February 10, 2022

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

RE: Review of Storm Water Samples Collected for the Separate Storm Sewer System
        (MS4) Permit for the calendar year 2021.

Dear Ms. Klopenstein:

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

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

Goals of the MS4 Permit, Sample Point Location and Descriptions

Four sample locations (P1 through P4) were selected to meet requirements of the MS4 Permit
and determine whether surface water quality is improving, remaining stable, or decreasing. The
sample point locations are located outside of the known Combined Sewer System (CSO) system
and should be storm water flowing within the City of Peoria boundaries. Sampling point 1 is
located the farthest to the north and encompasses a mix of residential, industrial, and
commercial properties. Sampling point 2 covers the northwest and some of the middle parts of
the city with a mix of residential, commercial, and industrial properties. Sampling point 3 is a mix
of residential and commercial properties, and sample point 4 encompasses the eastern portions
of the city and is predominately residential. The four sample point locations are shown on
attached Figure 1.

Summary of Procedures Utilized to Collect Storm Water Samples

Per General NPDES Permit ILR40, storm water samples must be collected within 48 hours of a
precipitation event greater than or equal to one quarter inch of precipitation in a 24-hour period.
Only one storm water grab sample per location is required to be collected per quarter. If there is
insufficient precipitation during a quarter, storm water samples would not be collected. Storm
water samples were collected every quarter in 2021.

Analytical Data Summary Including Trends and Potential Areas of Concern

Storm water samples were grab samples and were collected directly from the stream. Flow rate is not factored in sample collection as flow monitoring devices are not installed at the sampling point. Field observation sheets noting precipitation amount, weather conditions, sample appearance, etc. were completed at each sampling point every quarter, and are attached in Attachment 1. There were no observed factors that appeared to bias sample results. Some of those factors (if present) could be sheens, discoloration, smell, animal carcass/feces, etc. The parameters analyzed are required under General NPDES Permit ILR40 Part V.(A)(2)(c) and are shown in the attached Tables 1 through 4 (2021 laboratory results) and graphically on Figures 2 through 8 (all data). We now have three years of background data to analyze and can start to make some general assumptions and potential trends regarding concentration levels. A graph was not generated for the parameter grease and oil since all grease and oil concentrations in 2021 were reported as non-detected below the laboratory reporting limit (RL). Since the inception of storm water sampling in 2019, the grease and oil concentration has only been detected once above the RL at a concentration of 5.9 mg/L just above the RL of 5.1 mg/L.

As shown on Figure 2, the highest chloride concentration reported at all four sample locations is occurring during the 1st quarter event (except for the 2nd quarter event in 2019) and then decreases each subsequent quarter. A plausible explanation for this trend could be related to the seasonal effect of snowfall and the runoff of "salt" placed on local roads, residential driveways, and sidewalks as a deicer. A check of historical snowfall amounts showed on April 14, 2019, the Peoria area received 5.0 inches of snow. The second quarter 2019 stormwater sample was collected on April 29, 2019, which could explain the high chloride concentration for the 2nd quarter 2019 event.

A total suspended solid (TSS) is a waterborne particle that exceeds 2 microns in size, micron thickness is 0.001mm. A particle smaller than 2 microns is considered a total dissolved solid (TDS). TSS can be anything that floats or is suspended in water and can affect water clarity. Common suspended solids are bacteria, and sediments, such as clay, gravel, sand, and silt. Common causes of TSS in water are erosion and runoff from rainfall or snow melting. Excluding the 2nd quarter 2019 event, TSS concentrations have been consistent with an occasional spike in concentrations mostly occurring at Sampling Point 2. The EPA secondary drinking water standard for a TDS concentration is 500 ppm which is considerably higher than the TSS concentrations currently being reported at Sampling Points 1-4.

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

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

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

- Increase the number of sample locations and consider timed collection of storms, such as the TMDL study commencing in 2022.

- Collect samples during non-rain events to establish a normal flow background concentration (not effected by precipitation) for all parameters.

- At a minimum, collect monthly fecal coliform samples from June to December to try and determine when the increased concentrations occur and compare the sample concentrations between sample locations.

- Record snowfall total and amount of salt or other deicer products the City/County applied to roads during the month, analyzing whether corresponds with increased chloride concentrations in water samples.

- Track monthly precipitation amounts with date samples were collected looking for indications of runoff from erosion or application of landscaping chemicals.

- To explore further whether precipitation amounts are affecting the TSS concentration, a sample could be collected across the storm event not just once per storm event.

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

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

2. Early indications are it appears precipitation amounts are not affecting the TSS concentration. However, this should be explored further.

3. There is not a disparity between fecal coliform concentration and the four sample point locations. The fecal coliform concentration is consistent across all four sample locations with higher concentrations being reported for the 3rd and 4th quarter sampling events.

