Robinson ENGINEERING

Municipal Expertise. Community Commitment.

Dana Ludwig, PE, CFM, CPESC
Direct Line: (815) 412-2702
Email: dludwig@reltd.com

June 1, 2021

Project 14-770.RV

Illinois Environmental Protection Agency
Water Pollution Control
Compliance Assurance Section #19
P.O. Box 19276
Springfield, IL 62794-9276

RE: Village of Romeoville
NPDES Permit MS4 Annual Report
Reporting Cycle 2020-2021
Permit No. ILR40-0436

Dear Sir/Madam:

On behalf of the Village of Romeoville, please find enclosed the Annual Report in regard to the Village's NPDES Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4).

This report is being emailed to epa.ms4annualinsp@illinois.gov. If you have any questions, please call me at (815) 412-2702.

Very truly yours,

ROBINSON ENGINEERING, LTD.

Dana E. Ludwig

Dana E. Ludwig, PE, CFM, CPESC
Senior Project Manager

Encl.

xc: Eric Bjork, Capital Projects Engineer – Village of Romeoville
Jay Patel – IEPA-Des Plaines office

NPDES Phase II Small MS4 General Permit

Annual Report

June 1, 2021

Municipality/Organization: Village of Romeoville

NPDES Permit Number: ILR40 0436

Permit Effective Date: February 18, 2021

Permit Expiration Date: February 28, 2026

Annual Report Period: Year 5: March 2020-March 2021

Contact Information:

Village of Romeoville:

Eric Bjork
Capital Projects Engineer
815-886-1870
ebjork@romeoville.org
1050 W. Romeo Road
Romeoville, IL 60446

Robinson Engineering, Ltd:

Dana E. Ludwig, PE, CFM, CPESC
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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 0436

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

Name: Village of Romeoville Mailing Address 1: 1050 W. Romeo Road

Mailing Address 2: County: Will

City: Romeoville State: IL Zip: 60446 Telephone: 815-886-1870

Contact Person: Eric Bjork, Capital Projects Engineer Email Address: ebjork@romeoville.org
(Person responsible for Annual Report)

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

Village of Romeoville Will County

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))

E. Bjork 5/24/21

Owner Signature: Date:

Eric Bjork Capital Projects Engineer

Printed Name: 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

NPDES Phase II Small MS4 General Permit

Supplemental Information to Annual Facility Inspection Report

June 1, 2021

A. **Changes to BMPs:**
There have been no significant changes regarding the Village BMP's during the current reporting cycle. Due to the COVID Pandemic, the Village needed to postpone events for Public Education and Outreach and Public Involvement and Participation (public meeting and open house).

B. **Status of Compliance with Permit Conditions:**
A summary of the Village's minimum control measures indicating measurable goals and status of compliance with the permit conditions are included on the following pages of this report. The BMPs have been evaluated and appear to be the most appropriate measures for achieving the requirements and meeting the intent of the program. This conclusion appears to continue to be supported by the data obtained from in-stream sampling.

C. **Monitoring Data:**
Monitoring data has been collected; results are included in this report.

The Village has continued to utilize the monitoring and assessment program for evaluating the effectiveness of the BMPs that was developed and implemented previously. The Village collects in-stream samples and evaluates chemical and biological components, consistent with sampling performed by workgroups in the area so that the results can supplement and assist in the validation of results and conclusions.

D. **Stormwater Activities Planned in Next Reporting Cycle:**
A summary of the Village's planned activities is included on the following pages of this report (combined with Item B: Compliance with Permit Conditions).

E. **Permit Obligations by Another Entity:** Not applicable.

Permit Assistance through Another Entity:
The Village of Romeoville is currently a member of the Lower DuPage River Watershed Coalition, the Lower DesPlaines River Watershed Workgroup and Lower DesPlaines River Chlorides Workgroup. These memberships fulfill the requirements of Section III.D of the current General NPDES ILR40 permit (regarding chloride concentration reductions in receiving streams). Information obtained from these groups such as assessment of the impacts of stormwater discharges, effectiveness of any BMPs, and public outreach campaigns, is used to supplement the Village's NPDES Program and activities. These organizations are well underway with collaborative watershed-scale monitoring to assess water quality of the water bodies and sources of pollutants. Information is included as part of this report.

F. **Village Construction Projects:**

Contracts that the Village let and constructed during this reporting period:

NPDES #	Facility Name	Owner Name
ILR10BN49	Romeoville Recreation and Athletic Center - Addition	Village of Romeoville

A list of other NOIs filed during the last reporting period:

NPDES #	Facility Name	Owner Name
ILR10ZA7B	Arby's Plaza	TBD
ILR10Y669	Weber Road – Widening and Reconstruction	Will County DOT
ILR10W657	Stone Bluff Subdivision	William Ryan Homes
ILR10AE32	Airport Logistics Center	Duke Realty
ILR10AC27	Renwick Road Improvements	Duke Realty

Village of Romeoville - NPDES Program
Summary of Minimum Control Measures

6/1/2021

1. Public Education and Outreach (relating to the impacts of stormwater discharges on water bodies, steps to reduce pollutants in runoff, information about green infrastructure, and effective pollution prevention

BMP ID No.	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 5 (2020-2021)	Copy or Other Documentation	Planned Activities- Permit Year 6 (2021-2022)
A.1	Distributed **Paper Material**	Robinson to select from available materials; Dept of PW to delegate execution	Distribution of pamphlet, flyer or brochure.	Educational outreach is a portion of the watershed planning effort associated with the Lower DuPage River Watershed Coalition and the Lower Des Paines River Watershed Workgroup. Outreach materials were made available through the Conservation Foundation. The Village will continue to utilize these resources moving forward.	Brochure regarding threatened dragonfly species; for collection at the front window at Village Hall (approximately 25).	Select, print and distribute brochures at Village Hall Kiosk and at the Recreation Center.
A.1	Other Public Education	Robinson to select from available materials; Dept of PW to delegate execution	Include **articles** in newsletters annually.	The Village's newsletter, Community Focus, is distributed to all residential postal addresses in the Village, reaching approximately 40,000 residents and property owners. Stormwater-related articles in resident newsletters were distributed in Fall and Spring. Articles include information on the minimum topics required per NOI: "Where You Leave Your Leaves Matters"; Spring Clean-Up Week; Yard Waste & Branch Pick-Up; Help Keep Our Waterways Clean.	Copy of Fall 2020 & Spring 2021 Newsletters	Continue including articles in newsletters which contain information per NOI requirements (about disposal of oil and paint, car washing, lawn care chemicals, deicing materials storage or other MS4 related topics).
A.6-added	Other Public Education	Robinson to review current website and confirm permit requirements are met; Dept of PW to delegate execution	Village **Website** includes the most current NOI, Annual Report and Plan. Also included is information about the NPDES Program and keeping pollutants out of stormwater runoff. There is also included is information about the Illegal Discharge Reporting Hotline.	Website still has items posted as required. Most current Annual Report is linked (2019-2020). Most current NOI is posted. Link is http://www.romeoville.org/233/Stormwater-Reports	Screenshots of current website: Stormwater Reports; Storm Sewer Program; Improve Water Quality.	Maintain links and content on website; update with 2020-2021 Annual Report when available.
A.6-added	Other Public Education	Dept of PW & other Village Departments	Facilitate **rain barrel** program.	Promote the use and explain the benefits of rain barrels; provide links to the Conservation Foundation for purchasing a rain barrel.	Facebook screenshot.	Continue to facilitate rain barrel program for Village residents. Evaluate options through the Conservation Foundation to promote program.
A.6-added	Other Public Education	Dept of PW to work with Legion Post 52	Install **storm drains** and distribute door hangers with information on the effects of pollutants entering the storm system.	This project was postponed due to COVID-19 Pandemic and Stay at Home Order.	Door hanger with educational info; magnet reminder. Also See B.7.	Discuss future participation with the Legion; potentially for Fall 2021 dependent upon COVID restrictions.
A.6-added	Other Public Education	Dept of PW	Emails sent to communicate various Village initiatives.	Emails were sent regarding the Spring Clean Up, Tree Replacements, Renovated Conservation Park, and O'Hara Woods Volunteer Workday. The email distribution list currently goes to approximately 3,500 subscribers.	Emails.	Continue to email residents and business owners regarding initiatives that promote stormwater quality.
A.6-added	Other Public Education	Dept of PW	Conduct annual spring clean up, including brach collection from individual property owners.	Branch clean up still occurred in the Spring, even with variations from typical program due to COVID.	Not available.	Conduct annual spring clean up, including brach collection from individual property owners.
A.6-added	Other Public Education	Dept of PW to work with other Village Departments	Distribution of salt cups and informational bookmark to residents.	Distribute about 29 salt cups to residents with accompanying literature to assist residents to not to oversalt sidewalks in the winter.	Photo of cups at Village Hall; Copy of Bookmark	Continue to distribute cups and bookmarks in Fall 2021.
A.6-added	Other Public Education	Dept of PW	Display of truck magnets on Village plows.	Village plow trucks display the magnet with a message about salting. These trucks drive throughout the Village during winter months.	Photo of truck	Continue use of magnets on Village plows during winter months.
A.6-added	Other Public Education	Village	Post stormwater related items on Village Facebook Page.	The Village posted a few items on the Facebook page relating to the O'Hara Woods Volunteer Workdays, Special Waste Pick Up, Yard Waste Collection, Clean Up after the storms, lawn maintenance, rain barrels and stormwater runoff.	Screenshots of most recent posts.	Continue to use Facebook as another means to communicate about stormwater.

