

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, 2018 To	March, 2	019	Permit No. ILR40 0283
MS4 OPERATOR INFORMATION: (As it appear	ars on the	current permit)	
Name: City of Aurora		Mailing Address 1: 44 East	Downer Place
Mailing Address 2:			County: Kane
City: Aurora	State:	IL. Zip: 60505-3302	Telephone: 630-256-3231
Contact Person: Mark Phipps, P.E., CFM, CPESC (Person responsible for Annual Report)		Email Address: mphipps@ar	urora-il.org
Name(s) of governmental entity(ies) in which MS	S4 is loca	ated: (As it appears on the cu	rrent permit)
Kane Co, Aurora Twp, Sugar Grove Twp, Batavia Will Co, Wheatland Twp		DuPage Co, Naperville Twp, W Kendall Co, Oswego Twp	/infield Twp
THE FOLLOWING ITEMS MUST BE ADDRESSED	<u>D.</u>		
 A. Changes to best management practices (check a regarding change(s) to BMP and measurable go 		te BMP change(s) and attach ir	nformation
Public Education and Outreach	<u>7</u> 4.	Construction Site Runoff Cont	rol
2. Public Participation/Involvement] 5.	Post-Construction Runoff Con	trol
3. Illicit Discharge Detection & Elimination] 6.	Pollution Prevention/Good Ho	usekeeping
B. Attach the status of compliance with permit cond management practices and progress towards acl MEP, and your identified measurable goals for ea	hieving th	e statutory goal of reducing the	
C. Attach results of information collected and analyze	zed, inclu	ding monitoring data, if any dur	ing the reporting period.
D. Attach a summary of the storm water activities yo implementation schedule.)	ou plan to	undertake during the next repo	orting cycle (including an
E. Attach notice that you are relying on another gov	ernment	entity to satisfy some of your pe	ermit obligations (if applicable).
F. Attach a list of construction projects that your ent	tity has pa	aid for during the reporting perio	od.
Any person who knowingly makes a false, fictitious, commits a Class 4 felony. A second or subsequent of			
Owner/Signature:		5/31 /	19
Mark Phipps, P.E., CFM, CPESC		Engineering Coord	dinator
Printed Name:		Title	
MAIL COMPLETED FORM TO: epa.ms4annualinsp	@illinois.	gov	1

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

WATER POLLUTION CONTROL

COMPLIANCE ASSURANCE SECTION #19 1021 NORTH GRAND AVENUE EAST

POST OFFICE BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form WPC 691 Rev 6/10 has been approved by the Forms Management Center.

IL 532 2585

ANNUAL FACILITY INSPECTION REPORT FOR DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS

REPORTING PERIOD: MARCH 1, 2018 – FEBRUARY 28, 2019
CITY OF AURORA, ILLINOIS
(NPDES Permit No. ILR400283)

I. CHANGES TO BEST MANAGEMENT PRACTICES

During this reporting period, the City made a change to its Public Education and Outreach Best Management Practices. The City's Community Relations Division is moving away from mailing print media, due to its cost and limited effectiveness. Based on this policy, the City has suspended printing of the Aurora Borealis newsletter, so it is no longer practical to annually publish an article on the impacts of stormwater discharges on water bodies. The City has also decided against mailing an educational flyer to Homeowner Associations regarding maintenance of their stormwater best management practices.

Instead, the City will add BMP A.2 – Speaking Engagement, which will put a City employee that is knowledgeable about the impacts of stormwater discharges on water bodies in direct contact with an audience interested in learning about the topic.

No other changes were made to the Best Management Practices and measurable goals of the City's stormwater management program during this reporting period.

II. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

The City has committed to specific stormwater Best Management Practices (BMPs) in order to meet the requirements of General NPDES Permit No. ILR40. The selected BMPs are designed to reduce the discharge of pollutants from the City's municipal separate storm sewer system to the maximum extent practicable, with consideration of the City's staff and budget. Each of the selected BMPs has been effective during the reporting period. The following is a status report for each BMP describing the activities undertaken during this reporting period.

