



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, 2022 To March, 2023

Permit No. ILR40 0361

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

Name: City of Joliet Mailing Address 1: 150 W. Jefferson Street

Mailing Address 2: _____ County: Will

City: Joliet State: IL Zip: 60432 Telephone: 815-724-4260

Contact Person: Greg Ruddy Email Address: gruddy@jolietcity.org
(Person responsible for Annual Report)

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

City of Joliet

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:

05/30/23

Date:

Greg Ruddy

Printed Name:

Director of Public Works

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
NPDES PERMIT FOR STORMWATER DISCHARGES
FROM MUNICIPAL SEPARATE STORM SEWER
SYSTEMS (MS4)

CITY OF JOLIET, ILLINOIS
2023 ANNUAL FACILITY INSPECTION REPORT

MARCH 2022 TO MARCH 2023 REPORTING PERIOD

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Part A. Changes to Best Management Practices

Note: X indicates BMPs performed as proposed in the MS4 Program NOI
 ✓ indicates changes to BMPs proposed

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|---|--------|--------|--------|--------|---|
| MS4 | | | | | |
| A. Public Education and Outreach | | | | | |
| X | X | X | X | X | A.1 Distributed Paper Material |
| | | | | | A.2 Speaking Engagement |
| X | X | X | X | X | A.3 Public Service Announcement |
| | | | | | A.4 Community Event |
| | | | | | A.5 Classroom Education Material |
| X | X | X | X | X | A.6 Other Public Education |
| B. Public Participation/Involvement | | | | | |
| | | | | | B.1 Public Panel |
| | | | | | B.2 Educational Volunteer |
| | | | | | B.3 Stakeholder Meeting |
| | | | | | B.4 Public Hearing |
| | | | | | B.5 Volunteer Monitoring |
| | | | | | B.6 Program Coordination |
| X | X | X | X | X | B.7 Other Public Involvement |
| C. Illicit Discharge Detection and Elimination | | | | | |
| X | X | X | X | X | C.1 Storm Sewer Map Preparation |
| X | X | X | X | X | C.2 Regulatory Control Program |
| | | | | | C.3 Detection/Elimination Prioritization Plan |
| X | X | X | X | X | C.4 Illicit Discharge Tracing Procedures |
| | | | | | C.5 Illicit Source Removal Procedures |
| | | | | | C.6 Program Evaluation and Assessment |
| X | X | X | X | X | C.7 Visual Dry Weather Screening |
| X | X | X | X | X | C.8 Pollutant Field Testing |
| | | | | | C.9 Public Notification |
| | | | | | C.10 Other Illicit Discharge Controls |

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|--|--------|--------|--------|--------|--|
| MS4 | | | | | |
| D. Construction Site Runoff Control | | | | | |
| | | | | | D.1 Regulatory Control Program |
| | | | | | D.2 Erosion and Sediment Control BMPs |
| | | | | | D.3 Other Waste Control Program |
| | | | | | D.4 Site Plan Review Procedures |
| X | X | X | X | X | D.5 Public Information Handling Procedures |
| X | X | X | X | X | D.6 Site Inspection/Enforcement Procedures |
| X | X | X | X | X | D.7 Other Construction Site Runoff Controls |
| E. Post-Construction Runoff Control | | | | | |
| | | | | | E.1 Community Control Strategy |
| | | | | | E.2 Regulatory Control Program |
| | | | | | E.3 Long Term O&M Procedures |
| | | | | | E.4 Pre-Const Review of BMP Designs |
| X | X | X | X | X | E.5 Site Inspections During Construction |
| X | X | X | X | X | E.6 Post-Construction Inspections |
| | | | | | E.7 Other Post-Const Runoff Controls |
| F. Pollution Prevention/Good Housekeeping | | | | | |
| X | X | X | X | X | F.1 Employee Training Program |
| X | X | X | X | X | F.2 Inspection and Maintenance Program |
| | | | | | F.3 Municipal Operations Storm Water Control |
| | | | | | F.4 Municipal Operations Waste Disposal |
| | | | | | F.5 Flood Management/Assess Guidelines |
| | | | | | F.6 Other Municipal Operations Controls |

Part B. Status of Compliance with Permit Conditions

The City has developed a Stormwater Management Plan and posted it on the City's stormwater webpage. The status of BMPs and measurable goals performed for the reporting year is summarized below.

1. Public Education and Outreach

The City committed to perform activities and services related to the Public Education and Outreach minimum control measure under BMP numbers A.1, A.3, and A6. The status or progress for each of the measurable goals related to these BMPs is presented below.

