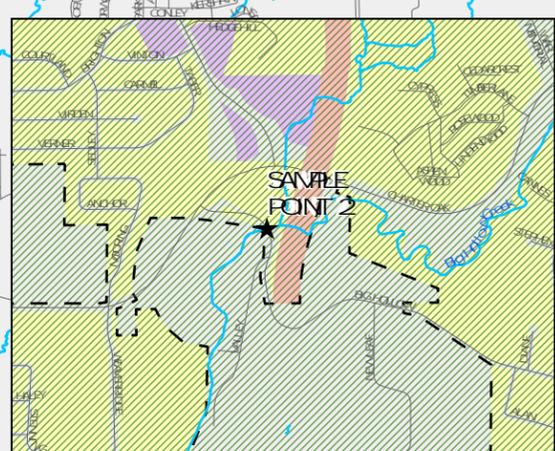
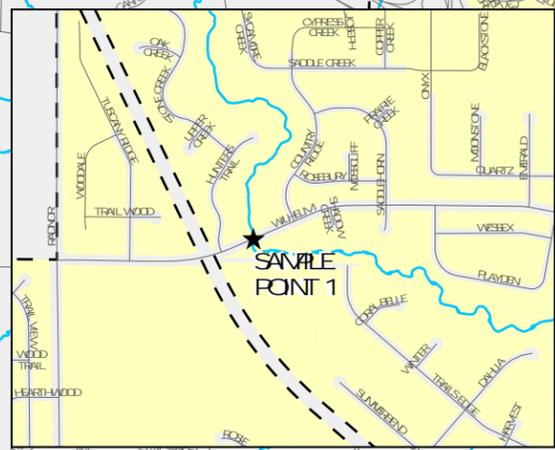
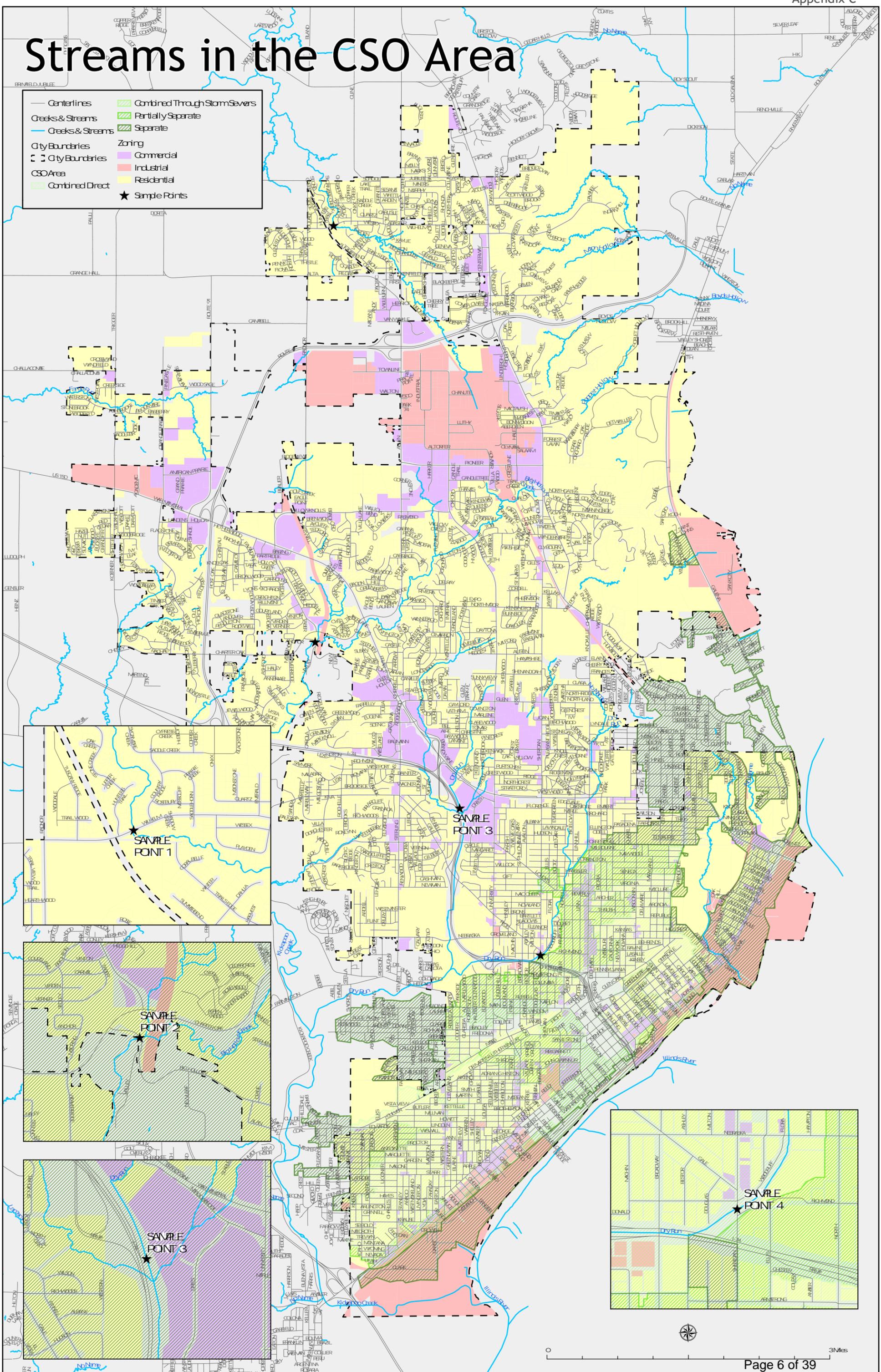
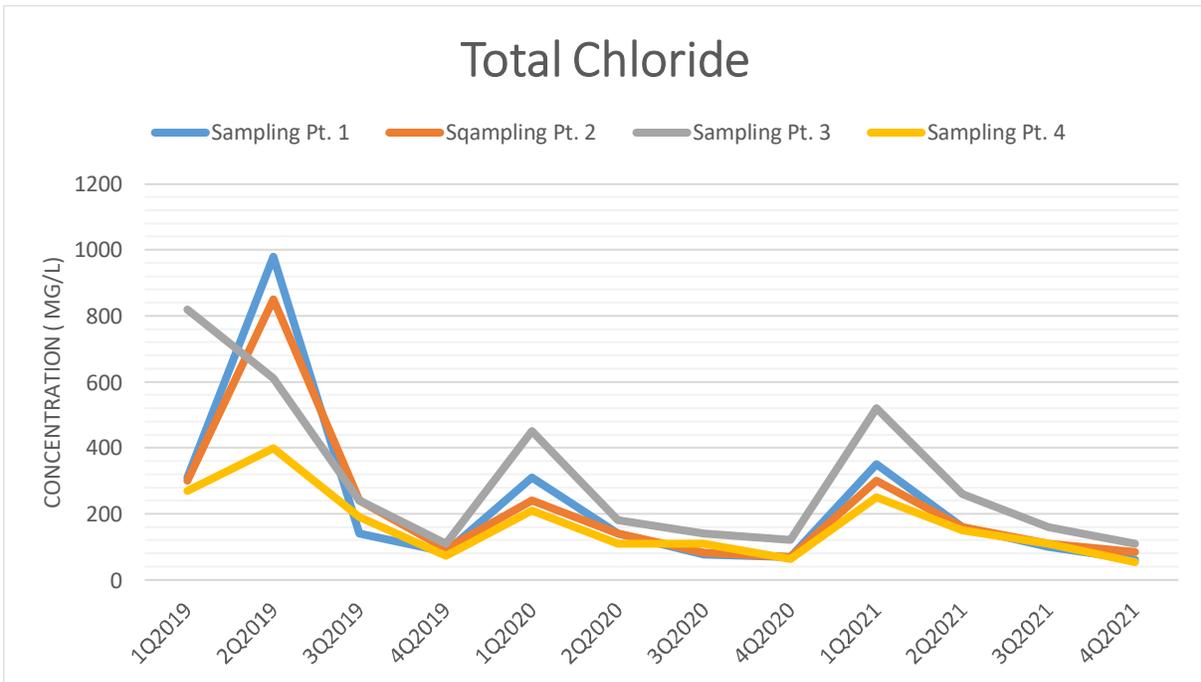
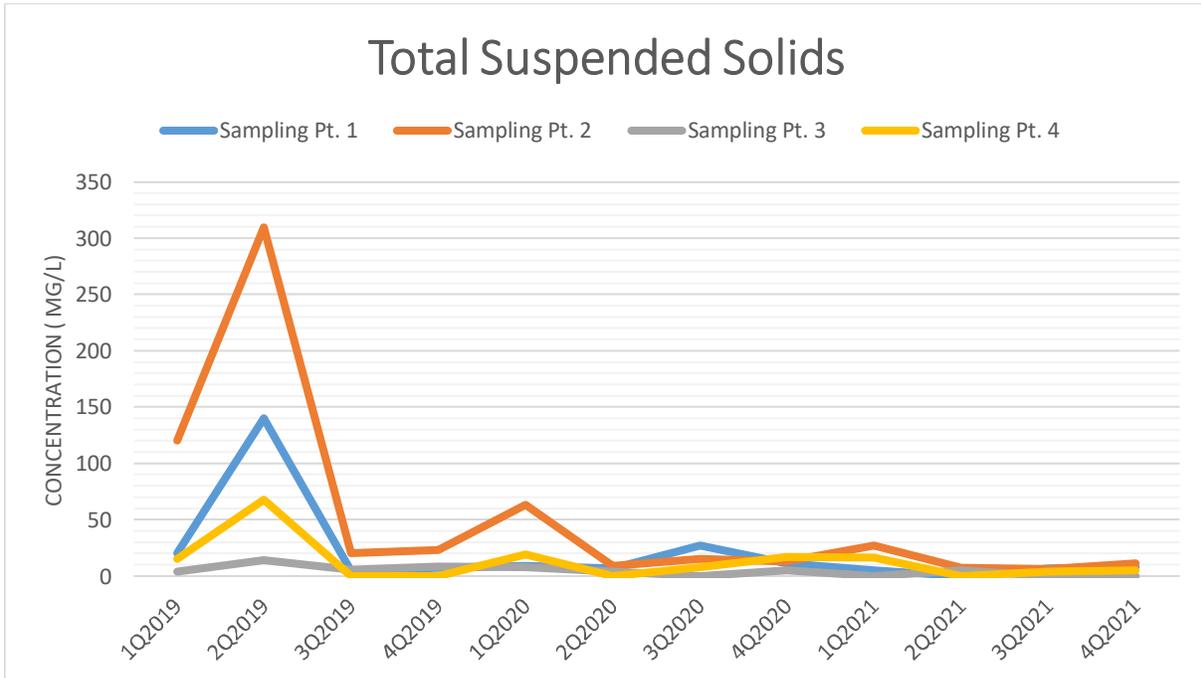


Figure 2
Total Chloride
1Q2019-4Q2021



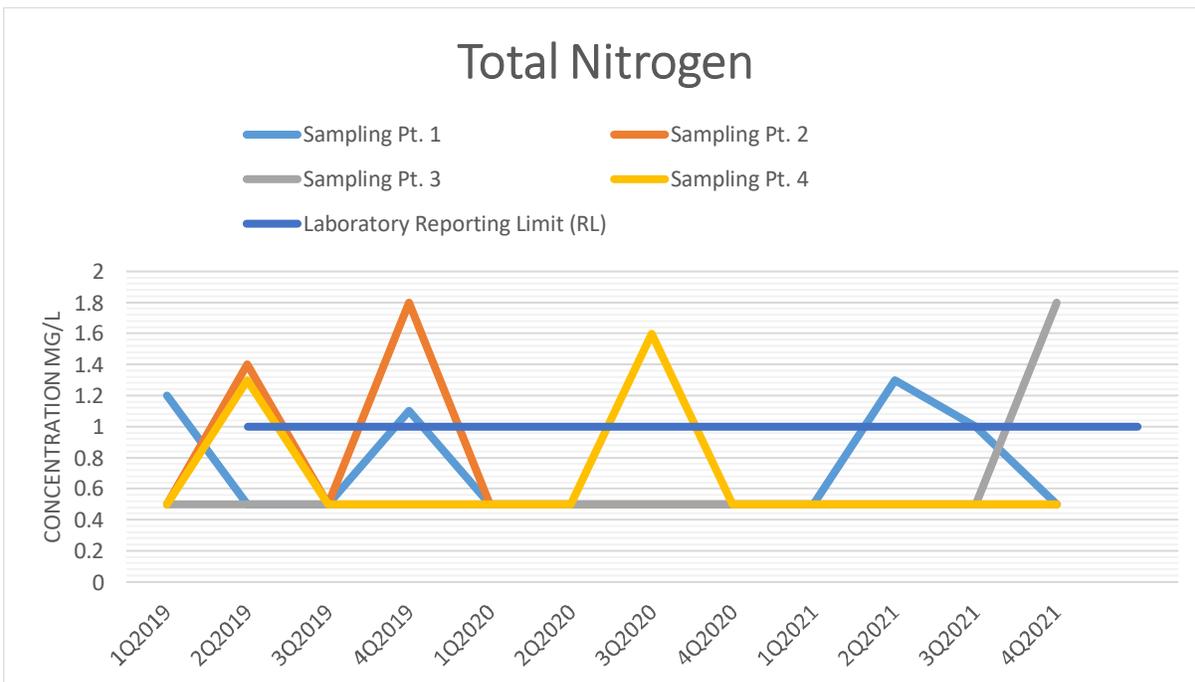
Chloride	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	310	300	820	270
2Q2019	980	850	610	400
3Q2019	140	240	240	190
4Q2019	85	94	110	72
1Q2020	310	240	450	210
2Q2020	140	140	180	110
3Q2020	77	82	140	110
4Q2020	69	69	120	64
1Q2021	350	300	520	250
2Q2021	160	160	260	150
3Q2021	100	110	160	110
4Q2021	62	84	110	55

Figure 3
Total Suspended Solids (TSS)
1Q2019-4Q2021



TSS	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	20	120	4	15
2Q2019	140	310	14	68
3Q2019	4.4	20	5.6	<4
4Q2019	7.2	23	8.4	<4
1Q2020	8.8	63	8	19
2Q2020	6.4	8.8	4	<4.0
3Q2020	27	15	<4.0	8
4Q2020	11	13	4.8	17
1Q2021	4.8	27	<4.0	16
2Q2021	<4	7.2	4.8	<4.0
3Q2021	6.4	6.4	<4.0	4
4Q2021	8	11	<4.0	4.8