PUBLIC EDUCATION AND OUTREACH

• BMP A.1 – Distributed Paper Material

	Annually distribute one educational flyer through an Aurora school.
MEASURABLE	Priority will be placed on schools located within environmental
GOAL	justice areas. Document the number of students that received the
	flyer each year.
	City staff created a bookmark listing ways the public can help keep
	Aurora's waterways clean. The text is printed in English on one side
STATUS	and Spanish on the other. During October and November 2018, over
	2,000 bookmarks were printed and distributed to the 5 th Grade
	students at every elementary school in Aurora.

• BMP A.2 – Speaking Engagement

MEASURABLE GOAL	 Annually make one public presentation in Aurora about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. The presentations will cover the following range of topics. Proper use and management of household chemicals such as: fluids for vehicles and other equipment; soaps, solvents, and detergents for outdoor washing; paint; chemicals for lawn and garden care; and winter de-icing materials The hazards associated with illegal discharges and improper disposal of waste, along with a telephone number for reporting potential incidents Green infrastructure strategies for stormwater pollution prevention and information about the costs of these strategies Climate change and its potential impact on stormwater pollution
STATUS	 During this reporting period, the City's Engineering Division made five presentations about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. Details about these presentations are listed below. May 20, 2018 – Presentation at the Ward 7 Meeting November 2, 2018 – Presentation to 7th grade students at Fred Rodgers Magnet Academy November 9, 2018 – Presentation to 6th grade students at John C. Dunham STEM Partnership School November 29, 2018 – Presentation to 5th grade students at Nancy Hill Elementary School January 25, 2019 – Presentation to 5th grade students at CM Bardwell Elementary School

• BMP A.6 – Other Public Education

	Continually provide links to educational resources on the City's web site about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. The educational resources will cover the following range of topics.	
MEASURABLE		
GOAL	 Proper use and management of household chemicals such as: fluids for vehicles and other equipment; soaps, solvents, and detergents for outdoor washing; paint; chemicals for lawn and garden care; and winter de-icing materials The hazards associated with illegal discharges and improper 	

	disposal of waste, along with a telephone number for reporting potential incidents • Green infrastructure strategies for stormwater pollution prevention and information about the costs of these strategies • Climate change and its potential impact on stormwater pollution
	The City's web site includes a page titled "Protecting Aurora's Waterways" (https://www.aurora-il.org/1787/Protecting-Auroras-Waterways) with information about the City's sewer system, what the City is doing to protect water quality, and what residents can do. This web page includes links to a wealth of educational resources.
STATUS	Rain barrels are on display with educational material at the Phillips Park Zoo and the Phillips Park Visitor Center. On February 21, 2018, a graduate student in the Masters of Public Administration program and DePaul University interviewed a representative of the Engineering Division on the social and economic benefits of green infrastructure by public organizations.

• PUBLIC INVOLVEMENT/PARTICIPATION

• BMP B.3 – Stakeholder Meeting

MEASURABLE GOAL	Participate in the Fox River Study Group (FRSG), which is a diverse group of stakeholders interested in improving and protecting the Fox River.
	City staff attended the monthly FRSG meetings, participated in the Modeling Committee and the Outreach Committee, continued tracking the City's annual phosphorus load reduction, and provided FRSG with \$99,000 of financial support. City staff participated in the monthly meetings of the Northwest
STATUS	Water Planning Alliance's Technical Advisory Sub-Committee on Sensible Salting. In addition, City staff drafted a chapter for the Sensible Salting Manual, which is intended to be a reference manual for contractors and other practitioners throughout the Chicago region.
	The City also maintained its membership in the Fox River Ecosystem Partnership and the DuPage River Salt Creek Workgroup.

• BMP B.4 – Public Hearing

MEASURABLE GOAL	Annually present the City's stormwater management program at a publicly noticed City Council or Committee meeting to seek public input on the program.
STATUS	The City's stormwater management program was presented at the February 25, 2019 meeting of the Building, Grounds, and Infrastructure Committee.

