CITY OF
PEORIA
PUBLIC WORKS

2020 Stormwater Utility Report

Prepared by Public Works
February 2021
Amended July 20, 2021

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EXECUTIVE SUMMARY

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

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.

Table 1 Stormwater Utility Activities

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

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 preliminary and not the result of a financial audit.

The SWU account began the 2020 year with a fund balance (net position) of **$12,264,594.** Source (2019 COP Comprehensive Annual Financial Report -page 28) The City billed Approximately 46,300 SWU customers four times per year. The collection rate, from the start of the utility, is 89%.

SWU revenues (including interest) were $13,319,817. Expenses, including encumbrances, were $5,804,061. The total of annual bills for Peoria Public Schools, Park District and City properties were $898,065. This amount is not included in the SWU invoiced amount or collected revenues. Because of how projects work and the timing of invoices, it could be several to many months after the start of the new year that the prior year's invoices are sent to the city and processed. Although the bills are paid in the succeeding year, the expenses are encumbered against the prior year budget.

Below are the unaudited SWU expenses including encumbered amounts. Actual expenses at the time the report was generated would be the total below minus the encumbrance amount.
Administrative expenses were $2,208,776 ($78,410 encumbrances)
Maintenance expenses were $2,029,444 ($22,556 encumbrances)
Capital Improvement expenses were $1,565,841 ($676,169 encumbrances)

Table 2 SWU Revenues and Expenses

January 1, 2020 Fund Balance	$ 12,264,594	
	Revenue	**Expense**
2020 SWU Revenues	$13,319,817	
Administrative Expenses		$ 2,208,776
Maintenance Expenses (see note)		$ 2,029,444
Capital Improvement Expenses (see note)		$ 1,565,841
December 31, 2020 Fund Balance	$19,780,350	
Note: The Community Improvement Plan (CIP) includes all the Capital Expenses and some of the Maintenance Expenses.		

ROLES AND RESPONSIBILITIES

The City Council is responsible for setting the policies related to the stormwater utility and using the SWU 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 is responsible for responding to

legal challenges, answering legal questions ensuring that the stormwater utility meets the legal requirements. The Public Works department is responsible for public education related to the stormwater utility, appeals, the credit and grant programs, wet weather asset management, repairs, improvement and maintenance of wet weather assets, capital improvement projects funded with SWU dollars and the SWU funded public works operational budgets.

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. Each department has a role to perform in order to provide good customer service.

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 2020, the department received approximately 115 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.

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

VOLUME CONTROL CREDIT

Public Works received zero applications for the Volume Control Credit in 2020. 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 approved one application for a single property owner. The property owner received a 4% credit for removing at least 80% of suspended solids from runoff generated by 2,500 square feet of impervious area on private property.

RATE REDUCATION CREDIT

Public Works received zero applications for the Rate Reduction Credit in 2020. 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 zero applications for the direct discharge credit in 2020.

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, 2021.

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 2019 to March 2020 by June 1, 2020. See Appendix A for the Annual report. The annual report for March 2020 to March 2021 is due on June 1, 2021 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. The IEPA requires an Annual Facility Inspection Report; reference Appendix A for the report. 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 D 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 2020, the project documented 164 outfalls bringing the total to 458 outfalls mapped during this mapping effort. The City investigated one illicit discharge complaints regarding a car leaking oil on the pavement.

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 cancelled due to COVID.

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 scheduled these recommendations to start in 2020, but due to COVID related budget cuts, these recommendations did not start.

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 contains 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 2020, the project mapped 17.4 miles of storm sewer mapped and 2.7 square miles of the City. Since the start of the mapping project, this effort has mapped 144.1 miles of storm sewer and 34.5 square miles of the City. The CSO area is eight square miles. 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 adds the storm sewer condition data collected by televising crews to the City's GIS database. In 2020, City staff inspected and rated (by TV inspection) 14,570 lineal 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 of the assets are located and assessed.

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 in order to build the needed improvements. Tracking information on what was actually 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 2020. Appendix E provides details about the work performed and labor costs reported to these activities.

ASSET CLEANING AND MAINTENENACE

Public Works maintenance crews were busy in 2020 inspecting, cleaning, and maintaining the storm sewers.

- 198 hours of staff time spent cleaning inlet tops
- 72 hours of staff time spent cleaning headwalls
- 125 hours repairing retaining walls
- 2,296 hours of staff time spent on storm sewer repairs
- 785 hours of staff time spent on storm sewer cleaning
- 8,700 hours of street sweeping

Public works swept city streets five times during the year which removed 2,000 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. PW staff provided 5,814 hours of tree and brush services, mowing, TV/debris removal.

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 11 times. The City provides debris removal. The City provided 663 hours on debris removal completing 433 service tickets. SWU funds pay a contractor to maintain (weed control) over 100 city owned green infrastructure sites.

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.

WORKFORCE DEVELOPMENT

PEORIACORPS

The PeoriaCorps training program focuses on job skills required to maintain green infrastructure as well as communication and time management skills. Green infrastructure tries to replicate

natural conditions to reduce the amount of rainfall that becomes runoff and enters the storm sewer pipes. In 2020, PeoriaCorps participants performed approximately 1,300 hours of litter removal, plant maintenance, and weeding and watering of green infrastructure worksites.

The fifth cohort completed the AmeriCorps job-training program in 2020. Five persons completed the six-month program from June through December. There were also three sessions of the three-month program offered. Two persons completed the January through April session, four completed the June through September session, and one completed the September through December session.

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. Appendix E provides additional details about the 2020 PeoriaCorps program.

MAYOR'S YOUTH PROGRAM

The Mayor's Youth Program is a six-week program summer program. In 2020, City's COVID budget changes cut funding for this program. Illinois State Senator Dave Koehler (D-Peoria) sponsored the group via a Member Initiative Grant through the Illinois Department of Commerce and Economic Opportunity (DCEO). Due to the funding challenges, the program started late and was shortened to five-weeks. 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 2020, there were ten student participants, two student leaders, one Program Coordinator and one Team Leader.

INFRASTUCTURE INVESTMENT

Each year the City prepares a Community Investment Plan that identifies projects, equipment, and engineering studies to complete in the coming year.

STUDIES AND PLANNING

FLOODPLAIN MANAGEMENT

A public works staff member reviews floodplain permits for work in the floodplain and proposed floodplain map revisions.

PROJECT PLANNING

This activity includes creation of the Community Investment Plan (CIP) each year, identifying the larger projects to complete in the next five years. Project planning also includes complaint tracking to identify locations that need engineering studies prior to design. Project planning also involves looking at how to fund the projects.

CAPITAL INVESTMENTS

Appendix F provides additional details about the Community Investment Plan.

CONCRETE LINED DRAINAGE CHANNEL REPAIRS

This project consists of evaluating and repairing the existing shotcrete lined channel that crosses properties along the 400 blocks of West Florence Ave, West Merle Lane, and W Richwoods Blvd. The engineering studies of the conditions and possible solutions were completed but no further actions were initiated due to COVID budget impacts.

DRAINAGE REPAIR PROGRAM

This program funds the Annual Drainage Repair Contract (ARC) and Pipe Lining Contract. Both projects are bid time and material contracts that are eligible for up to two annual extension. The drainage repair contract repair broken stormwater infrastructure that is too big for operations staff, or requires special skills or equipment. The lining contract includes inserting a liner into the pipe to replace the existing pipe. Lining is less expensive, faster and has less impact to the neighborhood and streets than the traditional open cutting type of construction. We can line pipes that are in poor but stable condition. If the pipes are added to the annual repair contract when they have deteriorated past the point of being lined. COVID budget impacts slightly reduced funding for this program. The 2020 Drainage Repair work amounted to $720,000.

GREEN INFRASTRUCTURE MAINTENANCE

This item provides funding to replant and maintain existing green infrastructure sites. COVID budget impacts cut funding in half for this program. Because of the uncertainties of COVID, the project was delayed in 2020 and will be spent in 2021.

MERLE AND KNOXVILLE CULERT

This project will replace the deteriorated pipe under Merle lane at Knoxville Avenue. The project engineering started but stopped due to COVID budget impacts.

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. COVID budget impacts cut funding in half for this program.

STORMWATER INFRASTRUCTURE IMPROVEMENTS

COVID budget impacts cut funding to zero for this program. Two projects that were started in 2019 were completed in 2020. The culverts under the Bike Trail North of Teton Drive were completed at a cost of $17,200. The retaining wall with storm sewer outlet pipes at Humbolt and Prospect was also completed in 2020 at a cost of $84,800.

STORMWATER UTILITY GRANT PROGRAMS

The grant program provides investments into best management practices on private property. Four different grant programs are available to property owners that want to take an active role in managing stormwater by installing new stormwater management systems on their property. The City received and approved applications for three of the four grant programs.

RAIN BARREL GRANT

Fifteen property owners applied to the Rain Barrel program for installation of twenty-one rain barrels for a total program cost of $1,050.

GREEN INFRASTRUCTURE GRANT

Public Works uses a consultant to review the Green Infrastructure Grant applications. The consultant reviewed and approved ten grant applications in 2020. One of those projects was completed and reimbursed for a total reimbursement of $6,600. This project consisted of installing a permeable paver driveway. A second project received approval but the owner did not complete the project in 2020. This applicant plans to complete the project in 2021. The consultant approved the other applications, but the applicants decided not to move forward with the projects.

The completed projects created 2,100 square feet of pervious pavement that is managing 3,300 square feet of impervious area the CSO event of 2.61 inches of rainfall making it eligible for grant funding at $2.00 per square foot of pervious pavement.

PRIVATE PROPERTY DRAINAGE ASSITANCE GRANT

COVID budget impacts reduced funding for the PPDA program. The city received two applications after the program was out of funding. Other customers called in and were told that the program was closed and to send in their application in 2021.

Public Works uses a consultant to run the Private Property Drainage Assistance (PPDA) grant program. The consultant approved twenty-one PPDA applications. One property owner decided not to do the project, and another sent in a second revised application. One property owner is using the program on a large project that will not be completed until 2021. Eighteen of the projects were completed and reimbursed $98,725. 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.

STORMWATER INFRASTRUCTURE INVESTMENT GRANT

COVID budget impacts cut funding to zero for this program. 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.

EQUIPMENT PURCHASES

Public Works purchased a new street sweeper with SWU funds in 2020. Public Works owns six sweepers. Fleet monitors the maintenance costs of the sweepers and replaces the sweepers when they come to the end of their useful service life.

CIP ADDIDTIONS

Two projects that were not anticipated at the time the 2020 CIP was developed became high priorities due to failing infrastructure.

TRIBUTARY C CULVERT RECONSTRUCTION AT 711 W. GLEN

Routine inspections of the storm drainage system revealed a significant collapse of a culvert under the building located at 711 W. Glen Avenue. The car wash business was immediately closed as engineers, surveyors, and contractors assessed the extent of the problem. The solution was to design and build a new culvert to be located along the property line at the northwest corner of Glen and Sheridan. The property owner and City entered into an agreement to share in the costs that installed 250 feet of 72” diameter pipe to carry the dry run creek tributary under the street and developed properties. The city’s share of the project was $399,650.