Figure 4
Total Nitrogen
1Q2019-4Q2021

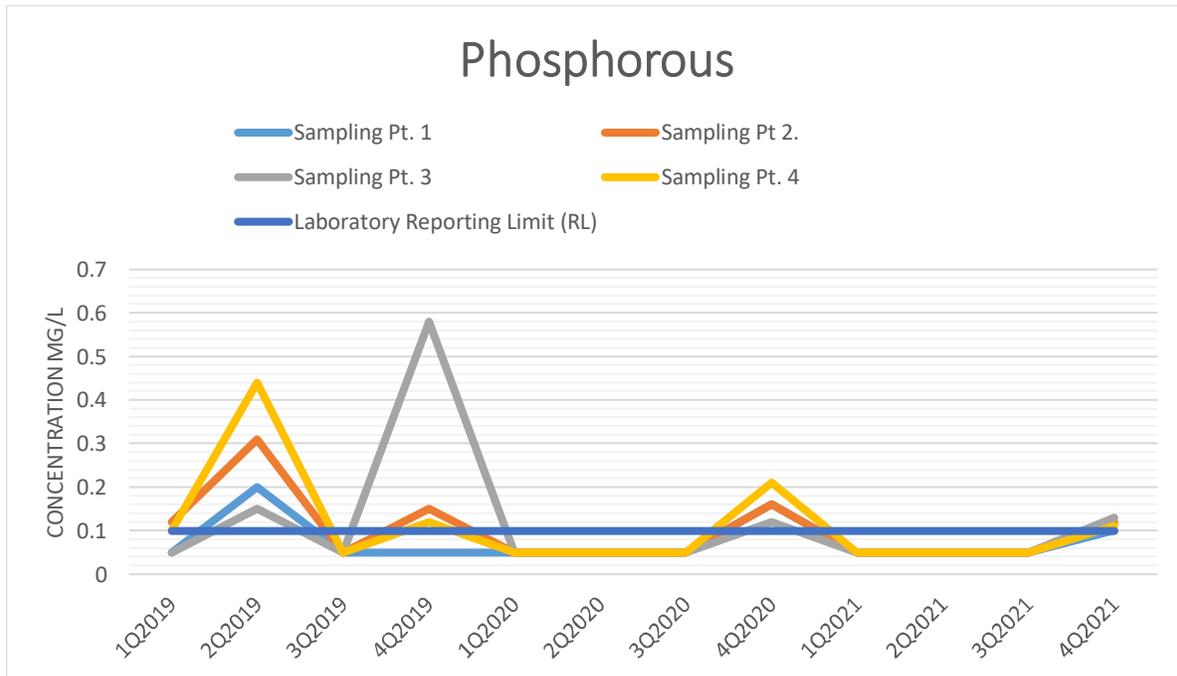


Nitrogen	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	1.2	<1.0	<1.0	<1.0
2Q2019	<1.0	1.4	<1.0	1.3
3Q2019	<1.0	<1.0	<1.0	<1.0
4Q2019	1.1	1.8	<1.0	<1.0
1Q2020	<1.0	<1.0	<1.0	<1.0
2Q2020	<1.0	<1.0	<1.0	<1.0
3Q2020	<1.0	<1.0	<1.0	1.6
4Q2020	<1.0	<1.0	<1.0	<1.0
1Q2021	<1.0	<1.0	<1.0	<1.0
2Q2021	1.3	<1.0	<1.0	<1.0
3Q2021	1	<1.0	<1.0	<1.0
4Q2021	<1	<1.0	1.8	<1.0

Note:

Non-detect values are shown at 1/2 the reporting limit

Figure 5
Total Phosphorous
1Q2019-4Q2021

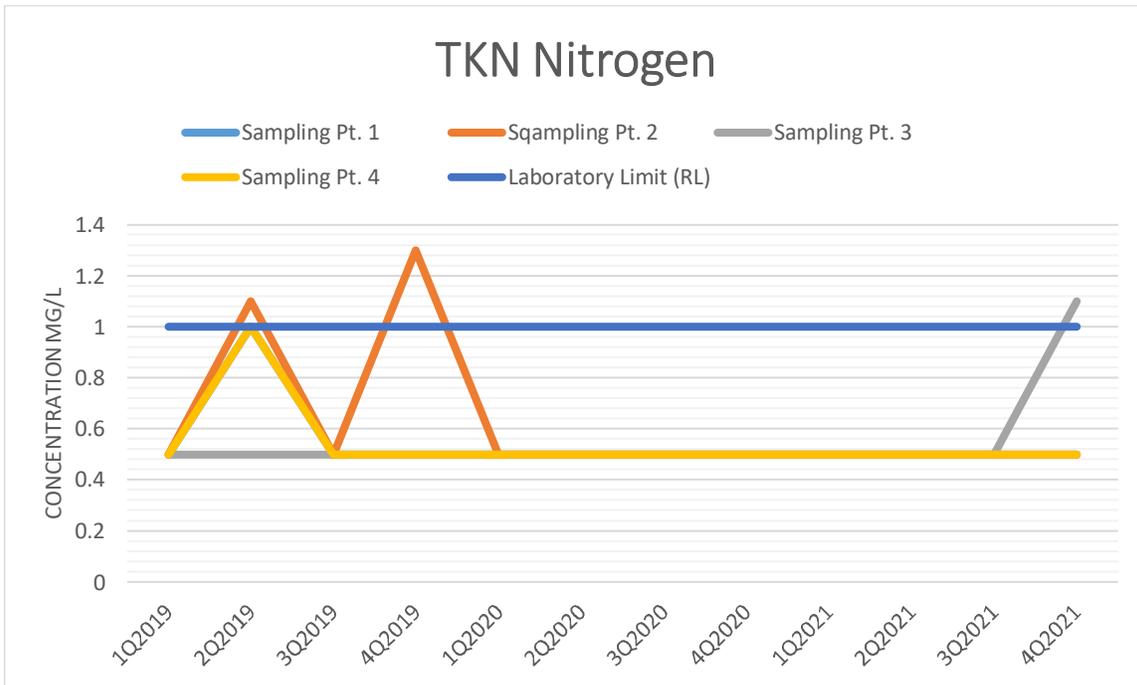


Phosphorous	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	<0.10	0.12	<0.1	0.1
2Q2019	0.2	0.31	0.15	0.44
3Q2019	<0.1	<0.1	<0.1	<0.1
4Q2019	<0.1	0.15	0.58	0.12
1Q2020	<0.1	<0.1	<0.1	<0.1
2Q2020	<0.1	<1.0	<0.1	<0.1
3Q2020	<0.1	<0.1	<0.1	<0.1
4Q2020	0.16	0.16	0.12	0.21
1Q2021	<0.1	<0.1	<0.1	<0.1
2Q2021	<0.1	<0.1	<0.1	<0.1
3Q2021	<0.1	<0.1	<0.1	<0.1
4Q2021	0.1	0.12	0.13	0.11

Note:

Non-detect values are shown at 1/2 the reporting limit

Figure 6
TKN Ammonia
1Q2019-4Q2021

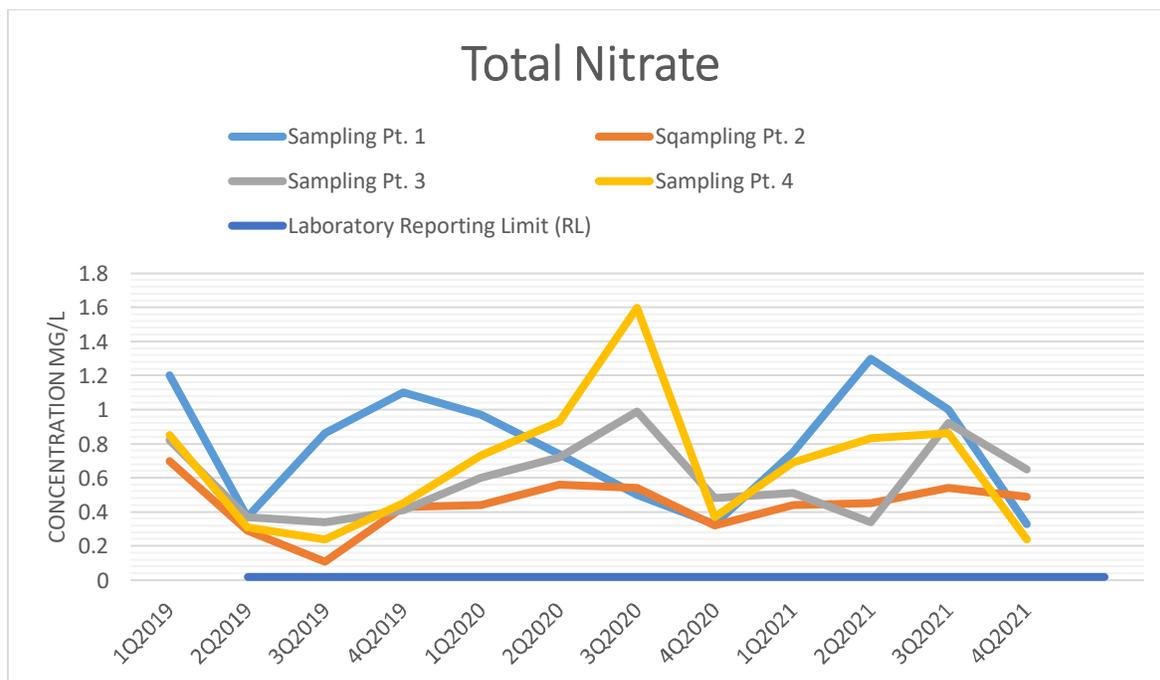


TKN	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	<1.0	<1.0	<1.0	<1.0
2Q2019	1	1.1	<1.0	1
3Q2019	<1	<1.0	<1.0	<1.0
4Q2019	<1	1.3	<1	<1
1Q2020	<1	<1.0	<1.0	<1.0
2Q2020	<1	<1.0	<1.0	<1.0
3Q2020	<1	<1.0	<1.0	<1.0
4Q2020	<1	<1.0	<1.0	<1.0
1Q2021	<1.0	<1.0	<1.0	<1.0
2Q2021	<1.0	<1.0	<1.0	<1.0
3Q2021	<1.0	<1.0	<1.0	<1.0
4Q2021	<1.0	<1.0	1.1	<1.0

Note:

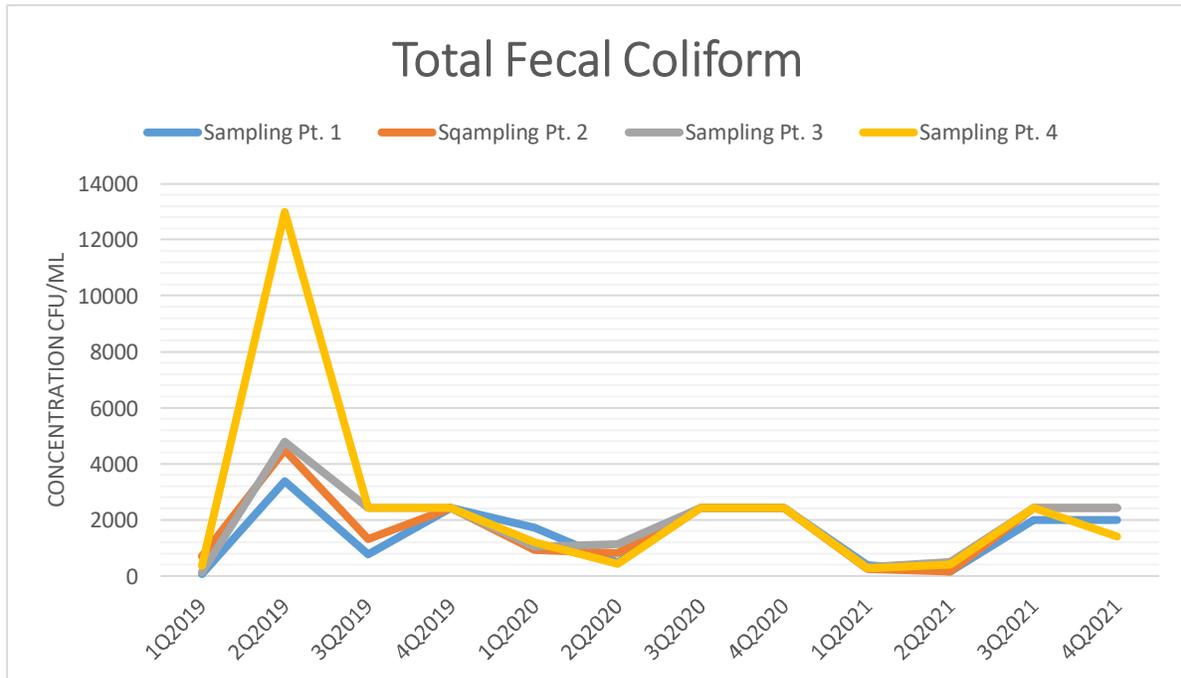
Non-detect values are shown at 1/2 the reporting limit

Figure 7
Total Nitrate
1Q2019-4Q2021



Nitrate	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	1.2	0.7	0.82	0.85
2Q2019	0.37	0.29	0.37	0.31
3Q2019	0.86	0.11	0.34	0.24
4Q2019	1.1	0.43	0.41	0.45
1Q2020	0.97	0.44	0.6	0.73
2Q2020	0.74	0.56	0.72	0.93
3Q2020	0.5	0.54	0.99	1.6
4Q2020	0.33	0.32	0.48	0.37
1Q2021	0.75	0.44	0.51	0.69
2Q2021	1.3	0.45	0.34	0.83
3Q2021	1	0.54	0.92	0.86
4Q2021	0.33	0.49	0.65	0.24

Figure 8
Total Fecal Coliform
1Q2019-4Q2021



Fecal Coliform	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	81	700	140	350
2Q2019	3400	4500	4800	13000
3Q2019	770	1300	2420	2420
4Q2019	2420	2420	2420	2420
1Q2020	1730	921	1050	1200
2Q2020	461	816	1120	435
3Q2020	2420	2420	2420	2420
4Q2020	2420	2420	2420	2420
1Q2021	387	238	308	276
2Q2021	162	172	488	403
3Q2021	1990	2420	2420	2420
4Q2021	1990	2420	2420	1410

Tables

Table 1
Sample Point 1 Analytical Results from
1Q21-4Q21

Parameters	Units	1Q2021	2Q2021	3Q2021	4Q2021
Chloride	mg/L	350	160	100	62
Oil and Grease	mg/L	<5	<5	<5.0	<5
Total Suspended Solids (TSS)	mg/L	4.8	<4	6.4	8
Total Nitrogen	mg/L	<1.0	1.3	1	<1
Fecal Coliform	CFU/100 mL	387	162	1990	1990
Nitrate/Nitrite	mg/L	0.75	1.3	1	0.33
Phosphorous Total as P	mg/L	<0.1	<0.1	<0.1	0.1
	mg/L	<1.0	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.79	0.08	0.25	1.03
Last 48 hours	inch	0.83	3.13	0.44	1.16

Notes:

CFU/100 mL = colony forming units per 100 milliliters

mg/L = milligrams per liter

Prepared by: MAW

Checked by: JCG1

Table 2
Sample Point 2 Analytical Results
1Q/2021-4Q2021

Parameters	Units	1Q2021	2Q2021	3Q2021	4Q2021
Chloride	mg/L	300	160	110	84
Oil and Grease	mg/L	<5.0	<5.1	<5.0	<5.1
Total Suspended Solids (TSS)	mg/L	27	7.2	6.4	11
Total Nitrogen	mg/L	<1.0	<1.0	<1.0	<1.0
Fecal Coliform	CFU/100 mL	238	172	>2420	2420
Nitrate/Nitrite	mg/L	0.44	0.45	0.54	0.49
Phosphorous Total as P	mg/L	<0.1	<0.1	<0.1	0.12
Total Kjeldahl-Nitrogen (TKN)	mg/L	<1.0	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.79	0.08	0.25	1.03
Last 48 hours	inch	0.83	3.13	0.44	1.16

Notes:

CFU/100 mL = colony forming units per 100 mL
mg/L = milligrams per liter

Prepared by: MAW

Checked by: JCG1

Table 3
Sample Point 3 Analytical Results
1Q2021-4Q2021

Parameters	Units	1Q2021	2Q2021	3Q2021	4Q2021
Chloride	mg/L	520	260	160	110
Oil and Grease	mg/L	<5	<5.1	<5.0	<5.1
Total Suspended Solids (TSS)	mg/L	<4.0	4.8	<4.0	<4.0
Total Nitrogen	mg/L	<1.0	<1.0	<1.0	1.8
Fecal Coliform	CFU/100 mL	308	488	2420	>2420
Nitrate/Nitrite	mg/L	0.51	0.34	0.92	0.65
Phosphorous Total as P	mg/L	<0.1	<0.1	<0.1	0.13
Total Kjeldahl-Nitrogen (TKN)	mg/L	<1.0	<1.0	<1.0	1.1
Precipitation					
Last 24 hours	inch	0.79	0.08	0.25	1.03
Last 48 hours	inch	0.83	3.13	0.44	1.16

