



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, 2016 To March, 2017

Permit No. ILR40 0283

MS4 OPERATOR INFORMATION: (As it appears 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. Email Address: mhipps@aurora-il.org
(Person responsible for Annual Report)

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

Kane Co, Aurora Twp, Sugar Grove Twp, Batavia Twp DuPage Co, Naperville Twp, Winfield Twp
Will Co, Wheatland Twp Kendall Co, Oswego Twp

THE FOLLOWING ITEMS MUST BE ADDRESSED.

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

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

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

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

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

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

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

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

Owner Signature:

Mark Phipps, P.E.

Printed Name:

5/31/17

Date:

Professional Engineer

Title:

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

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

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

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

REPORTING PERIOD: MARCH 1, 2016 – FEBRUARY 28, 2017

CITY OF AURORA, ILLINOIS
(NPDES Permit No. ILR400283)

I. CHANGES TO BEST MANAGEMENT PRACTICES

During this reporting period the City has not made any changes to the Best Management Practices and measurable goals of its stormwater management program.

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**

MEASURABLE GOAL	<p>Annually publish one article in the Aurora Borealis about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. Over time the articles will cover the following range of topics.</p> <ul style="list-style-type: none"> • 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	<p>2016 Issue 2 of the Aurora Borealis included an article titled “Rain Barrels Capture Spring and Summer Showers”. The same issue also included information about the Waubonsie Lake clean-up in an article titled “From the Mayor’s Desk.”</p>

• **BMP A.1 – Distributed Paper Material**

MEASURABLE GOAL	Annually distribute one educational flyer through an Aurora school. Priority will be placed on schools located within environmental justice areas. Document the number of students that received the flyer each year.
STATUS	<p>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 and Spanish on the other. In October 2016, 3,000 bookmarks were printed and distributed to the 5th Grade students at every elementary school in Aurora.</p> <p>48 copies of an educational Rain Garden poster were delivered to O’Donnell Elementary School on January 13, 2017.</p>

• **BMP A.1 – Distributed Paper Material**

MEASURABLE GOAL	Annually distribute an educational flyer to Homeowner Associations on maintenance of stormwater best management practices, management of pesticides and fertilizers, or green infrastructure. Document the number of Homeowner Associations that received the brochure each year.
STATUS	The educational flyer was developed in August 2016 and contact information was gathered for the owners of over 500 detention basins in Aurora. The flyer will be printed and distributed during the next reporting period.

• **BMP A.6 – Other Public Education**

<p>MEASURABLE GOAL</p>	<p>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.</p> <ul style="list-style-type: none"> • 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
<p>STATUS</p>	<p>The City’s web site includes a page titled “Protecting Aurora’s 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.</p> <p>On September 20, 2016, City staff provided the John C. Dunham STEM Partnership School with information on water quality for the school’s Ecosystems and Adaptations Unit.</p> <p>Students from Steck Elementary School received an educational presentation on the Waubonsie Lake dredging project on November 30, 2016.</p> <p>City staff made educational presentations on stormwater management at: the Fox River Ecosystem Partnership meeting on April 13, 2016; the Beyond the Basics conference on September 14, 2016; and the Fox River Study Group meeting on October 27, 2016.</p> <p>Rain barrels are on display with educational material at the Phillips Park Zoo and the Phillips Park Visitor Center.</p>

- **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.
STATUS	<p>City staff attended the monthly FRSG meetings, began tracking the City’s annual phosphorus load reduction, provided water quality monitoring data to FRSG’s consultant, and provided FRSG with \$99,000 of financial support.</p> <p>City staff also participated in the DuPage River Salt Creek Workgroup (DRSCW) by attending several of the bi-monthly meetings and providing the DRSCW with \$900 of financial support.</p>

- **BMP B.4 – Public Hearing**

MEASURABLE GOAL	Annually present the City’s stormwater management program at 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 27, 2017 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	<p>The City is partnering with Friends of the Fox River (FOFR) to bring the Watershed Watchdogs program to Aurora. Between September 22, 2016 and November 10, 2016, 10 students from Triple Threat Mentoring participated in a series of 4 in-stream events. During these events students learned about water quality and collected water quality data. Since this program is just beginning in Aurora, the City and FOFR are actively working to publicize and promote the program to area schools. An example is the Watershed Watchdogs demonstration that was held in downtown Aurora as part of the City's First Fridays event on October 7, 2016.</p> <p>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.</p>