ABINGTON/MADISON CULVERT RECONSTRUCTION

An existing corrugated metal pipe culvert that was constructed on the upstream side of an arch culvert under the Peoria/Peoria Heights & Western Railroad had failed due to recent extreme storm events. The damage was extensive and required engineering expertise to determine the appropriate solution. The consulting engineer studied the situation and developed construction plans in 2020 for a cost of $152,120. Discussions with the impacted property owner have prevented the construction of the proposed improvements. The construction costs are

estimated to be approximately $750,000 and will be initiated once an agreement is reached with the property owner.

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 0424

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 Klopfensein 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 ☑
2. Public Participation/Involvement ☑
3. Illicit Discharge Detection & Elimination ☑
4. Construction Site Runoff Control ☑
5. Post-Construction Runoff Control ☑
6. Pollution Prevention/Good Housekeeping ☑

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:

05/27/21
Date:

Andrea Klopfenstein
Printed Name:

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

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.

<u>Status of Compliance with Permit Conditions</u>

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.

<u>Assessment of Appropriateness of Identified BMP's</u>

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)

- 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

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

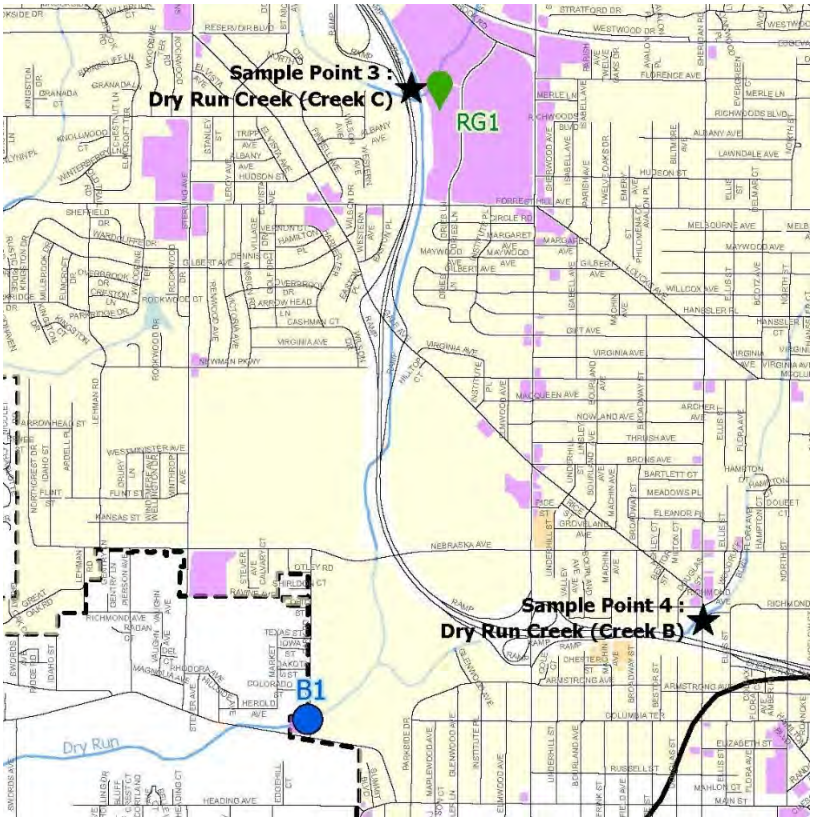
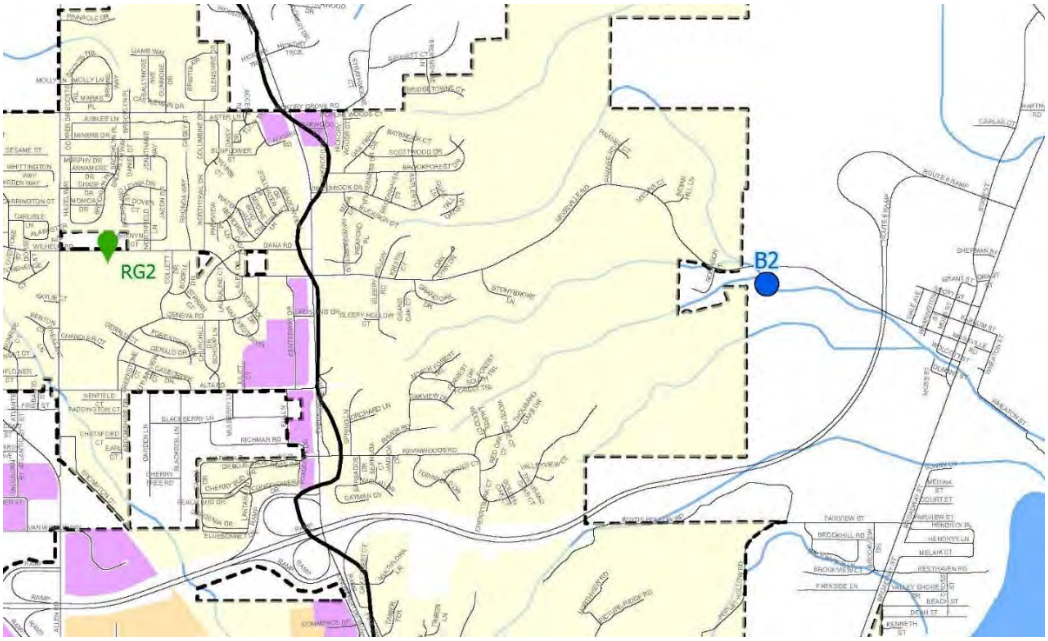


Figure 2 – Illinois River Main Stem Sampling Location and Associated Rain Gauge



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February 12, 2021

Ms. Andrea Klopenstein, P.E.
Assistant Director, Storm Water Engineer
City of Peoria Public Works Department
3505 N. Dries Ln
Peoria, IL 61604

Dear Ms. Klopenstein:

RE: Review of Storm Water Samples Collected for the Separate Storm Sewer System (MS4) Permit for the calendar year 2020.

The following is a summary report for storm water samples collected in 2020 from sample points P1 through P4. Include in this summary report are:

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

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.

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 2020 beginning with the first set of samples collected on February 25, 2020.

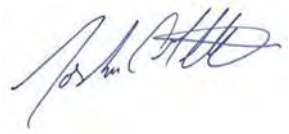
Storm water samples were grab samples and were collected directly from the stream. Flow rate is not factored in sample collection as flow monitoring devices are not installed at the sampling point. Field observation sheets noting precipitation amount, weather conditions, sample appearance, etc. were completed at each sampling point every quarter, and are attached in Appendix A. 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 (2020 laboratory results) and graphically in Figures 2 through 8 (all data). A graph was not generated for the parameter grease and oil. With the exception of a grease and oil concentration of 5.9 ug/l reported 1st quarter at Sampling point 4, the rest of the grease and oil concentrations in 2020 were all reported at less than the laboratory reporting limit (not detected). As shown in the figures, the chloride, total suspended solids, nitrogen, phosphorus and TKN ammonia concentrations trended downward in 2020 when compared to the previous year concentrations. The nitrate concentration trended upward the first three quarters of 2020 but decreased for the recent 4th quarter 2020 event.

The fecal coliform concentrations in 2020 were consistent across all four sampling points. There does not appear to be a disparity between the upgradient and downgradient locations. The highest fecal coliform result for the 1st quarter 2020 sampling event was recorded at the most upgradient location (Sample Pt. 1). For the third and fourth quarters of 2020, at all four sample locations, the fecal coliform result was reported at > 2420 CFU/100 ml as shown in Tables 1 through 4. In the graphical trend analysis (Figure 8) the 3rd and 4th quarter 2020 concentration levels are shown at concentration level of 2420 CFU/100 ml. In general, the fecal concentrations at all four sample locations are relatively high compared to drinking water, but not surprising in that the streams run through a combination of residential, industrial and natural environments at the sample locations.

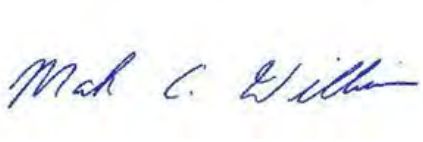
Analyzing the 2019 and 2020 fecal concentration data it appears that when precipitation level is at least 0.4 to 0.5 inches in twenty-four period the fecal concentration is in the 2420 CFU/100 ml or greater concentration level. Again not surprising, that with more precipitation, which can create higher flow rates, the fecal concentration level is higher as stagnant material is moved downstream. The higher precipitation level does appear to affect the fecal concentration more than the other parameters. In 2021, the fecal coliform concentration will be studied, particularly looking for evidence of trends related to precipitation amount, visible stream velocity and location and establish a background fecal coliform concentration.

As shown in the figures, a baseline is being established for the individual parameter concentrations which future concentrations levels will be compared. After 2021, we will have three years of analytical data but only 12 sample events for reference. We can begin to understand if surface 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 Nitrate Concentration Graph
Figure 6 - Total Phosphorous Concentration Graph
Figure 7 - TKN Ammonia 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
Appendix A - Field Observation Sheets

Figures

Streams in the CSO Area

Centerlines

Creeks & Streams
- Creeks & Streams

City Boundaries
- City Boundaries

CSO Area
- Combined Direct
- Combined Through Storm Sewers
- Partially Separate
- Separate