Notes:

CFU/100 mL = colony forming units per 100 milliliters

mg/L = milligrams per liter

Prepared by: MAW

Checked by: JCG1

Table 4
Sample Point 4 Analytical Results
1Q2021-4Q2021

Parameters	Units	1Q2021	2Q2021	3Q2021	4Q2021
Chloride	mg/l	250	150	110	55
Oil and Grease	mg/l	<5	<5.1	<5	<5.1
Total Suspended Solids (TSS)	mg/l	16	<4.0	4	4.8
Total Nitrogen	mg/l	<1.0	<1.0	<1.0	<1.0
Fecal Coliform	CFU/100 ml	276	403	>2420	1410
Nitrate/Nitrite	mg/l	0.69	0.83	0.86	0.24
Phosphorous Total as P	mg/l	<0.1	<0.1	<0.1	0.11
Total Kjeldahl-Nitrogen (TKN)	mg/l	<1.0	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.79	0.08	0.25	1.03
Last 48 hours	inch	0.83	3.13	0.44	1.16

Attachment 1
Field Observation Sheets

Field Sheet
1st Quarter 2021



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	03/16/2021	
Sampling Location Point:	Sample Pt 1	
Sampling Personnel:	Mark Williams & Dakota Ladwig	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal debris at sampling pt.	
Precipitation:	Last 24 hours	Last 48 hours
	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	No odor	
Appearance:		
Color:	Light brown	
Turbidity:	Slight Turbidity	
Other:		
Additional Information/Comments		



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	03/16/2021	
Sampling Location Point:	Sample Pt 2	
Sampling Personnel:	Mark Williams & Dakota Ladwig	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal debris at sampling pt.	
	Last 24 hours	Last 48 hours
Precipitation:	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:	medium flow	
Color:	Light Brown	
Turbidity:	Slight Turbidity	
Other:		
Additional Information/Comments		



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	03/16/2021	
Sampling Location Point:	Sample PE 3	
Sampling Personnel:	Mark Williams & Dakota Ludwig	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Brush upstream	
	Last 24 hours	Last 48 hours
Precipitation:	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:	low-flow	
Color:	Brown	
Turbidity:	low	
Other:		
Additional Information/Comments		



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	03/16/2021	
Sampling Location Point:	Sample Pt 4	
Sampling Personnel:	Mark Williams & Dakota Ludwig	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Debris upstream (T.V. etc)	
	Last 24 hours	Last 48 hours
Precipitation:	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:	low flow	
Color:	Light brown	
Turbidity:	Low	
Other:		
Additional Information/Comments		

Field Sheet
2nd Quarter 2021



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	4-30-2021	
Sampling Location Point:	Sample Point 1	
Sampling Personnel:	Dakota Ludwig + Alisha Weatherspoon	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):		
	Last 24 hours	Last 48 hours
Precipitation:	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:		
Color:	Light-brown	
Turbidity:	Slight	
Other:		
Additional Information/Comments	Time of Sampling 11:05 AM	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	4-30-2021	
Sampling Location Point:	Sample Point 2	
Sampling Personnel:	Dakota Ludwig, Alisha Weatherspoon	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):		
	Last 24 hours	Last 48 hours
Precipitation:	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:		
Color:	Light-brown	
Turbidity:	slight	
Other:		
Additional Information/Comments	Time of Sampling 10:45 AM	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	04-30-2021	
Sampling Location Point:	Sample Point #3	
Sampling Personnel:	Dakota Ludwig & Alisha Weatherspoon	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):		
	Last 24 hours	Last 48 hours
Precipitation:	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:		
Color:	Light Brown	
Turbidity:	slight	
Other:		
Additional Information/Comments	Time of Sampling 10:20 AM	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	04-30-2021	
Sampling Location Point:	Sample Point #4	
Sampling Personnel:	Dakota Ludwig, Alisha Weatherspoon	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Debris upstream	
Precipitation:	Last 24 hours	Last 48 hours
	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		
Water Sample Observations		
Odor:	None	
Appearance:		
Color:	Lt-brown	
Turbidity:	slight	
Other:		
Additional Information/Comments	Time of Sampling 10:00 AM	

Field Sheet
3rd Quarter 2021



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	07/13/2021	
Sampling Location Point:	Sample Pt 1	
Sampling Personnel:	Mark Williams and Dakota Ladwig	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal / overgrown vegetation	
Precipitation:	Last 24 hours 0.25"	Last 48 hours 0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	M.P. Cloudy	
Water Sample Observations		
Odor:	None	
Appearance:	lt brn	
Color:	" "	
Turbidity:	slight	
Other:		
Additional Information/Comments	TOS 10/10	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	07/13/2021	
Sampling Location Point:	Sample Pt 2	
Sampling Personnel:	Mark Williams and Dakota Ladwig	

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal	
Precipitation:	Last 24 hours 0.25"	Last 48 hours 0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	Cloudy	

Water Sample Observations

Odor:	Normal
Appearance:	v. lt brn
Color:	11
Turbidity:	none
Other:	

Additional Information/Comments

TOS 0938



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	07/13/2021	
Sampling Location Point:	Sample Pt 3	
Sampling Personnel:	Mark Williams and Dakota Ladwig	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal flow	
Precipitation:	Last 24 hours 0.25"	Last 48 hours 0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	Cloudy	
Water Sample Observations		
Odor:	algae	
Appearance:	v. lt brn	
Color:	"	
Turbidity:	none	
Other:		
Additional Information/Comments	TOS: 09:13	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	07/13/2021	
Sampling Location Point:	Sample Pt 4	
Sampling Personnel:	Mark Williams and Dakota Ladwig	

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	concrete debris upstream, some trees	
Precipitation:	Last 24 hours 0.25"	Last 48 hours 0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	Cloudy	

Water Sample Observations

Odor:	None
Appearance:	lt brn
Color:	11
Turbidity:	low
Other:	

Additional Information/Comments

TOS 0858

Field Sheet
4th Quarter 2021



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	10-08-2021	
Sampling Location Point:	Sample Pt 1	
Sampling Personnel:	Dakota Ludwig & Johannes Fisseha	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	creek level up. Normal debris	
	Last 24 hours	Last 48 hours
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	68°F	
Current Weather Conditions:	P. Cloudy, Wind SW 3 mph	
Water Sample Observations		
Odor:	Earthy	
Appearance:		
Color:	lt brn	
Turbidity:	Moderate	
Other:		
Additional Information/Comments	TOS 1010	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	10-08-2021	
Sampling Location Point:	Sample Pt 2	
Sampling Personnel:	Dakota Ludwig & Johannes Fisseha	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal debris (down trees)	
	Swift flow	
	Last 24 hours	Last 48 hours
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	68°F	
Current Weather Conditions:	P. Cloudy, Wind SW 2-3 mph	
Water Sample Observations		
Odor:	Earthy	
Appearance:		
Color:	lt brn	
Turbidity:	Moderates	
Other:		
Additional Information/Comments	TOS 0950	



Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	10-08-2021	
Sampling Location Point:	Sample Pt 3	
Sampling Personnel:	Dakota Ludwig & Johannes Fisseha	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	No debris, evidence on sides of swift flow	
	bent grass etc.	
	Last 24 hours	Last 48 hours
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	68°F	
Current Weather Conditions:	P. Cloudy Wind SW 3 mph	
Water Sample Observations		
Odor:	None	
Appearance:		
Color:	v. lt brn	
Turbidity:	Slight	
Other:		
Additional Information/Comments	TOS 0925	

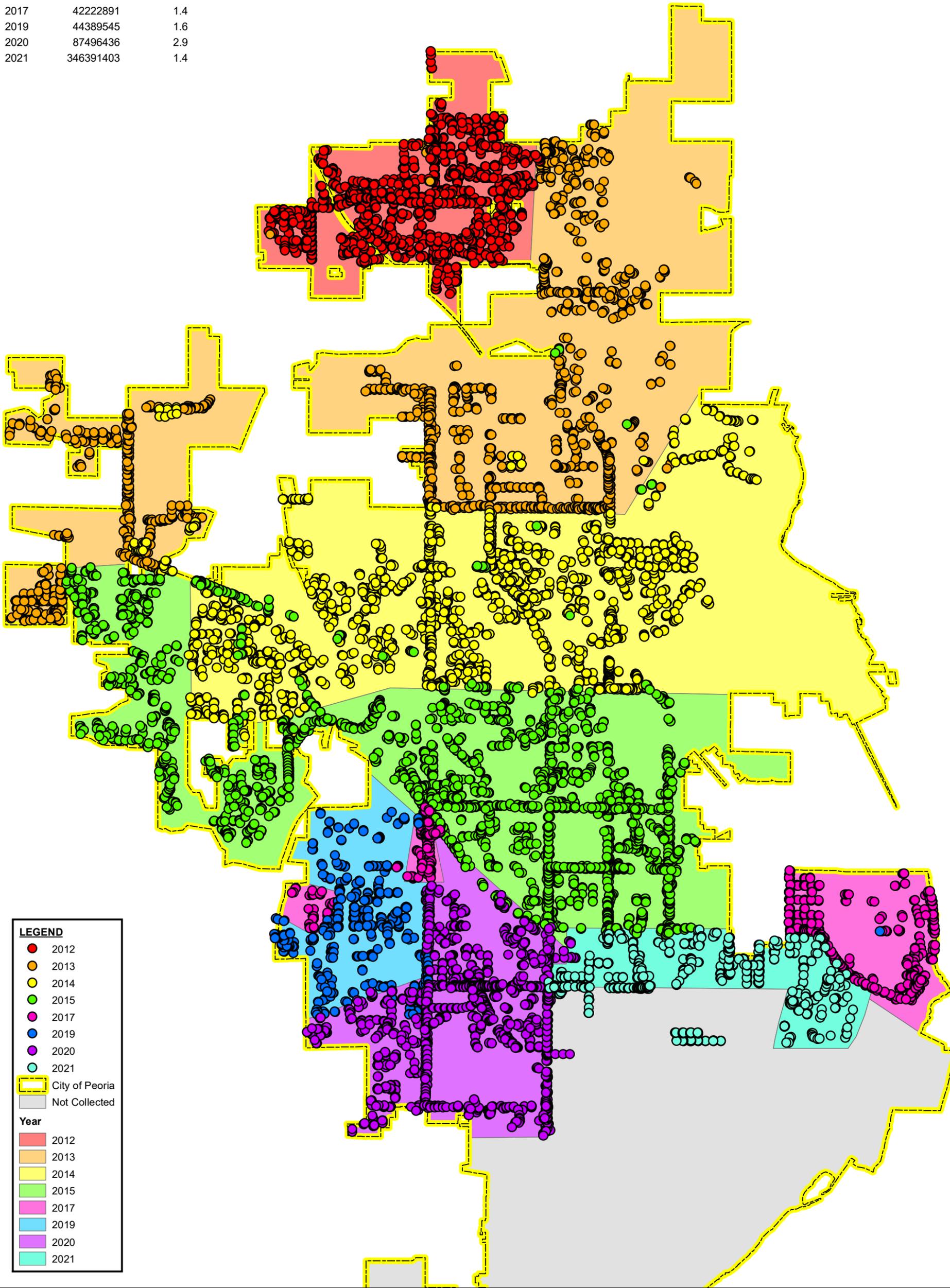


Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling	
Date:	10-08-2021	
Sampling Location Point:	Sample Pt 4	
Sampling Personnel:	Dakota Ludwig & Yohannes Fisseha	
Conditions of Sampling Point Location		
Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Debris, concrete rubble, & few trees up stream	
	Last 24 hours	Last 48 hours
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	67°F	
Current Weather Conditions:	P. Cloudy, Wind SW 2mph	
Water Sample Observations		
Odor:	Earthy	
Appearance:		
Color:	lt brn	
Turbidity:	moderate	
Other:		
Additional Information/Comments	TOS 0910	

APPENDIX D

Year	Shape_Area	SquareMile
	346391403	11.6
2012	58943743	2.7
2013	258678026	9.3
2014	261649178	9.4
2015	209715727	7.3
2017	42222891	1.4
2019	44389545	1.6
2020	87496436	2.9
2021	346391403	1.4



LEGEND

- 2012
- 2013
- 2014
- 2015
- 2017
- 2019
- 2020
- 2021

City of Peoria
 Not Collected

Year

- 2012
- 2013
- 2014
- 2015
- 2017
- 2019
- 2020
- 2021

NOTES:
 1. Coordinate System - NAD 1983 State Plane
 Illinois West - Feet

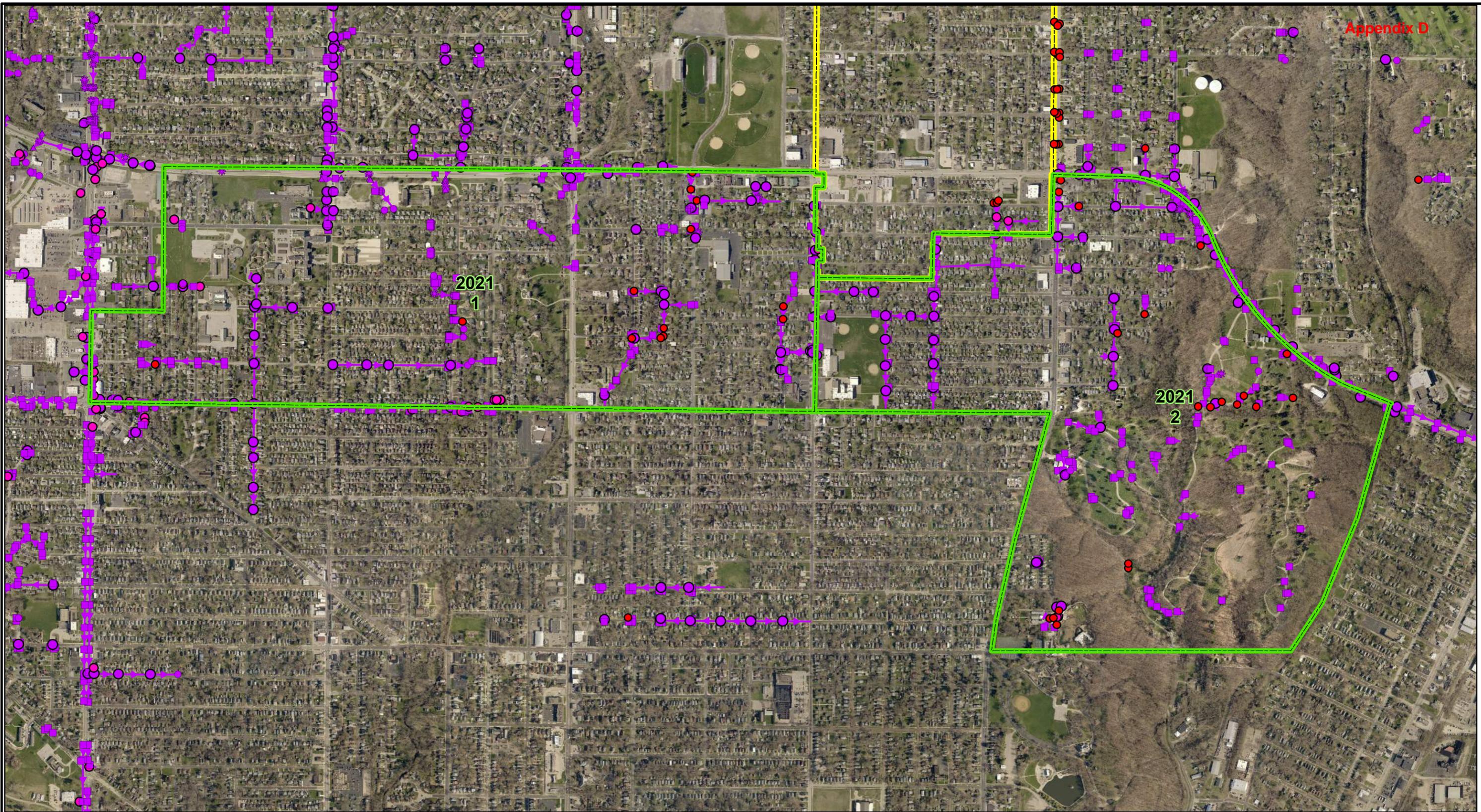
CITY OF PEORIA	
FIGURE 1	
Collection Area by Year Peoria, Illinois	
Date: MAY 2022	Revision Date:
Drawn By: DAT	Checked By: JCG1
Project: 21P007	

N
↑

0 2,000 4,000

 Feet

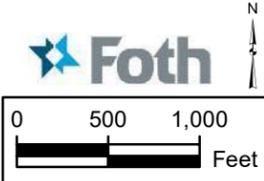
This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.