• BMP B.5 – Volunteer Monitoring

MEASURABLE GOAL	Annually inform residents of a telephone number for reporting stormwater related issues including: ordinance violations, construction site soil erosion and sediment control violations, maintenance issues, and illicit discharges. Publicize the telephone number using the City's newsletters and the City's web site.
STATUS	The City's web site includes a page titled "Protecting Aurora's Waterways" with a telephone number residents can call to report stormwater related issues.

• BMP B.6 – Program Involvement

MEASURABLE GOAL	Annually coordinate an event with an Aurora school to educate children about water quality and collect water quality data. Priority will be placed on schools located within environmental justice areas.
STATUS	The City is partnering with Friends of the Fox River (FOFR) to implement the Aurora Watershed Watchdogs program, which teaches students about water quality. They also collect water quality data at the in-stream events. • March 1, 2018 – 120 Hill Elementary students (in-school) • March 21, 2018 – 88 Hill Elementary students (in-school) • April 5, 2018 – 55 Nicholson Elementary students (in-school) • April 13, 2018 – 125 Hill Elementary students (in-school) • April 21, 2018 – 100 Cowherd Middle School and Aurora East High School students (STEM fair) • April 24, 2018 – 75 Gates Middle School students (STEM fair) • May 2, 2018 – 200 students from various schools (natural resource tour) • May 10, 2018 – 200 students from various schools (natural resource tour) • May 25, 2018 – 270 Waldo Middle School students (inschool) • September 9, 2018 – 10 Aurora Central Catholic students (instream)
	 students (in-stream) October 25, 2018 – 110 Hill Elementary students (in-school) October 30, 2018 – 15 Girl Scouts (in-stream)

The City partners with Kiwanis International and other agencies on a community-wide service day that includes cleaning-up along the Fox River and Indian Creek on April 7, 2018. Beyond promoting the event to its staff, the City provides banners, dumpsters, a tent, and a grill.

The City sponsors a rain barrel program with The Conservation Foundation. Rain barrels can be purchased online at a reduced price. Arrangements can be made for home delivery or pick-up at Aurora's Green Fest. 25 rain barrels were purchased through the program in 2018.

The cities of Aurora and Naperville work together to sponsor and promote the collection of a wide range of household hazardous waste items. These items are collected at the Naperville Public Works Building at no cost to residents and then are disposed of properly.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

• BMP C.1 – Sewer Map Preparation

MEASURABLE GOAL	Continually maintain and improve the City's GIS-based sewer atlas.
STATUS	As construction projects are completed (public and private), the City's sewer atlas is consistently updated according to as-built engineering plans and/or field located infrastructure. As sewer lines are cleaned and televised, the City links the inspection videos to the sewer atlas.

• BMP C.2 and C.5 - Regulatory Control Program and Illicit Source Removal Procedures

MEASURABLE GOAL	Document all reports of suspicious discharges, along with the investigative measures taken and any enforcement actions.
STATUS	 Six suspicious discharges were identified during the reporting period. March 1, 2018 – oil dumping at 4000 Sussex Ave March 6, 2018 – automobile accident at W Galena Blvd and N Highland Ave April 3, 2018 – diesel spill at 675 McClure Rd April 6, 2018 – draining chemicals at 702 N Lake St April 24, 2018 – pumping sewage at 1811 Daisy St April 27, 2018 – dumping chemicals at 140 S Rosedale Ave All matters were investigated and enforcement actions were taken, when appropriate.

• BMP C.3 – Detection/Elimination Prioritization Plan

MEASURABLE GOAL	Prioritize outfalls with the greatest potential for non-stormwater discharges for annual inspection and establish an inspection schedule for the remaining outfalls.
STATUS	Outfalls are designated as priority outfalls for dry weather inspection if they have a dimension larger than 48 inches (diameter, width, or height); or, if they were previously found with a suspicious odor or a suspicious visual characteristic. Each year, the City plans to inspect all priority outfalls and at least 20% of its other outfalls.

• BMP C.7 – Visual Dry Weather Screening

MEASURABLE GOAL	Perform dry weather screening of City outfalls according to the Prioritization Plan.
STATUS	The City screened its 57 priority outfalls and 174 of its 707 (25%) total outfalls during July and August 2018. The 174 outfalls inspected this reporting year were those along the west bank of the Fox River.