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

Sincerely,

Foth Infrastructure & Environment, LLC

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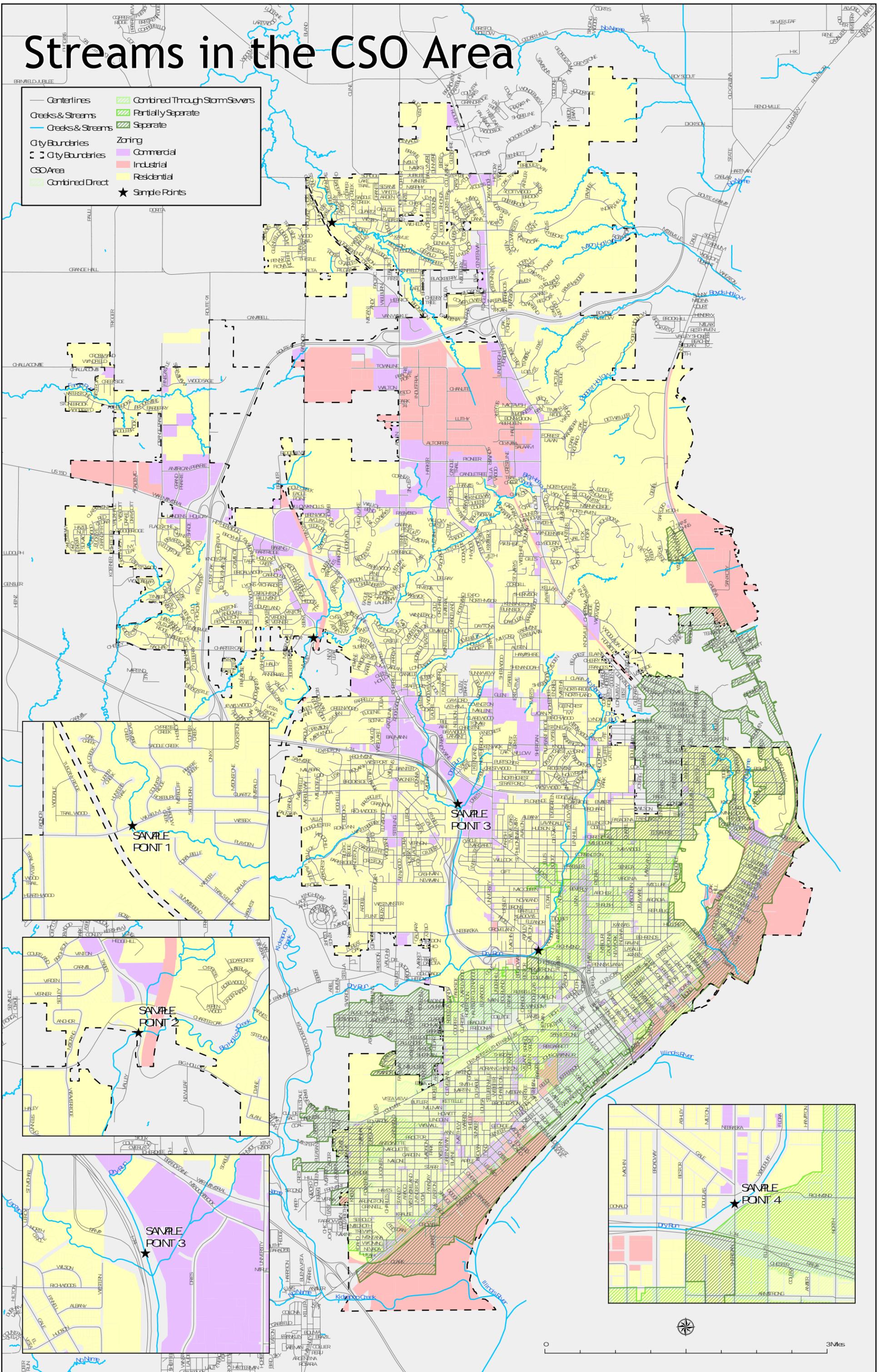Licensed in IL, IA, AR, GA

Enclosures:
       Figure 1: Map of Sample Point Locations
       Figure 2: Total Chloride Concentration Graph
       Figure 3: Total Suspended Solids Concentration Graph
       Figure 4: Total Nitrogen Concentration Graph
       Figure 5: Total Phosphorous Concentration Graph
       Figure 6: Total TKN Ammonia Concentration Graph
       Figure 7: Total Nitrate Concentration Graph
       Figure 8: Total Fecal Coliform Concentration Graph
       Table 1 – Sampling Point 1 Laboratory Analytical Results
       Table 2 – Sampling Point 2 Laboratory Analytical Results
       Table 3 – Sampling Point 3 Laboratory Analytical Results
       Table 4 – Sampling Point 4 Laboratory Analytical Results
       Attachment 1 – Field Observation Sheets