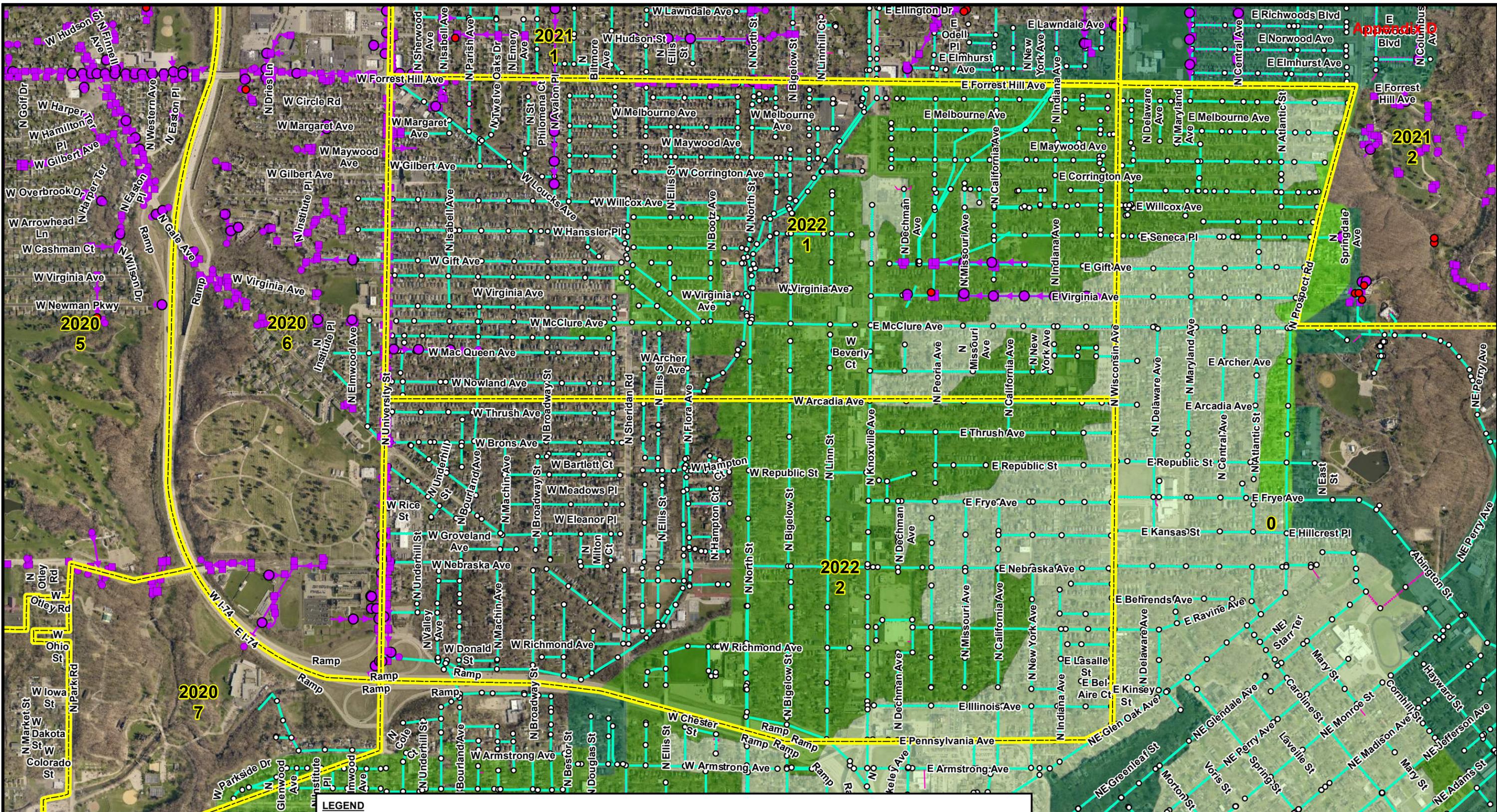
NOTES:
 1. Coordinate System - NAD 1983 State Plane Illinois West - Feet

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

LEGEND			
	PeoriaCollectionSequence		Drain
	<all other values>		End Section Flared; Headwall
	Missing		Standard Inlet
	Culvert - Pipe		Manhole
	Culvert - Box		Manhole Grate
	Storm Sewer		City of Peoria



CITY OF PEORIA		
FIGURE 1		
2021 Collection Area Peoria, Illinois		
Date: MAY 2022	Revision Date:	
Drawn By: DAT	Checked By: JCG1	Project: 21P007



NOTES:
 1. Coordinate System - NAD 1983 State Plane Illinois West - Feet

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

LEGEND		Stormwater Drainage Area		City of Peoria	
●	Missing	○	GPSD_Manholes	■	Combined Direct
●	Culvert - Pipe	○	Area_4_Structure_Information	■	Combined Through Storm Sewers
■	Culvert - Box	●	Area_4_Pipe_Information	■	Partially Separate
▲	End Section Flared; Headwall	—	GPSD_Mains	■	Separate
■	Standard Inlet	—	GPSD_Laterals	□	City of Peoria
○	Manhole			□	Collection Sequence
○	Manhole Grate				
—	Storm Sewer				

Foth

0 500 1,000 Feet

CITY OF PEORIA

FIGURE 1

2022 Area 1 and 2 Proposed Collection Area
Peoria, Illinois

Date: MARCH 2022	Revision Date:
Drawn By: DAT	Checked By: JCG1
Project: 20P007	

APPENDIX E

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.

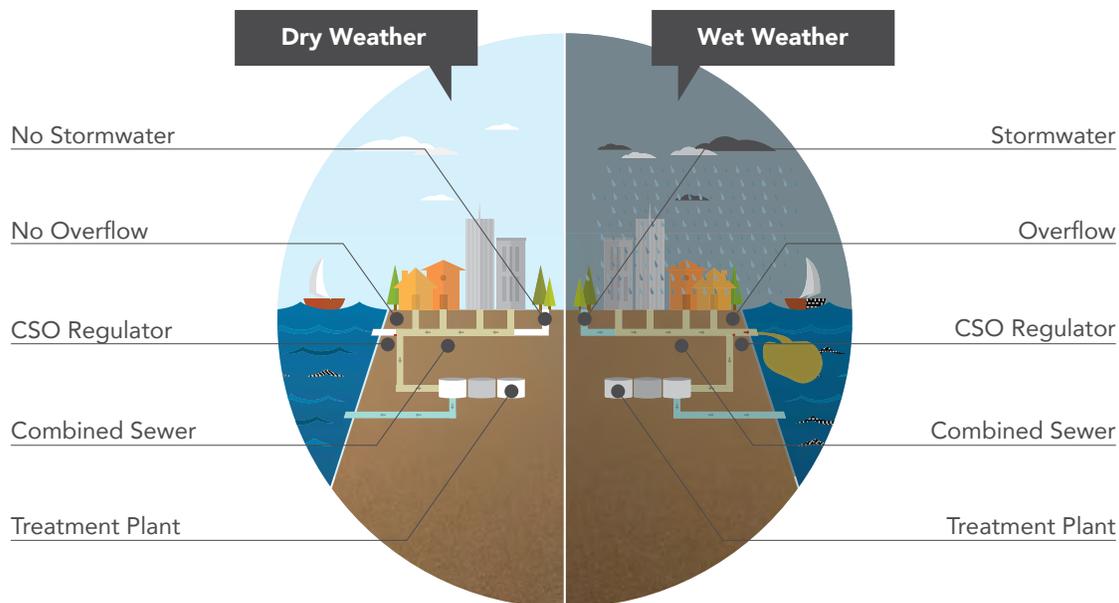
GROWING LIST OF PROBLEMS TO FIX

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

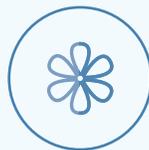
WHY GREEN WORKS



SAVES
MONEY



INVOLVES LOCAL
BUSINESSES



BEAUTIFIES
PUBLIC SPACES



DECREASES
POLLUTANTS

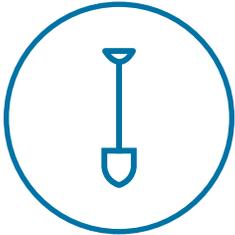


IMPROVES
AIR QUALITY



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.



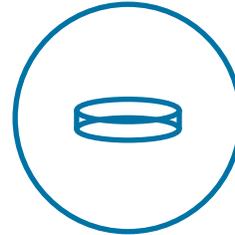
SEDIMENT



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

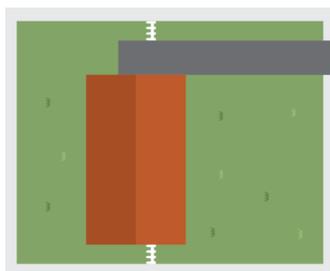
One less competing funding priority lets our city focus on other essentials, such as street repair, fire and police.

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.



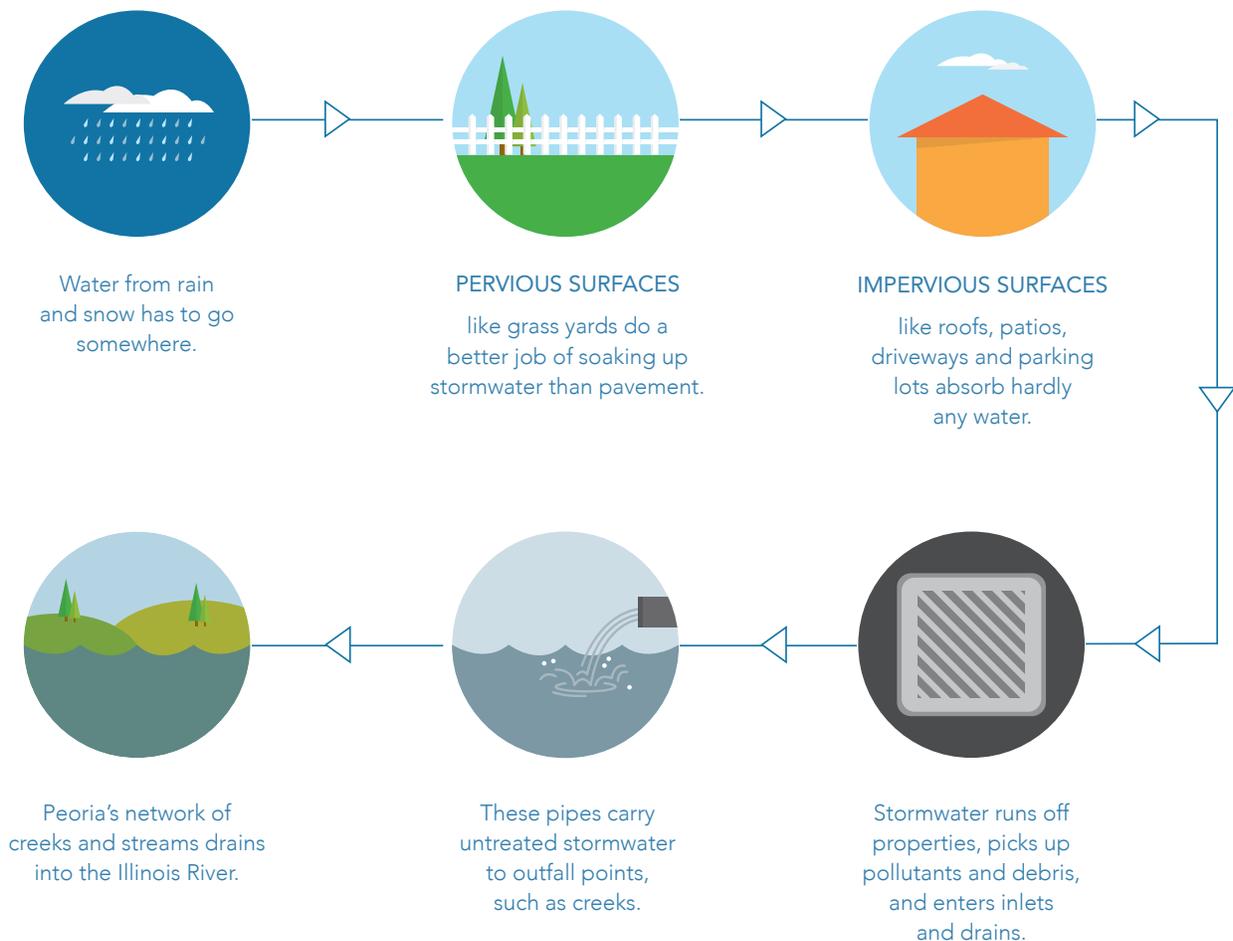
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 & = 2.6 \text{ Billing Units} \times \$3 \text{ per Billing Unit} \\
 & = \$7.80 \text{ per Month (Average Home)}
 \end{aligned}$$

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

WHAT IS STORMWATER INFRASTRUCTURE?

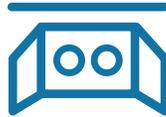
You probably use Peoria's stormwater infrastructure and not even realize it. Stormwater infrastructure is the engineered collection system that drains wet weather, like rain and snowmelt, to nearby waterbodies.