BMP No. A1 – Distributed Educational Material

Brief Description of BMP: The City makes materials available to the public pertaining to stormwater quality education.

Milestone: Develop a storm water education poster

BMP Status: Stormwater quality education materials are located on the City's website for public use. The City partners with the Lower DuPage River Watershed Coalition and Lower DuPage River Watershed Group for education and outreach, which has additional stormwater quality and pollution prevention activities and materials on its website. Educational materials covered various water conservation, pollution prevention, and rain barrel topics this reporting year.

Stormwater quality education materials were distributed at Star Wars Day on June 4, 2022, Slammer's Water Conservation Day on June 14, 2022, Fairmont Water Transfer Meeting on June 15, 2022, APWA Demo Day on August 1, 2022, and Kidzfest on August 8, 2022.

BMP No. A3 – Public Service Announcement

Brief Description of BMP: Public/cable education spot addressing storm water education.

Milestone: Produce and air a series of ads on local or cable television addressing storm water education to the public. The ads will rotate and air once a month.

BMP Status: A digital billboard ad for catch basin cleaning was created. The City uses billboards, Pace bus ads, and Eblasts for periodic water topics.

BMP No. A6 – Other Public Education

Brief Description of BMP: A section of the City’s website is dedicated to help educate the public on storm water quality.

Milestone: The City will expand the website to include additional information and links to proposed public programs. Expand on the Sustainability page information.

BMP Status: The City expanded its website to include information on its updated rain barrel program implemented through The Conservation Foundation.

The City continues to provide storm drain stenciling as needed.

2. Public Participation/Involvement

The City committed to perform activities and services related to the Public Participation/Involvement minimum control measure under BMP number B.7. The status or progress for the measurable goal related to these BMP is presented below.

BMP No. B.7 – Other Public Involvement

Brief Description of BMP: An outreach program with local educational institutions will be developed to educate residents on storm water issues. Educational programs will be established and maintained each year.

Milestone: Provide education and teaching aides.

BMP Status: The City holds open public meetings to provide an opportunity for residents to ask questions about water quality issues. The MS4 program NOI, stormwater management plan, and annual reports are available on the City’s Public Works Stormwater webpage.

An MS4 program update was provided at a public meeting on December 5, 2022.

The City’s public outreach campaign includes asking residents to “Adopt a Catch Basin” and clear it of debris as part of routine yard work. This is promoted on the City’s digital billboards which display over 20,000 times per year.

Public volunteers assisted with the Broadway Greenway Park Cleanup on April 14, 2023. Planning for this event took place during the reporting year.

3. Illicit Discharge Detection and Elimination

The City committed to perform activities related to the Illicit Discharge Detection and Elimination minimum control under BMP numbers C.1, C.2, C.4, C7, and C.8. The status or progress for each of the measurable goals related to these BMPs is presented below.

BMP No. C1 – Storm Sewer Map Preparation

Brief Description of BMP: Develop a separate storm sewer system map.

Milestone: Update the GIS storm sewer system map as new information becomes available.

BMP Status: The City has developed a storm sewer system map and converted 100% to GIS format to provide greater accessibility. Each year, the GIS maps are updated to include any new storm sewer pipes, outfalls and receiving water.

BMP No. C2 – Regulatory Control Program

Brief Description of BMP: The City will expand the program that indicates the restrictions of discharging non-stormwater into the storm sewer system, detects these discharges before they become a problem, and establish enforcement procedures.

Milestone: Educate staff on the application of the revised policies and maintain the program.

BMP Status: The City has developed an ordinance that prohibits illicit discharges into the storm drain system. Staff have been trained on the job on revised polices and program implementation.

BMP No. C4 – Illicit Discharge Tracing Procedures

Brief Description of BMP: Modify the complaint tracking system to identify illegal connections and illicit discharges to record locations on the GIS system and document previous actions. Make this information available to field staff to ensure resolution. Develop written notification with tracking system to ensure future compliance.

Milestone: Produce yearly summaries of known, new, and eliminated sources.

BMP Status: The City has a complaint tracking system to track illegal connections and illicit discharges on its GIS system. Field staff have access to the GIS to aid in resolutions.

BMP No. C.7 – Visual Dry Weather Screening

Brief Description of BMP: Areas with suspicious discharges will be inspected to determine suspected direct connections to the wastewater system and identify areas

where wastewater might be leaking into adjacent storm drain pipes. Approximately 25% of storm outfalls are to be screened each year with high priority locations screened on an annual basis.