Figures

Streams in the CSO Area

Centerlines
— 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

Illinois River

0   3 Miles

Figure 2
Total Chloride
1Q2019-4Q2021

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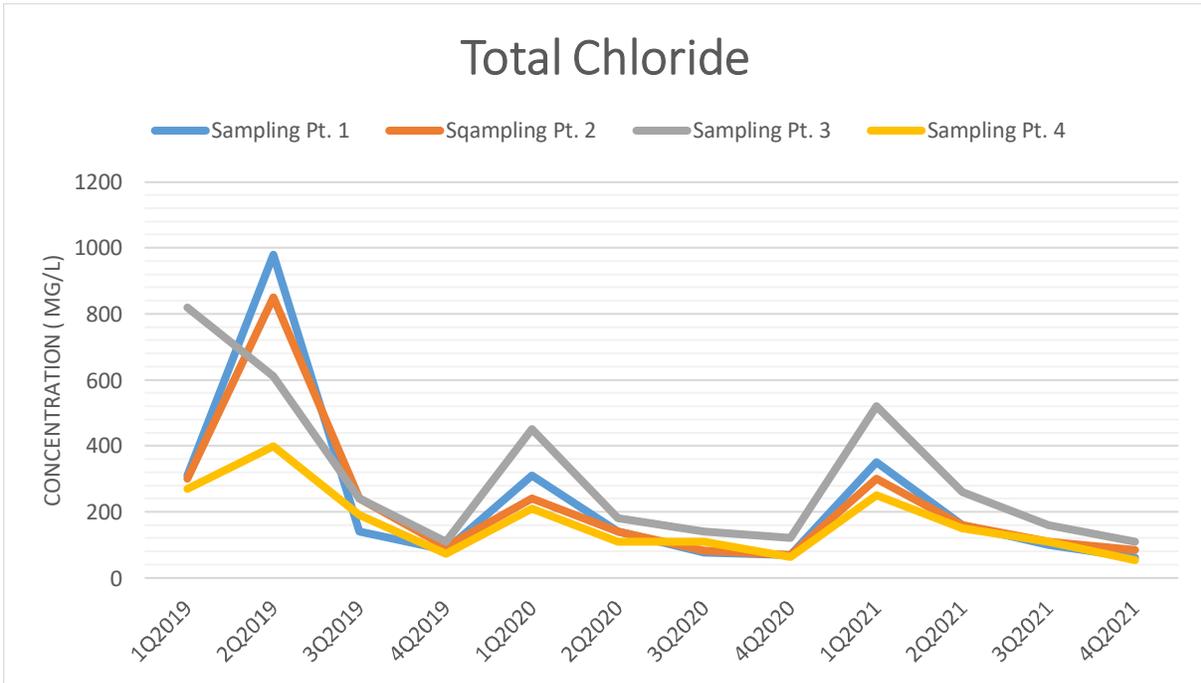
Chloride	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	310	300	820	270
2Q2019	980	850	610	400
3Q2019	140	240	240	190
4Q2019	85	94	110	72
1Q2020	310	240	450	210
2Q2020	140	140	180	110
3Q2020	77	82	140	110
4Q2020	69	69	120	64
1Q2021	350	300	520	250
2Q2021	160	160	260	150
3Q2021	100	110	160	110
4Q2021	62	84	110	55

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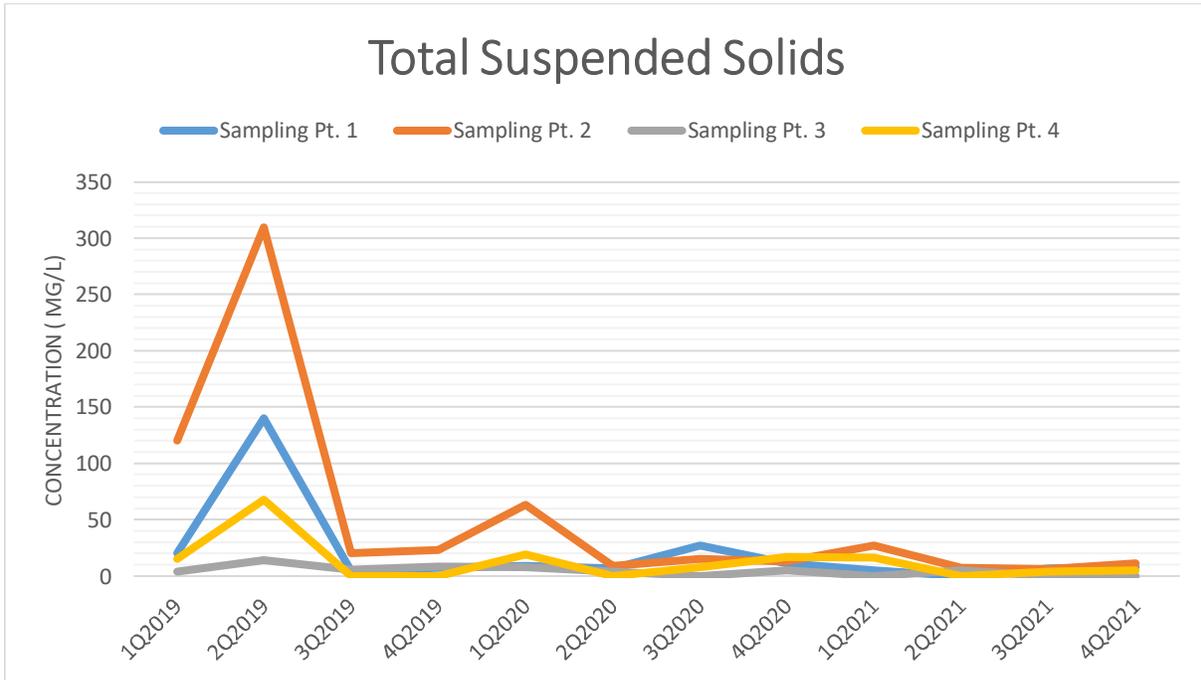
TSS	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	20	120	4	15
2Q2019	140	310	14	68
3Q2019	4.4	20	5.6	<4
4Q2019	7.2	23	8.4	<4
1Q2020	8.8	63	8	19
2Q2020	6.4	8.8	4	<4.0
3Q2020	27	15	<4.0	8
4Q2020	11	13	4.8	17
1Q2021	4.8	27	<4.0	16
2Q2021	<4	7.2	4.8	<4.0
3Q2021	6.4	6.4	<4.0	4
4Q2021	8	11	<4.0	4.8