DITCHES



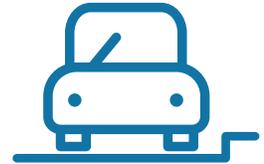
CREEKS



PIPES &
CULVERTS



PONDS &
LAKES



CURBS &
GUTTERS



INLETS &
MANHOLES



WETLANDS



OCEANS



RAIN
GARDENS



BIOSWALES

To learn more about the impact of stormwater, please visit 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.**

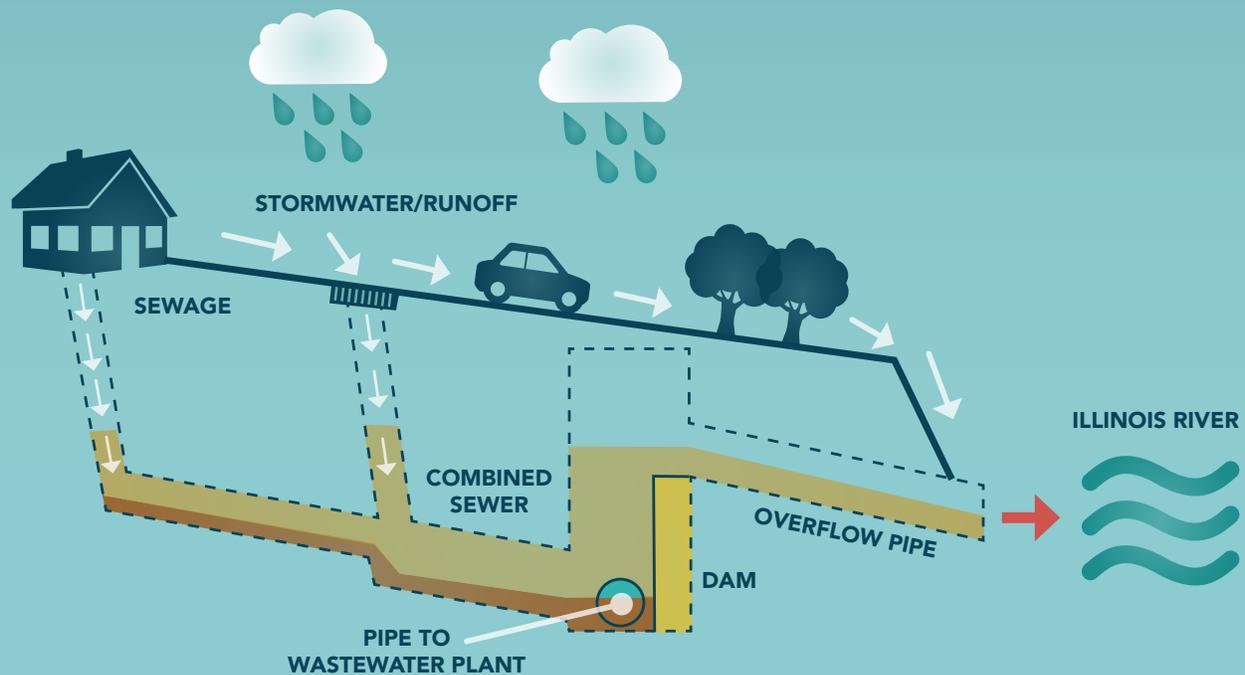
You can ask to organize a project with your school, Scout troop or church to plant things like native grasses and shrubs. The roots from plants keep the soil in place, so it doesn't erode and dirty up the water. Animals like this, too!



**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



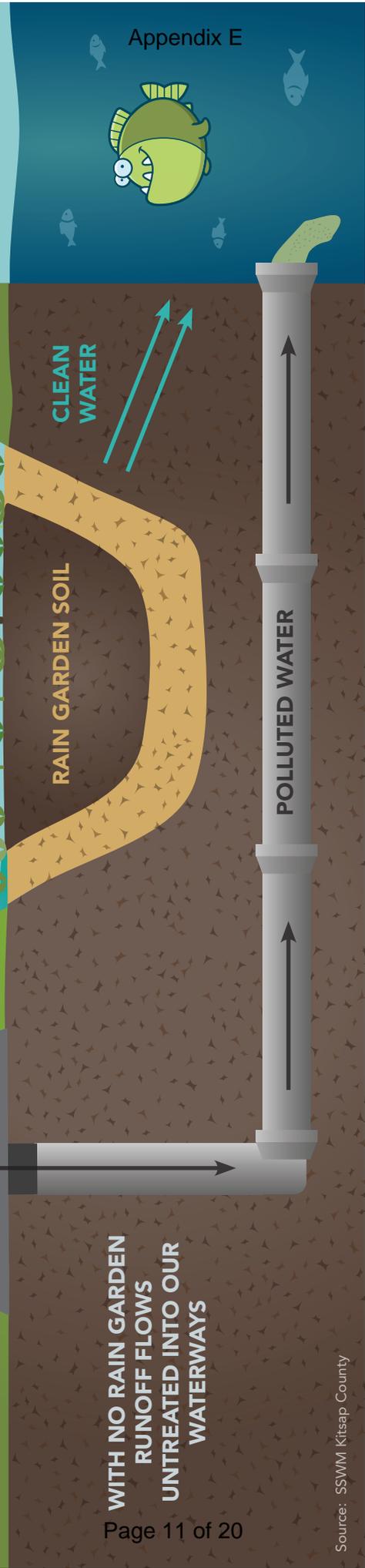
WHAT IS A RAIN GARDEN?

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>



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

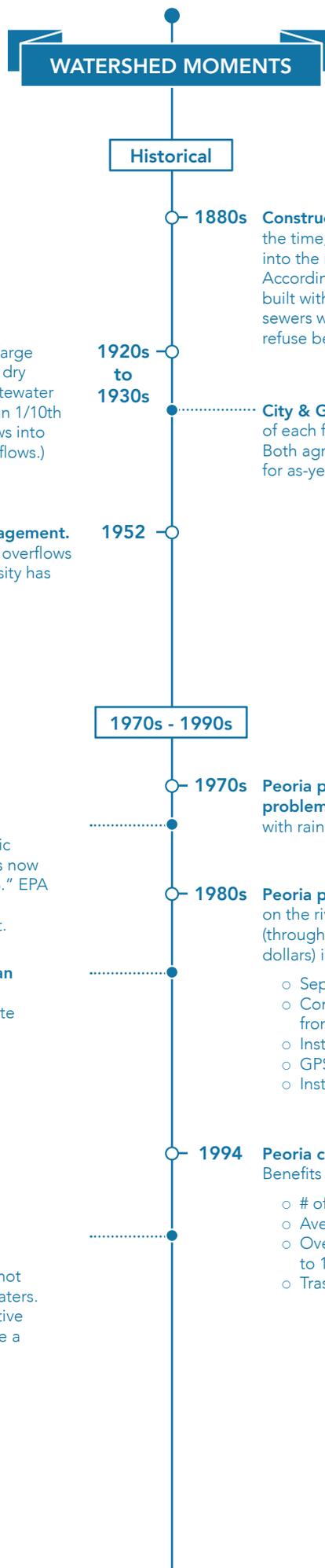
- Providing a scale and scope of design and construction work that can be met by local companies
- Creating a demand for workforce training and education to build capacity for public and private sector jobs



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



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.

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.

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.

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.

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

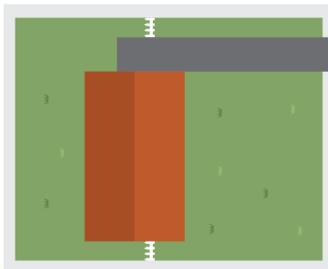
By investing in smart, natural stormwater solutions, we will create a beautiful, sustainable future for Peoria. Learn about the stormwater utility and how it will improve our community.

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.



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

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. To learn more about these wet weather issues, please visit 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

APPENDIX F

2021 SWU Capital Projects

Capital Project Expenses

Org	Object	Project	Description		2021 Actual	2021 Enc		
8012201	525001	A1909	New Fire Station	LAND	Capital	-	15,000.00	15,000.00
8013001	523655	N1901	Drainage Repair Program	SEWER	Capital	236,271.84	-	236,271.84
8013001	525304	O1800	SWU Enterprise Software	COMPUTERS	Capital	1,275.00	-	1,275.00
8013001	513999	O1902	Humboldt / Prospect Retaining Wall	CONTRACT - OTHER	Capital	-	7,294.42	7,294.42
8013001	513999	O1903	Storm Water Mgmt - Clean Water Act	CONTRACT - OTHER	Capital	8,608.30	4,914.96	13,523.26
8013001	513999	O1904	SWU Grants	CONTRACT - OTHER	Capital	125,736.09	7,652.66	133,388.75
8013001	513999	O1906	Watershed Drainage Analysis	CONTRACT - OTHER	Capital	-	18,707.98	18,707.98
8013001	523655	O2001	Concrete Lined Drainage Channel Repair	SEWER	Capital	4,910.52	-	4,910.52
8013001	523655	O2002	Drainage Repair Program	SEWER	Capital	130,771.89	-	130,771.89
8013001	523655	O2005	Green Infrastructure Maintenance	SEWER	Capital	8,721.90	-	8,721.90
8013001	523655	O2006	Merle & Knoxville Culvert	SEWER	Capital	72,343.97	23,378.41	95,722.38
8013001	523655	O2008	Storm Water Mgmt - Clean Water Act	SEWER	Capital	61,797.34	85,393.31	147,190.65
8013001	513999	O2009	SWU Grants	CONTRACT - OTHER	Capital	53,197.53	8,022.08	61,219.61
8013001	513999	O2010	Glen & Sheridan Road Culvert	CONTRACT - OTHER	Capital	115,000.61	1,731.84	116,732.45
8013001	523655	O2102	Drainage Analysis Engineering	SEWER	Capital	56,219.32	118,310.68	174,530.00
8013001	523655	O2103	Drainage Repair Program	SEWER	Capital	1,138,607.91	46,842.45	1,185,450.36
8013001	523655	O2106	Merle & Knoxville Culvert	SEWER	Capital	219.00	19,781.00	20,000.00
8013001	523655	O2107	SWU Infrastructure Improvements	SEWER	Capital	95,746.75	145,688.00	241,434.75
8013001	523655	O2108	Storm Water Mgmt - Clean Water Act	SEWER	Capital	52,579.78	34,389.00	86,968.78
8013001	523655	O2110	Storm Water Asset Mgmt	SEWER	Capital	6,135.68	33,864.32	40,000.00
8013001	523655	R2104	Glen Ave - War Drive to University	SEWER	Capital	3,675.75	3,824.25	7,500.00
								-
						2,171,819.18	574,795.36	2,746,614.54

DRAC	\$	1,505,652	\$	46,842	\$	1,552,494
GI Maint	\$	8,722	\$	-	\$	8,722
Merle Culvert	\$	72,563	\$	43,159	\$	115,722
Glen & Sheridan Road Culvert	\$	115,001	\$	1,732	\$	116,732
Drainage Analysis Engineering	\$	59,895	\$	140,843	\$	200,738
Storm Water Asset Mgmt	\$	6,136	\$	33,864	\$	40,000
SWU Grants	\$	178,934	\$	15,675	\$	194,608
NPDES Program	\$	122,985	\$	124,697	\$	247,683
Spring/Orchard	\$	95,747	\$	145,688	\$	241,435
Misc Items	\$	1,275	\$	15,000	\$	16,275
Misc Project	\$	4,911	\$	7,294	\$	12,205
	\$	2,171,819	\$	574,795	\$	2,746,615

APPENDIX G

Memorandum

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

March 10, 2022

TO: Andrea Klopfenstein, City of Peoria, Public Works Department

CC: Josh Gabehart, Foth Infrastructure & Environment, LLC

FR: Nick Vetsch, Foth Infrastructure & Environment, LLC
Yohannes Fisseha, Foth Infrastructure & Environment, LLC

RE: 2021 Storm Sewer Repair and Lining Annual Report

Foth Infrastructure & Environment, LLC (Foth) is contracted by the city of Peoria (City) to assist with administering storm sewer repair programs. Foth's efforts in 2021 included site investigations, program management, construction observation, and end of year reporting.

J.C. Dillon, Inc. (Dillon) was originally contracted in 2019 to complete construction work under both the Annual Storm Sewer Repair Contract (ARC) and the Annual Storm Sewer Lining Contract (ALC). Dillon's original 2019 ARC and ALC were extended via change order to continue to provide services in 2020. The 2019 ARC contract was again extended via change order to continue to provide services in 2021, however, in 2021 the ALC was not extended, and lining work in 2021 was instead completed under the ARC. An additional change order was issued in 2021 to add budget for additional repairs.

The remaining budgets from 2020 and budget additions in 2021 are as follows:

2020 ARC Remaining Budget	\$9,299.62
2020 ALC Remaining Budget (added to ARC)	\$220,000.00
2021 Contract Extension Change Order	\$900,000.00
2021 Budget Addition Change Order	\$750,000.00
TOTAL 2021 BUDGET	\$1,879,299.62

The 2019 ARC was not renewed for 2022, a new ARC including both repair and lining work was instead issued and released for Request for Proposals (RFP). Dillon was awarded the new 2022 ARC and will continue to provide repair and lining work through 2022. Due to the new contract, any previously issued work orders which have not been completed shall be considered void and new work orders will be issued for work to be completed in 2022.

1. Annual Repair Contract Work Completed in 2021

In 2021, Dillon completed 30 individual projects under the ARC, one of these projects (ALC 20-08) was a former ALC project which was completed in 2021 under the ARC. A total of 33 projects were invoiced, some of which were separate billings for different components of the same project.

A total invoiced cost of \$1,272,383.23 was approved for work completed in 2021 via Progress Billings 19 through 22. Progress Billing 22 was approved on February 17, 2022, but has been included in this total due to the work billed being completed in 2021, and this is the last billing under the 2019 ARC and/or ALC. A Progress Billing Summary may be found attached which includes all payments approved under the 2019 ARC.

The Work Orders (WO) listed below were completed in 2021. Some of these projects have carryover 20-XX WO numbers due to the WOs being generated in 2020.

1.1 WO 20-04 924 Bridgetown Court

Cost \$15,716.16

Constructed ditch across new easement. Graded to drain and installed heavier erosion matting in swale.

1.2 WO 20-08 1614 E. Lake Street

Cost \$12,036.28

Cleaned and replaced broken concrete energy dissipater. Stabilized stream bank erosion encroaching near house. This site has future needs in bank stabilization and storm water modeling.

1.3 WO 20-08 5118 N. Sherbrook Lane (ALC)

Cost \$15,473.94

Evaluated, measured, and pipe lining at location.

1.4 WO 20-10 408 W. Westwood Drive

Cost \$76,170.52

Televised, cleaned, and evaluated work at location.

1.5 WO 20-17 3716 Verner Drive

Cost \$38,214.95

Cleaned and televised storm sewer. Repaired outfall in backyard.

1.6 WO 20-18 412 Collingwood Circle

Cost \$11,275.98

Repaired and restored miscellaneous damage caused by overflow from late fall major storm as needed from lining work order.

1.7 WO 20-20 6601 N. Post Oak Road

Cost \$34,261.66

1.8 WO 21-01 225 Detweiler Drive

Cost \$99,534.16

Replaced existing storm sewer pipe, connected drain line to the piping with structure, and installed riprap at outfall.

1.9 WO 21ARC-02 4918 N. Sherwood Avenue

Cost \$84,964.50

Added manhole at blind connection of PVC pipe west of property. Contractor was able to reshape slope and replace inlet to the storm sewer under ROW.

1.10 WO 21ARC-03 3809 Woodtrail Court

Cost \$8,412.70

Filled and restored sinkhole between houses. Pipe #204-1 from MH 604 to MH 604-a, 117.5' of 30" has been lined.

1.11 WO 21ARC-04 3357 W. Lexington

Cost \$45,414.21

Replaced old CMP. Graded slope. Placed large rock around flared end of pipe. Seeded slope and placed erosion control blanket. Laid sod on flat section of yard.

1.12 WO 21ARC-05 9169 N. Picture Ridge Road

Cost \$48,757.06

Cleaned up debris from failed pipe and graded as needed. Stabilized channel with riprap.

1.13 WO 21ARC-06 W. Albany Avenue and Stanley

Cost \$30,308.45

Contractor cleaned ditch and did structure lowering.

1.14 WO 21ARC-11 N. Isabelle Avenue

Cost \$2,557.32

Initial investigation and cleaning of pipe to evaluate repair options.

1.15 WO 21ARC-13 1021 Nebraska Avenue

Cost \$24,488.37

1.16 WO 21ARC-14 616 Brook Forest Drive

Cost \$43,239.40

Repaired storm water sewers and installed riprap at outfall.

1.17 WO 21ARC-16 2914 W. Brookside Drive

Cost \$76,456.11

Removed damaged section at outlet of culvert beneath street. Lined full length of pipe and extended liner at outlet end as partial pipe replacement.

1.18 WO 21ARC-17 11321 N. Hickory Woods Court

Cost \$21,779.86

Removed existing riprap from detention basin outlet to plastic inlet at northwest corner of property. Replaced with 3-foot-wide concrete V-shaped channel from outlet to inlet. Graded and placed sod back where existing riprap is.