Zoning
- Commercial
- Industrial
- Residential

★ Sample Points

SAMPLE POINT 1

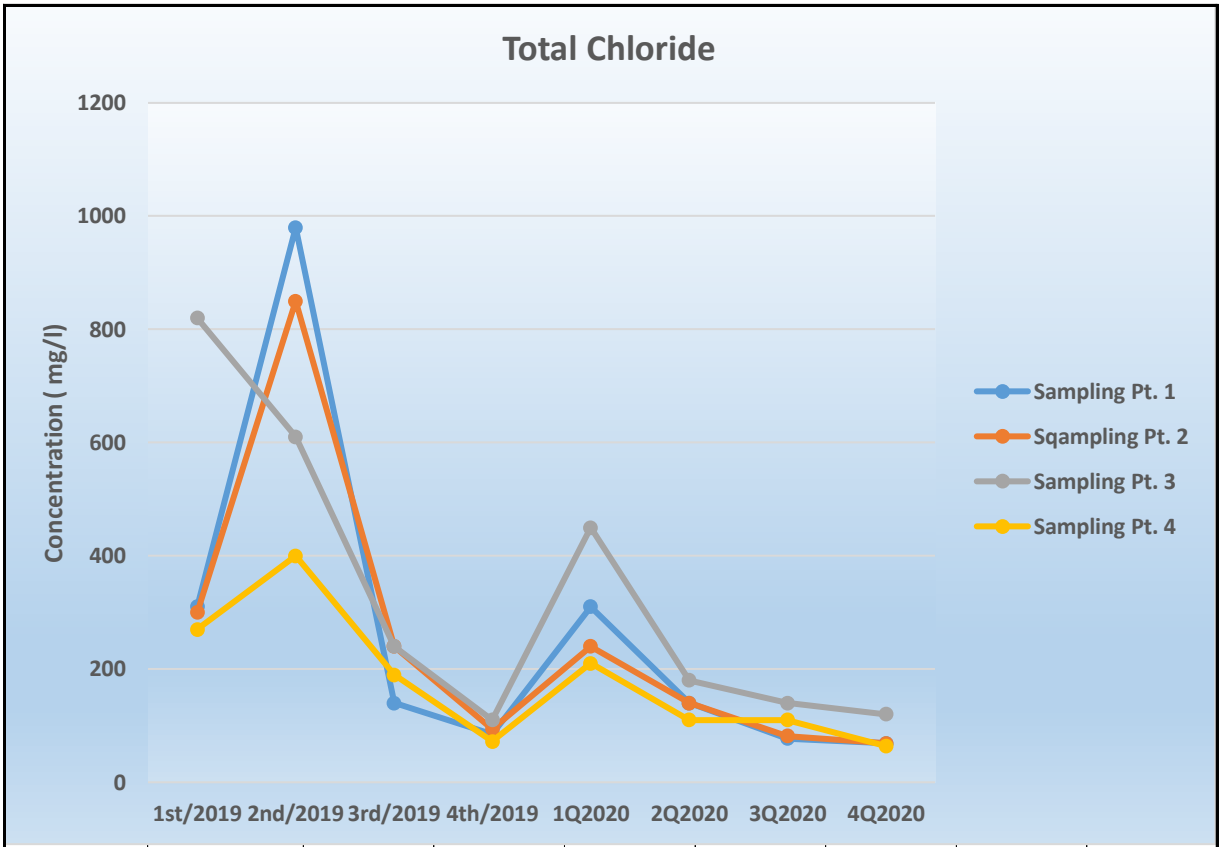
SAMPLE POINT 2

SAMPLE POINT 3

SAMPLE POINT 4

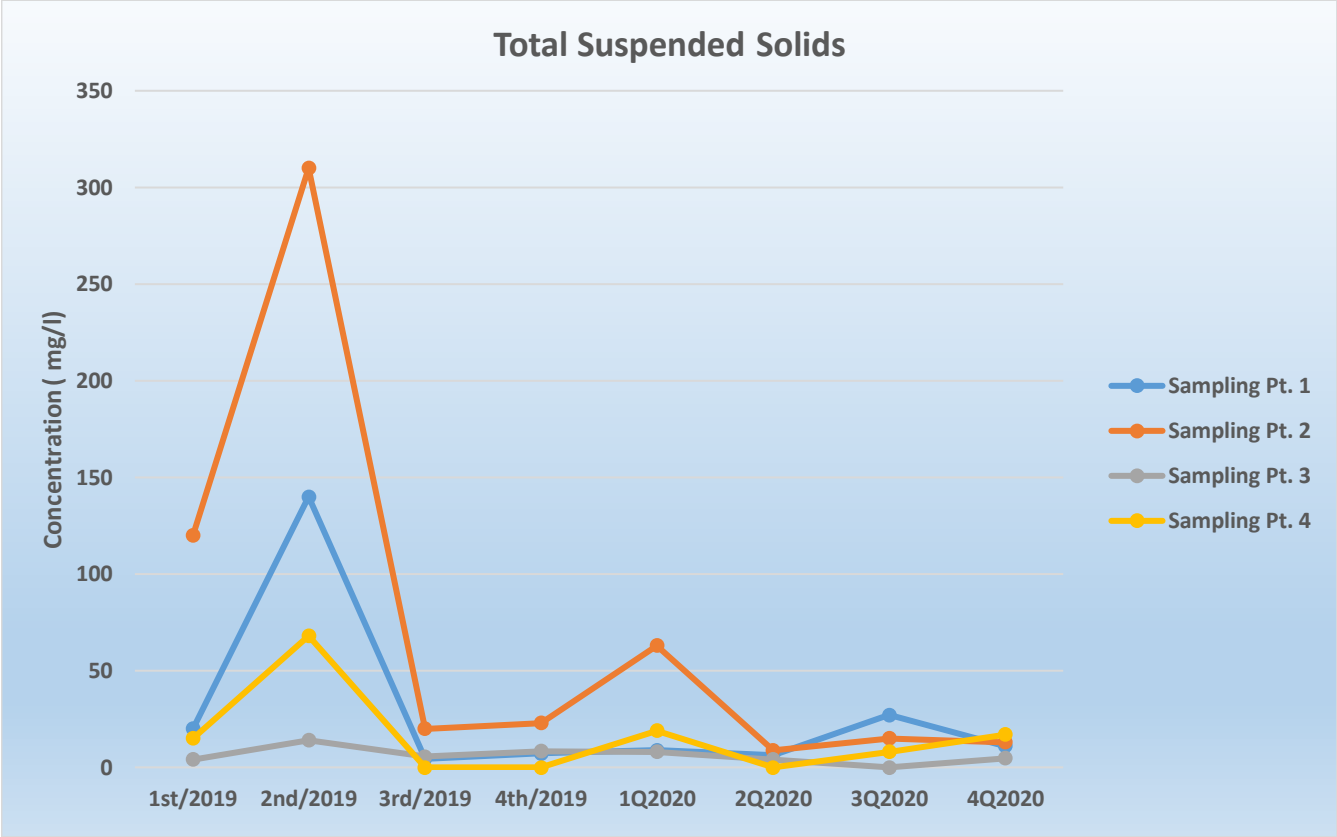
0 3 Miles

Figure 2
Total Chloride
1Q19-4Q20



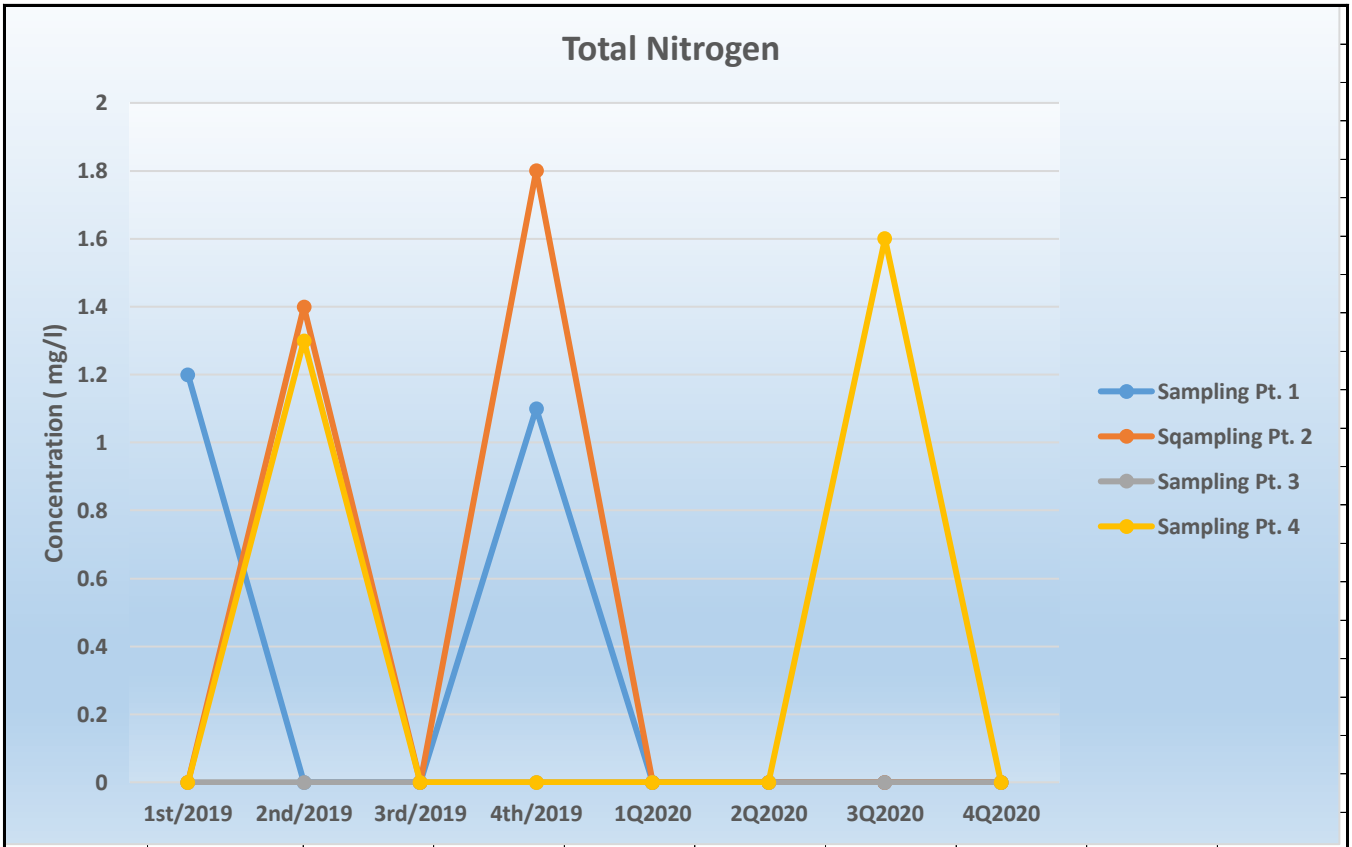
Chloride	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	310	300	820	270
2nd/2019	980	850	610	400
3rd/2019	140	240	240	190
4th/2019	85	94	110	72
1Q2020	310	240	450	210
2Q2020	140	140	180	110
3Q2020	77	82	140	110
4Q2020	69	69	120	64