Milestone: Inspect / screen stormwater outfalls. Educate staff and public on identifying suspicious discharges.

BMP Status: The City performed dry weather screening at 214 of the City's 283 outfalls during the reporting period. No illicit discharges or illegal connections were noted.

BMP No. C.8 – Pollutant Field Testing

Brief Description of BMP: Each year a number of storm water drain system outfalls will be sampled and tested to identify outfalls with illicit discharges.

Milestone: Maintain program.

BMP Status: Any outfalls with active flows were tested using a hand held multi-parameter probe.

4. Construction Site Runoff Control

The City committed to perform activities and services related to the Construction Site Runoff Control minimum control measure under BMP numbers D.5, D.6, and D.7

BMP No. D5 – Public Information Handling Procedures

Brief Description of BMP: The City will expand the tracking process whereby public complaints, concerns, permits, etc. are logged to include Public Works / Roadways issues. The tracking process will be implemented throughout the life of the storm water management program.

Milestone: Maintain the tracking process.

BMP Status: Due to software modification issues, the online system has not been developed. Public information is tracked within the City file network using Gov Outreach and Vueworks.

BMP No. D6 – Site Inspection/Enforcement Procedures

Brief Description of BMP: Perform site inspections and initiate enforcement procedures as needed.

Milestone: Investigate alternate methods to reduce amounts of large scale soil stripping. Educate public on new soil stripping policies

BMP Status: The City implemented the County and local ordinance for stormwater BMPs / controls at construction sites. Active construction sites are inspected weekly. The inspector filed multiple site inspection reports, and the observed deficiencies were given to the on-site contractor/foreman for correction and followed up. The City utilized project phasing to minimize large-scale soil stripping through the platting and bonding processes.

BMP No. D7 – Other Construction Site Runoff Controls

Brief Description of BMP: The City will modify the existing requirements for storm water pollution prevention program for construction site operators to include the use of catch all inlet protectors instead of filter fabric, and define the procedure for site dewatering during construction.

Milestone: Maintain the requirements through site review and staff training.

BMP Status: Site review and on the job staff training was performed as needed.

5. Post-Construction Runoff Control

The City committed to perform activities and services related to the Post-Construction Site Runoff Control minimum control measure under BMP numbers E.5 and E.6. The status or progress for each of the measurable goals related to these BMPs is presented below.

BMP No. E5 – Site Inspection During Construction

Brief Description of BMP: The City will develop coordinating procedure between staff and Certified Site Operation inspected sites, an inspection check sheet, and establish penalties and consequences for non-compliance.

Milestone: Provide additional staff education on current policies.

BMP Status: The City implemented the County and local ordinance for post-construction stormwater BMPs / controls for new development. The City developed coordinating procedures between staff and Certified Site Operation inspected sites, inspection check sheets, and established penalties and consequences for non-compliance. The City continues to perform inspections and maintain the procedures.

BMP No. E.6 –Post Construction Inspections

Brief Description of BMP: The City has identified priority sites that warrant inspections before and after significant rain events.

Milestone: Maintain inspections. Prepare site maps showing the location of priority sites.

BMP Status: The City identified priority sites by maintenance district and provided them to each district foreman for inspection before and after significant rain events. The City performed the inspections and will add additional priority sites as necessary.

6. Pollution Prevention/Good Housekeeping

The City committed to perform activities for BMP numbers F.1 and F.2. The status or progress for each of the measurable goals related to these BMPs is presented below.

BMP No. F1 – Employee Training Program

Brief Description of BMP: The City will run a staff education program to train City staff regarding the importance of storm water pollution and good housekeeping practices.

Milestone: Maintain the program and continue to train staff within the storm water training program.

BMP Status: The City provided pollution prevention training for management and maintenance staff. Facility and equipment use BMP training occurs as part of operations throughout the year.

BMP No. F2 – Inspection and Maintenance Program

Brief Description of BMP: Establish a tracking method to document the street sweeping debris, grate cleaning, and ditch cleaning with quarterly summaries.

Milestone: Begin transition to online tracking using MS4 program. Add additional locations, including ditch & sewer grate cleaning to tracking log.

BMP Status: The City has identified priority sites that warrant inspections before and after significant rain events. The City established a tracking method with quarterly summaries to document street sweeping debris, grate cleaning, and ditch cleaning. The transition to an online system has been delayed due to software development issues.