- **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	<p>Three suspicious outfalls were identified during dry weather outfall screening in June 2016. After further investigation, two were found not to be illicit. The third was outside the City limits and was referred to Kane County for further investigation.</p> <p>The Aurora Police Department received a notice of illegal dumping into the sewer system on July 6, 2016. A ticket was issued to the offending party.</p>

- **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 59 priority outfalls and 195 of its 707 (28%) total outfalls in June 2016.

- **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 2016 and January 2017, 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 4 times per week Spring-Fall and 1 time per week during the Winter. The receptacles at Millennium Plaza are serviced daily.

- **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	<p>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 reviews proposed site plans prior to issuing permits for development and re-development.</p> <p>Files are maintained for every regulated development. The file typically includes an approved site plan. The file may also include a plat and as-built plans, depending on the type of development. If the project is cited for an Ordinance violation, the file includes documentation of the citation and the enforcement action taken.</p>

- **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 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	<p>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.</p> <p>Files are maintained for every regulated development. The file typically includes an approved site plan and design calculations for any structural BMPs and green infrastructure. The file may also include a plat. If the project is cited for an Ordinance violation, the file includes documentation of the citation and the enforcement action taken.</p>

- **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. Detention basins that are prone to clogging are typically inspected and, if necessary, maintained prior to significant storm events.

- **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 after construction.

- **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	Standards will be developed during the next reporting period to incorporate permanent erosion control measures and native plantings, where appropriate, in the design of new and retrofit flood management projects.

- **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	<p>The City provided staff training, including a written exam, for a total of 93 employees between October 25, 2016 and October 26, 2016. The training covered the topics of stormwater pollution prevention for municipal operations, illicit discharge detection and elimination, and maintenance of green infrastructure.</p> <p>The City also sent 6 employees to the 2016 Kane County Public Roads Deicing Workshop on October 6, 2016.</p> <p>Qualifications are considered whenever the City hires contractors to maintain, repair, or replace BMPs.</p>

- **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	12 City facilities were inspected between July 2016 and September 2016. During each inspection, an interview was conducted with City staff responsible for inspection and maintenance of the storm sewer system. A Stormwater Pollution Prevention Plan will be prepared for the City during the next reporting period.

III. RESULTS OF INFORMATION COLLECTED AND ANALYZED

The City began a water quality monitoring program in the 4th Quarter of 2016. 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 will be collected within 48 hours of a precipitation event greater than or equal to one quarter inch within a 24-hour period.

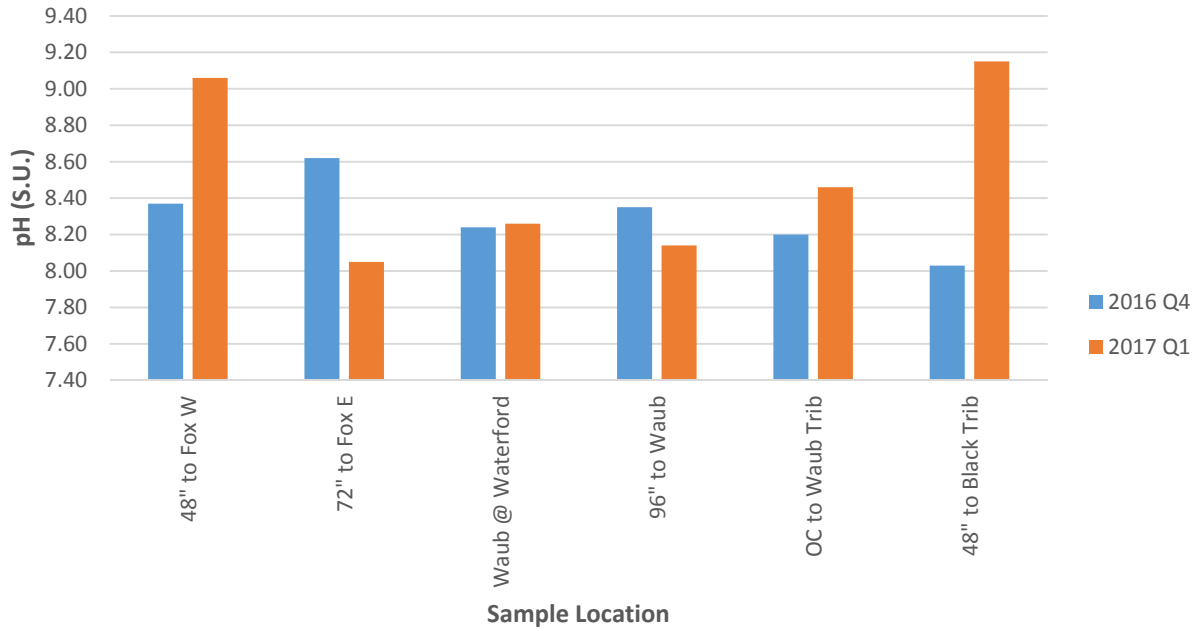
Extensive water quality data has been collected on behalf of the Fox River Study Group (FRSG) by the Illinois State Water Survey, the Fox Metro Water Reclamation District, and the Fox River Water Reclamation District. This data includes more than 10 years of water quality testing performed on samples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