Figure 3
Total Suspended Solids
1Q19-4Q19



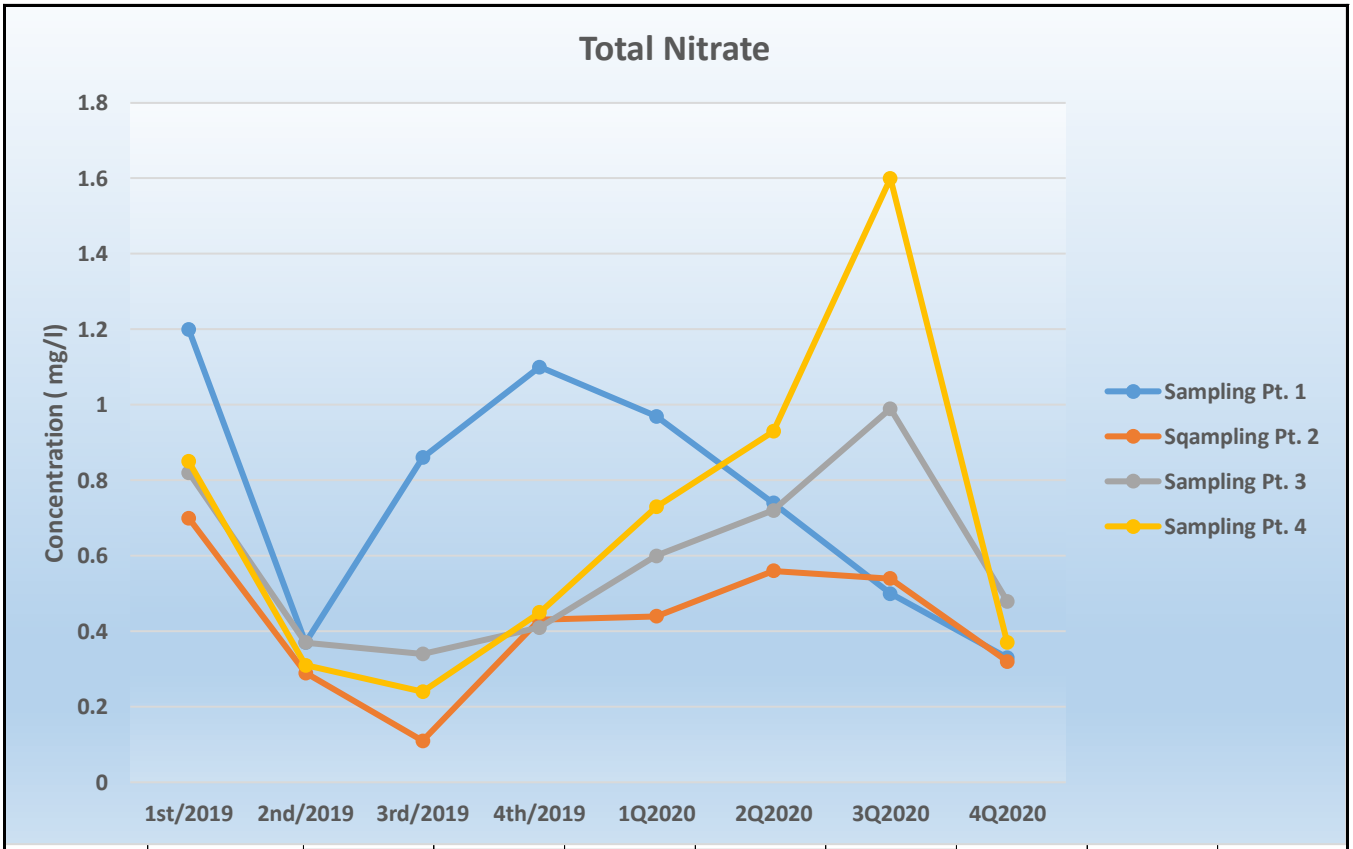
TSS	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	20	120	4	15
2nd/2019	140	310	14	68
3rd/2019	4.4	20	5.6	<4
4th/2019	7.2	23	8.4	<4
1Q2020	8.8	63	8	19
2Q2020	6.4	8.8	4	<4.0
3Q2020	27	15	<4.0	8
4Q2020	11	13	4.8	17

Figure 4
Total Nitrogen
1Q19-4Q19



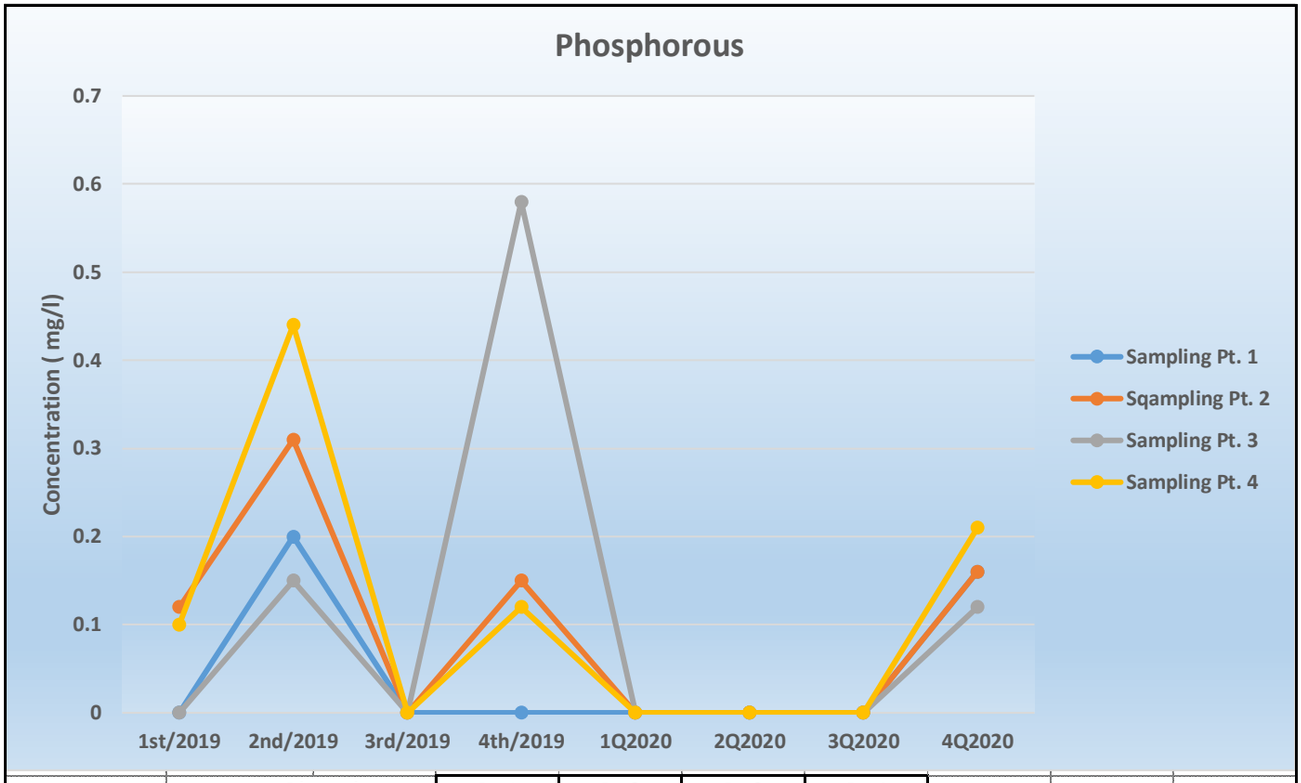
Nitrogen	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	1.2	<1.0	<1.0	<1.0
2nd/2019	<1.0	1.4	<1.0	1.3
3rd/2019	<1.0	<1.0	<1.0	<1.0
4th/2019	1.1	1.8	<1	<1
1Q2020	<1.0	<1.0	<1.0	<1.0
2Q2020	<1.0	<1.0	<1.0	<1.0
3Q2020	<1.0	<1	<1.0	1.6
4Q2020	<1.0	<1.0	<1.0	<1.0

Figure 5
Total Nitrate
1Q19-4Q19



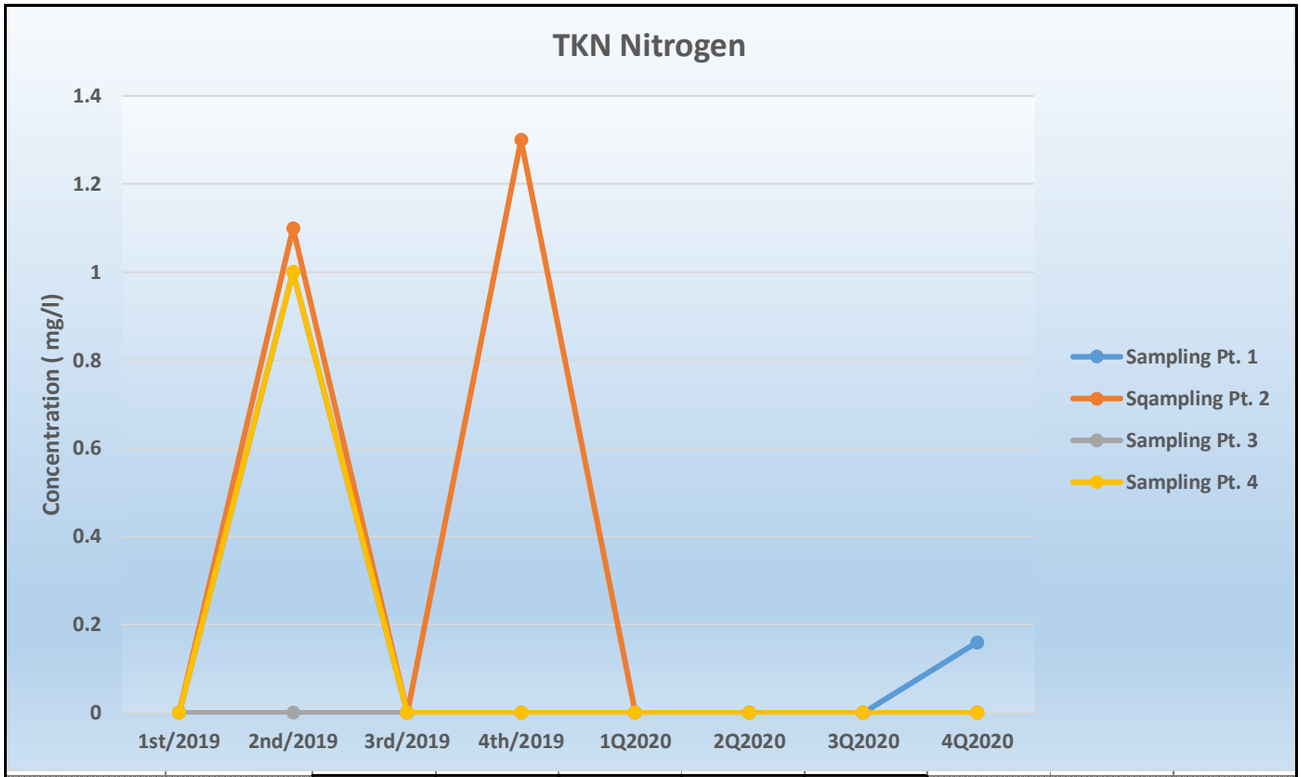
Nitrate	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	1.2	0.7	0.82	0.85
2nd/2019	0.37	0.29	0.37	0.31
3rd/2019	0.86	0.11	0.34	0.24
4th/2019	1.1	0.43	0.41	0.45
1Q2020	0.97	0.44	0.6	0.73
2Q2020	0.74	0.56	0.72	0.93
3Q2020	0.5	0.54	0.99	1.6
4Q2020	0.33	0.32	0.48	0.37