1.19 WO 21ARC-19 2800 Montana Street

Cost \$2,612.43

Repaired inlet structure found during restoration of IAW project Dillon was working on. Requested as ARC per City Engineer.

1.20 WO 21ARC-20 412 W. Birchwood Avenue

Cost \$15,383.26

Repaired washed out pipe connection. Investigated smaller pipe insert into larger pipe and repaired as needed.

1.21 WO 21ARC-21 3330 Overbrook Drive

Cost \$59,436.29

Added drop manhole at washed outfall and placed riprap in the same ravine at nearby outfall from 3319 Parkridge Dr. from the same access point.

1.22 WO 21ARC-22 2601 N. Kingston Drive

Cost \$27,401.88

Replaced rusted out CMP and installed riprap at outfall.

1.23 WO 21ARC-23 2814 Overbrook Court

Cost \$22,170.84

Added drop manhole at washed out outfall and placed riprap. Contractor located and tied in outfall from 2811 Rustic Ridge Dr. at drop manhole.

1.24 WO 21ARC-24 3033 Ward Cliffe Drive

Cost \$25,726.22

Added drop manhole where the washed-out outfall is and installed riprap around the outfall.

1.25 WO 21ARC-25 2622 Woodhaven Drive

Cost \$48,099.65

Installed riprap at outfall. Cleaned the ditch and dug out debris from inlet to HPDE culvert beneath wood retaining wall at 2612 property.

1.26 WO 21ARC-27 3216 Isabell and Hudson (liner)

Cost \$7,414.94

Lined pipe and cleaned ditch at outfall.

1.27 WO 21ARC-28 3425 Villa Ridge

Cost \$15,790.50

Added drop MH, outfall pipe and stabilized outfall.

1.28 WO 21ARC-29 3428 Dorchester Ridge

Cost \$28,587.46

Added drop MH and outfall pipe and stabilized outfall.

1.29 WO 21ARC-30 3420 Baskin Ridge

Cost \$18,134.94

Recycled end section in place to install riprap. Installed new flared end with riprap flume at existing end of pipe. Graded and stabilized around the outfall.

1.30 WO 21ARC-36 Hawthorne Place and North Street

Cost \$37,045.35

Repaired shifted section at end of survey for pipe #5726. Repaired majorly shifted section of pipe #5735. Repaired separated section near manhole for pipe #5797.

1.31 WO 21-ARC-36 Hawthorne Place and North Street (liner)

Cost \$52,604.54

Lined pipe #5722. Lined pipe #5736.

1.32 WO 21ARC-44 435 Detweiler Avenue

Cost \$127,811.74

Worked on emergency repairs at location.

1.33 WO 21ARC-45 3216 Isabelle and Hudson (repair)

Cost \$165,628.30

Cleaned out ditch and extended pipe from existing outfall to downstream outlet. Associated structure installation and line piping has been completed as well.

2. Annual Lining Contract Work Paid in 2021

ALC Progress Billing 9 was approved on March 4, 2021, for Work Orders 20-07 and 20-12 completed in 2020. This was the final billing under the 2019 ALC. The 2019 ALC was not extended for work in 2021, lining work in 2021 was completed under the extension of the ARC.

3. 2022 Work Plan

Unfinished work orders from 2021 are being assigned new work order numbers under the new 2022 ARC. A list of WOs that are being transferred to 2022 are as follows:

- ◆ WO 21 ARC-07 701 E. Cox Ave.
- ◆ WO 21 ARC-08 2706 W. Parkridge Dr.
- ◆ WO 21 ARC-09 5611 Humboldt Ave.
- ◆ WO 21 ARC-10 413 W. Lakewood Dr.

- ◆ WO 21 ARC-18 921 W. Westwood Dr.
- ◆ WO 21 ARC-26 2606 Woodhaven Dr.
- ◆ WO 21 ARC-31 2802 N. Easton Pl.
- ◆ WO 21 ARC-32 1738 N. Great Oak Rd.
- ◆ WO 21ARC-33 2373 N. Ardell Pl.
- ◆ WO 21ARC-34 2229 N. Ardell Pl.
- ◆ WO 21ARC-35 2315 N. Lehman Rd.
- ◆ WO 21ARC-37 123 E. Morningside Dr.
- ◆ WO 21ARC-38 University St. and Brons Ave.
- ◆ WO 21ARC-39 8307 N. Bramberry
- ◆ WO 21ARC-40 6135 N. Pin Oak Cir.
- ◆ WO 21ARC-41 Tiffany Ct. Flooding Issue
- ◆ WO 21ARC-42 5317 N. Hamilton Rd.
- ◆ WO 21ARC-43 1818 W. Willow Wood Dr.

4. Conclusion

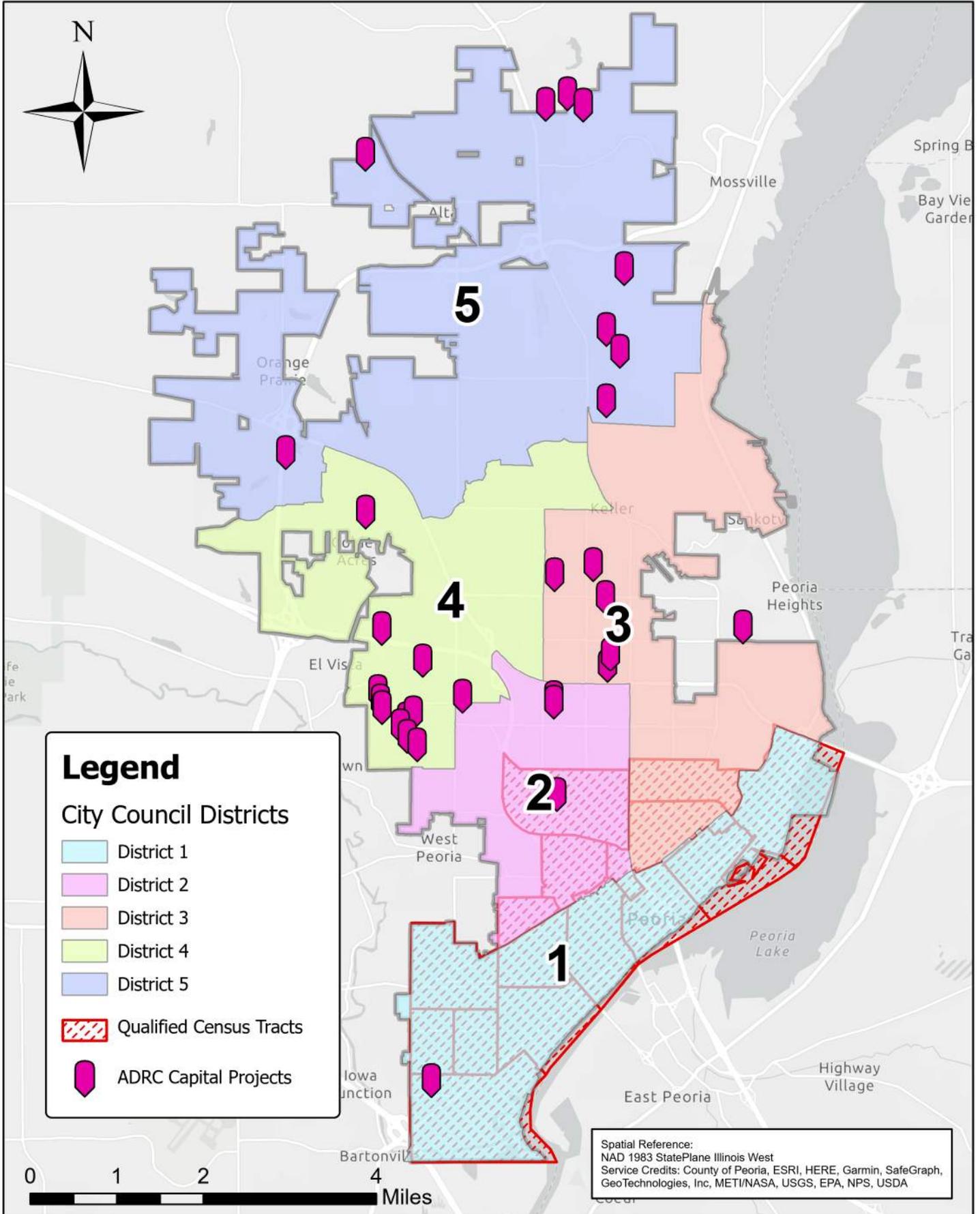
Foth is conducting site assessments to develop work to be completed and continuing to maintain the project backlog. Foth will continue to provide work orders to Dillon and review of Progress Billings as they are received.

The 2022 work plan will include dedicated budget for lining projects as well as “open cut” repairs. Foth will continue to work with Dillon on receiving regular pay requests and project schedules. The work will include assigning a construction manager to the project to drive regular updates and progress to complete the assigned budget of the project.

5. Attachments

- ◆ Attachment 1: Progress Billing Summary
- ◆ Attachment 2: Work Order Summary

Annual Drainage Repair Contracts City of Peoria, IL 2021 STORMWATER UTILITY REPORT



Attachment 1
Progress Billing Summary

Annual Storm Sewer Repair Contract 2021

Date: 2/17/2022

2019 Construction Budget Review			
Description	Funding	Invoiced	Remaining Budget
2019 Annual Repair Contract Budget	\$520,000.00	\$520,000.00	\$0.00
2019 Credit (unit cost correction)		-\$592.02	
2020 Change Order #1	\$550,000.00	\$550,000.00	\$0.00
2021 Change Order #2	\$900,000.00	\$900,000.00	\$0.00
2021 Change Order #3	\$750,000.00	\$364,267.68	\$385,732.32
Total Budget	\$2,720,000.00	\$2,333,675.66	\$386,324.34

Previously Invoiced Work Orders		
Pay App	Location	Cost \$
2019 Pay Applications		
PA 1	-	\$ 52,372.58
PA 2	-	\$ 1,056.44
PA 3	-	\$ 8,218.52
PA 4	-	\$ 26,934.20
PA 5	-	\$ 86,798.06
PA 6	-	\$ 105,643.86
PA 7	-	\$ 49,316.31
PA 8	-	\$ 113,859.26
PA 9	-	\$ 25,273.61
PA 10	-	\$ 25,749.02
PA 11	-	\$ 12,245.10
Total	Total 2019 pay estimates	\$ 507,466.96
2020 Pay Applications		
PA 12	-	\$ 3,347.70
PA 13	-	\$ 102,909.41
PA 14	-	\$ 58,731.63
PA 15	-	\$ 47,900.52
PA 16	-	\$ 144,284.18
PA 17	-	\$ 164,970.70
PA 18	-	\$ 31,681.30
Total	Total 2020 pay estimates	\$ 553,825.44
Previous 2021 Invoices		
Work Order	Location	Cost \$
PA 19		\$ 427,272.69
PA 20		\$ 275,027.53
PA 21	-	\$ 216,623.52
Total	Total 2021 pay estimates	\$ 918,923.74
Total Previously Invoiced		\$ 1,980,216.14

Current - Pay App 22		
Work Order	Location	Cost \$
Payment #22		
21-27	3216 Isabell and Hudson (liner)	\$ 7,414.94
21-36	Hawthorne Place and North St (liner)	\$ 52,604.54
21-44	435 Detweiller Dr	\$ 127,811.74
21-45	3216 Isabell and Hudson (repair)	\$ 165,628.30
	Subtotal	\$ 353,459.52
TOTAL		\$ 353,459.52

Attachment 2
Work Order Summary

Work Order Summary

WO#	Location	Status	Invoice	Invoiced Cost
20-04 (ARC)	924 Bridgetowne Ct	completed March 2021	Progress Billing 19	\$ 15,716.16
20-08 (ALC)	5118 N. Sherbrook Ln	completed March 2021	Progress Billing 19	\$ 15,473.94
20-08 (ARC)	1614 Lake	completed March 2021	Progress Billing 19	\$ 12,036.28
20-10 (ALC)	408 W Westwood Dr	completed March 2021	Progress Billing 19	\$ 5,643.81
20-17 (ARC)	3716 Verner	completed April 2021	Progress Billing 19	\$ 38,214.95
20-18 (ARC)	412 Collingwood Circle	completed April 2021	Progress Billing 19	\$ 11,275.98
20-20b (ARC)	6601 N Post Oak Rd	completed April 2021	Progress Billing 19	\$ 34,261.66
21ARC-01	255 Detweiler Dr	completed June 2021	Progress Billing 19	\$ 99,534.16
21ARC-02	4918 Sherwood Ave	completed June 2021	Progress Billing 20	\$ 84,964.50
21ARC-03	3809 Wood Trail Court - Lining	completed June 2021	Progress Billing 20	\$ 8,412.70
21ARC-04	3357 W Lexington	completed May 2021	Progress Billing 19	\$ 45,414.21
21ARC-05	9169 N Picture Ridge Rd	completed May 2021	Progress Billing 19	\$ 48,757.06
21ARC-06	Stanley and Albany	completed June 2021	Progress Billing 20	\$ 30,308.45
21ARC-07	701 E Cox Ave	reissue work order in 2022	n/a	n/a
21ARC-08	2706 W Parkridge Dr	project not applicable to ARC	n/a	n/a
21ARC-09	5611 Humboldt Ave	hold	n/a	n/a
21ARC-10	413 W Lakewood Dr	project not applicable to ARC	n/a	n/a
21ARC-11	Isabell and Hanssler	completed June 2021	Progress Billing 20	\$ 2,557.32
21ARC-12	N Sommer Court	hold, too large for ARC	n/a	n/a
21ARC-13	1015 Nebraska	completed June 2021	Progress Billing 19	\$ 24,488.37
21ARC-14	616 Brookforest Dr	completed September 2021	Progress Billing 21	\$ 43,239.40
21ARC-15	6502 N Post Oak Rd	reissue work order in 2022	n/a	n/a
21ARC-16	2914 W Brookside Dr	completed June 2021	Progress Billing 19	\$ 76,456.11
21ARC-17	11321 Hickory Woods Court	completed June 2021	Progress Billing 20	\$ 21,779.86
21ARC-18	921 W Westwood Dr	reissue work order in 2022	n/a	n/a
21ARC-19	Montana and Oregon	completed June 2021	Progress Billing 20	\$ 2,612.43
21ARC-20	4720 Idlewood and 412 W Birchwood	completed July 2021	Progress Billing 20	\$ 15,383.26
21ARC-21	3330 Overbrook Dr	completed July 2021	Progress Billing 20	\$ 59,436.29
21ARC-22	2601 Kingston Dr	completed August 2021	Progress Billing 20	\$ 27,401.88
21ARC-23	2814 Overbrook Ct	completed August 2021	Progress Billing 20	\$ 22,170.84
21ARC-24	3033 Wardcliffe Dr	completed August 2021	Progress Billing 21	\$ 25,726.22

WO#	Location	Status	Invoice	Invoiced Cost
21ARC-25	2622 Woodhaven Dr	completed August 2021	Progress Billing 21	\$ 48,099.65
21ARC-26	2606 Woodhaven Dr	reissue work order in 2022	n/a	n/a
21ARC-27	3216 and 3218 Isabell Ave	completed July 2021	Progress Billing 22	\$ 7,414.94
21ARC-28	3425 Villa Ridge	completed August 2021	Progress Billing 21	\$ 15,790.50
21ARC-29	3428 Dorchester Ridge	completed August 2021	Progress Billing 21	\$ 28,587.46
21ARC-30	3420 Baskin Ridge	completed August 2021	Progress Billing 21	\$ 18,134.94
21ARC-31	2802 N Easton Pl	easement needed	n/a	n/a
21ARC-32	1738 N Great Oak Rd	easement needed	n/a	n/a
21ARC-33	2373 N Ardell Pl	easement needed	n/a	n/a
21ARC-34	2229 N Ardell Pl	reissue work order in 2022	n/a	n/a
21ARC-35	2315 N Lehman Rd	easement needed	n/a	n/a
21ARC-36	Hawthorne Pl and North St	completed October 2021	Progress Billing 21	\$ 37,045.35
21ARC-36(2)	Hawthorne Pl and North St	2nd billing for lining work	Progress Billing 22	\$ 52,604.54
21ARC-37	123 E Morningside	reissue work order in 2022	n/a	n/a
21ARC-38	University St and Brons Ave	reissue work order in 2022	n/a	n/a
21ARC-39	8307 N Bramberry	reissue work order in 2022	n/a	n/a
21ARC-40	6135 N Pin Oak Cir	reissue work order in 2022	n/a	n/a
21ARC-41	Tiffany Ct Flooding Issue	reissue work order in 2022	n/a	n/a
21ARC-42	5317 N Hamilton Rd	reissue work order in 2022	n/a	n/a
21ARC-43	1818 W Willow Wood Dr	reissue work order in 2022	n/a	n/a
21ARC-44	435 Detweiler	completed October 2021	Progress Billing 22	\$ 127,811.74
21ARC-45	3216 Isabell and Hudson	completed October 2021	Progress Billing 22	\$ 165,628.30

APPENDIX H

Memorandum

2314 West Altorfer Drive
Peoria, IL 61615
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foth.com

March 15, 2022

TO: Andrea Klopfenstein, City of Peoria, Public Works Department

CC: Josh Gabehart, Foth Infrastructure & Environment, LLC

FR: Nick Vetsch, Foth Infrastructure & Environment, LLC
Yohannes Fisseha, Foth Infrastructure & Environment, LLC

RE: 2021 Private Property Drainage Assistance Annual Report

Foth Infrastructure & Environment, LLC (Foth) is contracted by the city of Peoria (City) to assist with administering the 2021 Private Property Drainage Assistance (PPDA) program. The summary for those parcels utilizing the program are provided below. The approved 2021 reimbursement budget for PPDA was \$200,000.00 and \$174,960.50 was awarded for 24 projects. The remaining amount of \$24,960.50 is to be transferred to year 2022.