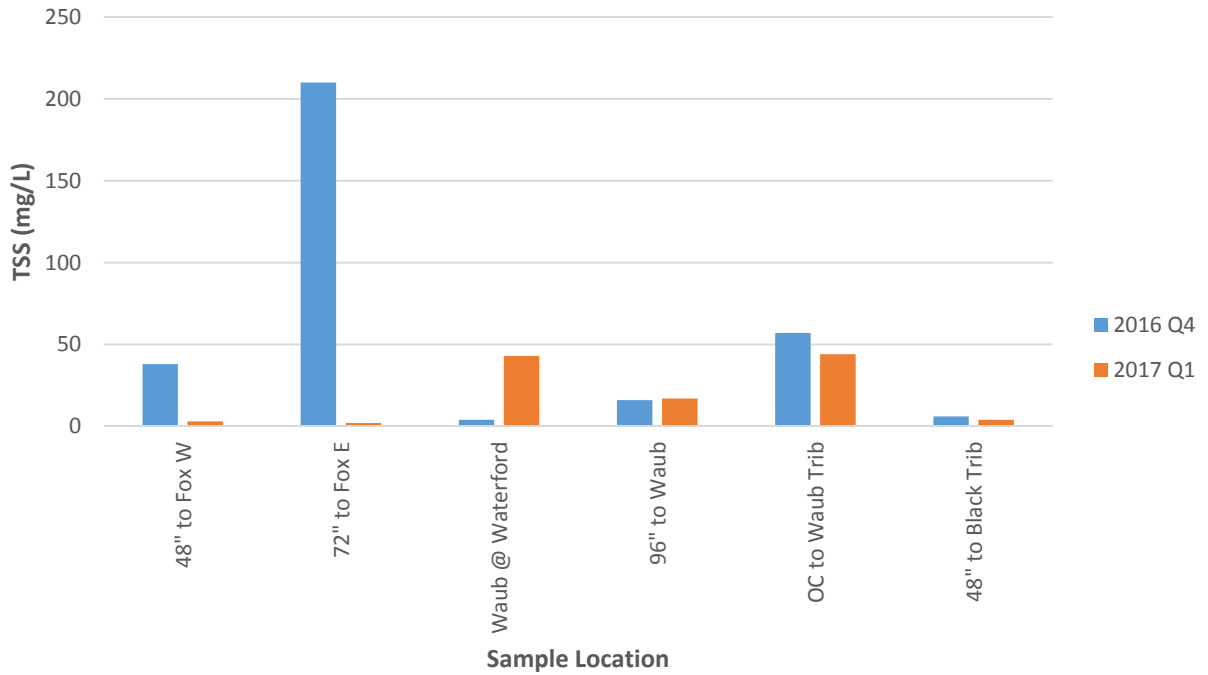
The FRSG is working to compile its water quality data from the past 10 years into a database. The project is expected to be completed in July 2017. When that data becomes available, results from FRSG's water quality testing can be compared to results from the City's water quality testing.