The City inspected and maintained a portion of its stormwater system. Catch basin cleaning was performed by the street sweepers and on an as needed basis by hand by City crews. Downtown streets were swept every night Monday through Friday. On average, every street is swept 6 times a year removing over 630 tons of debris that otherwise would be discharged into the local waterways.

Road salt and deicing chemicals are stored in a permanent structure, protected from rainfall and stormwater runoff. Salt spreading equipment is routinely calibrated.

The City operates and maintains a municipal rain garden at 900 Westwood Avenue. This garden filters and cleans storm water from approximately 12 city blocks before being discharged to the Des Plaines River. In addition to removing dirt, debris and road salt, the site also reduces the volume of storm water discharge that previously contributed to local flooding problems. Maintenance is performed each year, including invasive plant control and debris removal.

Part C. Information and Data Collection Results

The City is an active member of the Lower DuPage Watershed Coalition and the Lower Des Plaines Watershed Workgroup and their regional water quality monitoring programs. Data collected is available for public use and may be used for program evaluation and implementation.

The Lower DuPage Watershed Coalition and the Lower Des Plaines Watershed Workgroup activities summary reports are attached to this report.

Part D. Summary of Planned Stormwater Activities

The following table summarizes the BMPs committed to for the next program implementation year. Specific BMPs and measurable goals are presented following the table.

Note: X indicates BMP commitment

| | |
|---|---|
| | |
| MS4 | |
| A. Public Education and Outreach | |
| X | A.1 Distributed Paper Material |
| | A.2 Speaking Engagement |
| X | A.3 Public Service Announcement |
| | A.4 Community Event |
| | A.5 Classroom Education Material |
| X | A.6 Other Public Education |
| B. Public Participation/Involvement | |
| X | B.1 Public Panel |
| | B.2 Educational Volunteer |
| | B.3 Stakeholder Meeting |
| | B.4 Public Hearing |
| | B.5 Volunteer Monitoring |
| | B.6 Program Coordination |
| X | B.7 Other Public Involvement |
| C. Illicit Discharge Detection and Elimination | |
| X | C.1 Storm Sewer Map Preparation |
| X | C.2 Regulatory Control Program |
| | C.3 Detection/Elimination Prioritization Plan |
| X | C.4 Illicit Discharge Tracing Procedures |
| | C.5 Illicit Source Removal Procedures |
| | C.6 Program Evaluation and Assessment |
| X | C.7 Visual Dry Weather Screening |
| X | C.8 Pollutant Field Testing |
| | C.9 Public Notification |
| | C.10 Other Illicit Discharge Controls |

| | |
|--|--|
| | |
| MS4 | |
| D. Construction Site Runoff Control | |
| X | D.1 Regulatory Control Program |
| | D.2 Erosion and Sediment Control BMPs |
| | D.3 Other Waste Control Program |
| | D.4 Site Plan Review Procedures |
| X | D.5 Public Information Handling Procedures |
| X | D.6 Site Inspection/Enforcement Procedures |
| X | D.7 Other Construction Site Runoff Controls |
| E. Post-Construction Runoff Control | |
| | E.1 Community Control Strategy |
| | E.2 Regulatory Control Program |
| | E.3 Long Term O&M Procedures |
| | E.4 Pre-Const Review of BMP Designs |
| X | E.5 Site Inspections During Construction |
| X | E.6 Post-Construction Inspections |
| | E.7 Other Post-Const Runoff Controls |
| F. Pollution Prevention/Good Housekeeping | |
| X | F.1 Employee Training Program |
| X | F.2 Inspection and Maintenance Program |
| X | F.3 Municipal Operations Storm Water Control |
| X | F.4 Municipal Operations Waste Disposal |
| | F.5 Flood Management/Assess Guidelines |
| X | F.6 Other Municipal Operations Controls |

1. Public Education and Outreach

The City will perform activities and services related to the Public Education and Outreach minimum control measure. BMPs will be implemented under BMP number A.1, A.3, and A.6 as described below

BMP No. A1 – Distributed Educational Materials

Brief Description of BMP: The City makes materials available to the public pertaining to stormwater quality education. Stormwater quality education materials are located on the City’s website for public use. The City partners with the Lower DuPage River Watershed Coalition and Lower DuPage River Watershed Group for education and outreach, which has additional stormwater quality and pollution prevention activities and materials on its website.

Measurable Goal(s), including frequencies: The City will continue to update its educational material each year.

Milestones: Continue to provide resident educational material each year. Maintain and update the website.