Figure 6
Total Phosphorous
1Q19-4Q19



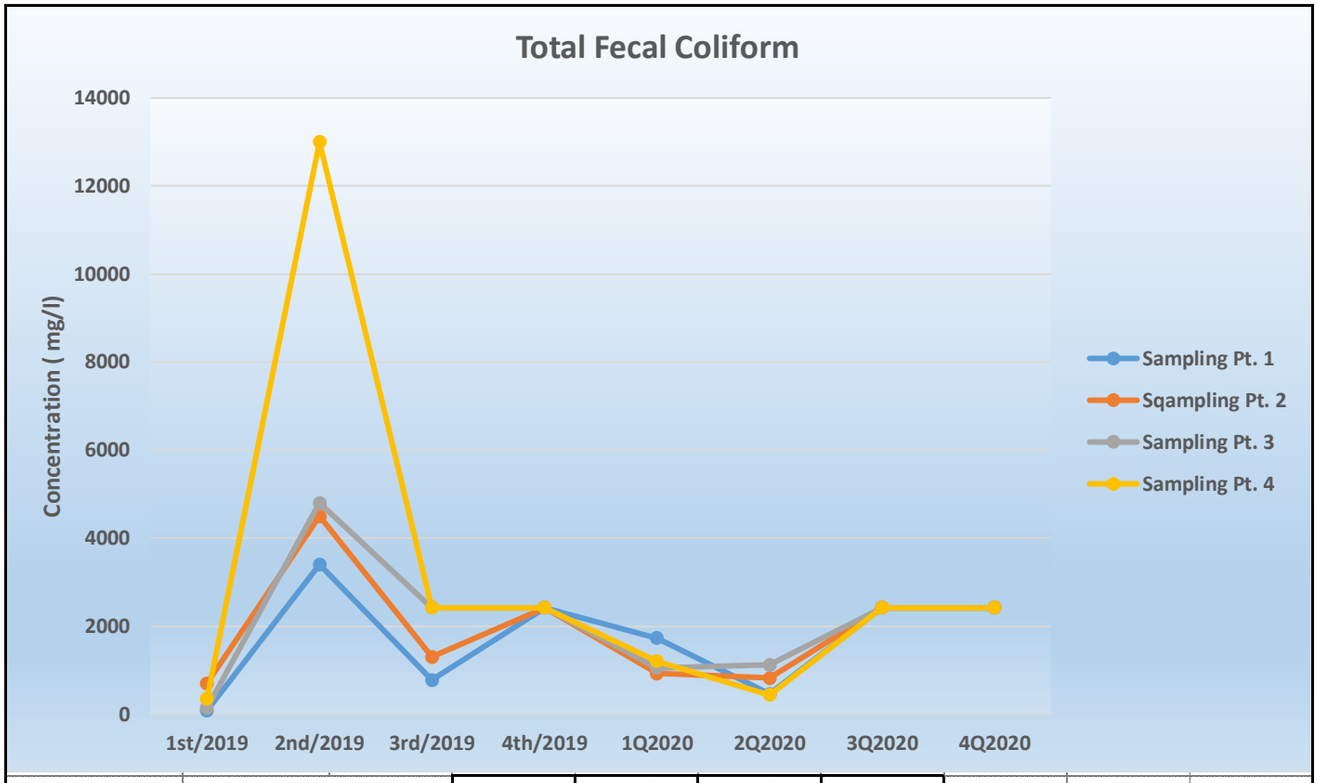
Phosphorous	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	<0.10	0.12	<0.1	0.1
2nd/2019	0.2	0.31	0.15	0.44
3rd/2019	<0.1	<0.1	<0.1	<0.1
4th/2019	<0.1	0.15	0.58	0.12
1Q2020	<0.1	<0.1	<0.1	<0.1
2Q2020	<0.1	<1.0	<0.1	<0.1
3Q2020	<0.1	<0.1	<0.1	<0.1
4Q2020	0.16	0.16	0.12	0.21

Figure 7
TKN Ammonia
1Q19-4Q19



TKN	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	<1.0	<1.0	<1.0	<1.0
2nd/2019	1	1.1	<1.0	1
3rd/2019	<1	<1.0	<1.0	<1.0
4th/2019	<1	1.3	<1	<1
1Q2020	<0.1	<1.0	<1.0	<1.0
2Q2020	<0.1	<1.0	<1.0	<1.0
3Q2020	<0.1	<1.0	<1.0	<1.0
4Q2020	0.16	<1.0	<1.0	<1.0

Figure 8
Total Fecal Coliform
1Q19-4Q19



Fecal Coliform	Pt 1	Pt 2	Pt 3	Pt 4
1st/2019	81	700	140	350
2nd/2019	3400	4500	4800	13000
3rd/2019	770	1300	2420	2420
4th/2019	2420	2420	2420	2420
1Q2020	1730	921	1050	1200
2Q2020	461	816	1120	435
3Q2020	2420	2420	2420	2420
4Q2020	2420	2420	2420	2420

Tables

Table 1
Sample Point 1 Analytical Resuts from 1Q20-4Q20

Parameters	Units	1Q2020	2Q2020	3Q2020	4Q2020
Chloride	mg/l	310	140	77	69
Oil and Grease	mg/l	<5.1	<5.4	<5.0	<5.1
Total Suspended Solids (TSS)	mg/l	8.8	6.4	27	11
Total Nitrogen	mg/l	<1.0	<1.0	<1.0	<1.0
Fecal Coliform	CFU/100 ml	1730	461	>2420	>2420
Nitrate/Nitrite	mg/l	0.97	0.74	0.5	0.33
Phosphorous Total as P	mg/l	<0.1	<0.1	<0.1	0.16
	mg/l	<1	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.42	0.28	5.15	0.49
Last 48 hours	inch	0.42	0.28	5.15	0.49

Table 2
Sample Point 2 Analytical Results
1Q/2020-4Q2020

Parameters	Units	1Q2020	2Q2020	3Q2020	4Q2020
Chloride	mg/l	240	140	82	69
Oil and Grease	mg/l	<5.1	<5.1	<5.0	<5.1
Total Suspended Solids (TSS)	mg/l	63	8.8	15	13
Total Nitrogen	mg/l	<1.0	<1.0	<1	<1.0
Fecal Coliform	CFU/100 ml	921	816	>2420	>2420
Nitrate/Nitrite	mg/l	0.44	0.56	0.54	0.32
Phosphorous Total as P	mg/l	<0.1	<1.0	<0.1	0.16
otal Kjelddahl-Nitrogen (TKN	mg/l	<1.0	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.42	0.28	5.15	0.49
Last 48 hours	inch	0.42	0.28	5.15	0.49

Table 3
Sample Point 3 Analytical Results
1Q2020-4Q2020

Parameters	Units	1Q2020	2Q2020	3Q2020	4Q2020
Chloride	mg/l	450	180	140	120
Oil and Grease	mg/l	<5.1	<5.2	<5.1	<5.2
Total Suspended Solids (TSS)	mg/l	8	4	<4.0	4.8
Total Nitrogen	mg/l	<1.0	<1.0	<1.0	<1.0
Fecal Coliform	CFU/100 ml	1050	1120	>2420	>2420
Nitrate/Nitrite	mg/l	0.6	0.72	0.99	0.48
Phosphorous Total as P	mg/l	<0.1	<0.1	<0.1	0.12
Total Kjelddahl-Nitrogen (TKN)	mg/l	<1.0	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.42	0.28	5.15	0.49
Last 48 hours	inch	0.42	0.28	5.15	0.49

Table 4
Sample Point 4 Analytical Results
1Q2020-4Q2020

Parameters	Units	1Q2020	2Q2020	3Q2020	4Q2020
Chloride	mg/l	210	110	110	64
Oil and Grease	mg/l	5.9	<5.1	<5.1	<5.4
Total Suspended Solids (TSS)	mg/l	19	<4.0	8	17
Total Nitrogen	mg/l	<1.0	<1.0	1.6	<1.0
Fecal Coliform	CFU/100 ml	1200	435	>2420	>2420
Nitrate/Nitrite	mg/l	0.73	0.93	1.6	0.37
Phosphorous Total as P	mg/l	<0.1	<0.1	<0.1	0.21
otal Kjelddahl-Nitrogen (TKN	mg/l	<1.0	<1.0	<1.0	<1.0
Precipitation					
Last 24 hours	inch	0.42	0.28	5.15	0.49
Last 48 hours	inch	0.42	0.28	5.15	0.49

Appendix A
Field Observation Sheets

Field Sheet
1st Quarter 2020

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	02/25/2020
Sampling Location Point:	Sample Pt 1
Sampling Personnel:	Dakota Ladwig & Mark Williams

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Conditions	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.42"	0.42"
Current Outdoor Air Temperature:	35°F	
Current Weather Conditions:	Wintery Mix	

Water Sample Observations

Odor:	None
Appearance:	
Color:	light brown
Turbidity:	Slight
Other:	

Additional Information/Comments

TDS 1015

Swift flow

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	02/25/2020
Sampling Location Point:	Sample Pt 2
Sampling Personnel:	Dakota Ladwig & Mark Williams

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Conditions	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.42"	0.42"
Current Outdoor Air Temperature:	35° F	
Current Weather Conditions:	Wintery Mix	

Water Sample Observations

Odor:	None
~~**Appearance:**~~	
Color:	light brown
Turbidity:	Slight
Other:	

Additional Information/Comments

TOS 0955

Swift flow

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	02/25/2020
Sampling Location Point:	Sample Point 3
Sampling Personnel:	Dakota Ladwig & Mark Williams

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Conditions	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.42"	0.42"
Current Outdoor Air Temperature:	36°F	
Current Weather Conditions:	Wintery Mix	

Water Sample Observations

Odor:	None
Appearance:	
Color:	light brown
Turbidity:	Slight
Other:	

Additional Information/Comments

TOS 0940

Swift flow

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	02/25/2020
Sampling Location Point:	Sample Pt 4
Sampling Personnel:	Dakota Ladwig & Mark Williams

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal conditions	
Precipitation:	**Last 24 hours** 0.42"	**Last 48 hours** 0.42"
Current Outdoor Air Temperature:	37°F	
Current Weather Conditions:	Wintery Mix	

Water Sample Observations

Odor:	None
~~**Appearance:**~~	
Color:	light brown
Turbidity:	Slight
Other:	

Additional Information/Comments

TOS 0925

Swift flow

Field Sheet
2nd Quarter 2020

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	04/29/2020
Sampling Location Point:	Sample Point 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.):	Low flow	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.28"	0.28"
Current Outdoor Air Temperature:	52°F	
Current Weather Conditions:	Cloudy / Misting	

Water Sample Observations

Odor:	None
Appearance:	light brown
Color:	" "
Turbidity:	Slight
Other:	

Additional Information/Comments

TOS: 1025

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	04/29/2020
Sampling Location Point:	Sample Point 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.):	Low - Med flow	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.28"	0.28"
Current Outdoor Air Temperature:	52°F	
Current Weather Conditions:	Cloudy / Misting	

Water Sample Observations

Odor:	none
Appearance:	light brown
Color:	"
Turbidity:	low
Other:	

Additional Information/Comments

TOS: 10:05

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	04/29/2020
Sampling Location Point:	Sample Point 3
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.):	low flow	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.28"	0.28"
Current Outdoor Air Temperature:	53°F	
Current Weather Conditions:	Cloudy	

Water Sample Observations

Odor:	None
Appearance:	light brown
Color:	"
Turbidity:	Slight
Other:	

Additional Information/Comments

TOS: 09:10

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	04/29/2020
Sampling Location Point:	Sample Point 4
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.):	low Flow	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.28"	0.28"
Current Outdoor Air Temperature:	53°	
Current Weather Conditions:	cloudy	

Water Sample Observations

Odor:	-None
Appearance:	light-brown
Color:	" "
Turbidity:	low
Other:	

Additional Information/Comments

TOS: 09:00

Field Sheet
3rd Quarter 2020

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	07-16-2020
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.):	N/A	
Precipitation:	**Last 24 hours** 5.15"	**Last 48 hours** 5.15"
Current Outdoor Air Temperature:	82	
Current Weather Conditions:	Sunny, Wind NW 5 mph	

Water Sample Observations

Odor:	None
Appearance:	It brown
Color:	" "
Turbidity:	Moderate
Other:	