Figure 4
Total Nitrogen
1Q2019-4Q2021

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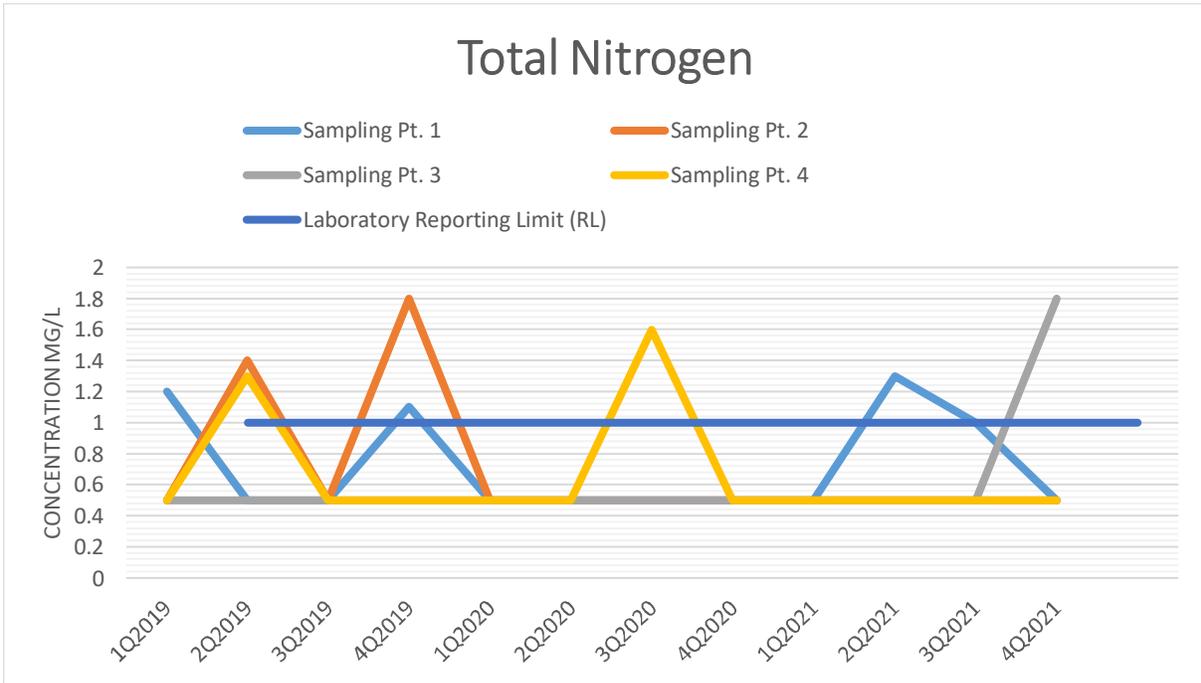
Nitrogen	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	1.2	<1.0	<1.0	<1.0
2Q2019	<1.0	1.4	<1.0	1.3
3Q2019	<1.0	<1.0	<1.0	<1.0
4Q2019	1.1	1.8	<1.0	<1.0
1Q2020	<1.0	<1.0	<1.0	<1.0
2Q2020	<1.0	<1.0	<1.0	<1.0
3Q2020	<1.0	<1.0	<1.0	1.6
4Q2020	<1.0	<1.0	<1.0	<1.0
1Q2021	<1.0	<1.0	<1.0	<1.0
2Q2021	1.3	<1.0	<1.0	<1.0
3Q2021	1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

Note:

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

Figure 5
Total Phosphorous
1Q2019-4Q2021
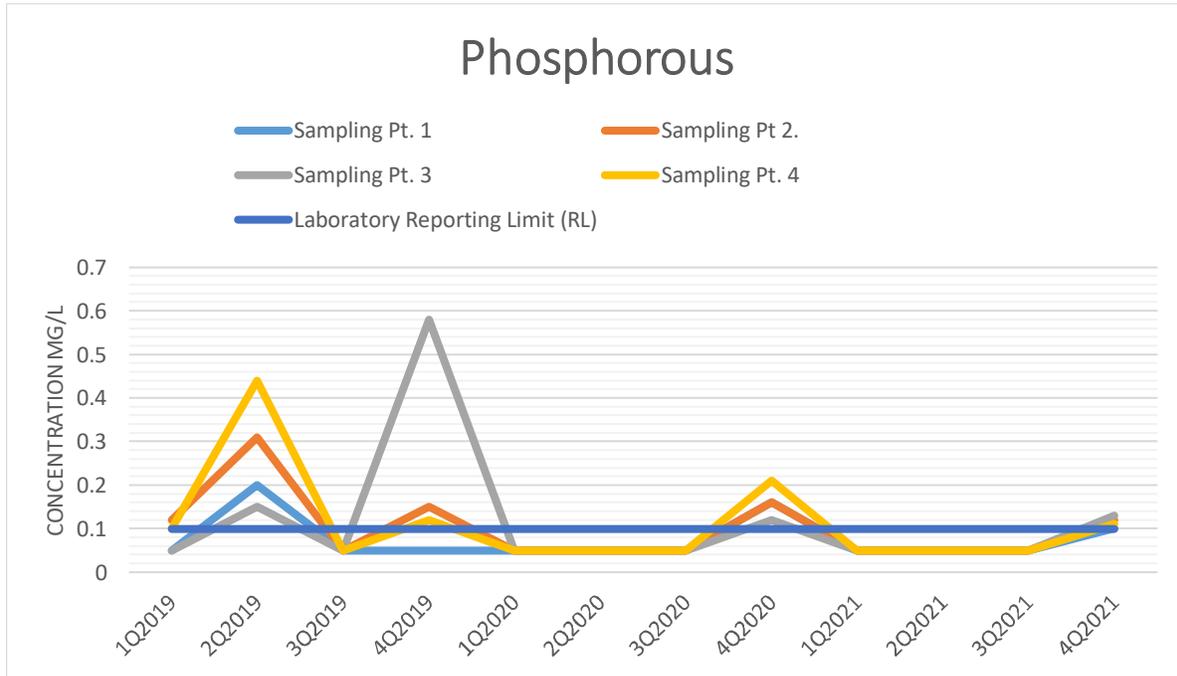
Phosphorous

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

Note:

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

Figure 6
TKN Ammonia
1Q2019-4Q2021

TKN Nitrogen

Legend: Sampling Pt. 1, Sqampling Pt. 2, Sampling Pt. 3, Sampling Pt. 4, Laboratory Limit (RL)
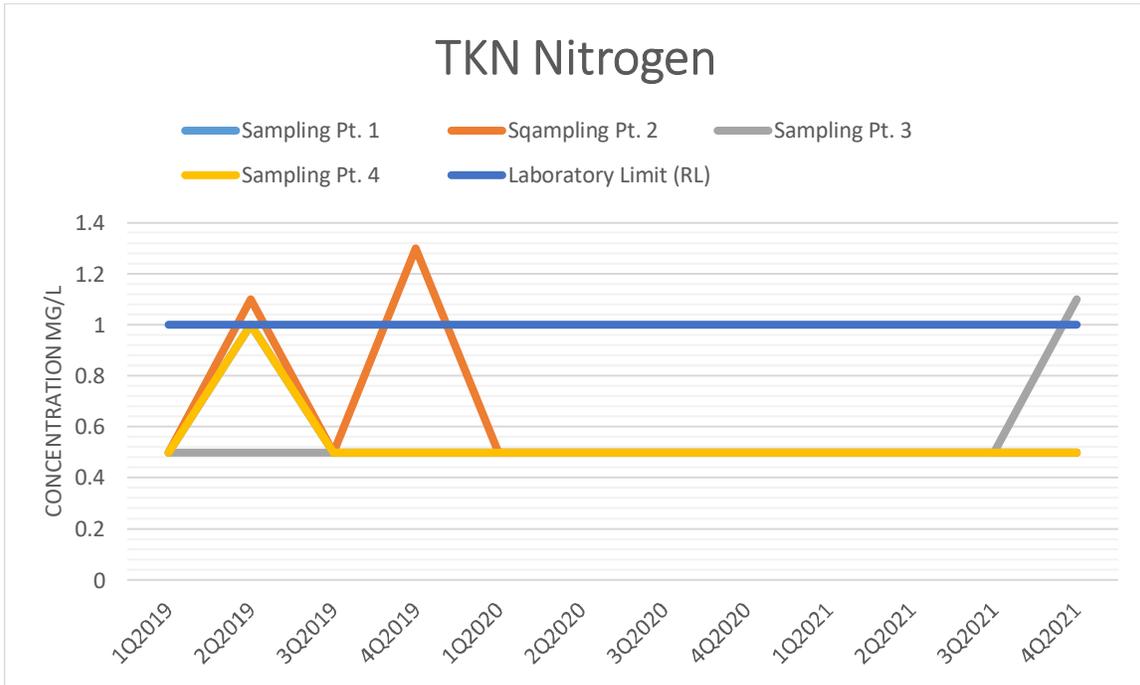
TKN	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	<1.0	<1.0	<1.0	<1.0
2Q2019	1	1.1	<1.0	1
3Q2019	<1	<1.0	<1.0	<1.0
4Q2019	<1	1.3	<1	<1
1Q2020	<1	<1.0	<1.0	<1.0
2Q2020	<1	<1.0	<1.0	<1.0
3Q2020	<1	<1.0	<1.0	<1.0
4Q2020	<1	<1.0	<1.0	<1.0
1Q2021	<1.0	<1.0	<1.0	<1.0
2Q2021	<1.0	<1.0	<1.0	<1.0
3Q2021	<1.0	<1.0	<1.0	<1.0
4Q2021	<1.0	<1.0	1.1	<1.0