Village of Romeoville - NPDES Program
Summary of Minimum Control Measures

6/1/2021

2. Public Participation/Involvement

BMP ID No.	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 5 (2020-2021)	Copy or Other Documentation	Planned Activities- Permit Year 6 (2021-2022)
B.4	Public Meeting (minimum of one per year)	Robinson to prepare; Dept of PW to select date, secure place on agenda	Conduct Public Hearing, Forum or Workshop.	Public meeting planned, format selected.	Postponed due to Covid-19. Village Board meeting agendas and attendance are currently limited.	Public meeting at Village Board meeting to be held in Fall 2020 or later. Prepare 10-15 slides to be used for presentation and hand out at meeting.
B.4	Public Meeting	Dept of Public Works/ Robinson Engineering	Conduct Public Hearing, Forum or Workshop.	Lower DuPage River Watershed Coalition meetings were held regularly.	Agendas/Packets & Minutes saved to folder.	Participation in meetings will continue.
B.4	Public Meeting	Dept of Public Works/ Robinson Engineering	Conduct Public Hearing, Forum or Workshop.	Lower DesPlaines Watershed Group meetings were held. Village Staff and/or Robinson Engineering Staff were in attendance.	Agendas/Packets & Minutes saved to folder.	Participation in meetings will continue.
B.6-Added	Program Involvement	Dept of Public Works	Spring Clean Up	The Spring Clean Up was postponed during this cycle year due to COVID.	N/A	Discuss plans for Spring 2021.
B.7-Added	Other Public Involvement (Public Event)	Village/Conservation Foundation	Host a Public Event at O'Hara Woods.	In conjunction with The Conservation Foundation, the Village hosted a few Community Workdays when volunteers were able to pick up trash, cut brush, pull weeds and collect seeds from native plants at O'Hara Woods.	Emails	Continue to team up with similar organizations to provide more events to the residents.
B.7-Added	Other Public Involvement (Volunteer Project)	Village Staff	Install **storm drains** and distribute door hangers with information on the effects of pollutants entering the storm system.	This project was postponed due to COVID-19 Pandemic and Stay at Home Order.	N/A	Discuss future participation with the Legion.
B.7 - Added	Other Public Involvement (Waste and Recycle Collection)	Department of Public Works / Waste Management	Provide collection service of waste and recyclables	Village provides weekly collection of waste and recyclables.	Website Document, outlining policies and procedures	Continue contract with waste collector to provide services to residents.
B.7 - Added	Other Public Involvement (Additional Collection Services)	Department of Public Works / Waste Management	Provide collection service of hazardous waste	Village provides a service through Waste Management to provide pick up of hazardous waste at residents' homes.	Website Document, outlining policies and procedures	Continue contract with waste collector to provide service to residents.
B.7 Added	Other Public Involvement (Additional Collection Services)	Department of Public Works / Waste Management	Provide collection service for branches	Village and Waste Management provide collection various times throughout the year (seasonally).	Email	Continue contract with waste collector to provide service to residents. Village to collect branches in Fall and Spring during clean up weeks.
B.7 Added	Other Public Involvement (Additional Collection Services)	Police Department	Provide prescription drug collection program	Police Department provides drop off location for prescription drugs.	Website Document, outlining policies and procedures	Village continues to work with law enforcement to provide service to residents
B.7 Added	Other Public Involvement	Beautification Commission	Include activities that assist keeping waterways clean; bring awareness to children.	The Beautification Commission held a clean up week, chipper program and poster contest for school children.	Website Document, outlining services	Village to continue supporting this group in provide services to residents
B.7-Added (additional permit requirement)	Environmental Justice	Robinson Engineering/Dept of Public Works	Review online sources, prepare summary. Amend public education/outreach and participation/involvement activities accordingly.	Evaluation of online sources was complete; one-page summary prepared. Most notable item is 33% of the Village population is Hispanic or Latino (compared to 17% in state).	One-page report.	Consider multi-lingual outreach materials.

Village of Romeoville - NPDES Program
Summary of Minimum Control Measures

6/1/2021

3. Illicit Discharge Detection and Elimination

BMP ID No.	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 5 (2020-2021)	Copy or Other Documentation	Planned Activities- Permit Year 6 (2021-2022)
C.1	Storm Sewer Map Preparation	Village GIS Staff/ Robinson Engineering	Review and update GIS and outfall map annually.	GIS was updated as needed and during closeout of new development projects; a new outfall map was generated. ArcGIS is available online; tablets in the field assist efficiency and accuracy of data entry.	Outfall map in folder.	Review and update GIS and outfall map annually.
C.2	Regulatory Control Program	Dept of Public Works/ Robinson Engineering	Review of sewer use ordinance for effectiveness annually and enforcement of ordinance as necessary.	Sewer use ordinance in place. No updates needed.	Ordinances 52.10 Use of Public Sewers Required & 52.99 Penalties	Review and revision of ordinance and enforcement of ordinance as necessary.
C.3	Detection/Elimination Prioritization Plan	Dept of Public Works/ Robinson Engineering	Establish written procedure for locating priority areas, and review of the procedure.	Written procedure in place. No priority locations have been identified to date. CWP Manual was added to Village's resources for future use (if needed): Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments.	Written Prioritization Plan	Review written procedure and revise if necessary.
C.4	Illicit Discharge Tracing Procedures	Dept of Public Works/ Robinson Engineering	Establish written procedure for the tracing of the source of pollutants that may be detected at outfalls, and review of procedure.	Written procedure in place. Procedure was not needed during this cycle year. CWP Manual was added to Village's resources for future use (if needed): Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments.	Written Procedure for Tracing	Review written procedure and revise if necessary.
C.5	Illicit Source Removal Procedures	Dept of Public Works/ Robinson Engineering	Establish written procedure for the removal of sources of detected illicit discharges, and review of procedure.	Written procedure in place. Procedure was not needed during this cycle year. CWP Manual was added to Village's resources for future use (if needed): Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments.	Written Procedure for Removal	Review written procedure and revise if necessary.
C.7	Visual Dry Weather Screening	Robinson Engineering (Joel)	Inspections of a minimum of 1/5 of outfalls and any outfalls identified as priority outfalls and enforcement of ordinance upon detection of violations.	63 outfalls were inspected under dry weather conditions in 2020. No illicit discharges were identified.	Inspection report for each location.	Continue field inspections at dry weather conditions. Enforcement of ordinance upon detection of any violations.
C.8	Pollutant Field Testing	Dept of Public Works/ Robinson Engineering	Establish written procedure for testing of pollutants, and review of procedure. Utilize procedure during monitoring program and for testing warranted through inspection program.	Reviewed written procedure. Samples taken at creeks, laboratory testing completed in May, August, December and March. Spreadsheet was updated/compiled.	Written Procedure for Testing; Written Monitoring Plan; Monitoring Results	Review written procedure and revise if necessary. Continue with monitoring.
C.10-added	Other (Illicit Discharge Hotline / Phone Log)	Department of Public Works	The Public Works Department is available for property owners to call regarding illicit discharges and other stormwater related items.	The Public Works Department remains open to calls regarding illicit discharges and other stormwater related items.	Illicit Discharge Hotline / Phone Log (none to report for this cycle year).	The Public Works Department will continue to be the point of contact for calls regarding illicit discharges and other stormwater related items.

Village of Romeoville - NPDES Program
Summary of Minimum Control Measures

6/1/2021

4. Construction Site Runoff Control

BMP ID No.	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 5 (2020-2021)	Copy or Other Documentation	Planned Activities- Permit Year 6 (2021-2022)
D.1	Regulatory Control Program - Erosion & Sediment Control Ordinances (for properties less than and greater than 1 acre)	Robinson Engineering	Review applicable Sections of Stormwater of Stormwater Management Ordinance for effectiveness annually.	Applicable Sections of Stormwater Management Ordinance reviewed. No action necessary.	Ordinances 160.055-160.068 for Sediment and Erosion Control; 160.150-160.154 Enforcement and Penalties	Review applicable sections of Ordinance and implement revisions if deemed necessary.
D.2	Erosion and Sediment Control BMPs (for properties less than and greater than 1 acre)	Robinson Engineering	Review of required BMPs annually, including incorporation of green infrastructure where appropriate and practicable.	Required BMPs during design and installation/construction, and ensure maintenance to control velocity, minimize erosion, minimize exposed soil, buffer natural areas, etc. to minimize sediment discharges from the site. Continue to review requirements for effectiveness.	Checklists for Phase II requirements/erosion and sediment control BMPs.	Review required BMPs and modify requirements as necessary.
D.3	Other Waste Control Program	Robinson Engineering	Requirements to control wastes such as building materials, concrete truck washout, chemicals, litter, sanitary waste, and any wastewater generated by clean up activities.	Note regarding control of waste is required to be included on plans.	Checklist of Notes for Erosion and Sediment Control Plans including Waste Control	Pre-Construction plan review for inclusion of waste control requirements, periodic inspections of sites for control of wastes.
D.4	Site Plan Review Procedures (for properties less than and greater than 1 acre)	Robinson Engineering	Pre-Construction review of runoff control in development plans.	Stormwater pollution prevention measures were reviewed in plan review phase for new developments. Green infrastructure techniques/BMPs are part of reviews. Development Review Committee (DRC) meetings are held early in the development process; stormwater and green infrastructure items are discussed when appropriate.	Ordinance 160.061 Sediment and Erosion Control Plan Requirements; Checklist; Plan Review Letters	Review stormwater pollution prevention measures in plan review phase.
			Require preparation of SWPPP and submittal of NOI and NOT for construction sites over 1 acre.	Six projects were required Notices of Intent to be submitted, a list is contained in the beginning of the Annual Report. Notices of Intent were submitted when/if appropriate.	Lists of active projects; please also refer to beginning of Annual Report.	Continue to enforce NOIs and NOTs based on ILR10 requirements.
D.6	Site Inspection/ Enforcement Procedures (for properties less than and greater than 1 acre)	Village Staff; Robinson provide overview of plans	Periodic inspections of construction sites and enforcement of ordinance.	Periodic inspections of construction sites were performed. Graduated enforcement steps including Stop Work Orders were available for enforcement of Ordinance if necessary. Inspections of sites also reviewed control of wastes.	Plans, SWPPPs.	Continue inspections of construction sites and enforcement of ordinance.

Village of Romeoville - NPDES Program
Summary of Minimum Control Measures

6/1/2021

5. Post-Construction Runoff Control

BMP ID No.	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 5 (2020-2021)	Copy or Other Documentation	Planned Activities- Permit Year 6 (2021-2022)
E.2	Regulatory Control Program	Robinson Engineering	Review Applicable Sections of Stormwater of Stormwater Management Ordinance for effectiveness annually.	Applicable Sections of Stormwater Management Ordinance reviewed. No action necessary.	Ordinances 160.135-160.140 Long Term Maintenance; 160.150-154 Enforcement and Penalties	Review applicable sections of Stormwater Management Ordinance and implement revisions as necessary.
E.3	Long Term O&M Procedures	Department of Public Works	Enforcement of Ordinance. Attention to minimize volume and pollutants and protect water quality.	Facilities observed during outfall inspections. Ordinance enacted 2/19/14 for establishment of pond annual self-inspection program.	Ordinances 160.135-160.140 Long Term Maintenance; 160.150-154 Enforcement and Penalties	Enforcement of Ordinances as necessary, including annual reporting requirement of pond self-inspection program. Village will prepare letters to remind Associations about pond maintenance and include an educational piece this year.
E.4	Pre-Construction Review of BMP Designs	Robinson Engineering	Pre-Construction review of BMP designs in development plans, including operation and maintenance plans and strategies that incorporate infiltration, reuse and reduction in volume and velocity. Public surfaces to be included in reviews.	Reviews of BMP designs in all development plans were performed.	Checklist of submittal items and requirements (Ordinance Sections 160.110-160.126)	Continue review of BMP designs development plans were performed.
E.5	Site Inspections During Construction	Robinson Engineering	Periodic inspections of construction sites and enforcement of ordinance. As well as proper control of wasted (Item D3).	Inspections of post-construction BMPs and waste control were performed and punch lists of deficiencies were provided. Projects accepted only after correction of deficiencies.	Inspection Forms (also see Item D.6)	Continue inspection of post-construction structural BMPs during construction.
E.6	Post-Construction Inspections	Department of Public Works/ Robinson Engineering	Inspect structural BMPs/drainage facilities at time of acceptance and one year after acceptance.	Inspections of drainage facilities performed post-construction and one year after completion of construction.	Sample punchlists	Continue post-construction inspections.
E.7	Other Post-Construction Runoff Controls	Department of Public Works/ Robinson Engineering	Assess water quality impacts of any flood management projects.	No proposed flood control projects.	Statement regarding future flood management projects and assessment of water quality impacts.	Assess as any flood control projects may be proposed in future.