Additional Information/Comments

Swift flow

TOS 11:10

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	07-16-2020
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.):	N/A	
Precipitation:	**Last 24 hours** 5.15"	**Last 48 hours** 5.15"
Current Outdoor Air Temperature:	82	
Current Weather Conditions:	Sunny, wind NW 5mph	

Water Sample Observations

Odor:	None
Appearance:	It brn
Color:	" "
Turbidity:	Moderate
Other:	

Additional Information/Comments

Swift flow

TOS 10:50

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	07-16-2020
Sampling Location Point:	Sample 3
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.):	N/A	
	Last 24 hours	**Last 48 hours**
Precipitation:	5.15"	5.15"
Current Outdoor Air Temperature:	82	
Current Weather Conditions:	Sunny, Wind NW 5mph	

Water Sample Observations

Odor:	None
Appearance:	lt brn
Color:	" "
Turbidity:	Moderate
Other:	

Additional Information/Comments

Swift flow

TOS 1030

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	07-16-2020
Sampling Location Point:	Sample Pt 4
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.):	Large pile of broken cement (12x20) & debris	
	Last 24 hours	**Last 48 hours**
Precipitation:	5.15"	5.15"
Current Outdoor Air Temperature:	79	
Current Weather Conditions:	Sunny, wind NW 5 mph	

Water Sample Observations

Odor:	None
Appearance:	lt brn
Color:	lt brn
Turbidity:	slight
Other:	

Additional Information/Comments

swift flow

TOS 10:15

Field Sheet
4th Quarter 2020

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10/22/20
Sampling Location Point:	Sample Pt 1.
Sampling Personnel:	Alisha Weatherspoon, Mavic Williams

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal conditions - Stream Banks Full	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.49 inches	0.49 inches
Current Outdoor Air Temperature:	55°	
Current Weather Conditions:	Overcast	

Water Sample Observations

Odor:	None
Appearance:	
Color:	light tan
Turbidity:	Slight
Other:	

Additional Information/Comments

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10/22/20
Sampling Location Point:	Sample Pt #2
Sampling Personnel:	Mark Williams, Alisha Weatherspoon

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.49 inches	0.49 inches
Current Outdoor Air Temperature:	55°	
Current Weather Conditions:	overcast	

Water Sample Observations

Odor:	None
Appearance:	
Color:	light Tan
Turbidity:	slight
Other:	

Additional Information/Comments

Moderate Flow

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10/22/20
Sampling Location Point:	Sample pt # 3
Sampling Personnel:	Mark Williams, Alisha Weatherspoon

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Conditions	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.49 inches	0.49 inches
Current Outdoor Air Temperature:	55°	
Current Weather Conditions:	overcast	

Water Sample Observations

Odor:	None.
Appearance:	
Color:	light Tan
Turbidity:	slight
Other:	

Additional Information/Comments

Moderate Flow

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10/22/20
Sampling Location Point:	Sample pt. 4
Sampling Personnel:	Mark Williams Alisha Weatherspoon

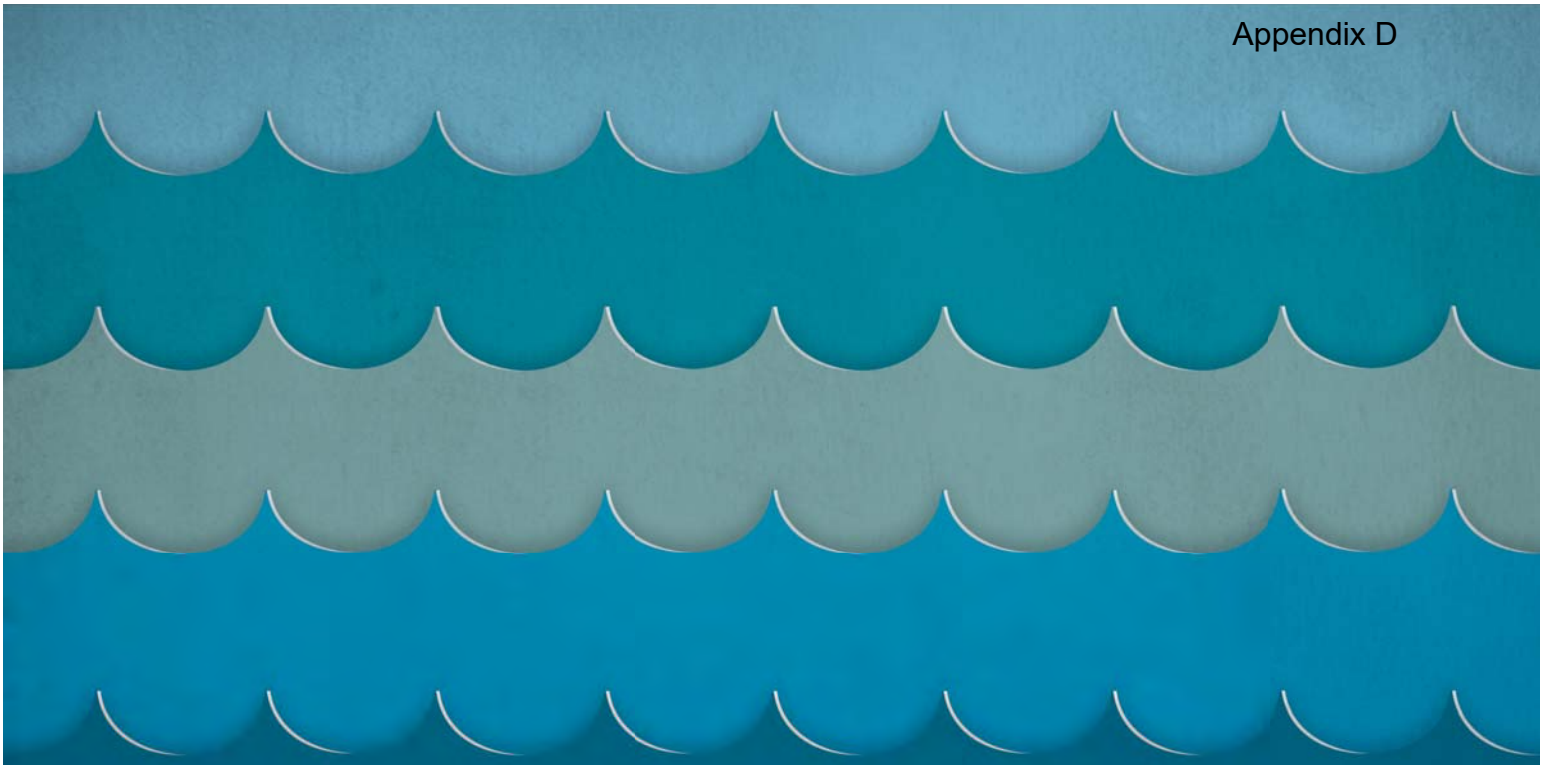
Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Conditions	
	Last 24 hours	**Last 48 hours**
Precipitation:	0.49 inches	0.49 inches
Current Outdoor Air Temperature:	55°	
Current Weather Conditions:	overcast	

Water Sample Observations

Odor:	None
Appearance:	light Tan
Color:	" "
Turbidity:	Slight Turbidity
Other:	Moderate Flow

Additional Information/Comments



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.

CITY OF PEORIA

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.

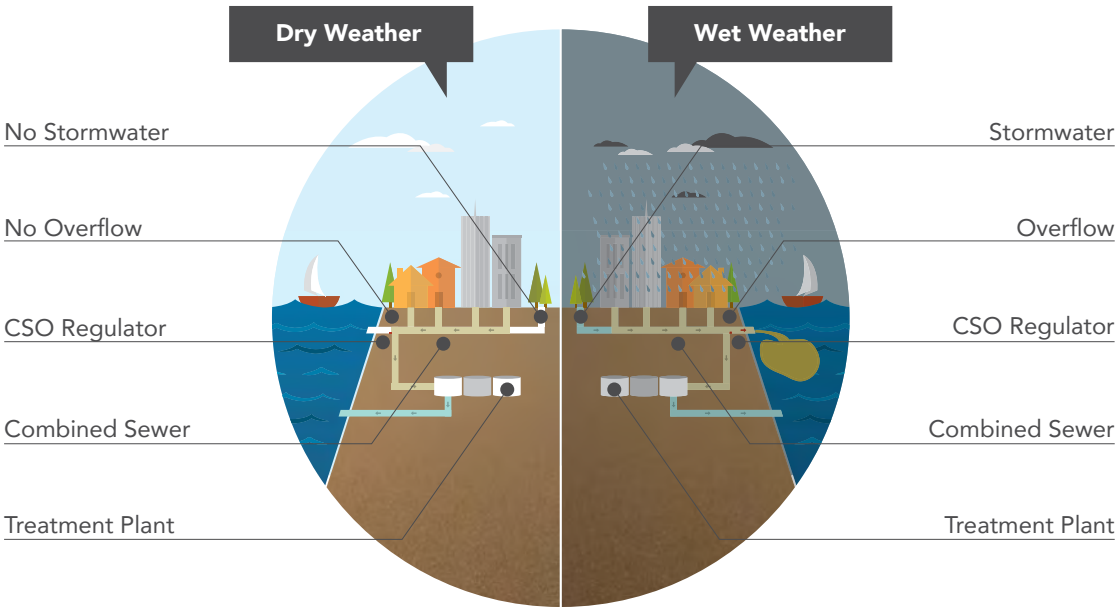
GROWING LIST OF PROBLEMS TO FIX

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

Learn even more ways to minimize your impact and keep up with current issues at

PEORIASTORMWATER.COM

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).

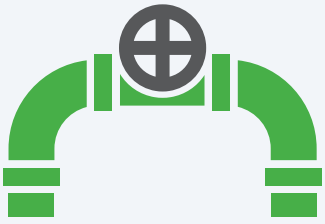
common – other Illinois cities, like Morton, Bloomington, Champaign and others, also have a stormwater utility.

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

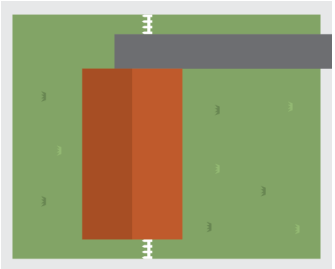
One less competing funding priority lets our city focus on other essentials, such as street repair, fire and police.

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.



+ = 2,600 SF Impervious

= 2.6 Billing Units x $3 per Billing Unit

= $7.80 per Month (Average Home)

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.

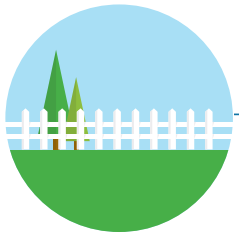
To learn more please visit **peoriastormwater.com**.

CITY OF PEORIA

PATH OF STORMWATER

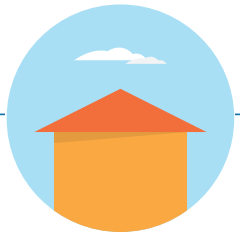
Stormwater can take quite the route from the sky to the ground and eventually to the Illinois River. Where the water travels can make a big difference to homeowners and local wildlife alike.

Water from rain and snow has to go somewhere.