BMP No. A3 – Public Service Announcement

Brief Description of BMP: The City uses local and cable television to promote stormwater education.

Measurable Goal(s), including frequencies: Produce and air a series of ads on local or cable television addressing storm water education to the public. The ads will rotate and air once a month.

Milestones: Continue implementation.

BMP No. A6 – Other Public Education

Brief Description of BMP: A section of the City’s website is dedicated to help educate the public on storm water quality.

Measurable Goal(s), including frequencies: The City will maintain the website to include additional information and links to proposed public programs.

Milestones: Maintain the website public education information.

2. Public Participation/Involvement

The City will perform activities and services related to the Public Participation/Involvement minimum control measure BMPs will be implemented under BMP number B.1 and B.7 as described below.

BMP No. B1 – Public Panel

Brief Description of BMP: The stormwater program is presented at a public meeting to inform the public and provide an opportunity for input. The MS4 program NOI, stormwater management plan, and annual reports are available on the City’s Public Works Stormwater webpage.

Measurable Goal(s), including frequencies: Annually present the stormwater program at a public meeting.

Milestones: Presentation at a public meeting.

BMP No. B7 – Other Public Involvement

Brief Description of BMP: The City developed an outreach program with local educators to encourage resident education on storm water.

Measurable Goal(s), including frequencies: Educational programs will be established and maintained each year.

Milestones: Continue implementation.

3. Illicit Discharge Detection and Elimination

The City commits to perform activities related to the Illicit Discharge Detection and Elimination minimum control. BMPs will be implemented under BMP numbers C.1, C.2, C.4, C.7, and C.8 as described below.

BMP No. C1 – Storm Sewer Map Preparation

Brief Description of BMP: The City has a drafted storm sewer system map. It is being converted to GIS format to provide greater accessibility.

Measurable Goal(s), including frequencies: The City will continue to convert its separate storm sewer map into GIS format until is 100% complete and incorporate any new storm sewer pipes, outfalls, and receiving waters.

Milestones: Update the GIS storm sewer system map as new information becomes available.

BMP No. C2 – Regulatory Control Program

Brief Description of BMP: The City will expand the portions of its regulatory program concerning non-stormwater discharges to storm system.

Measurable Goal(s), including frequencies: The City will implement the program that indicates the restrictions of discharging non-stormwater into the storm sewer system, detects these discharges before they become a problem, and establish enforcement procedures.

Milestones: Continue implementation.

BMP No. C4 – Illicit Discharge Tracing Procedures

Brief Description of BMP: The City currently has a complaint tracking system which it will expand to include illegal and illicit discharge complaints on its current GIS system.

Measurable Goal(s), including frequencies: The complaint tracking system will be modified to identify illegal connections and illicit discharges on its GIS system. Field staff have access to the GIS to aid in resolutions.

Milestones: Maintain the tracking program.

BMP No. C7 – Visual Dry Weather Screening

Brief Description of BMP: The City inspects suspicious discharges to determine if they are directly connected or leaking into to the sanitary sewer.

Measurable Goal(s), including frequencies: The City will continue inspecting the storm system.

Milestones: Maintain the survey system.

BMP No. C.8 – Pollutant Field Testing

Brief Description of BMP: Each year a number of storm sewer outfalls along with critical outfall locations will be inspected and sampled to identify illicit discharges.

Measurable Goal(s), including frequencies: Approximately 25% of storm outfalls to be inspected and sampled each year with critical locations tested on a yearly basis.

Milestones: Continue implementation.

4. Construction Site Runoff Control

The City will perform activities and services related to the Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP numbers D.1, D.5, D.6, and D.7 as described below.

BMP No. D1 – Regulatory Control Program

Brief Description of BMP: The current ordinance requires a party proposing to perform site grading, stripping, excavating, or filling of land to submit a site permit. The party must describe sediment and erosion control measures on the permit. The City also utilizes field inspectors to monitor these measures and enforce the City's requirements through routine inspections. The City also performs site review programs to review the individual pre-construction sites to ensure consistency with the sediment and erosion control requirements.

Measurable Goal(s), including frequencies: The City will perform site inspections to enforce the ordinance.

Milestones: Implement the control ordinance.

BMP No. D5 – Public Information Handling Procedures

Brief Description of BMP: The City will expand its tracking process whereby public complaints, concerns, permits, etc. are logged to include Public Works/Roadway issues.

Measurable Goal(s), including frequencies: The tracking process will be implemented throughout the life of the storm water management program.

Milestones: Maintain the tracking process.