Village of Romeoville - NPDES Program
Summary of Minimum Control Measures

6/1/2021

6. Pollution Prevention/ Good Housekeeping

BMP ID No.	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 5 (2020-2021)	Copy or Other Documentation	Planned Activities- Permit Year 6 (2021-2022)
F.1	Employee Training Program - Annual	Department of Public Works/ Robinson Engineering	Provide training materials to implement operational BMPs and other topics listed in permit.	Appropriate employees provided with training and materials.	Sign In Sheets 6/09/20, 6/11/20 & 7/22/20. Memo distributed to all Public Works Supervisors.	Provide appropriate employees with training and materials.
				Employees and consultants meet to plan and implement various program items.	Documentation form from 7/17/20, 9/25/20, 11/20/20, 2/12/21.	Continue to meet periodically to ensure program compliance.
				County-wide salt-use seminar attended by Village personnel.	List of attendees for salt training.	Continue to train staff on appropriate use of salt.
F.2	Inspection & Maintenance Program	Robinson Engineering / Dept of Public Works	Inspection and maintenance of Village structural BMPs.	Inspections of ponds were completed in September 2020.	Inspection report for each location; map with notes; list of ponds/owners/ inspection notes.	Inspections of ponds will be completed in Summer 2021 or later.
F.2	Inspection & Maintenance Program	Department of Public Works	Effective pollution prevention measures, as well as inspection measures, were implemented for **municipal properties** and BMPs.	Ongoing program for inspection, repair and cleaning of various structural BMPs continued village-wide (vehicle washing, spill procedures, minimize leaks, inspection of BMPS, minimize exposure of construction waste, landscape materials, fertilizers, pesticides, chemicals, dicing materials, detergents, etc.)	Call out sheets.	Maintenance of Village structural BMPs as needed and as warranted by inspections/surveillance. Evaluate additional documentation for street sweeping and catch basin cleaning.
F.2	Inspection & Maintenance Program	Spill Prevention Control & Countermeasure Plan (SPCC)	Review and update (currently 3/02/12)	Draft under review for the Public Works Site (Budler Road).	Copy of SPCC.	Update SPCC for the main Public Works Site (Anderson Drive).
F.3	Municipal Operations Program for Stormwater Control	Department of Public Works	Review municipal operations program for stormwater control/storm sewer system. Revise BMPs or implement BMPs as necessary, and audit program for compliance.	BMP program reviewed. Deicing materials were stored properly in salt domes and in brine tanks. Excess road salt was contained within temp. concrete block enclosure with secure tarp and also under covered storage area. Loading/unloading area kept clean. Prewetting and electronic equipment controls resulted in less salt used and thus resulted in corporate fund savings, robust street sweeping program resulted in cost savings through less labor intensive catch basin and sewer cleaning.	List of Municipal Operations BMPs. Photo of salt storage and surrounding area. Photo of bioswale at public works site.	Continue use of BMPs and annual review of BMP program. Deicing material will continue to be stored in permanent storage structures.
F.4	Municipal Operations Waste Control	Department of Public Works	Review municipal operations program for **Village-wide waste control**. Revise BMPs or implement BMPs as necessary, and audit program for compliance.	BMP program reviewed. Village provides brush pick up after large storms twice per week. Various other waste services are available to property owners.	Refer to B7 items regarding waste collection services. Also, invoice for used oil service.	Continue use of BMPs and annual review of BMP program. Continue contract with waste collector to provide services to residents.
F.5	Flood Management/Assess Guidelines	Robinson Engineering	Review ordinances and policies annually to ensure compliance with FEMA regulations. Review development plans for compliance with ordinances and policies.	Ordinances and policies utilized and reviewed during development reviews to ensure compliance with FEMA regulations. Developers provide obtain LOMRs where required. Amended Stormwater Ordinance adopting updated LOMR maps as required by FEMA was approved 1/16/19.	Ordinance Chapter 160. Plan Review Checklist - Floodplain & Floodway portion.	Continue with pre-construction review of development plans for compliance with current FEMA regulations.

ENVIRONMENTAL JUSTICE AREA

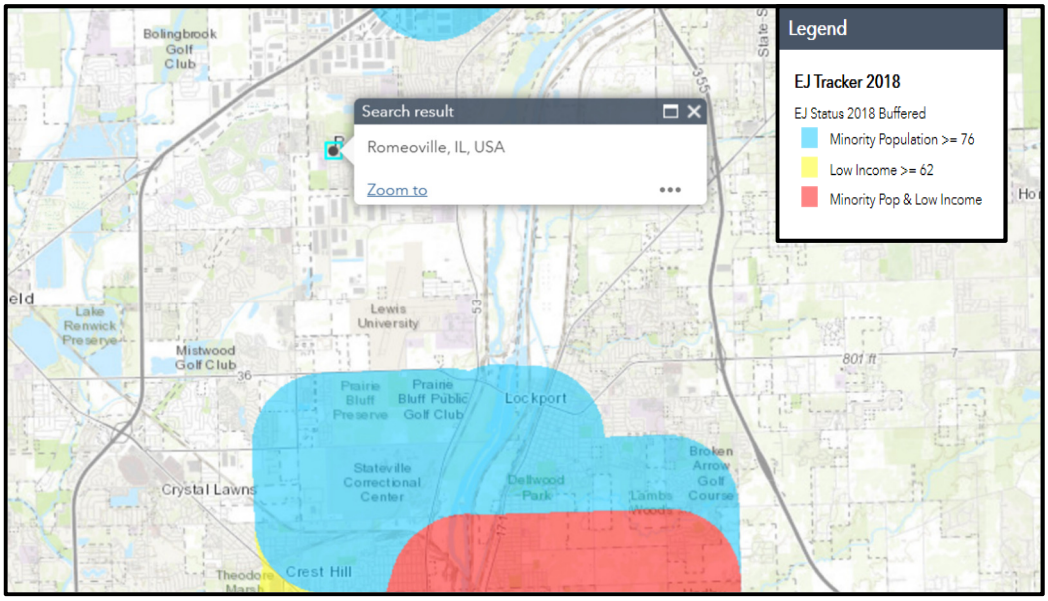
Name of Person filling out form: Robinson Engineering, Ltd.

Position: Village Engineer

Date: 3/24/2020

Evaluation: *(Municipality vs. State of Illinois)*

The following are screenshots of the Illinois EPA EJ Start Website: http://illinois-epa.maps.arcgis.com/apps/webappviewer/index.html?id=f154845da68a4a3f837cd3b880b0233c



The following information was obtained from the United States Census Bureau QuickFacts (https://www.census.gov/quickfacts/fact/table/US/PST045218):

Date of Census: April 1st, 2010		
	Illinois	**Romeoville**
Minority Population		
Black or African American alone (%)	14.6	10.7
American Indian and Alaska Native alone (%)	0.6	0.8
Asian alone (%)	5.9	6.8
Native Hawaiian and Other Pacific Islander alone (%)	0.1	0.0
Two or More Races (%)	2.0	4.3
Hispanic or Latino (%)	17.4	33.1
Income & Poverty		
Median Household Income (in 2018 dollars), 2014-2018	$63,575	$77,053
Persons in poverty (%)	12.1	7.0

Village of Romeoville

Stream Monitoring Data / Pollutant Field Testing
2020-2021 Monitoring Results

Des Plaines River

Upstream (135th)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	8	6	6	18	8
Total Nitrogen (mg/L)	8.8	3.4	1.0	5.1	8.23
Phosphorus (mg/L)	0.201	0.238	0.428	0.499	0.723
Oil & Grease (mg/L)	5	5	6	6	5
Chloride (mg/L)	462	161	328	163	508
Fecal Coliform (CFU/100ml)	10,000	100	100	7,300	5,300
pH (S.U.)	8.2	8.02	7.64	7.09	7.88
Dissolved Oxygen (mg/L)	9.96	8.77	7.38	10.65	9.91
Temp. C	9.5	12.1	23.8	7.6	10.7
Mercury (mg/L)	0.0002	0.0002	0.0002	0.0002	0.0002
PCB	ND	ND	ND	ND	ND

Downstream (Material Service Property)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	31	7	6	24	19
Total Nitrogen (mg/L)	5.0	2.5	6.7	3.8	4.3
Phosphorus (mg/L)	0.444	0.196	0.469	0.388	0.307
Oil & Grease (mg/L)	5	6	6	5	6
Chloride (mg/L)	232	128	183	111	362
Fecal Coliform (CFU/100ml)	100	100	300	6,200	600
pH (S.U.)	8.98	8.09	8.03	8.18	7.84
Dissolved Oxygen (mg/L)	10.56	8.32	8.59	11.07	10.03
Temp. C	7.6	11.2	24.8	4.5	11.7
Mercury (mg/L)	0.0002	0.0002	0.0002	0.0002	0.0002
PCB	ND	ND	ND	ND	ND

Legend:

Total Suspended Solids (mg/L)
Total Nitrogen (mg/L)
Phosphorus (mg/L)
Oil & Grease (mg/L)
Chloride (mg/L)
Fecal Coliform (CFU/100ml)
pH (S.U.)
Dissolved Oxygen (mg/L)

Village of Romeoville

Stream Monitoring Data / Pollutant Field Testing
2020-2021 Monitoring Results

Lily Cache Slough / Creek

Upstream (Normantown)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	46	122	dry	6	dry
Total Nitrogen (mg/L)	1.4	1.5	dry	0.15	dry
Phosphorus (mg/L)	0.122	0.525	dry	0.1	dry
Oil & Grease (mg/L)	6	6	dry	6	dry
Chloride (mg/L)	908	565	dry	159	dry
Fecal Coliform (CFU/100ml)	100	2000	dry	100	dry
pH (S.U.)	6.96	7.35	dry	N/A	dry
Dissolved Oxygen (mg/L)	9.92	9.07	dry	N/A	dry
Temp. C	6.1	8.2	dry	N/A	dry

Downstream (Budler)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	10	17	6	21	11
Total Nitrogen (mg/L)	1.1	0.84	1	0.65	1
Phosphorus (mg/L)	0.1	0.128	0.1	0.1	0.134
Oil & Grease (mg/L)	6	5	6	5	5
Chloride (mg/L)	330	292	154	130	498
Fecal Coliform (CFU/100ml)	300	200	300	300	100
pH (S.U.)	7.37	7.6	7.09	5.67	7.22
Dissolved Oxygen (mg/L)	8.4	8.81	2.6	11.82	6.12
Temp. C	6.5	8.4	20.7	1.3	11.4