• BMP C.9 – Public Notification

MEASURABLE GOAL	Require the installation of grates cast with "Dump No Waste, Drains to River" for all new inlets and catch basins installed with road maintenance projects or new development.
STATUS	The City's standard specifications for road maintenance projects and new development projects were revised in December 2017 and January 2018, respectively. When new grates are installed for inlets and catch basins, the grates will be cast with the statement "Dump No Waste, Drains to River."

• BMP C.10 – Other Illicit Discharge Controls

MEASURABLE GOAL	Maintain and service pet waste receptacles weekly at McCarty Park, the Phillips Park dog park, and Millennium Plaza.
STATUS	City staff services the pet waste receptacles at McCarty Park and the Phillips Park dog park 2-3 times per week Spring-Fall and 1 time per week during the Winter. The receptacles at Millennium Plaza are serviced 3-4 times per week.

• CONSTRUCTION SITE RUNOFF CONTROL

• BMP D.1 and D.4 – Regulatory Control Program and Site Plan Review Procedures

MEASURABLE GOAL	Review site plans for effective soil erosion and sediment controls, controls for non-stormwater discharges from the construction site, and compliance with General NPDES Permit No. ILR10.
STATUS	The City has adopted a more restrictive version of the Kane County Stormwater Ordinance. This Ordinance requires soil erosion and sediment controls for regulated development and it includes sanctions the City can use to ensure compliance. The City (or its erosion control consultant) reviews proposed site plans prior to issuing permits for development and re-development.
	Files are maintained for every regulated development. The file includes an approved site plan specifying appropriate soil erosion and sediment controls. For construction sites over 1 acre in size, the file also includes erosion control inspection reports documenting the condition of control measures and any necessary corrective action.

• BMP D.5 – Public Information Handling Procedures

MEASURABLE GOAL	Provide the public with opportunities for input on proposed development and re-development at publicly noticed meetings.
STATUS	Meetings of the Plan Commission, the Planning and Development Committee, the Committee of the Whole, and the City Council are publicly noticed and typically provide public with the opportunity to comment on agenda items, including proposed development projects.

• BMP D.6 – Site Inspection/Enforcement Procedures

MEASURABLE GOAL	All permitted development sites will be inspected throughout construction to ensure appropriate erosion and sediment control measures have been installed and are being maintained.
STATUS	Ongoing projects are inspected regularly and in response to complaints received from the public. Insufficient erosion control measures are addressed promptly.

• POST-CONSTRUCTION RUNOFF CONTROL

• BMP E.2 and E.4 – Regulatory Control Program and Pre-Construction Review of BMP Designs

MEASURABLE GOAL	Review site plans for appropriate structural and non-structural BMPs, including green infrastructure, as well as compliance with General NPDES Permit No. ILR10.
STATUS	The City has adopted a more restrictive version of the Kane County Stormwater Ordinance, which is the regulatory mechanism used to

minimize the volume of stormwater runoff and reduce the discharge of pollutants from new development, re-development, and public surfaces to the maximum extent practicable. The City reviews the design of stormwater infrastructure prior to issuing permits for development and re-development.
Files are maintained for every regulated development. The file includes an approved site plan and design calculations for any structural BMPs and green infrastructure. The file may also include a plat.

• BMP E.3 – Long Term O&M Procedures

MEASURABLE GOAL	Require Long-Term O&M Plans for stormwater management facilities in accordance with the Kane County Stormwater Ordinance. Inspect priority detention basins.
STATUS	The City requires long-term operation and maintenance plans for stormwater infrastructure in accordance with the Kane County Stormwater Ordinance. Prior to significant storm events, detention basins that are prone to clogging are typically inspected and, if necessary, maintained by the City's Water & Sewer Maintenance Division.

• BMP E.5 and E.6 - Site Inspections During Construction and Post-Construction Inspections

MEASURABLE GOAL	All permitted development sites will be inspected throughout construction and at the completion of construction to ensure consistency with the approved construction plans.
STATUS	The City inspects new development and re-development sites during and at the completion of construction. As-built plans are prepared for required BMPs. If the constructed BMP is deficient in any way, the deficiency must be addressed before the letter of credit or subdivision bond is released.