Results from the City's 4th Quarter 2016 and 1st Quarter 2017 monitoring program are shown in the following charts.

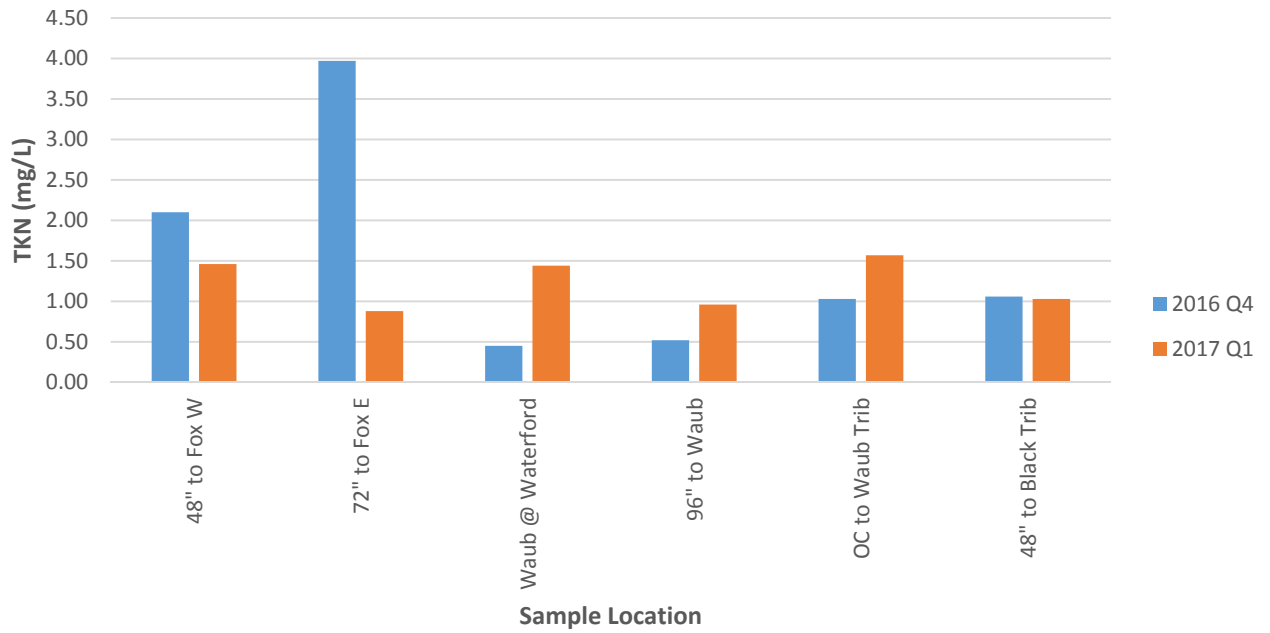
pH 2016-17



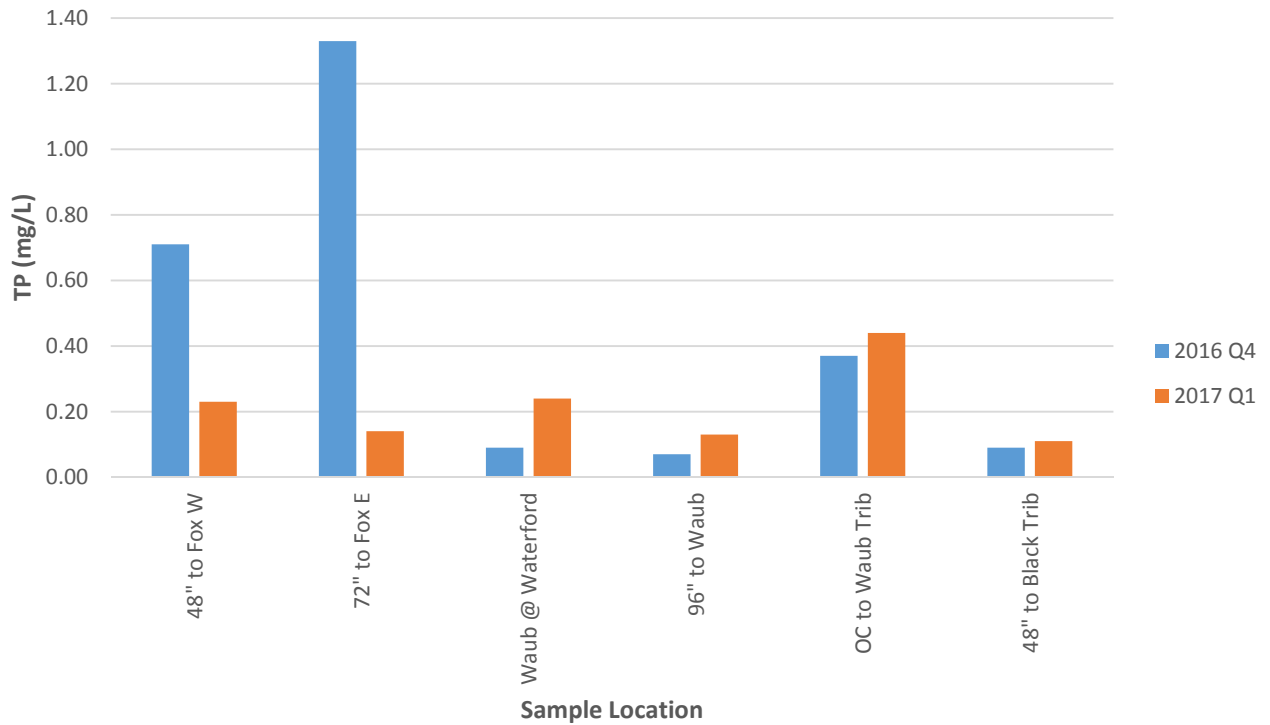
Total Suspended Solids 2016-17



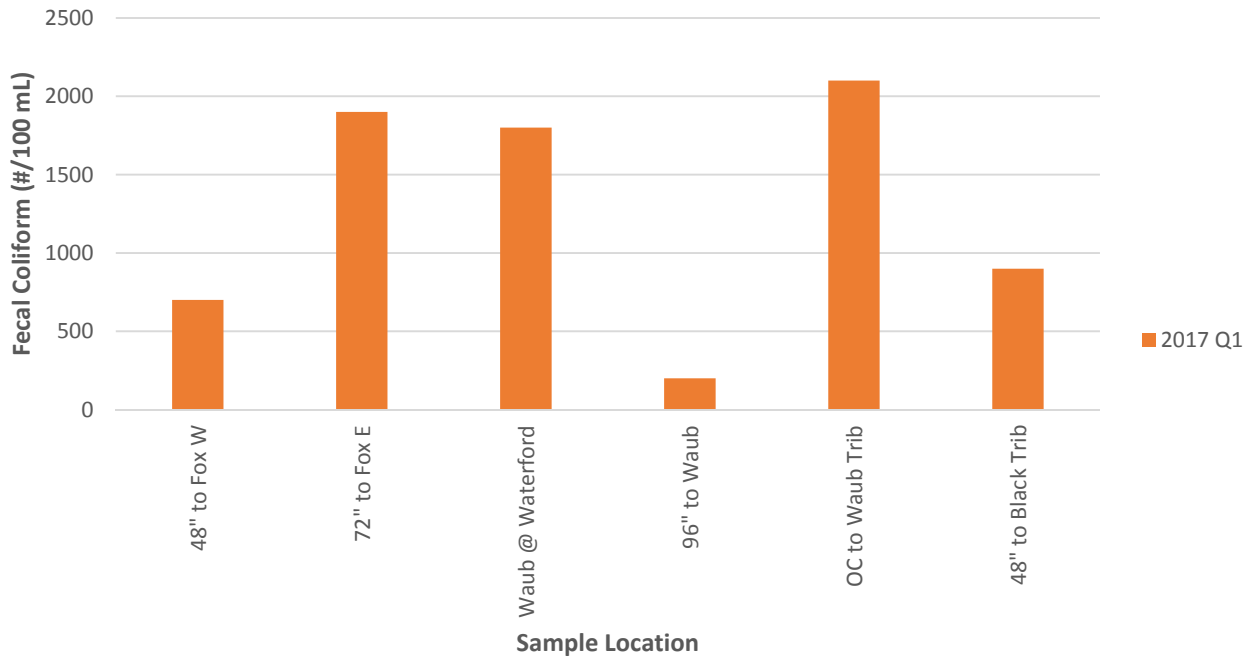
Total Kjeldahl Nitrogen 2016-17



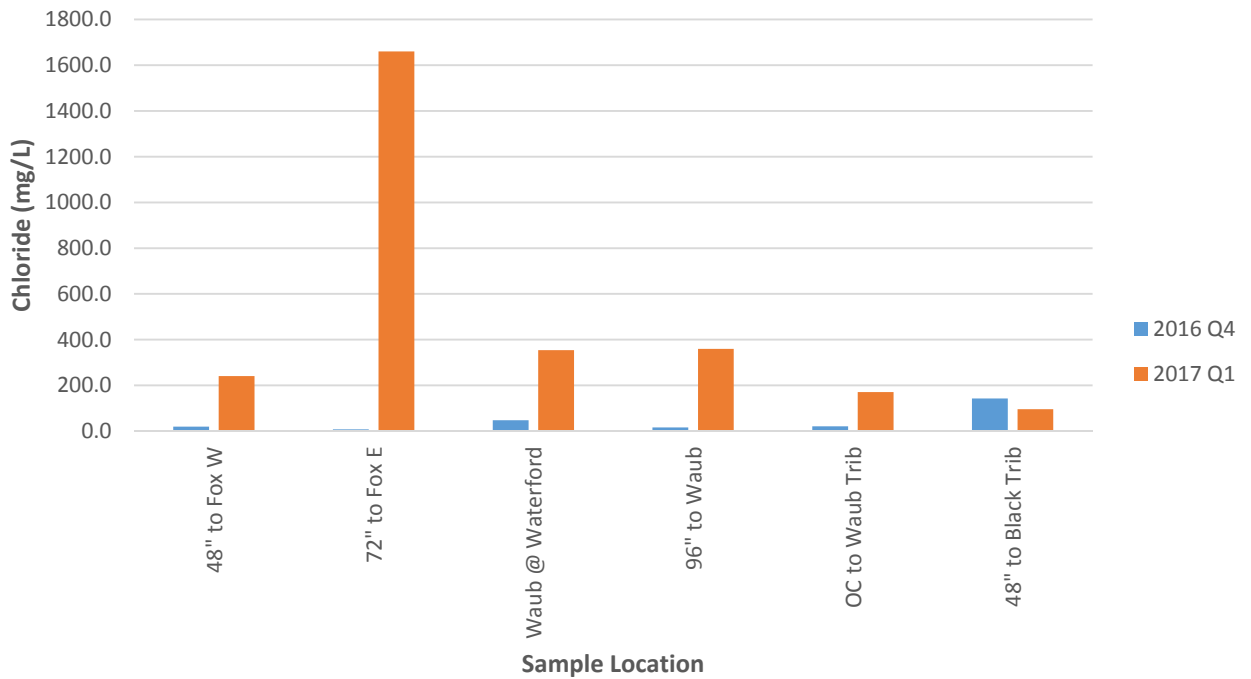