Legend:

Total Suspended Solids (mg/L)
Total Nitrogen (mg/L)
Phosphorus (mg/L)
Oil & Grease (mg/L)
Chloride (mg/L)
Fecal Coliform (CFU/100ml)
pH (S.U.)
Dissolved Oxygen (mg/L)

Village of Romeoville

Stream Monitoring Data / Pollutant Field Testing
2020-2021 Monitoring Results

Mink Creek

Upstream (Weber Rd)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	11	13	7	6	11
Total Nitrogen (mg/L)	0.19	0.7	1	0.15	0.1
Phosphorus (mg/L)	0.10	0.10	0.10	0.10	0.10
Oil & Grease (mg/L)	6	5	6	6	5
Chloride (mg/L)	346	269	195	159	489
Fecal Coliform (CFU/100ml)	100	100	100	100	100
pH (S.U.)	8.1	7.96	7.54	8.21	7.8
Dissolved Oxygen (mg/L)	11.8	8.86	1.31	12.7	10.14
Temp. C	6.8	12.4	20.9	3.3	10

Midstream (Airport Rd)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	24	18	21	6	31
Total Nitrogen (mg/L)	1.0	0.83	1.0	0.14	1.0
Phosphorus (mg/L)	0.10	0.108	0.103	0.10	0.10
Oil & Grease (mg/L)	5	6	7	5	6
Chloride (mg/L)	362	266	153	159	491
Fecal Coliform (CFU/100ml)	200	200	400	100	100
pH (S.U.)	7.94	7.78	7.54	7.23	7.45
Dissolved Oxygen (mg/L)	9.82	9.47	5.04	12.08	5.69
Temp. C	7.5	11.2	19.5	2.9	7.5

Downstream (Renwick Rd)

	3/10/2020	5/6/2020	8/12/2020	12/14/2020	3/21/2021
Total Suspended Solids (mg/L)	25	13	65	6	15
Total Nitrogen (mg/L)	0.94	0.81	1.0	0.15	1.0
Phosphorus (mg/L)	0.10	0.127	0.456	0.10	0.10
Oil & Grease (mg/L)	5	5	7	6	6
Chloride (mg/L)	256	173	124	133	275
Fecal Coliform (CFU/100ml)	100	200	100	200	100
pH (S.U.)	7.51	7.85	7.84	5.37	7.68
Dissolved Oxygen (mg/L)	8.72	8.53	6.04	10.75	8.72
Temp. C	8	10.3	20.5	3.2	10.2

Legend:

Total Suspended Solids (mg/L)
Total Nitrogen (mg/L)
Phosphorus (mg/L)
Oil & Grease (mg/L)
Chloride (mg/L)
Fecal Coliform (CFU/100ml)
pH (S.U.)
Dissolved Oxygen (mg/L)

Lower DuPage River Watershed Coalition ILR40 Activities
March 2020 – February 2021

PART I. COVERAGE UNDER GENRAL PERMITS ILR40

Not applicable to the work of the LDRWC.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the LDRWC.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the LDRWC.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the LDRWC.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

- The LDRWC website was maintained during the reporting period and periodically updated (http://www.dupagerivers.org).
- A Seasonal Outreach Campaign was implemented throughout year. The "Members" tab on the website includes all past and present seasonal outreach materials for download. Materials for each season include text for websites, newsletters, posters, blogs and social media posts. The website has also been expanded to utilize this information to enhance the experience for visitors to the LDRWC website. Campaign specific materials were also developed – see examples attached at end of report. For the winter season www.SaltSmart.org website is also used as a clearinghouse of winter BMPs for residents, public agencies and private deicing companies. This website has provided a wider reach beyond the Lower DuPage River watershed and has organically grown into a regional Salt Smart Collaborative.

  Seasonal outreach topics:

  - Spring – Rain Gardens, Rain Barrels, Using native plants
  - Summer – Healthy Lawns, Stream Ecology, Impacts of Dams
  - Fall – Proper leaf collection/disposal
  - Winter – SaltSmart – Winter Snow & Ice Management BMPs

2. Public Involvement and Participation – Due to the Coronavirus pandemic restrictions the LDRWC did not attend any in-person events. LDRWC did work with members to provide resources on setting up rain barrel sales program and materials to encourage residents to install rain barrels and rain gardens to help minimize stormwater runoff from residential properties. Over 200 rain barrels were sold within the Lower DuPage and Lower Des Plaines watershed areas.

3. Illicit Discharge Detection and Elimination – no activities

4. Construction Site Storm Water Runoff Control - no activities

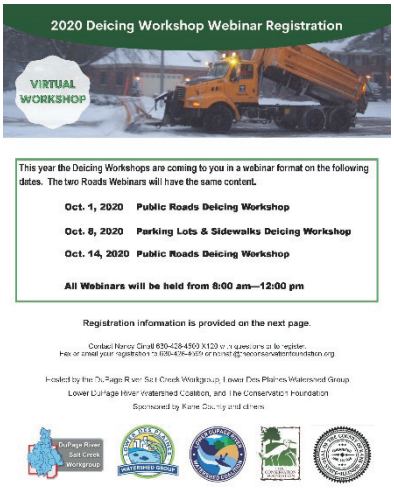
5. Post-Construction Stormwater Management in New Development and Redevelopment - no activities

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Chloride Reduction Workshops

In the past several years, deicing workshops have been held separately by The Conservation Foundation in partnership with Kane County, the DuPage River Salt Creek Workgroup, and the Lower DuPage River Watershed Coalition in partnership with Lower Des Plaines Watershed Group. In 2020, it was decided that these groups would collaborate and host the webinars jointly.

Figure 1. Deicing Workshops Registration Form, 2020.



During the reporting period, three chloride reduction workshops and four technical webinar briefs were held. Due to precautions necessitated by the Coronavirus pandemic, the workshops were held in a webinar format. Registration was also made available to agencies in McHenry, Lake and Cooks counties as their usual deicing workshops were not being held. Accordingly, the webinars were attended by staff in DuPage, Will, Kane, Kendall, Lake, McHenry and Cook counties.

Public Roads Deicing Workshops were held on October 1 and October 14, 2020. Fortin Consulting, Inc. from Minnesota was engaged to present the material. A registration fee was required per agency in order view the webinar. The links were sharable so the webinars could be viewed individually or in groups. A poll was taken at the beginning of each webinar asking how many persons were in the room. The polling results indicated that there were 280 persons viewing the Oct. 1 webinar and 190 persons viewing the Oct. 14th webinar for a total of 470 attendees for the Public Roads webinars. Certificates of attendance were provided to those

who requested them. Evaluation surveys were sent to the persons who logged in to the webinars. A link to the *Minnesota Snow and Ice Control: Field Book for Snowplow Operators* was provided to each registrant.

On October 8, 2020 the Parking Lots and Sidewalks Deicing
Workshop webinar was held with Fortin Consulting, Inc. presenting. The polling results indicated that there were 123 persons viewing the webinar. Certificates of attendance were provided to those who requested them. Evaluation surveys were sent to the persons who logging in to the webinars. A link to the *Minnesota Pollution Control Agency Winter Parking Lot & Sidewalk Maintenance Manual* was provided to each registrant.

Figure 2. Welcome & Introduction to Parking Lots & Sidewalks Presentation, 2020.

Questions from participants were entered into the chat and answered by Fortin Consulting staff, Workgroup staff as well as others participating in the training. A summary of all links provided during the training as well as other links added to the chat were captured and provided to the participants after the webinar.

Figure 3. Links from webinar presentation and chat, 2020.

To complement the Winter Deicing Workshops, the Winter Technical Briefs – Mini-Webinar Series was presented to focus on specific issues. Topics in 2020 included: October 20 – Reducing Salt With Organics: The Boost & Reduce Method, October 27 – Sourcewell & Cooperative Purchasing, November 10 – Benefits of Segmented Blades and November 17 – The Fine Art of Brine Making. Staff also worked with local partners to create a training video on how to calibrate a walk behind salt spreader. These webinars and training video are posted on at www.saltsmart.org .

Figure 4. Winter Technical Briefs, 2020.

Qualifying State, Country or Local Program

Not applicable to the work of the LDRWC.

C. Sharing Responsibility

This report outlines the activities conducted by the LDRWC on behalf of its' members related to the implementation of the ILR40 permit. It is the responsibility of the individual ILR40 permit holders to utilize this information to fulfill the reporting requirements outlined in Part V.C. of the permit.

D. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the LDRWC.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The ILR40 permit states that permit holders "must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts". The LDRWC monitoring program meets the following monitoring objectives and requirements outlined in the permit:

- Measuring pollutants over time (Part V. A. 2. b. ii)
- Sediment monitoring (Part V. A. 2. b. iii)
- Assessing physical and habitat characteristics such as stream bank erosion caused by storm water discharges ((Part V. A. 2. b. vi)
- Collaborative watershed-scape monitoring (Part V. A. 2. b. x)
- Ambient monitoring of total suspended solids, total nitrogen, total phosphorus, fecal coliform, chlorides, and oil and grease (Part V. A. 2. c.)

BIOASSESSMENT

Overview and Sampling Plan

A biological and water quality survey, is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. The LDRWC bioassessment is the latter. The LDRWC bioassessment program began in 2012 with sampling 26 stations in the Lower DuPage River watershed. In 2015 an additional 15 stations were added for a total of 41 stations monitored. Forty-one stations were sampled in the summer of 2018. The bioassessment program functions under a quality assurance plan agreed on with the Illinois Environmental Protection Agency.

The LDRWC bioassessment program utilizes standardized biological, chemical, and physical monitoring and assessment techniques employed to meet three major objectives:

1) determine the extent to which biological assemblages are impaired (using IEPA guidelines);
2) determine the categorical stressors and sources that are associated with those impairments; and,
3) add to the broader databases for the DuPage River watershed to track and understand changes through time in response to abatement actions or other influences.

The data collects as part of the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. The assessments are directly comparable to previously conducted bioassessments such that trends in status can be examined and causes and sources of impairment can be confirmed, amended, or removed. A final report containing a summary of major findings and recommendations for future monitoring, follow-up investigations, and any immediate actions that are needed to resolve readily diagnosed impairments is prepared following each bioassessment. The bioassessment reports are posted on the LDRWC at http://www.dupagerivers.org/bioassessment-monitoring/ . It is not the role of the bioassessments to identify specific remedial actions on a site specific or watershed basis. However, the baseline data provided by the bioassessments contributes to the Integrated Priority System that was developed by the DuPage River Salt Creek Workgroup to help determine and prioritize remedial projects and is now being updated to incorporate Lower DuPage River

watershed data. A final draft of the IPS model update was completed in 2020 and is being utilized to identify and design restoration projects aimed at improving aquatic life scores.