• BMP E.7 – Other Post-Construction Runoff Controls

MEASURABLE GOAL	Develop and implement standards to incorporate permanent erosion control measures and native plantings, where appropriate, in the design of new and retrofit flood management projects.
STATUS	New and retrofit flood management projects are designed with permanent erosion control measures and native plantings, where appropriate. Rip-rap and permanent turf reinforcement matting are typically specified in locations where overland flow or wave action may be too erosive for turf grass. And, the City has developed a list of native plants that have performed well in rain gardens and bioswales. Plants will be selected from this list whenever additional native plantings are desirable.

• POLLUTION PREVENTION/GOOD HOUSEKEEPING

• BMP F.1 – Employee Training Program

MEASURABLE GOAL	Provide annual staff training and a written exam on stormwater pollution prevention for municipal operations, illicit discharge detection and elimination, and maintenance of green infrastructure. When contractors are hired for maintenance, repair, or replacement of stormwater BMPs, only hire contractors that have been trained and are experienced in this type of work.
STATUS	The City provided staff training for a total of 80 employees on November 5-20, 2018. The training covered the topics of stormwater pollution prevention for municipal operations, illicit discharge detection and elimination, and maintenance of green infrastructure. 2 City employees attended APWA's North American Snow Conference, which was held in Indianapolis, IN May 6-9, 2018. The event included presentations on winter road maintenance techniques that reduce the amount of salt usage. Qualifications are considered whenever the City hires contractors to maintain, repair, or replace BMPs.

• BMP F.3 – Municipal Operations Stormwater Control

MEASURABLE GOAL	Document City procedures and control measures designed to reduce
	the discharge of pollutants from municipal operations in a
	Stormwater Pollution Prevention Plan for the City.
STATUS	Design of a new Public Works Facility is underway and construction is
	expected to begin in 2020. A Stormwater Pollution Prevention Plan
	will be prepared for the Public Works Facility during the next
	reporting period.

III. RESULTS OF INFORMATION COLLECTED AND ANALYZED

The City continued its water quality monitoring program throughout the reporting period. Samples are collected quarterly at the locations listed below.

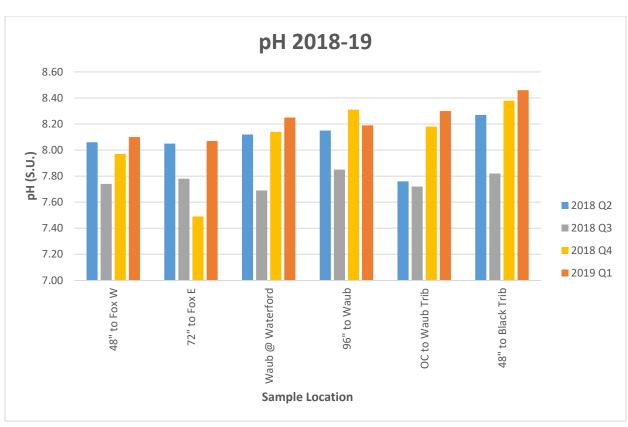
- The 48 inch storm sewer discharging to the Fox River near the intersection of West Park Avenue and River Street
- The 72 inch storm sewer discharging to the Fox River near Hurds Island Park, south of North Avenue
- The 96 inch storm sewer discharging to Waubonsie Creek near the intersection of Raintree Road and Gregory Street
- An open channel in the Waubonsie Creek watershed near the intersection of Ellington Drive and Keating Drive
- Waubonsie Creek near the City limits at Waterford Drive
- The 48 inch storm sewer discharging to a tributary of Blackberry Creek near the intersection of Coach and Surrey Lane and Lakeview Drive