Note:

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

Figure 7
Total Nitrate
1Q2019-4Q2021

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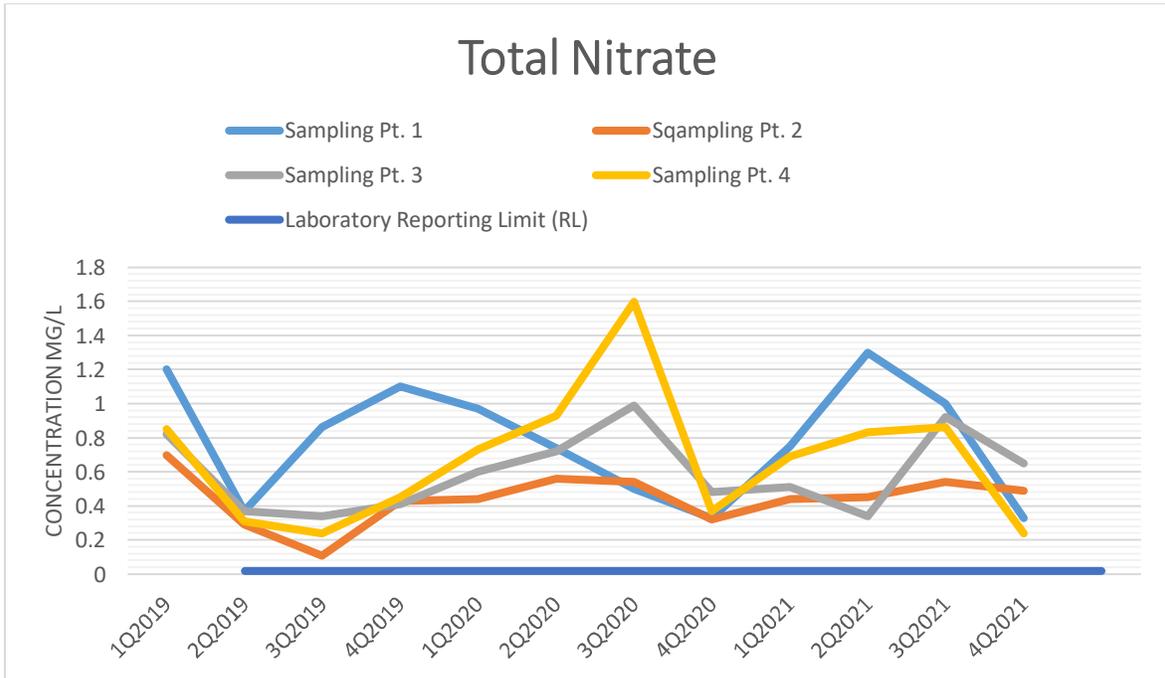
Nitrate	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	1.2	0.7	0.82	0.85
2Q2019	0.37	0.29	0.37	0.31
3Q2019	0.86	0.11	0.34	0.24
4Q2019	1.1	0.43	0.41	0.45
1Q2020	0.97	0.44	0.6	0.73
2Q2020	0.74	0.56	0.72	0.93
3Q2020	0.5	0.54	0.99	1.6
4Q2020	0.33	0.32	0.48	0.37
1Q2021	0.75	0.44	0.51	0.69
2Q2021	1.3	0.45	0.34	0.83
3Q2021	1	0.54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