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exude an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or "pour point" of the watershed (Level 1 site), then continues by deriving each subsequent "panel" at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in in seven drainage area levels in each of the three watersheds, starting at the largest (150 sq. mi) and continuing through successive panels of 75, 38, 19, 9, 5 and 2 sq. mi. Targeted sites are then added to fill gaps left by the geometric design and assure complete spatial coverage in order to capture all significant pollution gradients including reaches that are impacted by wastewater treatment plants (WWTPs), major stormwater sources, combined sewer overflows (CSOs) and dams. The number of sampling sites by method/protocol and watershed are listed in Table 1 and illustrated in Figure 1.

Representativeness – Reference Sites

Data is collected from selected regional reference sites in northeastern Illinois preferably to include existing Illinois EPA and Illinois DNR reference sites, potentially being supplemented with other sites that meet the Illinois EPA criteria for reference conditions. One purpose of this data will be to index the biological methods used in this study that are different from Illinois EPA and/or DNR to the reference condition and biological index calibration as defined by Illinois EPA. In addition, the current Illinois EPA reference network does not yet include smaller headwater streams, hence reference data is needed to accomplish an assessment of that data. Presently thirteen (13) reference sites have been established.

Figure 5. Lower DuPage River Watershed bioassessment monitoring sites for 2015 and 2018

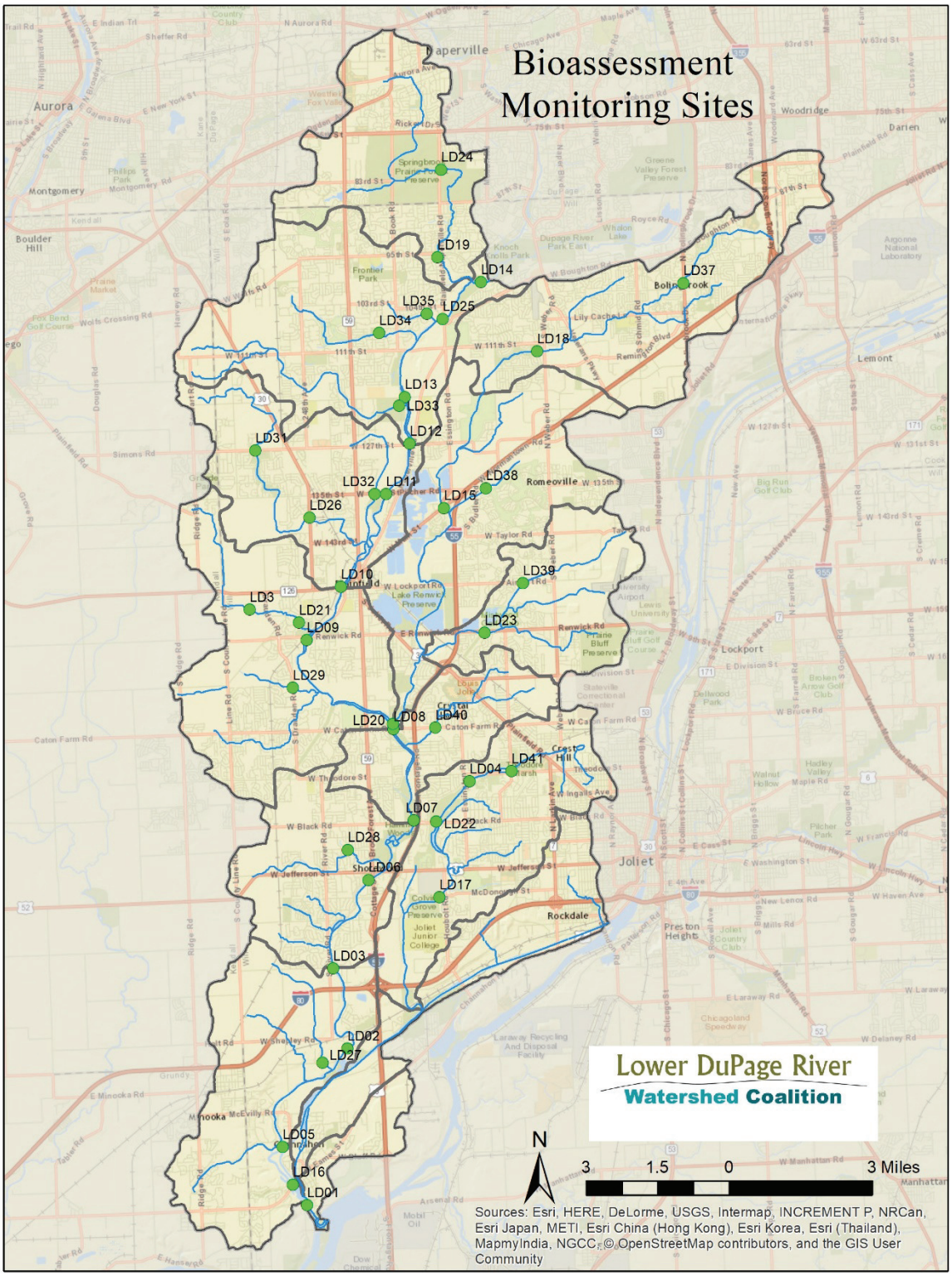


Table 1. Number of sampling sites in the LDRWC project area.

Method/Protocol	Lower DuPage River (2012)	Lower DuPage River (2015 & 18)
Biological sampling	26	41
Fish	26	41
Macroinvertebrates	26	41
QHEI	26	41
Water Column Chemical/Physical Sampling		
Nutrients*	26	41
Water Quality Metals	26	41
Water Quality Organics	8	0
Sediment Sampling	7	7

*Also included indicators or organic enrichment and ionic strength, total suspended solids (TSS), DO, pH and temperature

The bioassessment sampling includes four (4) sampling methods/protocols: biological sampling, Qualitative Habitat Evaluation Index (QHEI), water column chemical/physical parameter sampling and sediment chemistry. The biological sampling includes two assemblages: fish and macroinvertebrates.

FISH

Methodology

Methods for the collection of fish at wadeable sites was performed using a tow-barge or longline pulsed D.C. electrofishing apparatus (MBI 2006b). A Wisconsin DNR battery powered backpack electrofishing unit was used as an alternative to the long line in the smallest streams (Ohio EPA 1989). A three-person crew carried out the sampling protocol for each type of wading equipment sampling in an upstream direction. Sampling effort was indexed to lineal distance and ranged from 150-200 meters in length. Non-wadeable sites were sampled with a raft-mounted pulsed D.C. electrofishing device in a downstream direction (MBI 2007). Sampling effort was indexed to lineal distance over 0.5 km. Sampling was conducted during a June 15-October 15 seasonal index period.

Samples from each site were processed by enumerating and recording weights by species and by life stage (y-o-y, juvenile, and adult). All captured fish were immediately placed in a live well, bucket, or live net for processing. Water was replaced and/or aerated regularly to maintain adequate D.O. levels in the water and to minimize mortality. Fish not retained for voucher or other purposes were released back into the water after they had been identified to species, examined for external anomalies, and weighed either individually or in batches. While the majority of captured fish were identified to species in the field, any uncertainty about the field identification required their preservation for later laboratory identification. Identification was made to the species level at a minimum and to the sub-specific level if necessary. Vouchers were deposited and verified at The Ohio State University Museum of Biodiversity (OSUMB) in Columbus, OH.

Results

The fish sampling results presented in this report summarize the findings for the mainstem reaches of the DuPage River. Information on the tributaries and detailed analysis of all results can be found at http://www.dupagerivers.org/bioassessment-monitoring/ Results from the 2018 bioassessment will be available in late 2020.

The fish and macroinvertebrate results are presented as Index of Biotic Integrity (IBI) scores. IBI is an evaluation of a waterbodies biological community in a manner that allows the identification, classification and ranking of water pollution and other stressors. IBIs allow the statistical association of various anthropogenic influences on a water body with the observed biological activity in said water body and in turn the evaluation of management interventions in a process of adaptive management. Chemical testing of water samples produce only a snapshot of chemical concentrations while an IBI allows an evaluation of the net impact of chemical, physical and flow variables on a biological community structure. Dr. James Karr formulated the IBI concept in 1981.

DuPage River

As in previous studies, fish assemblages in the lower DuPage River watershed ranged from poor to good in 2015 (Figure 6), but in 2018 three sites in the mainstem fully attained the Illinois general aquatic life thresholds (LD01, LD06 and LD14). The only site with consistently good quality assemblages during all surveys is found in the Channahon Dam tailwaters, a short reach wedged in between the dam and the Des Plains River. Mainstem fish communities at most sites have improved since 2012 and 2015, and no sites were in the poor range in 2018. In contrast to the mainstem, conditions in the tributaries tended to improve from mostly poor, to mostly fair quality between 2012 and 2015, but regressed somewhat in 2018 (see figure 7).

Figure 6. Fish Index of Biotic Integrity (fIBI) scores for the Lower DuPage River from 1976-2018, in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). The shaded region demarcates the "fair" narrative range.