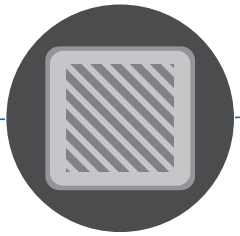
PERVIOUS SURFACES

like grass yards do a better job of soaking up stormwater than pavement.

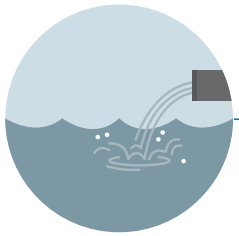


IMPERVIOUS SURFACES

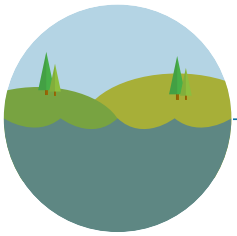
like roofs, patios, driveways and parking lots absorb hardly any water.



Stormwater runs off properties, picks up pollutants and debris, and enters inlets and drains.



These pipes carry untreated stormwater to outfall points, such as creeks.

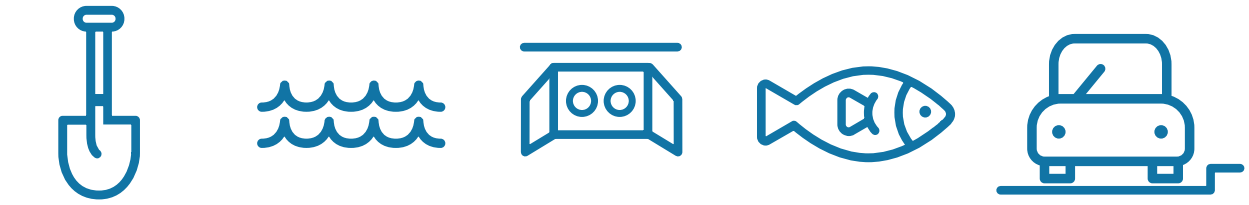


Peoria's network of creeks and streams drains into the Illinois River.

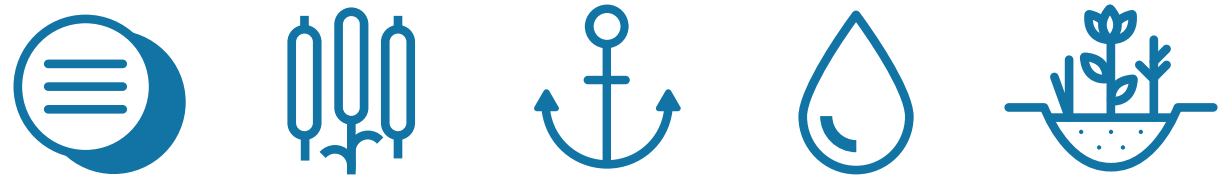
To learn more about the impact of stormwater, please visit **peoriastormwater.com**

WHAT IS STORMWATER INFRASTRUCTURE?

You probably use Peoria's stormwater infrastrucuture 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.

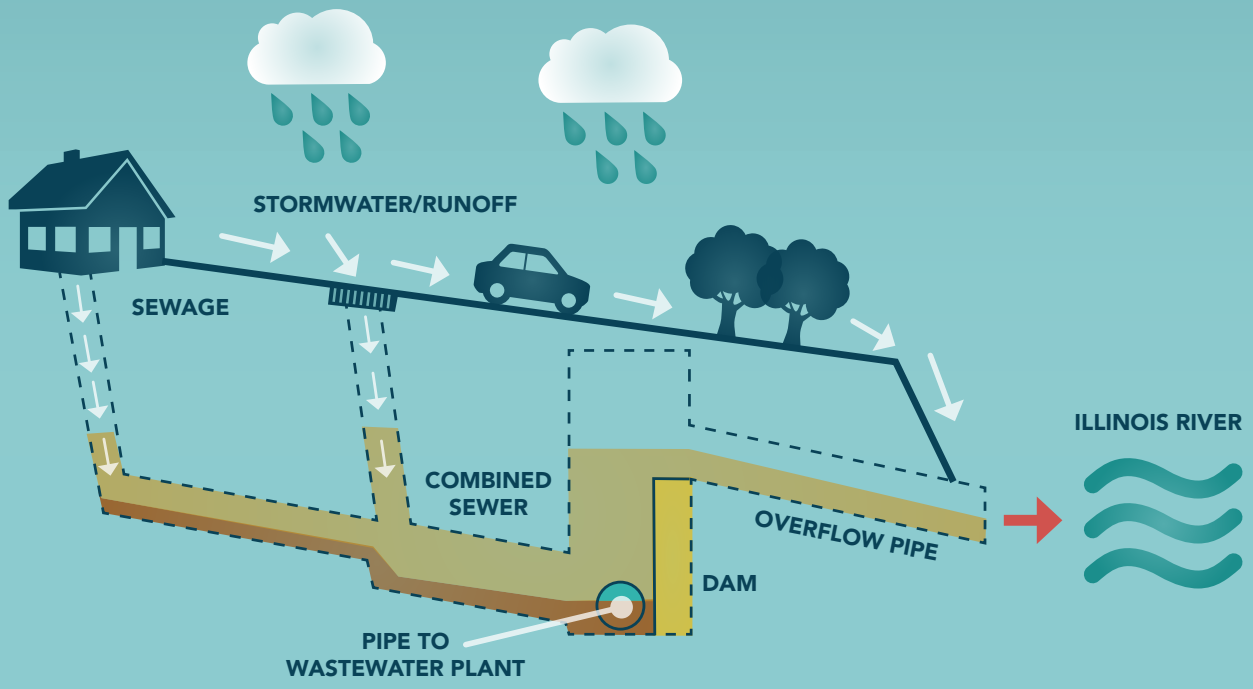
PLANT VEGETATION ALONG STREAM BANKS.

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 PEORIAGOV.ORG/PUBLIC-WORKS/COMBINED-SEWER-OVERFLOW TO LEARN MORE.

NATURE'S WATER FILTER

THE RAIN GARDEN

SOAKS UP AND CLEANS OUR WATER

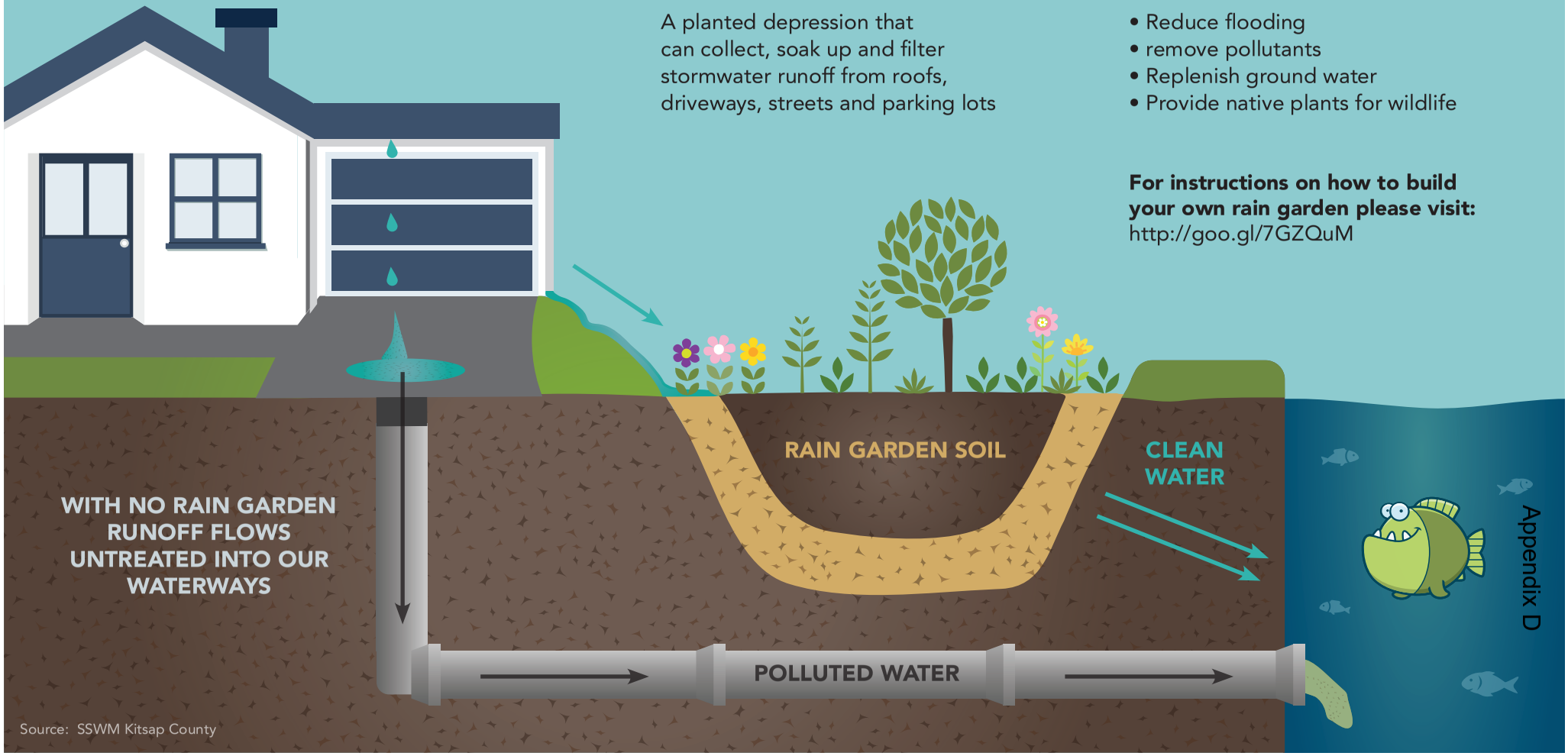
WHAT IS A RAIN GARDEN?

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



Source: SSWM Kitsap County

Appendix D

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**

CITY OF PEORIA

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."

1920s to 1930s **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.)

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.

1952 **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.

1970s - 1990s

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.

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.

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

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).

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

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.

CITY OF PEORIA

WATERSHED MOMENTS

2000s - Present

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

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.

2006 **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.

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.

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.

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

2014 **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.

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.

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

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.

(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.

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

2018 **(June 1) Stormwater utility goes into effect,** providing Peoria dedicated funding to proactively address wet weather related issues.

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.

CITY OF PEORIA

FUNDING A BETTER TOMORROW

Frequently Asked Questions: Stormwater Utility

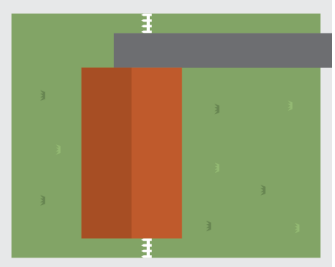
By investing in smart, natural stormwater solutions, we will create a beautiful, sustainable future for Peoria. Learn about the stormwater utility and how it will improve our community.

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.



+ = 2,600 SF Impervious

= 2.6 Billing Units x $3 per Billing Unit

= $7.80 per Month (Average Home)

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.

CITY OF PEORIA

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.

CITY OF PEORIA

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

CITY OF PEORIA

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.

CITY OF PEORIA

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."