Total Phosphorus 2016-17



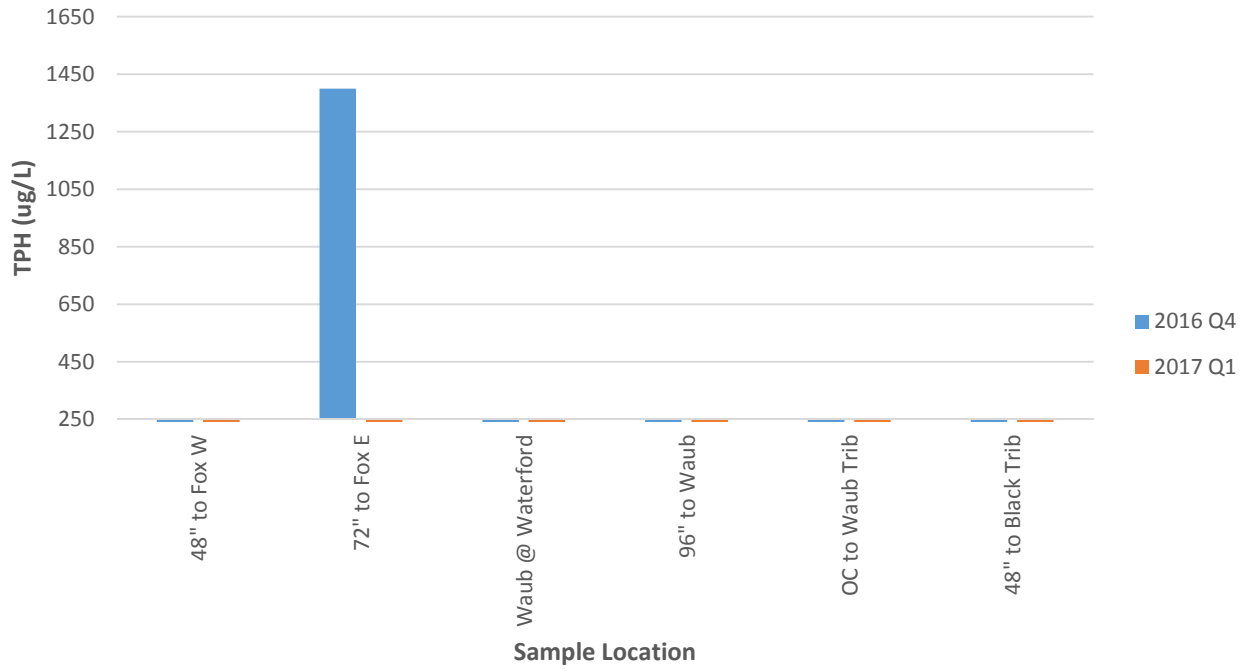
Fecal Coliform 2016-17



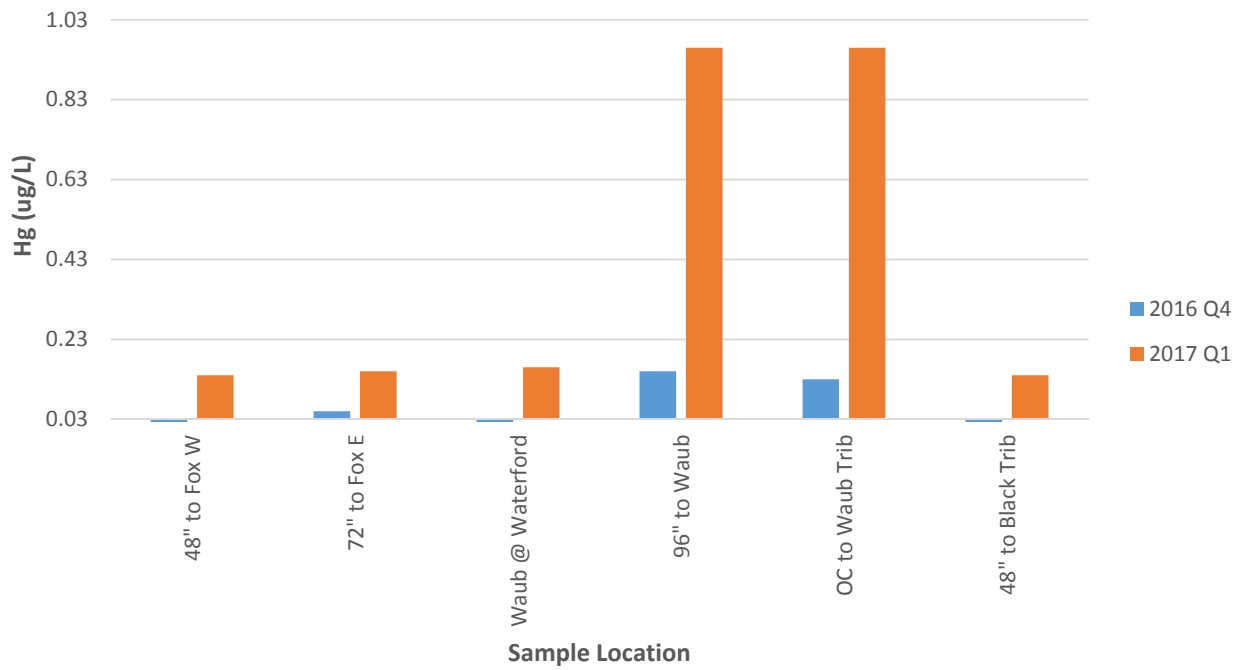
Chloride 2016-17



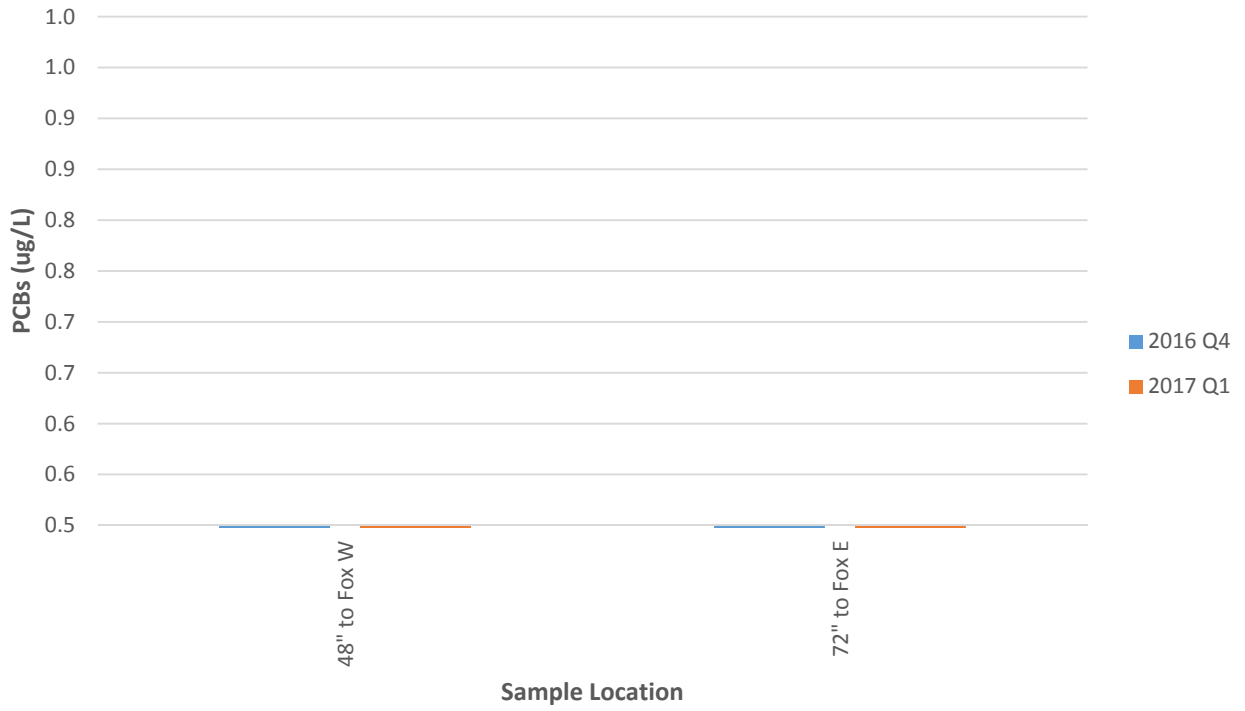
Total Petroleum Hydrocarbon 2016-17



Mercury 2016-17



Polychlorinated Biphenyls 2016-17



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

PUBLIC EDUCATION AND OUTREACH

- Publish one article in the Aurora Borealis, distribute one flyer through an Aurora school, and distribute one flyer to HOAs.
- 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, providing annual water quality monitoring data, 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 non-stormwater discharges from the construction site, and compliance with General NPDES Permit No. ILR10.
- Provide the public with opportunities for input on proposed development and re-development 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.
- Develop standards to 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 City.

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 a number of 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

- Sheffer Road and Farnsworth Avenue Water Main Replacement
- East Galena Boulevard and East Downer Place Sewer Separation – Water Street to State Street
- Eola Road Improvements
- Illinois Route 59 Commuter Parking Lot Modifications
- Farnswood Flood Relief Improvements
- Waubonsie Lake Restoration