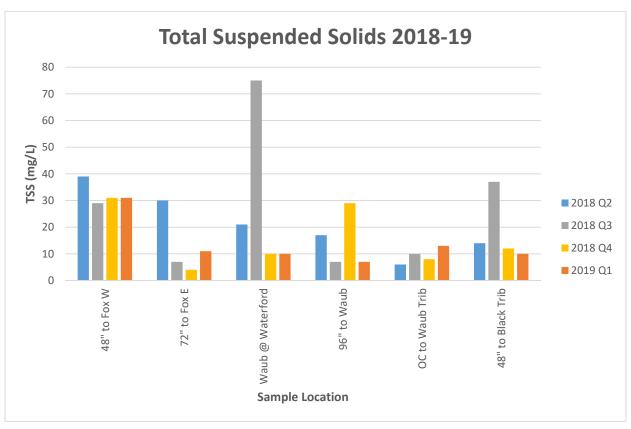
Each sample is tested for: pH, Total Suspended Solids (TSS), Total Kjeldahl Nitrogen (TKN), Total Phosphorus, fecal coliform, chlorides, and Total Petroleum Hydrocarbons (TPH). In addition, samples collected from the storm sewer discharges to the Fox River are tested for mercury and polychlorinated biphenyls (PCBs) biannually. All samples are collected within 48 hours of a precipitation event greater than or equal to one quarter inch within a 24-hour period.

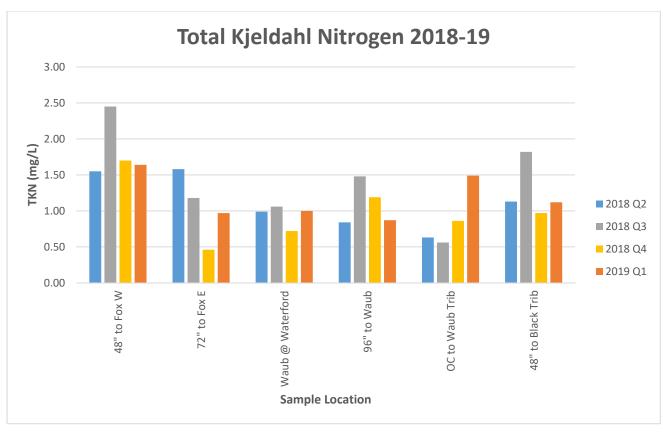
Extensive water quality data has been collected on behalf of the Fox River Study Group (FRSG) by the Illinois State Water Survey, the Fox Metro Water Reclamation District, and the Fox River Water Reclamation District. This data includes more than 10 years of water quality testing performed on samples collected at the following locations in Aurora.

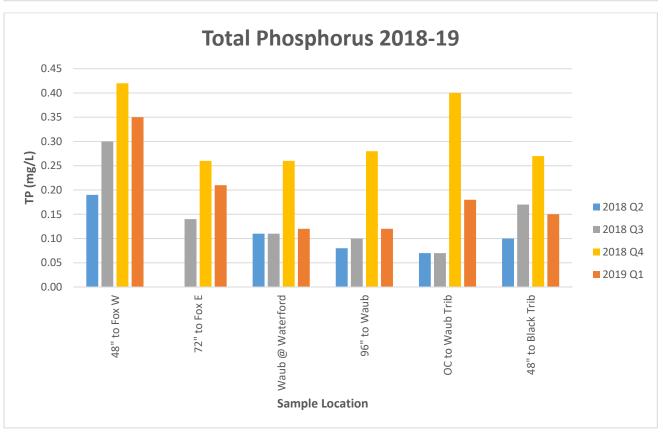
- Fox River at Sullivan Road
- Fox River at North Avenue
- Fox River at Ashland Avenue
- Indian Creek at its confluence with Fox River
- Indian Creek at Ohio Street
- Indian Creek at Austin Avenue
- Indian Creek at Reckinger Road