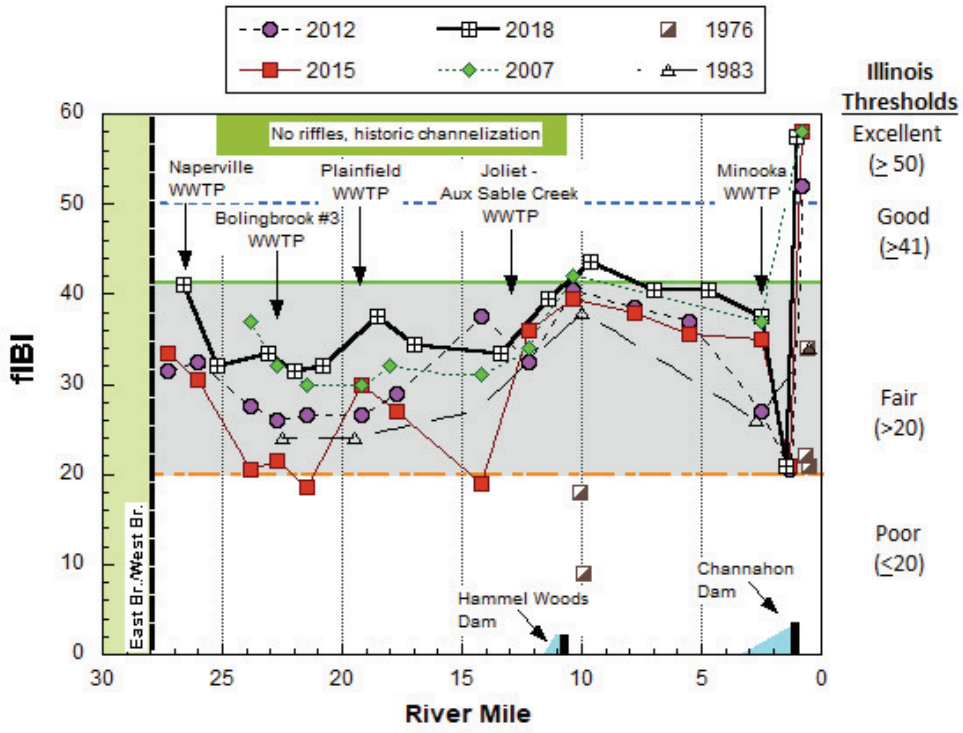
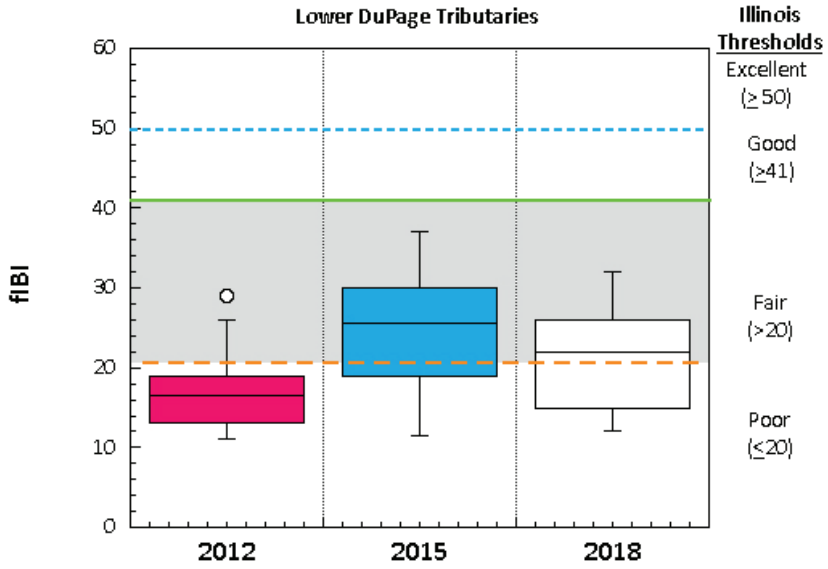


Figure 7. Box and whisker plot of fIBI scores from Lower DuPage River tributary sites in 2012, 2015, and 2018



MACROINVERTEBRATES

Methodology

The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded tray. Taxonomic resolution is performed to the lowest practicable resolution for the common macroinvertebrate assemblage groups such as mayflies, stoneflies, caddisflies, midges, and crustaceans, which goes beyond the genus level requirement of IEPA (2005). However, calculation of the macroinvertebrate IBI followed IEPA methods in using genera as the lowest level of taxonomy for mIBI calculation and scoring.

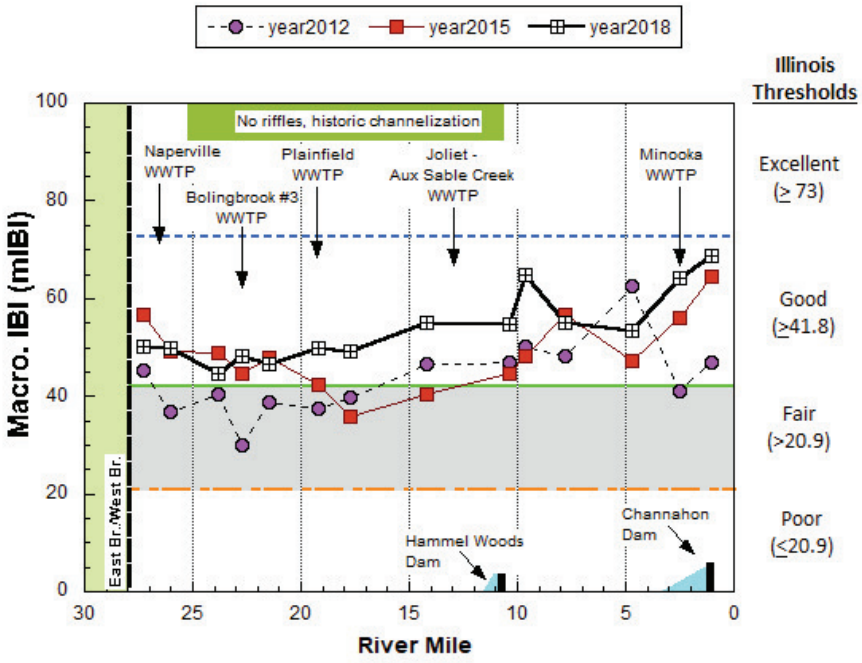
Results

The macroinvertebrate sampling results presented in this report summarize the findings for the mainstem reaches of the DuPage River. Information on the tributaries and detailed analysis of all results can be found at http://www.dupagerivers.org/bioassessment-monitoring/ A final draft of the 2018 is under review and should be released in mid-2021.

DuPage River

Macroinvertebrate assemblage performance in the lower DuPage River watershed (mainstem and tributaries) were all in the good range in 2018 an improvement over 2012 and 2015 (see Figure 8); 7 sites were rated as fair in 2012 and 3 in 2015. Mainstem communities improved at almost all stations compared to 2012 and 2015. The lower scoring sites (still in the good range) were in the long sluggish, historically channelized reach between the Naperville WWTP and Hammel Woods dam. The reach consists of mostly pooled or slow-run habitats with fine substrates and an abundance of macrophytes.

Figure 8. Macroinvertebrate Index of Biotic Integrity (mIBI) scores for the Lower DuPage River in 2012, 2015, and 2018 in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). The shaded region demarcates the "fair" narrative range.



HABITAT

Methodology

Physical habitat was evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995; Ohio EPA 2006b) and as modified by MBI for specific attributes. Attributes of habitat are scored based on the overall importance of each to the maintenance of viable, diverse, and functional aquatic faunas. The type(s) and quality of substrates, amount and quality of instream cover, channel morphology, extent and quality of riparian vegetation, pool, run, and riffle development and quality, and gradient used to determine the QHEI score which generally ranges from 20 to less than 100. QHEI scores and physical habitat attribute were recorded in conjunction with fish collections.

Results

The QHEI data presented in this report summarize the findings for the mainstem reaches of the Lower DuPage River. Information on the tributaries and detailed analysis of all results can be found at http://www.dupagerivers.org/bioassessment-monitoring/ A final draft of the 2018 is under review and should be released in mid-2021.

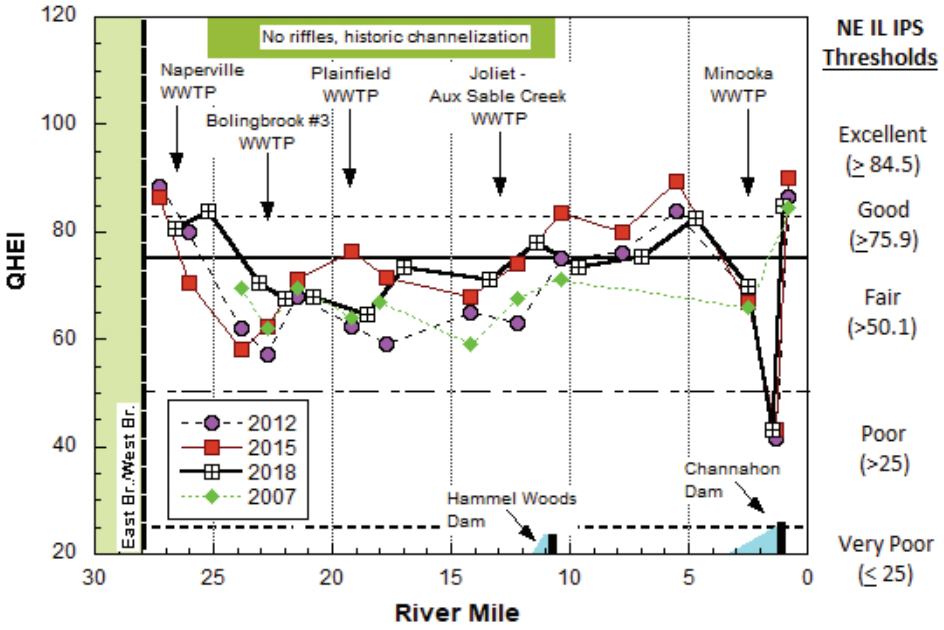
The physical habitat of a stream is a primary determinant of biological quality. Streams in the glaciated Midwest, left in their natural state, typically possess riffle-pool-run sequences, high

sinuosity, and well-developed channels with deep pools, heterogeneous substrates and cover in the form of woody debris, glacial tills, and aquatic macrophytes. The QHEI categorically scores the basic components of stream habitat into ranks according to the degree to which those components are found in a natural state, or conversely, in an altered or modified state.

DuPage River

As in previous surveys, 2015 DuPage River habitat quality varied by location but was more than adequate to support warm water communities throughout most of its 27.8-mile length (see figure 4). Extreme upper mainstem habitats remained clearly exceptional, but continued to decline to the lower good range in the sluggish, historically channelized reach between the Naperville WWTP and the Hammel Woods low-head dam (~ RMs 25-10.6). Two projects are being developed to improve habitat and dissolved oxygen levels within this reach. The first project is to removed the Hammel Woods dam. This project is designed and is awaiting permits. Construction is anticipated to take place during low flows in 2021.

Figure 9. Qualitative Habitat Evaluation Index (QHEI) scores and narrative ranges in the Lower DuPage River in 2007, 2012, 2015 and 2018 in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). QHEI scores less than 45 are often typical of highly modified channels or dam pools. The IPS narrative ranges of QHEI scores from excellent to very poor are indicated by solid and dashed lines.



Water and Sediment Chemistry

Methodology

Water column and sediment samples are collected as part of the LDRWC bioassessment programs. The total number of sites sampled is detailed in Table 1. The number of samples collected at each site is largely a function of the sites drainage area with the frequency of sampling increasing as drainage size increases. Organics sampling is a single sample done at a subset of sites. Sediment sampling is done at a subset of 41 sites using the same procedures as IEPA.

The parameters sampled for are included in Table 2 and can be grouped into demand parameters, nutrients, demand, and metals. Locations of sample sites are shown on Figure 5. All sampling occurs between May and October of the sample year. The Standard Operating Procedure for water quality sampling can be found at http://www.dupagerivers.org/bioassessment-monitoring/ A final draft of the 2018 is under review and should be released in mid-2021.

Table 2. Water Quality and sediment Parameters sampled as part of the LDRWC Bioassessment Program.