Figure 8
Total Fecal Coliform
1Q2019-4Q2021

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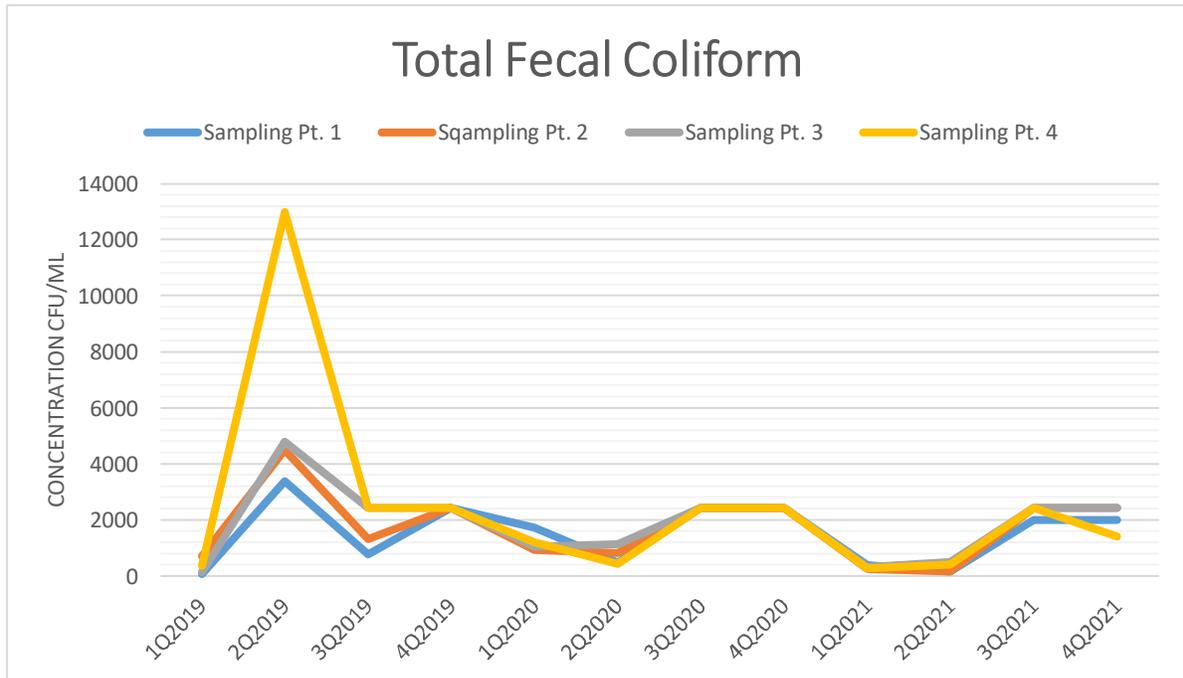
Fecal Coliform	Pt 1	Pt 2	Pt 3	Pt 4
1Q2019	81	700	140	350
2Q2019	3400	4500	4800	13000
3Q2019	770	1300	2420	2420
4Q2019	2420	2420	2420	2420
1Q2020	1730	921	1050	1200
2Q2020	461	816	1120	435
3Q2020	2420	2420	2420	2420
4Q2020	2420	2420	2420	2420
1Q2021	387	238	308	276
2Q2021	162	172	488	403
3Q2021	1990	2420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

Tables

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

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

Notes: Prepared by: MAW

CFU/100 mL = colony forming units per 100 milliliters   Checked by: JCG1

mg/L = milligrams per liter

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

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

Notes: Prepared by: MAW
CFU/100 mL = colony forming units per 100 mL   Checked by: JCG1
mg/L = milligrams per liter

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

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

Notes:

CFU/100 mL = colony forming units per 100 milliliters

mg/L = milligrams per liter

Prepared by: MAW

Checked by: JCG1

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

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

Attachment 1
Field Observation Sheets

Field Sheet
1st Quarter 2021

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	03/16/2021
Sampling Location Point:	Sample Pt 1
Sampling Personnel:	Mark Williams & Dakota Ladwig

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal debris at sampling pt.

	Last 24 hours	Last 48 hours
Precipitation:	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	No odor
Appearance:	
Color:	Light brown
Turbidity:	Slight Turbidity
Other:	

Additional Information/Comments	

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	03/16/2021
Sampling Location Point:	Sample Pt 2
Sampling Personnel:	Mark Williams & Dakota Ludwig

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal debris at sampling Pt.

Precipitation:	Last 24 hours	Last 48 hours
	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	medium flow
Color:	Light Brown
Turbidity:	Slight Turbidity
Other:	

Additional Information/Comments	

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	03/16/2021
Sampling Location Point:	Sample Pt 3
Sampling Personnel:	Mark Williams & Dakota Ludwig

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Brush upstream

	Last 24 hours	Last 48 hours
Precipitation:	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	low - flow
Color:	Brown
Turbidity:	low
Other:	

Additional Information/Comments	

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	03/16/2021
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.):	Debris upstream (T.V. etc)

	Last 24 hours	Last 48 hours
Precipitation:	0.79"	0.83"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	low flow
Color:	Light brown
Turbidity:	Low
Other:	

Additional Information/Comments	

Field Sheet
2nd Quarter 2021

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	4-30-2021
Sampling Location Point:	Sample Point 1
Sampling Personnel:	Dakota Ledwig + Alisha Weatherspoon

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):		
	Last 24 hours	**Last 48 hours**
Precipitation:	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	
Color:	Light-brown
Turbidity:	Slight
Other:	
Additional Information/Comments	Time of sampling 11:05 AM

Storm Water Sample Collection Form

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	4-30-2021
Sampling Location Point:	Sample Point 2
Sampling Personnel:	DeKota Ledwig, Alisha Wetherspoon

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	

	Last 24 hours	Last 48 hours
Precipitation:	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	
Color:	Light - brown
Turbidity:	Slight
Other:	