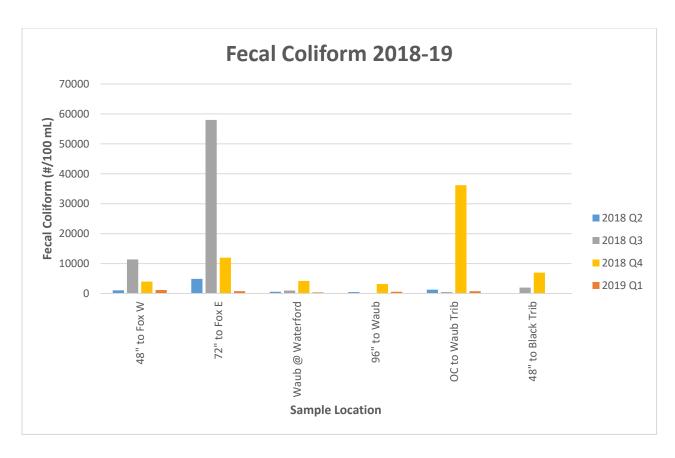
Results from the City's water quality monitoring program are shown in the following charts.

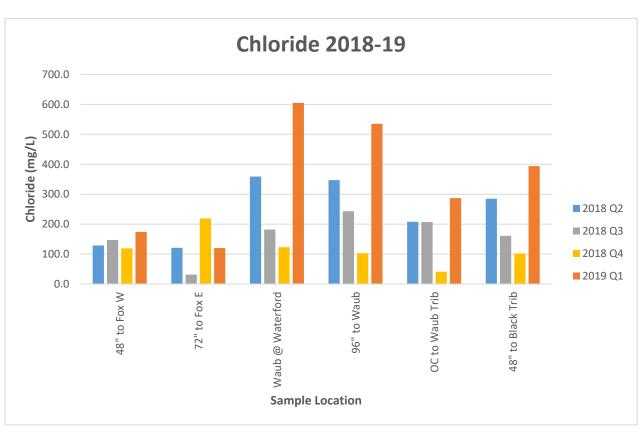


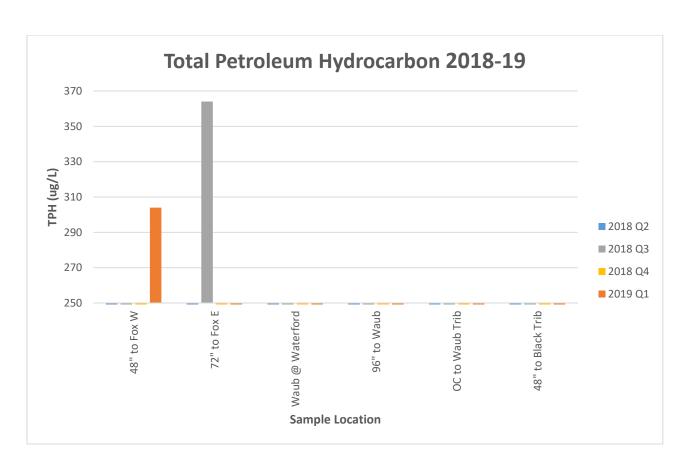


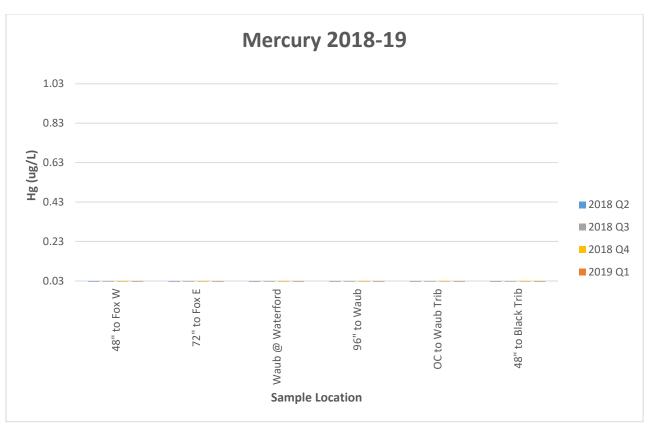


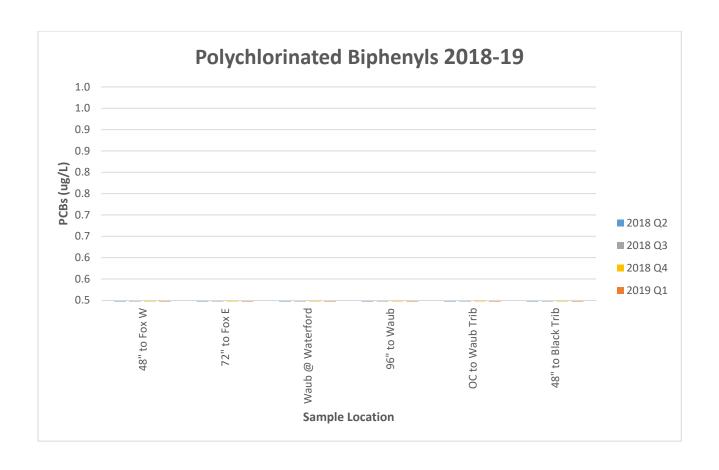












IV. SUMMARY OF STORMWATER ACTIVITIES PLANNED FOR THE NEXT REPORTING PERIOD

PUBLIC EDUCATION AND OUTREACH

- Distribute one flyer through an Aurora school.
- Make one public presentation in Aurora.
- Provide links to educational resources on the City's web site.

PUBLIC INVOLVEMENT/PARTICIPATION

- Participate in the FRSG by attending monthly meetings, tracking annual phosphorus load reduction, and providing annual financial support.
- Present the City's stormwater management program at a publicly noticed City Council or Committee meeting.
- Inform residents of a telephone number for reporting stormwater related issues.
- Coordinate an event with Aurora schools to educate children about water quality and collect water quality data. Priority will be placed on schools located within environmental justice areas.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

- Maintain and improve the City's GIS-based sewer atlas.
- Document all reports of suspicious discharges, along with investigative measures taken and any enforcement actions.
- Update the Prioritization Plan for dry weather outfall screening.
- Perform dry weather screening of City outfalls according to the Prioritization Plan.
- Trace and remove all illicit discharges.
- Require new inlets and catch basins installed as part of capital improvement projects and new development to be cast with the statement "Dump No Waste, Drains to River."
- Maintain and service pet waste receptacles weekly.

CONSTRUCTION SITE RUNOFF CONTROL

- Review site plans for effective soil erosion and sediment controls, controls for nonstormwater discharges from the construction site, and compliance with General NPDES Permit No. ILR10.