Water Quality Parameters	Sediment Parameters
Demand Parameters	**Sediment Metals**
5 Day BOD	Arsenic
Chloride	Barium
Conductivity	Cadmium
Dissolved Oxygen	Chromium
pH	Copper
Temperature	Iron
Total Dissolved Solids	Lead
Total Suspended Solids	Manganese
	Nickel
Nutrients	Potassium
Ammonia	Silver
Nitrogen/Nitrate	Zinc
Nitrogen – Total Kjeldahl	
Phosphorus, Total	
	Sediment Organics
Metals	Organochlorine Pesticides
Cadmium	PCBS
Calcium	Percent Moisture
Copper	Semivolatile Organics
Iron	Volatile Organic Compounds
Lead	
Magnesium	
Zinc	

Results

The discussion presented below focuses on the constituents listed in the MS4 permit: total suspended solids, total nitrogen, total phosphorus, and chlorides. Total nitrogen is presented as ammonia, nitrate, and total kjeldahl nitrogen (TKN). Fecal coliform and oil and grease sampling will be added to all future bioassessment sampling starting in 2021 ensuring that both parameters will be sampled during the effective period of the ILR40 permit. A final draft of the 2018 is under review and should be released in mid-2021.

Detailed analysis and results for the other water quality constituents is located at http://www.dupagerivers.org/bioassessment-monitoring/

Lower DuPage River - Chemical Water Quality

As discussed in previous reports, nutrient levels in the Lower DuPage River mainstem are heavily influenced by WWTP inputs from its sources upstream, the East and West Branches. In each Lower DuPage survey, phosphorus and nitrate levels have ranged from highly elevated to slightly elevated (based on NE Illinois IPS Model thresholds), depending largely on flow conditions and contributions from upstream point sources. Concentrations have tended to be highest in the extreme upper mainstem, nearer to the confluence with the branches. Under very low-flows in 2012, nitrates routinely exceeded the 10 mg/l criterion in the upper reach and phosphorus was almost entirely above the recommended 1.0 mg/l effluent limit from headwaters to mouth. In both surveys, contributions from WWTPs along the Lower DuPage mainstem may have helped maintain nutrient levels but parameters experience minimal change downstream from the discharges. Both median and mean ammonia concentrations were near or below detection throughout the DuPage River mainstem in 2012 and 2015, but there was an increase in ammonia in 2018, albeit in the IPS fair range, but none were exceedances of water quality criteria that depend on temperature and pH (Figure 8, top). This likely originated in the upper part of the watershed. A final draft of the 2018 is under review and should be released in mid-2021.

Lower Des Plaines Watershed Group ILR40 Activities
March 2020 – February 2021

PART I. COVERAGE UNDER GENRAL PERMITS ILR40

Not applicable to the work of the LDWG.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the LDWG.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the LDWG.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the LDWG.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

LDWG outreach activities for the year ending 2020 included:

- The LDWG website was maintained during the reporting period and periodically updated (http://www.lowerdesplaineswatershed.org).
- A Seasonal Outreach Campaign was implemented throughout year. The "Members" tab on the website includes all past and present seasonal outreach materials for download. Materials for each season include text for websites, newsletters, posters, blogs and social media posts. The website has also been expanded to utilize this information to enhance the experience for visitors to the LDWG website. Campaign specific materials were also developed – *see examples attached at end of report*. For the winter season www.SaltSmart.org website is also used as a clearinghouse of winter BMPs for residents, public agencies and private deicing companies. This website has provided a wider reach beyond the Lower DuPage River watershed and has organically grown into a regional Salt Smart Collaborative.

  Seasonal outreach topics:

  - Spring – Rain Gardens, Rain Barrels, Using native plants
  - Summer – Healthy Lawns, Stream Ecology, Impacts of Dams
  - Fall – Proper leaf collection/disposal
  - Winter – SaltSmart – Winter Snow & Ice Management BMPs

2. Public Involvement and Participation – Due to the Coronavirus pandemic restrictions the LDWG did not attend any in-person events. LDWG did work with members to provide resources on setting up rain barrel sales program and materials to encourage residents to install rain barrels and rain gardens to help minimize stormwater runoff from residential properties. Over 200 rain barrels were sold within the Lower DuPage and Lower Des Plaines watershed areas.

3. Illicit Discharge Detection and Elimination – no activities

4. Construction Site Storm Water Runoff Control - no activities

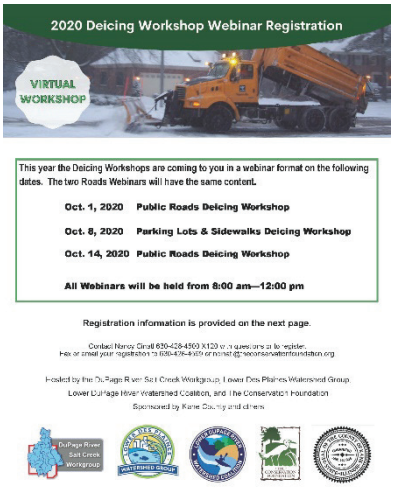
5. Post-Construction Stormwater Management in New Development and Redevelopment - no activities

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Chloride Reduction Workshops

In the past several years, deicing workshops have been held separately by The Conservation Foundation in partnership with Kane County, the DuPage River Salt Creek Workgroup, and the Lower DuPage River Watershed Coalition in partnership with Lower Des Plaines Watershed Group. In 2020, it was decided that these groups would collaborate and host the webinars jointly.

Figure 1. Deicing Workshops Registration Form, 2020.



During the reporting period, three chloride reduction workshops and four technical webinar briefs were held. Due to precautions necessitated by the Coronavirus pandemic, the workshops were held in a webinar format. Registration was also made available to agencies in McHenry, Lake and Cooks counties as their usual deicing workshops were not being held. Accordingly, the webinars were attended by staff in DuPage, Will, Kane, Kendall, Lake, McHenry and Cook counties.

Public Roads Deicing Workshops were held on October 1 and October 14, 2020. Fortin Consulting, Inc. from Minnesota was engaged to present the material. A registration fee was required per agency in order view the webinar. The links were sharable so the webinars could be viewed individually or in groups. A poll was taken at the beginning of each webinar asking how many persons were in the room. The polling results indicated that there were 280 persons viewing the Oct. 1 webinar and 190 persons viewing the Oct. 14th webinar for a total of 470

attendees for the Public Roads webinars. Certificates of attendance were provided to those who requested them. Evaluation surveys were sent to the persons who logged in to the webinars. A link to the *Minnesota Snow and Ice Control: Field Book for Snowplow Operators* was provided to each registrant.

On October 8, 2020 the Parking Lots and Sidewalks Deicing
Workshop webinar was held with Fortin Consulting, Inc. presenting. The polling results indicated that there were 123 persons viewing the webinar. Certificates of attendance were provided to those who requested them. Evaluation surveys were sent to the persons who logging in to the webinars. A link to the *Minnesota Pollution Control Agency Winter Parking Lot & Sidewalk Maintenance Manual* was provided to each registrant.

Figure 2. Welcome & Introduction to Parking Lots & Sidewalks Presentation, 2020.

Questions from participants were entered into the chat and answered by Fortin Consulting staff, Workgroup staff as well as others participating in the training. A summary of all links provided during the training as well as other links added to the chat were captured and provided to the participants after the webinar.

Figure 3. Links from webinar presentation and chat, 2020.

To complement the Winter Deicing Workshops, the Winter Technical Briefs – Mini-Webinar Series was presented to focus on specific issues. Topics in 2020 included: October 20 – Reducing Salt With Organics: The Boost & Reduce Method, October 27 – Sourcewell & Cooperative Purchasing, November 10 – Benefits of Segmented Blades and November 17 – The Fine Art of Brine Making. Staff also worked with local partners to create a training video on how to calibrate a walk behind salt spreader. These webinars and training video are posted on at www.saltsmart.org .

Figure 4. Winter Technical Briefs, 2020.

Qualifying State, Country or Local Program

Not applicable to the work of the LDWG.

C. Sharing Responsibility

This report outlines the activities conducted by the LDWG on behalf of its' members related to the implementation of the ILR40 permit. It is the responsibility of the individual ILR40 permit holders to utilize this information to fulfill the reporting requirements outlined in Part V.C. of the permit.

D. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the LDRWC.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The ILR40 permit states that permit holders "must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts". The LDWG will began a monitoring program in the summer of 2018 that meets the following monitoring objectives and requirements outlined in the permit:

- Measuring pollutants over time
- Sediment monitoring

- Assessing physical and habitat characteristics such as stream bank erosion caused by storm water discharges
- Collaborative watershed-scale monitoring
- Ambient monitoring of total suspended solids, total nitrogen, total phosphorus, fecal coliform, and chlorides

The first round of bioassessment monitoring was completed in 2018 at the twenty-nine (29) identified sites on the mainstem Des Plaines River from the confluence with the Kankakee River up to the I-355 bridge. The remaining thirty-three (33) mainstem sites were scheduled for sampling in 2019. As stated in the 2019 Annual Report, sampling was not completed in 2019 due to unsafe, high water conditions. A subset of fifteen (15) stations was resampled in 2020, all data collected on the mainstem (2018, 2019 and 2020) will be compiled in a report that will be available in late 2021. In addition to the mainstem Des Plaines River sites, forty (40) sites were sampled across the Hickory Creek watershed. The Bioassessment Report for Hickory Creek is also expected in late 2021. Plans to sample the remaining fifteen (15) tributaries will be completed in 2021 with a Bioassessment Report due in late 2022. Details of the bioassessment program are below.

BIOASSESSMENT

A biological and water quality survey, is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. The LDWG bioassessment is the latter.

The LDWG bioassessment program continued in 2020 resampling a subset of the 2019 mainstem Des Plaines River stations. Based on remaining budget, fifteen (15) stations we chosen for the resampling effort. All of the data collected on the mainstem Des Plaines River in 2018, 2019 and 2020 will be analyzed together and compiled into a single report due in late 2021.

Also sampled in 2020 was the forty (40) stations in the Hickory Creek watershed. The number of stations was reduced from the originally planned fifty (50) sites after field reconnaissance determined some sites to be dry, impoundments, or inaccessible. See table below for complete sampling schedule. The Bioassessment includes fish, macroinvertebrate, QHEI – habitat and water chemistry at all sites and sediment sampling at a subset of sites.

Table 1 – Bioassessment Sampling Schedule

Watershed	Year Sampled	# of Stations
Lower mainstem Lower Des Plaines River	2018	29
Upper mainstem Lower Des Plaines River + northern tributaries	2019	33 – aborted due to high water
Upper mainstem Lower Des Plaines River resample subset	2020	15
Hickory Creek subwatershed	2020	40
Remaining Tributaries	2021	56

The LDWG bioassessment program utilizes standardized biological, chemical, and physical monitoring and assessment techniques employed to meet three major objectives:

1) determine the extent to which biological assemblages are impaired (using IEPA guidelines);
2) determine the categorical stressors and sources that are associated with those impairments; and,
3) add to the broader databases for the Des Plaines River watershed to track and understand changes through time in response to abatement actions or other influences.