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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

CITY OF PEORIA

City of Peoria

Reporting Dates Year 2020 Appendix E

Cost Summary By Task

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Cleaning Inlet Tops	20	198.00	$6,439.05	$2,972.36	$0.00	$0.00	$0.00	$9,411.41
Headwall Cleaning	4	72.00	$2,346.09	$2,322.76	$0.00	$0.00	$0.00	$4,668.85
Storm Sewer Repair	138	2,296.50	$74,298.65	$66,477.62	$20,813.82	$94.46	$0.00	$161,684.54
Storm Sewers Cleaning	140	785.00	$25,475.36	$28,045.22	$35.73	$0.00	$0.00	$53,556.31
Tasks: 4	**302**	**3,351.50**		**$99,817.96**		**$94.46**		**$229,321.11**
			$108,559.14		**$20,849.55**		**$0.00**	

City of Peoria

Reporting Dates Year 2020

Appendix E

Cost Summary By Task

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Debris Removal	45	2,132.44	$70,774.51	$77,130.64	$6.63	$0.00	$0.00	$154,563.69
Mowing	1	4.00	$127.44	$98.06	$0.00	$0.00	$0.00	$225.50
Television pickup	1	8.00	$254.88	$0.00	$0.00	$0.00	$0.00	$254.88
Tree Planting	1	0.00	$0.00	$0.00	$479.50	$0.00	$0.00	$479.50
Tree Removal In House	7	28.50	$811.90	$694.97	$0.00	$0.00	$0.00	$1,506.87
Tree/Brush Trimming	83	3,641.12	$127,014.67	$166,281.81	$0.10	$0.00	$0.00	$301,750.78
Tasks: 6	**133**	**5,814.07**		**$244,205.49**		**$0.00**		**$458,781.22**
			$198,983.39		**$486.22**		**$0.00**	

Andrea Klopfenstein

From: Bob Williams
Sent: Thursday, February 11, 2021 11:29 AM
To: Andrea Klopfenstein
Cc: Sie Maroon
Subject: RE: 2020 SWU report

It was for a street sweeper. The cost was $211,014.85.

Bob Williams
City of Peoria
Fleet Management
Ph.309-256-3353 Cell
Ph.309-494-8882 Desk

From: Andrea Klopfenstein <aklopfenstein@peoriagov.org>
Sent: Thursday, February 11, 2021 11:19 AM
To: Bob Williams <bwilliams@peoriagov.org>
Cc: Sie Maroon <smaroon@peoriagov.org>
Subject: 2020 SWU report

Bob,

I'm working on the 2020 Storm Water Utility (SWU) report. Please send me information on any equipment that was purchased with SWU funds in 2020.

There is a line item in the capital budget for fleet recapitalization. Please provide an explanation on what that means that I can insert into the report.

Thanks for your help.

Andrea Klopfenstein, City Stormwater Engineer/Assist.Public Works Director
City of Peoria
3505 N Dries Lane
Peoria, IL 61604
309-494-8816
peoriagov.org
peoriastormwater.com
peoriapicksup.com

Andrea Klopfenstein

From: Bob Williams
Sent: Thursday, February 11, 2021 12:02 PM
To: Andrea Klopfenstein
Cc: Sie Maroon
Subject: RE: 2020 SWU report

We replace the sweepers when they come to the end of their useful life. The following is an example of the criteria that is used.

UNIT NO.	YEAR	VEHICLE	ASSIGNMENT/MAKE/MODEL	AGE/POINTS	UNIT NO.	AS OF 8/31/20 MILES/HOURS	MILEAGE/HOURS POINT
236PS	2013	Elgin	PELICAN 3-WHEEL SWEEPER	8	236PS	5,890	5.9

CONDITION

30 Total Points +	32 Points + <40% M/R
UNDER 18	CONDITION 1
18 TO 22	CONDITION 2
23 TO 27	CONDITION 3
28 AND ABOVE	CONDITION 4

M/R POINTS

0-20%	1
21-40%	2
41-60%	3
61-75%	4
76-100%	5

RELIABILITY

EXCELLENT	1
GOOD	2
FAIR	3
POOR	4

TYPE OF SERVICE

OCCASIONAL	1
MODERATE	2
FAIR	3
HARD	4
SEVERE	5

We have 6 sweepers, and are replaced as they start to cost too much to operate in repairs and down time. We also weigh in the best time to trade in as well. The above sweeper scored 28 points so it is due for replacement this year. Due to budget cuts the last few years, it is forcing causing us to operate an old piece of equipment for one more year.

Bob

Andrea Klopfenstein

From: Alexandrea Williams
Sent: Thursday, August 13, 2020 8:36 AM
Subject: Thurs., Aug. 13 - Mayor's Youth Program Wraps Up with Closing Ceremony at 10 a.m.

CITY OF PEORIA PUBLIC WORKS

NEWS RELEASE

Mayor's Youth Program Makes Their Mark

Summer work opportunity yields better students, better citizens

PEORIA – August 13, 2020 – All good things must come to an end – including Peoria's lifechanging summer work program for teens. The Public Works Department lead Mayor's Youth Program wraps up this week, with a congratulatory closing celebration at the City's **Gateway Building today, Thursday, August 13, at 10 a.m.**

The small but mighty crew had a jam-packed schedule this year with a number of accomplishes to boot. Their wide range of assignments leapt from litter and tire pickup, to weeding, landscaping, sodding and more. The outcomes have made a strong impact on the neighborhoods where the teens have given their time and effort.

"I always tell them, everything we touch as a program needs to turn to gold," said Program Coach, Demetrius Edwards.

Edwards serves as a teacher and coach at Peoria Public Schools and has helped facilitate the summer work program for the past seven years. Under his watch, students learn about what it means to be a hard worker, strong team player and respectable member of our community. And while the types of work and projects might change from year to year, the program messaging continues to hold steady.

"We aim to address the whole person . . . not just the teen or student – but what it means to be a member of the workforce and a productive member of their community," said Edwards.

This year's program would not have been possible without the collaboration between the City, State and Peoria Public Schools. Funding was initially uncertain due to economic hardships sparked by the COVID-19 pandemic. However, Illinois State Senator David Koehler of Peoria assisted in securing a Member Initiative Grant through the Illinois Department of Commerce and Economic Opportunity (DCEO).

The Senator, Mayor Jim Ardis and Superintendent Dr. Sharon Desmoulin-Kherat, as well as the

program coordinators and select participants have been invited to speak at the event. The closing ceremony is set to begin promptly at 10 a.m.

Thanks,

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PeoriaCorps 2020 Report

The training program focuses on job skills required to maintain green infrastructure. Green infrastructure 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 2020 PeoriaCorps program.

Nineteen persons completed the 2020 PeoriaCorps program. 2020 included two cohorts, the fourth and fifth groups to complete the AmeriCorps job training program in Peoria. Since its inception in 2017, PeoriaCorps has had 35 participants graduate from the program. In the first quarter of 2020 PeoriaCorps participants recorded 1304 hours of litter removal, plant maintenance, and weeding and watering of green infrastructure worksites within the city.

After receiving hands-on instruction about maintaining plants 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.

2020 Stormwater Community Investment Plan Projects

Project Name	Equipment	Eng. Study	Eng. PS&E	Eng. Const.	Const	Total Cost	Funding	Comment
Annual Repair Contract					$ 719,228	$ 719,228	SWU	Recurring annual work
SWU Grant Projects					$ 121,375	$ 121,375	SWU	21 PPDA Sites
Tyler Enterprise Software	$ 158,056					$ 158,056	SWU	
Fleet Recapture	$ 211,015					$ 211,015	SWU	
Stormwater Management - CWA		$ 136,909				$ 136,909	SWU	Recurring annual work
Bike Trail Culverts North of Teton Drive					$ 17,206	$ 17,206	SWU	Remove and replace three undersized culverts under the Bike Trail
Humbolt-Prospect Wall					$ 84,823	$ 84,823	SWU	
Investigation of Culvert Collapse at 711 W. Glen		$ 21,515				$ 21,515	SWU	
Dry Run Creek Trib. C Culvert Reconstruction			$ 70,678	$ 57,815	$ 249,641	$ 378,134	SWU	
Merle-Florence Concrete Lined Channel		$ 43,789				$ 43,789	SWU	
E. Branch Dry Run Creek Culvert at Merle		$ 16,559				$ 16,559	SWU	
Abington-Madison Culvert		$ 62,400	$ 89,718			$ 152,118	SWU	
Totals	**$369,071**	**$281,172**	**$160,396**	**$57,815**	**$1,192,273**	**$2,060,726**		

2020 Annual Drainage Repair Contract

WO #	Work Type (Repair or Lining)	Location	Estimated Cost	Status	Completed Cost
19-12		1524 W Marlene Ave	$ -	Completed in 2019, may have restoration	
19-19		Teton and N. University	$ -	Completed in 2019, may have restoration	
19-21		7127 N Fox Point Dr	$ -	Completed in 2019, may have restoration	
19-22		5015 N. Mansfield	$ -	Completed in 2019, may have restoration	
19-26		glen and Sheridan	$ 1,674	PA12	$ 1,674
20-01		1420 Greenleaf	$ 18,803	PA13	$ 18,803
20-02		6806 N Aycliffe Dr	$ -	On Hold	
20-03		Reservoir and Harmon	$ 3,722	PA13	$ 3,722
20-04		925 Bridgetowne Ct	$ 15,000	Waiting for Estimate	
20-05		4611 W Sable Way	$ 3,095	PA14	$ 3,095
20-06		Gerald Court and Geneva	$ 15,537	PA13,PA14	$ 15,537
20-07		4734 W. Pendleton PL	$ 52,575	PA16	$ 52,575
20-08		1614 Lake Ave	$ 30,000	on hold?	
20-09		Monroe & Abington	$ 83,947	PA13, PA14, PA17	$ 83,947
20-10		Barberry Ct	$ 67,876	PA14 and PA15	$ 67,876
20-11		5916 N Tampico Dr.	$ 28,795	complete	$ 28,795
20-12		Knoxville and Lake	$ 1,674	complete PA12	$ 1,674
20-13		906 W. Oakglen	$ 12,903	PA13	$ 12,903
20-14		N Great Oak Rd	$ 153,514	PA17	$ 80,456
20-15		2300 & 2323 W. Imperial Court Outfalls	$ 58,518	PA 16	$ 58,518
20-16		1933 W Teton Dr		Under Construction, part of 20-15	
20-17		3716 Verner Dr	$ 15,000	Needs Estimate	
20-18		412 Collingwood Circle	$ 8,000	Needs Estimate	
20-19		7121 n. Manning	$ 33,191	PA16	$ 33,191

2020 Annual Drainage Repair Contract

WO #	Work Type (Repair or Lining)	Location	Estimated Cost	Status	Completed Cost
20-20		5015 Mansfield	$ 59,378	PA17	$ 59,378
20-20b		6601 Post Oak Rd	$ 25,000	Need Estimate ASAP	
20-22 -> 21ARC-02		255 Detweiler Dr	$ 50,000		
20-21 -> 21ARC-02		4918 Sherwood Ave	$ 50,000		
Totals			**$788,203**		**$522,144**