- Provide the public with opportunities for input on proposed development and redevelopment at publicly noticed meetings.
- Conduct site inspections throughout construction for all permitted development sites.

POST-CONSTRUCTION RUNOFF CONTROL

- Review site plans for appropriate structural and non-structural BMPs, including green infrastructure, as well as compliance with General NPDES Permit No. ILR10.
- Require Long-Term O&M Plans for stormwater management facilities in accordance with the Kane County Stormwater Ordinance.

- Conduct site inspections during construction and at the completion of construction to ensure consistency with the approved construction plans.
- Incorporate permanent erosion control measures and native plantings, where appropriate, in the design of new and retrofit flood management projects.

POLLUTION PREVENTION/GOOD HOUSEKEEPING

- Provide staff training and a written exam on stormwater pollution prevention for municipal operations, illicit discharge detection and elimination, and maintenance of green infrastructure. Verify the qualifications of contractors hired to maintain, repair, or replace BMPs.
- Document City procedures and control measures designed to reduce the discharge of pollutants from municipal operations in a Stormwater Pollution Prevention Plan for the new Public Works Facility.

V. RELIANCE ON ANOTHER GOVERNMENT ENTITY

The City is not relying on any other government entity to satisfy the requirements of General NPDES Permit No. ILR40; however, the City benefits from Kane County's stormwater activities, including a number of Public Education and Outreach BMPs. Please see Kane County's Annual Facility Inspection Report for additional information about these activities.

VI. CITY CONSTRUCTION PROJECTS WITH 1 ACRE OR MORE DISTURBED AREA

- ATC Regional Enhancement Project
- Montgomery Road Shared Use Path
- South Eola Road Stormwater Management and Conveyance Improvements
- Farnsworth Avenue Bridge Removal and Replacement
- Mastodon Island Adventure
- East Galena Boulevard and East Downer Place Sewer Separation Water Street to State
 Street