The data collected as part of the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. The assessments are directly comparable to previously conducted bioassessments such that trends in status can be examined and causes and sources of impairment can be confirmed, amended, or removed. A final report containing a summary of major findings and recommendations for future monitoring, follow-up investigations, and any immediate actions that are needed to resolve readily diagnosed impairments is prepared following each bioassessment. The bioassessment reports will be posted on the LDWG website. It is not the role of the bioassessments to identify specific remedial actions on a site specific or watershed basis.

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exude an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or "pour point" of the watershed (Level 1 site), then continues by deriving each subsequent "panel" at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in in seven drainage area levels in each of the three watersheds, starting at the largest (150 sq. mi) and continuing through successive panels of 75, 38, 19, 9, 5 and 2 sq. mi. Targeted sites are then added to fill gaps left by the geometric design and assure complete spatial coverage in order to capture all significant pollution gradients including reaches that are impacted by wastewater treatment plants (WWTPs), major stormwater sources, combined sewer overflows (CSOs) and dams. The number of sampling sites by method/protocol and watershed are listed in Table 1 and illustrated in Figure 1. Field reconnaissance will be needed to confirm suitability of sites prior to sampling season.

<u>Representativeness – Reference Sites</u>

Data is collected from selected regional reference sites in northeastern Illinois preferably to include existing Illinois EPA and Illinois DNR reference sites, potentially being supplemented with other sites that meet the Illinois EPA criteria for reference conditions. One purpose of this data will be to index the biological methods used in this study that are different from Illinois EPA and/or DNR to the reference condition and biological index calibration as defined by Illinois EPA. In addition, the current Illinois EPA reference network does not yet include smaller headwater

streams, hence reference data is needed to accomplish an assessment of that data. Presently thirteen (13) reference sites have been established.

The bioassessment sampling includes four (4) sampling methods/protocols: biological sampling, Qualitative Habitat Evaluation Index (QHEI), water column chemical/physical parameter sampling and sediment chemistry. The biological sampling includes two assemblages: fish and macroinvertebrates.

FISH

Methodology

Methods for the collection of fish at wadeable sites was performed using a tow-barge or longline pulsed D.C. electrofishing apparatus (MBI 2006b). A Wisconsin DNR battery powered backpack

electrofishing unit was used as an alternative to the long line in the smallest streams (Ohio EPA 1989). A three-person crew carried out the sampling protocol for each type of wading equipment sampling in an upstream direction. Sampling effort was indexed to lineal distance and ranged from 150-200 meters in length. Non-wadeable sites were sampled with a raft-mounted pulsed D.C. electrofishing device in a downstream direction (MBI 2007). Sampling effort was indexed to lineal distance over 0.5 km. Sampling was conducted during a June 15-October 15 seasonal index period.

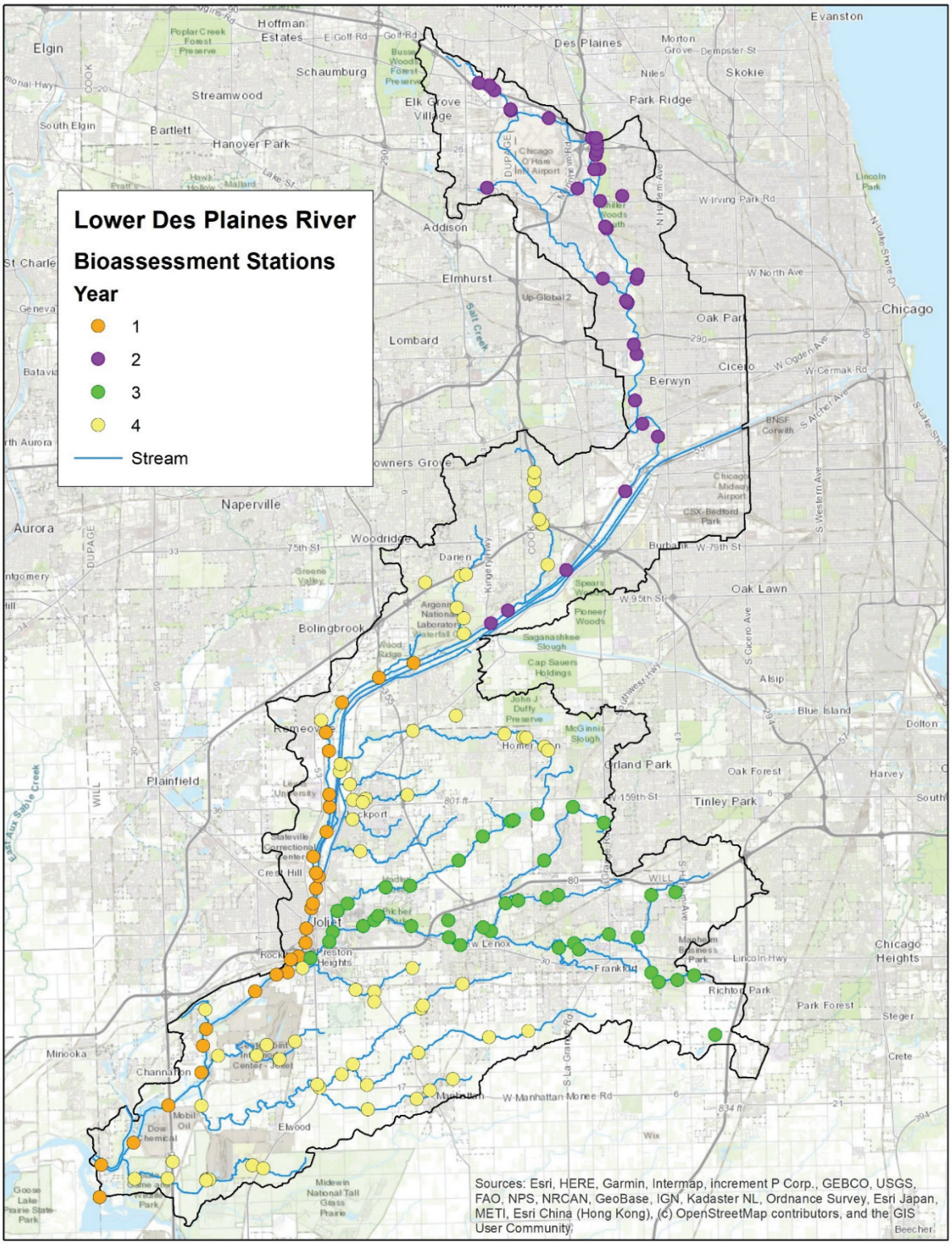
Samples from each site were processed by enumerating and recording weights by species and by life stage (y-o-y, juvenile, and adult). All captured fish were immediately placed in a live well, bucket, or live net for processing. Water was replaced and/or aerated regularly to maintain adequate D.O. levels in the water and to minimize mortality. Fish not retained for voucher or other purposes were released back into the water after they had been identified to species, examined for external anomalies, and weighed either individually or in batches. While the majority of captured fish were identified to species in the field, any uncertainty about the field identification required their preservation for later laboratory identification. Identification was made to the species level at a minimum and to the sub-specific level if necessary. Vouchers were deposited and verified at The Ohio State University Museum of Biodiversity (OSUMB) in Columbus, OH.

MACROINVERTEBRATES

Methodology

The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded tray. Taxonomic resolution is performed to the lowest practicable resolution for the common macroinvertebrate assemblage groups such as mayflies, stoneflies, caddisflies, midges, and crustaceans, which goes beyond the genus level requirement of IEPA (2005). However, calculation of the macroinvertebrate IBI followed IEPA methods in using genera as the lowest level of taxonomy for mIBI calculation and scoring.

Figure 5. Lower Des Plaines River Bioassessment Stations. Year represents order of sampling within bioassessment 5-year cycle.



HABITAT

Methodology

Physical habitat was evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995; Ohio EPA 2006b) and as modified by MBI for specific attributes. Attributes of habitat are scored based on the overall importance of each to the maintenance of viable, diverse, and functional aquatic faunas. The type(s) and quality of substrates, amount and quality of instream cover, channel morphology, extent and quality of riparian vegetation, pool, run, and riffle development and quality, and gradient used to determine the QHEI score which generally ranges from 20 to less than 100. QHEI scores and physical habitat attribute were recorded in conjunction with fish collections.

Chemistry

Methodology

Water column and sediment samples are collected as part of the LDWG bioassessment programs. The number of samples collected at each site is largely a function of the site's drainage area with the frequency of sampling increasing as drainage size increases. Grab sample is taken at center of flow. Temperature, dissolved oxygen, pH and conductivity are sampled in the field. Sediment sampling is done at a subset of 158 sites using the same procedures as IEPA.

The parameters sampled for are included in Table 2 and can be grouped into demand parameters, nutrients, demand, metals and organics. All sampling occurs between May and October of the sample year.

Table 2 Water Quality and sediment Parameters sampled as part of the LDWG Bioassessment Program.

Water Quality Parameters	Sediment Parameters
Demand Parameters	**Sediment Metals**
5 Day BOD	Arsenic
Chloride	Barium
Conductivity	Cadmium
Dissolved Oxygen	Chromium
pH	Copper
Temperature	Iron
Total Dissolved Solids	Lead
Total Suspended Solids	Manganese
	Nickel
Nutrients	Potassium
Ammonia	Selenium
Nitrogen/Nitrate	Silver
Nitrogen – Total Kjeldahl	Zinc
Phosphorus, Total	
Chlorophyll-a (new in 2020)	
	Sediment Organics
Metals	Organochlorine Pesticides
Cadmium Lead	PCBS
Calcium Magnesium	Percent Moisture
Copper Zinc	Semi-volatile Organics
Iron	Volatile Organic Compounds

Fecal Coliform

In 2020 fecal coliform was collected at ten (10) sites, three (3) on the Des Plaines River and seven (7) in the Hickory Creek Watershed. Grab samples were collected at center of flow five (5) times within a thirty (30) day period. Results from the fecal coliform sampling can be found below in Table 3.

Table 3. 2020 Fecal Coliform data. Results in Colony Forming Units (CFU)

Station ID	Location	9/22/2020	9/28/2020	10/6/2020	10/8/2020	10/12/2020
Des Plaines River						
LDG03	DS of I-55 Bridge	<50	<50	<50	<50	<50
LDG12	US McDonough Street	<50	<50	<50	<50	50
LDG14	US Ruby Street	<50	250	<50	50	50
Hickory Creek						
LDGG01	DS South Joliet Street	50	<50	100	50	150
LDGG03	US Miller Avenue	2250	1200	100	50	150
LDGG11	US Marley Road	50	<50	<50	<50	<50
Spring Creek						
LDGGA01A	DS Washington Street	200	400	50	<50	<50
LDGGA07	DS Parker Road	<50	<50	<50	<50	<50
Marley Creek						
LDGGB01	DS West Regan Road	150	50	<50	<50	<50
Union Ditch						
LDGGC01	DS Pedestrian Bridge off Walnut Creek Drive	50	<50	<50	<50	<50