1. Introduction

The city of Peoria (City) has included the Private Property Drainage Assistance (PPDA) within a suite of programs offered through the Storm Water Utility. The total budget reimbursed on PPDA projects was \$174,960.50 of the revised \$200,000.00 budget. The 2021 PPDA summary and PPDA Master Database are attachments to this memorandum.

The PPDA rules and guidelines can be found in the Storm Water Utility Grant and Credit manual here: <https://peoriastormwater.com/stormwater-utility/lower-your-payment/>. Within this document, Section 5 discusses credit and grant policies, including eligibility and the application process. Section 6 discusses the grant funding and selection process and the various programs that a resident may qualify for.

Residents complete the following process to apply for Storm Water management credits and grants:

1. The resident prepares the appropriate application forms as found on the City website, by contacting Public Works, or by picking up physical copies at the Public Works facility.
2. The resident submits the forms, fees, and attachments to the Public Works Department.
3. Foth reviews the application within 30 working days and notifies the applicant of credit or grant determination, including any deficiencies in the case that the application is not approved.
4. If the credit or grant is denied, the applicant may correct identified deficiencies and resubmit their revised application.

5. If a credit or grant is denied a second time, the applicant may appeal the determination following guidelines in Article IV of Chapter 31 of the city of Peoria Code of Ordinances.
6. Once accepted, the funding is reserved for 60 days. Construction must be completed within this timeframe, unless extenuating circumstances necessitate an extension.
7. Once construction is completed and the contractor has been paid by resident, the applicant submits a reimbursement request, which includes evidence of payment for the completed work within 30 days of the work's completion.

Foth's efforts in 2021 included site investigation, application assistance to residents, application reviews, payment coordination with City staff, and end of year reporting.

2. Private Property Drainage Assistance Program

The 2021 Private Property Drainage Assistance Program Contract consisted of helping local property owners make storm water improvements throughout the City and the 2021 approved PPDA budget was \$200,000.00. The City has maintained this reimbursement program for several years to great success.

The following summary is for reimbursed projects during 2021.

2.1 2129 W. Geneva Road

Cost \$4,410.00

Rebuilt failed retention wall in backyard to prevent mudslide along creek.

2.2 11200 N. Daniel Street

Cost \$4,875.00

Installed 60 feet of gabion baskets to prevent creek erosion.

2.3 Westporte Apartments

Cost \$6,525.00

Relined collapsing 12-inch storm drain.

2.4 416 W. Wolf Road

Cost \$7,500.00

Installed 45 feet of gabion baskets along streambank.

2.5 501 W. Red Oak Court

Cost \$7,500.00

Reconfigured existing gabion baskets to maximize drainage system's efficiency and installed new 45-foot long gabion basket along bank.

2.6 608 W. Thousand Oaks Drive

Cost \$7,500.00

Installed gabion check structure downstream from City manhole and installed thick gabion mattress at the foot of the check structure. Placed RR4 limestone in the stream and graded the existing rock path.

2.7 2135 W. Geneva Road

Cost \$4,725.00

Excavated level wall area along creek, removed trees, installed 42 feet of gabion baskets, and laid grass seed and straw.

2.8 2311 W. Chandler Court

Cost \$7,500.00

Installed gabion retaining walls. Infilled with RR3 limestone.

2.9 5003 W. Newcastle Drive

Cost \$7,500.00

Replaced existing gabion wall. Built drainage swales with rick-rock stones. Installed drainage tile behind retaining wall, down ravine.

2.10 2327 W. Chandler Court

Cost \$7,500.00

Constructed embankment with oversized R4 riprap. Placed RR4 into channel to prevent further scour.

2.11 2325 W. Chandler Court

Cost \$7,312.50

Constructed a retaining wall structure using gabion baskets. Placed 8 to 12-inch riprap into channel.

2.12 2409 W. Chandler Court

Cost \$7,500.00

Constructed an embankment with oversized A4 riprap. Placed rock to rebuild and stabilized eroded hillside.

2.13 2038 W. Geneva Road

Cost \$7,500.00

Installed gabion baskets.

2.14 1859 W. Teton Drive

Cost \$810.00

Installed 4-inch drainpipe, built retaining wall, installed riprap, and graded and seeded work area.

2.15 5925 N. Elm Lane

Cost \$7,500.00

Removed existing RR tie wall and replaced with new treated timbers. Constructed wall along ravine edge and installed oversized RR4 riprap onto hillside.

2.16 5916 W. Ridgecrest Court

Cost \$7,500.00

Removed and replaced existing timber retaining walls.

2.17 6914 N. Upper Skyline Drive

Cost \$6,375.00

Installed gabion baskets and graded land.

2.18 2331 W. Chandler Court

Cost \$7,500.00

Constructed an embankment with oversized A4 riprap and placed rock material to rebuild and stabilize hillside. Graded above riprap for smooth transition into yard.

2.19 5003 W. Newcastle Drive

Cost \$7,500.00

Installed timber retaining wall and drainage swales. Backfilled behind retaining wall. Installed drainage tiles down ravine. Graded and seeded entire work area.

2.20 2145 N. Hampton Court

Cost \$5,737.50

Installed railroad ties and drainage tiles. Backfilled and seeded work area.

2.21 4820 N. Westbrook Drive

Cost \$7,500.00

Contoured and straightened out the creek from property line to property line. Installed riprap to line stream bed. For restoration, seeded, fertilized, and placed straw mulch.

2.22 2419 Chandler Court

Cost \$7,500.00

Constructed an embankment with oversized riprap to stop existing erosion and to prevent future erosions.

2.23 2411 Chandler Court

Cost \$7,500.00

Constructed a stabilized embankment with oversized riprap to stabilize creek embank and slow the erosion.

2.24 2417 Chandler Court

Cost \$7,500.00

Constructed an embankment with oversized riprap to prevent erosion and deepening of the creek bed.

3. Conclusion

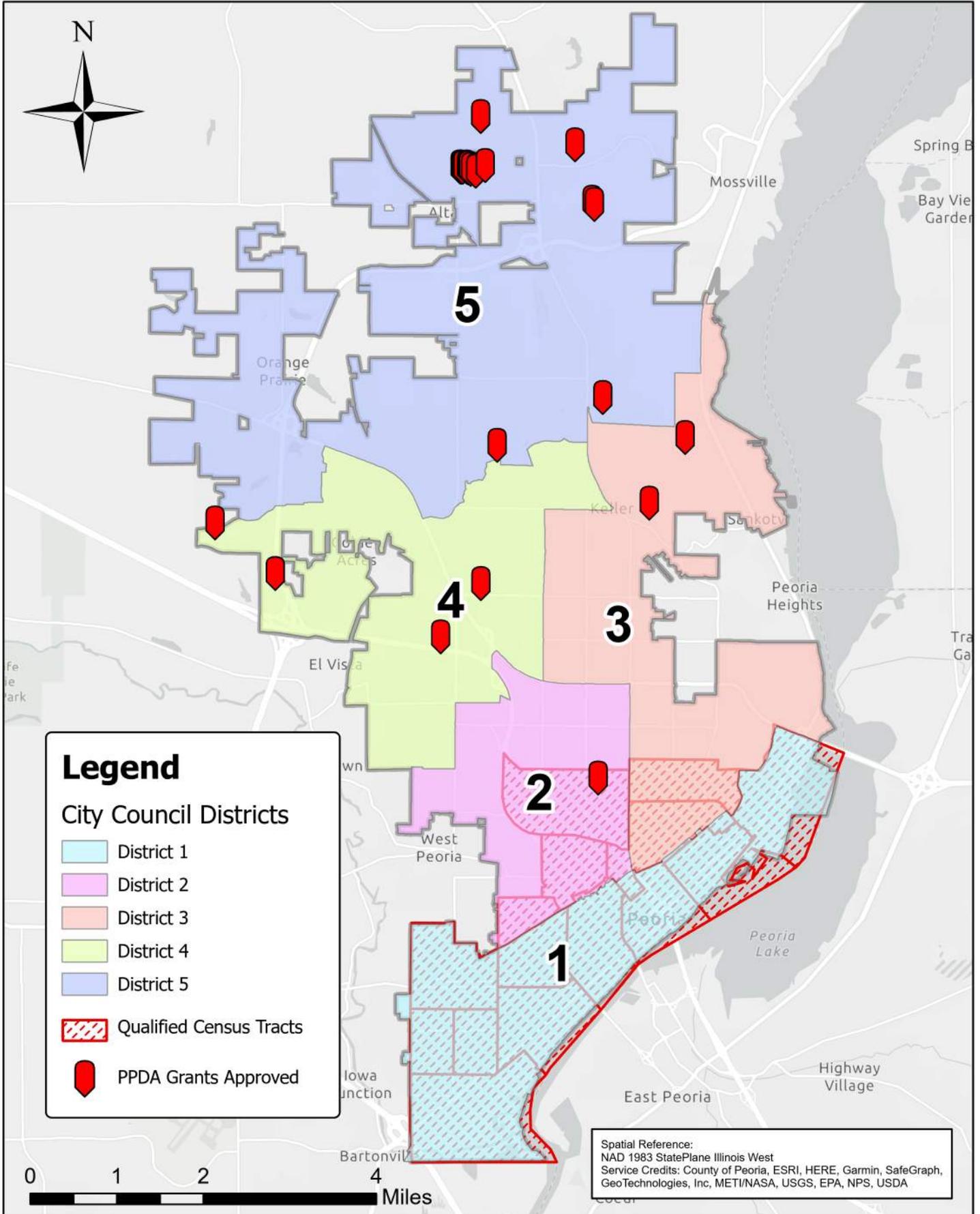
In 2022, Foth will continue to assist the City and residents with the PPDA program. We will continue to work to reduce our efforts and handle as many as possible from the office without site visits as conditions allow.

The 2021 program ended in October and several inquiries were deferred until 2022 and residents were required to hold off submitting applications until January 2022. Several applications have already been submitted and it is expected to pick back up as the warmer weather starts in March and April.

Attachments:

- 2021 PPDA Summary
- PPDA Master Database

Private Property Drainage Assistance City of Peoria, IL 2021 STORMWATER UTILITY REPORT



Spatial Reference:
NAD 1983 StatePlane Illinois West
Service Credits: County of Peoria, ESRI, HERE, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA

2021 PPDA Summary

2021 Private Property Drainage Assistance Grant Program Projects

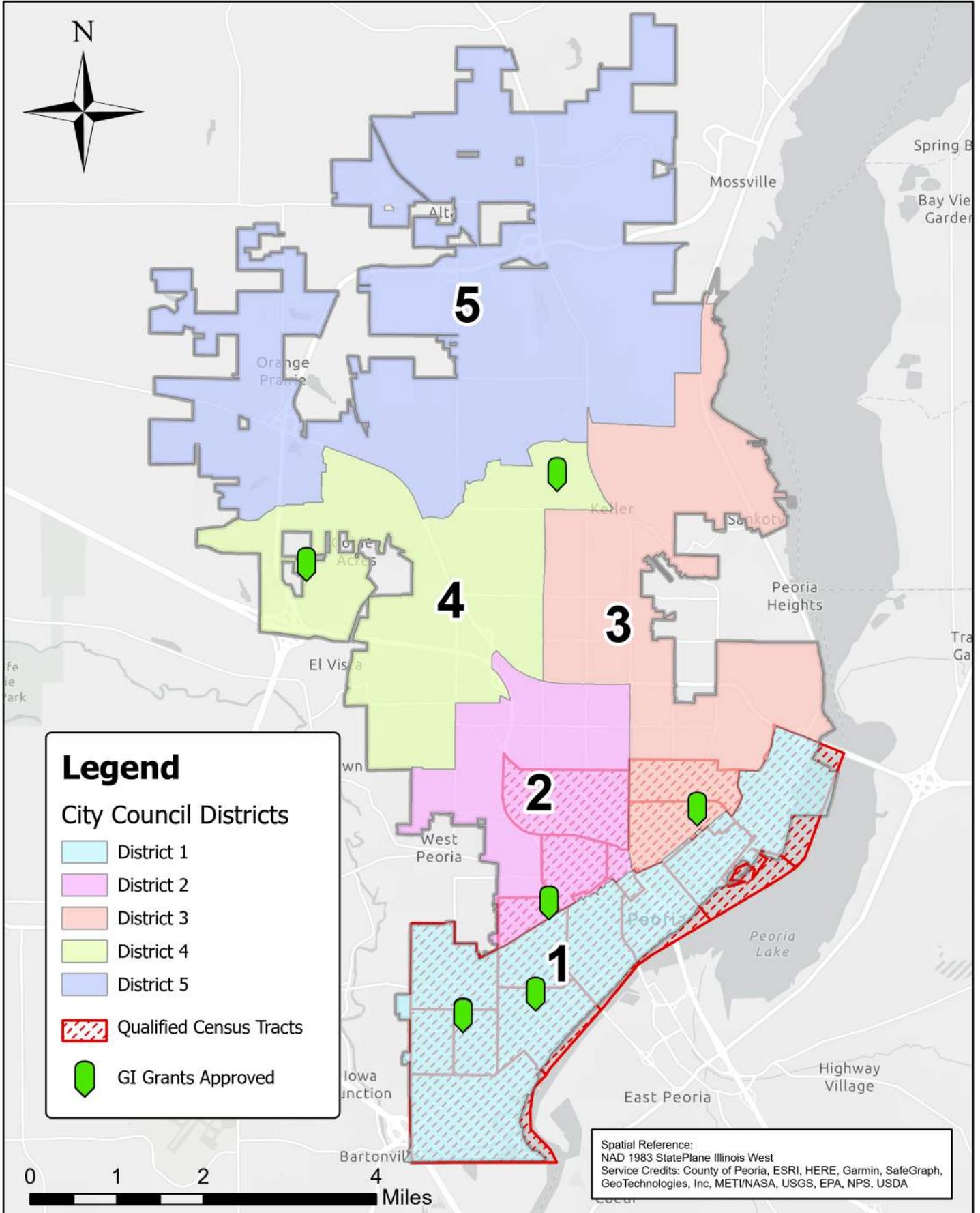
2021 Budget		\$200,000.00
2021 Engineering Budget		\$50,000.00
2021 Beginning BALANCE		\$150,000.00