Additional Information/Comments	Time of Sampling 10:45 Am

CITY OF PEORIA

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	04-30-2021
Sampling Location Point:	Sample Point #3
Sampling Personnel:	Dekota Ladwig & Alisha Weatherspoon

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):		
	Last 24 hours	**Last 48 hours**
Precipitation:	0.08 "	3.13 "
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	
Color:	Light Brown
Turbidity:	Slight
Other:	
Additional Information/Comments	Time of Sampling 10:20 Am

Storm Water Sample Collection Form

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	04-30-2021
Sampling Location Point:	Sample Point # 4
Sampling Personnel:	DeKota Ludwig, Alisha Weatherspoon

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Debris upstream

	Last 24 hours	Last 48 hours
Precipitation:	0.08"	3.13"
Current Outdoor Air Temperature:		
Current Weather Conditions:		

Water Sample Observations

Odor:	None
Appearance:	
Color:	Lt-brown
Turbidity:	Slight
Other:	
Additional Information/Comments	Time of sampling 10:00 Am

Field Sheet
3rd Quarter 2021

Storm Water Sample Collection Form

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	07/13/2021
Sampling Location Point:	Sample Pt 1
Sampling Personnel:	Mark Williams and Dakota Ladwig

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal /overgrow vegetation

Precipitation:	Last 24 hours	Last 48 hours
	0.25"	0.44"

Current Outdoor Air Temperature:	73°F
Current Weather Conditions:	M.P. Cloudy

Water Sample Observations

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

Additional Information/Comments	TSS 1010

Storm Water Sample Collection Form

CITY OF PEORIA

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

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal

	Last 24 hours	Last 48 hours
Precipitation:	0.25"	0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	Cloudy	

Water Sample Observations

Odor:	Normal
Appearance:	V. lt brn
Color:	li
Turbidity:	none
Other:	
Additional Information/Comments	TOS 0938

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	07/13/2021
Sampling Location Point:	Sample Pt 3
Sampling Personnel:	Mark Williams and Dakota Ladwig

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal flow

	Last 24 hours	Last 48 hours
Precipitation:	0.25"	0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	Cloudy	

Water Sample Observations

Odor:	algae
Appearance:	v. lt brn
Color:	"
Turbidity:	none
Other:	
Additional Information/Comments	TOS: 09:13

Storm Water Sample Collection Form

CITY OF PEORIA

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

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Concrete debris upstream, some tires

	Last 24 hours	Last 48 hours
Precipitation:	0.25"	0.44"
Current Outdoor Air Temperature:	73°F	
Current Weather Conditions:	Cloudy	

Water Sample Observations

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

Additional Information/Comments	TOS 0858

Field Sheet
4th Quarter 2021

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10-08-2021
Sampling Location Point:	Sample Pt 1
Sampling Personnel:	Dakota Ladwig & Yohannes Fisseha

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	creek level up. Normal debris

	Last 24 hours	Last 48 hours
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	68°F	
Current Weather Conditions:	P. Cloudy, Wind SW 3 mph	

Water Sample Observations

Odor:	Earthy
Appearance:	
Color:	lt brn
Turbidity:	Moderate
Other:	
Additional Information/Comments	TDS 1010

Storm Water Sample Collection Form

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10-08-2021
Sampling Location Point:	Sample Pt 2
Sampling Personnel:	Dakota Ludwig & Yohannes Fisseha

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal debris (down trees) Swift flow	
	Last 24 hours	**Last 48 hours**
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	68°F	
Current Weather Conditions:	P. Cloudy, Wind SW 2-3 mph	

Water Sample Observations

Odor:	Earthy
Appearance:	
Color:	lt brn
Turbidity:	Moderates
Other:	
Additional Information/Comments	TOS 0950

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10-08-2021
Sampling Location Point:	Sample Pt 3
Sampling Personnel:	Dakota Ladwig & Yohannes Fisseha

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	No debris, evidence on sides of swift flow bent grass etc.

	Last 24 hours	Last 48 hours
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	68°F	
Current Weather Conditions:	P. Cloudy Wind SW 3mph	

Water Sample Observations

Odor:	None
Appearance:	
Color:	V. lt brn
Turbidity:	Slight
Other:	

Additional Information/Comments	TOS 0925

CITY OF PEORIA

Proj. Name:	City of Peoria, IL - Storm Water Sampling
Date:	10-08-2021
Sampling Location Point:	Sample Pt 4
Sampling Personnel:	Dakota Ladwig & Yohannes Fisseha

Conditions of Sampling Point Location

Observations of Sampling Point Location (e.g., debris, downed trees, erosion, excessive sediment, etc.):	Normal Debris, concrete rubble, & few tires up stream	
	Last 24 hours	**Last 48 hours**
Precipitation:	1.03"	1.16"
Current Outdoor Air Temperature:	67°F	
Current Weather Conditions:	P. Cloudy, Wind SW 2mph	

Water Sample Observations

Odor:	Earthy
Appearance:	
Color:	lt brn
Turbidity:	moderate
Other:	
Additional Information/Comments	TOS 0910