Project #s o2009

Application Received Date	Application Approved Date	60 day deadline	Application Fee Paid	Applicant Name	Project Address	PIN	SWU acct #	Acct in good Standing	Amount Encumbered	Total Amount Encumbered	Reimbursed Amount Paid	Date request to Pay	Date Payment Entered	COMMENTS		
1/4/2021	1/7/2021	3/8/2021	Y	Fei Wang	2129 W Geneva Rd	930455006	112636	Y	\$ 4,410.00	\$ 4,410.00	\$ 4,410.00	4/13/2021	4/14/2021	Install gabion baskets and repair retaining wall		
1/8/2021	1/22/2021		Y	James/Jane Shadid	416 W Wolf Rd	1.409E+09	108251	Y	\$ 7,500.00	\$ 11,910.00	\$ 7,500.00	4/1/2021	5/5/2021	Install gabion baskets along the streambank to prevent further erosion		
	2/9/2021			Julio F Imura	2208 W Gerald Ct	930455005	112635	Y		\$ 11,910.00				did not complete, pulled application 2/26/2021		
2/8/2021	2/10/2021	4/11/2021	Y	Scott Coulier	2135 W Geneva Rd	930455007	112637	Y	\$ 4,725.00	\$ 16,635.00	\$ 4,725.00	4/13/2021	4/14/2021	Excavate level wall area along creek. Install gabion baskets		
2/2/2021	2/11/2021	4/12/2021	Y	Dr Robert Fitch	608 W Thousand Oaks Dr	933101005	104804		\$ 7,500.00	\$ 24,135.00	\$ 7,500.00					
2/2/2021	2/11/2021	4/12/2021	Y	William G Barnato	501 W Red Oak Ct	933151008	104837	Y	\$ 7,500.00	\$ 31,635.00	\$ 7,500.00	5/3/2021	5/18/2021	Install gabion basket along the bank to prevent hillside erosion		
1/5/2021	3/9/2021	5/8/2021	Y	Westport Apts Jon Symmonds	2805 W Larchmont	1.43E+09	147557	Y	\$ 6,525.00	\$ 38,160.00	\$ 6,525.00	4/27/2021	6/18/2021	Reline collapsing stormdrain		
2/25/2021	4/6/2021	6/5/2021	Y	William R Weber	2311 W Chandler Ct	930451015	112603	Y	\$ 7,500.00	\$ 45,660.00	\$ 7,500.00	4/1/2021	4/9/2021	Install gabion retaining wall to help prevent erosion		
1/4/2021	4/7/2021	6/6/2021	Y	Robert Wille	11200 N Daniel Ct	930227010	106380	Y	\$ 4,875.00	\$ 50,535.00	\$ 4,875.00	3/11/2021	4/9/2021	Install gabion in creek to prevent erosion		
4/13/2021	4/13/2021	8/20/2021	y	Sudheer Sajja	2038 Geneva Rd	930486001	112747	y	\$ 7,500.00	\$ 58,035.00	\$ 7,500.00	8/20/2021	10/28/2021	creek erosion and gabionwork		
4/1/2021	4/16/2021	6/15/2021	Y	Ronald Pullen	2327 W Chandler Ct	930451011	112599	Y	\$ 7,500.00	\$ 65,535.00	\$ 7,500.00	7/20/2021	7/23/2021	Installed large rock to help prevent erosion		
4/1/2021	4/16/2021	6/15/2021	Y	R. Michael/Joan Henderson	2325 W Chandler Ct	930451012	112600	Y	\$7,313.00	\$ 72,848.00	\$ 7,313.00	7/20/2021	7/23/2021	Construct a retaining wall with gabion baskets to prevent erosion		
4/7/2021	4/16/2021	6/15/2021	Y	Gerald Wombacher Jr	2409 W Chandler Ct	930451006	112594	Y	\$ 7,500.00	\$ 80,348.00	\$ 7,500.00	7/20/2021	7/23/2021	Embankment graded and covered with oversized rip raps to prevent erosion		
5/5/2021	5/6/2021	7/5/2021	Y	David Thompson	5925 N Elm Ln	1.416E+09	109067	Y	\$ 7,500.00	\$ 87,848.00	\$ 7,500.00	8/9/2021	8/11/2021	Remove and replace retaining wall. Excavation and backfill		
4/22/2021	5/24/2021	7/23/2021	Y	Eric Hipple	1859 W Teton Dr	1.407E+09	117812	Y	\$ 7,500.00	\$ 95,348.00	\$ 7,500.00	9/28/2021	10/26/21	Retaining wall reinforced to help improve drainaing from home and yard.		
6/2/2021	6/14/2021	8/13/2021	Y	James Schaber	2331 W Chandler Ct	930451010	112598	Y	\$ 7,500.00	\$ 102,848.00	\$ 7,500.00	6/21/2021	8/11/2021	Construct an embankment to prevent further erosion on hillside. Rebuild and stabilize eroded hillside.		
2/19/2021	6/23/2021	8/22/2021		William Crisp	5003 W Newcastle Dr	1.323E+09	116243		7500	\$ 110,348.00						
6/6/2021	7/26/2021	9/24/2021	Y	Clare Howard	6914 N Upper Skyline Dr	1.41E+09	108904	Y	\$ 6,375.00	\$ 116,723.00	\$ 6,375.00	7/13/2021	7/27/2021	Mitigate serious erosion occurring in a ravine at the back of the property.		
3/24/2021				Walter L Fitton	2145 N Hampton Ct	1.433E+09	134265	Y	5737.5	\$ 122,460.50						
10/5/2021			Y	Xin Liu	2008 W Gerald Dr	930478012	112685	Y	7500	\$ 129,960.50	\$ 7,500.00	10/5/2021	10/15/2021	Construct a retaining wall structure using gabion baskets to prevent erosion.		
4/30/2021	5/3/2021	8/30/2021	Y	Greg Miller	5916 Ridgecrest Cr	1.315E+09	116083	Y	\$ 7,500.00	\$ 137,460.50	\$ 7,500.00	5/6/2021		grade swale and repair wall that failed.		
5/14/2021	6/23/2021	8/23/2021	Y	Stephen Darche	4820 Westbrook Dr	1.419E+09	120479	Y	\$ 7,500.00	\$ 144,960.50	\$ 7,500.00	5/11/2021		clean creek bed out and reestablish grade. protect slopes		
6/10/2021	6/16/2021	8/16/2021	Y	Victor, Lori Flores	10817 N Oak Lynn Dr.	929426007	106263	Y	\$ 7,500.00	\$ 152,460.50	\$ 7,500.00	6/10/2021	8/24/2021			
10/15/2021	10/28/2021	12/28/2021	Y	Kurt and Kandy Anderson	2419 Chandler Court	930451003	112591-113146	Y	\$ 7,500.00	\$ 159,960.50	\$ 7,500.00	9/20/2021	10/28/2021	Construct an embankment with oversized riprap to stop existing erosion and to prevent future erosions		
10/15/2021	10/28/2021	12/28/2021	Y	John D Murphy	2411 Chandler Court	930451005	710472	Y	\$ 7,500.00	\$ 167,460.50	\$ 7,500.00	9/21/2021	10/15/21021	Construct a stabilized embankment with oversized riprap to stabilize creek embank and slow the erosion		
10/15/2021	10/29/2021	12/29/2021	Y	Norma N Howard	2417 Chandler Court	930451004	112592-113147	Y	\$ 7,500.00	\$ 174,960.50	\$ 7,500.00	9/21/2021	10/29/2021	Construct an embankment with oversized riprap to prevent erosion and deepening of the creek bed		
10/15/2021	10/29/2021	12/29/2021	Y													
									\$ 174,960.50		\$ 161,723.00					
									Total Drainage Program	-\$24,960.50		\$ (1,723.00)	2021 Amount Paid to Date			
									Amount Remaining (less encumbered)			Amount Remaining (less amount paid)				

APPENDIX I

Green Infrastructure Grants City of Peoria, IL 2021 STORMWATER UTILITY REPORT



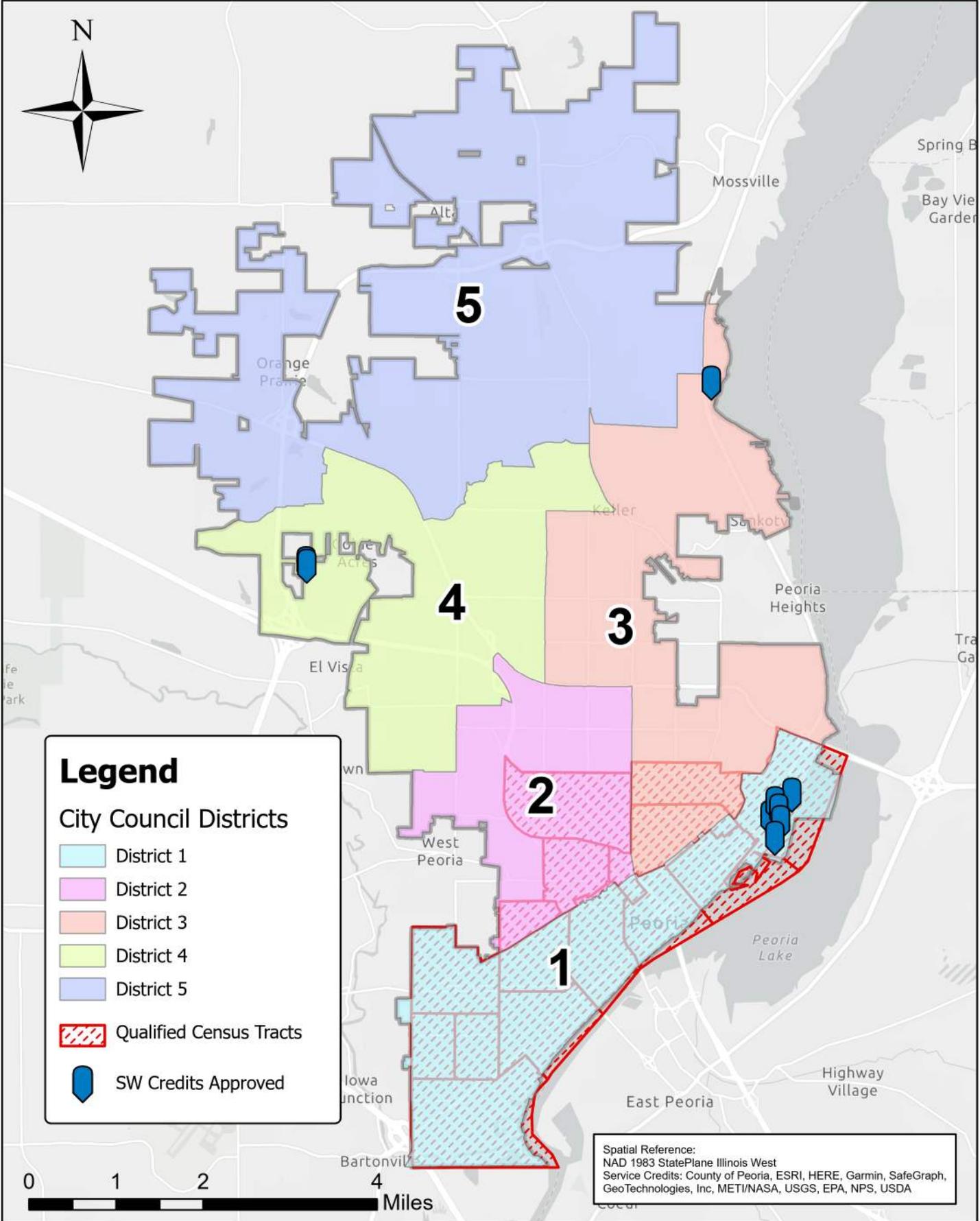
APPENDIX J

Stormwater Credits City of Peoria, IL

2021 STORMWATER UTILITY REPORT



Appendix J



APPENDIX K

Cost Summary By Task

2021 SWU Maintenance Work

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Cleaning Inlet Tops	23	210.00	\$8,385.08	\$3,165.10	\$0.00	\$0.00	\$0.00	\$11,550.18
Concrete	71	1,252.00	\$41,806.74	\$29,795.70	\$15,341.59	\$455.76	\$0.00	\$87,464.79
Concrete Work	17	247.00	\$8,170.30	\$4,888.66	\$5,260.55	\$122.33	\$0.00	\$18,441.84
Headwall Cleaning	1	15.00	\$494.61	\$669.48	\$0.00	\$0.00	\$0.00	\$1,164.09
Inlet Inspection	5	70.00	\$2,315.70	\$974.89	\$0.00	\$0.00	\$0.00	\$3,290.59
Inspection Of Pipes	70	528.50	\$13,592.12	\$496.02	\$0.00	\$0.00	\$0.00	\$14,088.13
Storm Sewer Repair	110	2,055.50	\$67,951.12	\$55,660.81	\$16,373.60	\$74.14	\$0.00	\$141,002.17
Storm Sewers Cleaning	76	553.50	\$18,116.59	\$15,604.01	\$84.00	\$0.00	\$0.00	\$34,157.35
Street Sweeping	763	8,629.04	\$290,701.77	\$516,745.76	\$124.68	\$0.00	\$0.00	\$807,572.20
Tasks:	9	1,136	13,560.54	\$628,000.43	\$37,184.42	\$652.23	\$0.00	\$1,118,731.34

APPENDIX L



PeoriaCorps 2021 Report

The training program focuses on job skills required to maintain green infrastructure; that is designed to replicate natural conditions within the urban environment to reduce the amount of rainfall that becomes runoff and enters the storm sewer pipes. Appendix E provides additional details about the 2021 PeoriaCorps program.

Seventeen persons completed the 2021 PeoriaCorps program. 2021 included two cohorts, the fifth and sixth groups to complete the AmeriCorps job training program in Peoria. Since its inception in 2017, PeoriaCorps has had 52 participants graduate from the program. *In the first half of 2021 PeoriaCorps participants recorded approximately 300 hours of litter removal, plant maintenance (Invasive Species Removal/Weeding, Organic Material removal) of green infrastructure worksites within the city. The second half of 2021 PeoriaCrops participants recorded approximately 490 hours of litter removal, plant maintenance (Invasive Species Removal/Weeding, Tree/Bush Trimming, Planting of pollinating flowers and prairie grass, Deadheading of flowers), and watering of green infrastructure worksites within the city. In all the 2021 PeoriaCorps program accumulated 180 acres of maintained green space and 800 hours of service within the city.

After receiving hands-on instruction about maintaining plants in landscaped areas and their importance to stormwater management, students are also provided communication, time management, and self-efficacy skills. Upon successfully completing the job training program, applicants are eligible and encouraged to take an exam to become certified by the National Green Infrastructure Certification Program. As of the publication of this report, PeoriaCorps has had three graduates to complete the certification process.

*Approximated hours and acreage based off previous months and typical work of Spring to early Summer work.