BMP No. D6 – Site Enforcement/Inspection Procedures

Brief Description of BMP: The City will modify the bonding and letter of credit process to account for long extended long-term site stabilization funding.

Measurable Goal(s), including frequencies: The procedures will be implemented throughout the life of the storm water management.

Milestones: Educate public on new soil stripping policies.

BMP No. D7 – Other Construction Site Runoff Controls

Brief Description of BMP: The City modified the existing requirements for its storm water pollution prevention program for construction site operators. It now includes the use of catch-all inlet protectors instead of filter fabric. The City also modified its procedures for construction site dewatering.

Measurable Goal(s), including frequencies: The requirements will continue to be maintained.

Milestones: Continue implementation. Maintain policies.

5. Post-Construction Runoff Control

The City will perform activities and services related to the Post-Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP numbers E.5 and E.6. as described below.

BMP No. E.5 – Site Inspection During Construction

Brief Description of BMP: The City developed coordinating procedures between staff and Certified Site Operation inspected sites, inspection check sheets, and establish penalties and consequences for non-compliance.

Measurable Goal(s), including frequencies: Site inspection procedures will be maintained.

Milestones: Continue implementation.

BMP No. E.6 – Post-Construction Inspections

Brief Description of BMP: The City identified priority sites that warrant inspections before and after significant rain events.

Measurable Goal(s), including frequencies: Priority sites will continue to be inspected and new sites added as necessary.

Milestones: Continue implementation.

6. Pollution Prevention/Good Housekeeping

The City will perform activities and services related to the Pollution Prevention/Good Housekeeping minimum control measure. BMPs will be implemented under BMP numbers F.1, F.2, F.3, F.4, and F.6 as described below.

BMP No. F1 – Employee Training Program

Brief Description of BMP: The City runs education programs to train City staff on the importance of stormwater pollution prevention and good housekeeping practices.

Measurable Goal(s), including frequencies: The staff training program will continue to be maintained.

Milestones: Continue implementation.

BMP No. F2 – Inspection and Maintenance Program

Brief Description of BMP: The City established a tracking method with quarterly summaries to document street sweeping debris, grate cleaning, and ditch cleaning.

Measurable Goal(s), including frequencies: Continue the tracking and documenting cleaning efforts.

Milestones: Maintain and utilize the tracking process.

BMP No. F3 – Municipal Operations Storm Water Control

Brief Description of BMP: The City will implement a City-wide street sweeping program.

Measurable Goal(s), including frequencies: Provide street sweeping six times per year, on average.

Milestones: Implement a street sweeping program.

BMP No. F4 – Municipal Operations Waste Disposal

Brief Description of BMP: Waste vehicle fluids and materials are stored in appropriate containers for recycling or proper disposal.

Measurable Goal(s), including frequencies: Properly dispose or recycle vehicle fluids annually.

Milestones: Properly dispose or recycle vehicle fluids.

BMP No. F6 – Other Municipal Operations Control

Brief Description of BMP: The City will perform good housekeeping in facility waste storage areas.

Measurable Goal(s), including frequencies: Facility waste storage areas are swept clean and waste dumpsters lids are kept closed when not in use.

Milestones: Perform good housekeeping in facility waste storage areas.

Part E. Notice of Reliance on Another Government Entity

The City participates in the Lower DuPage Watershed Workgroup and Lower Des Plaines Watershed Workgroup for public education and participation activities, and to meet the monitoring requirements of the MS4 permit. The Lower DesPlaines Watershed Workgroup conducts monitoring once every 3 years. Efforts include bioassessment and DO monitoring.

All other MS4 permit activities are implemented by the City.

Part F. Construction Projects Conducted

The following construction projects which have a disturbed area greater than one (1) acre were active during the reporting period.

- Circle K Joliet ILR10AA42
- Joliet Intermodal Spring Creek Structure Construction ILR10AY30
- Joliet Header Project ILR10BQ10
- Love's Joliet, IL ILR10BQ29
- Joliet Cold Storage – Phase 3 ILR10Z834
- Belle Tire – Northwest Joliet ILR10ZA8V
- Belle Tire – Joliet ILR10ZA8W
- Proposed Retail Development – Joliet ILR10ZAQB
- Portillo's – Joliet ILR10ZAQH
- Joliet Youngs Ave Pl – SC9720 Project (WO#140780) ILR10ZB0V
- IDOT Contract 62C25. Nov '21 Letting Item (111 East Ave at Joliet Rd) ILR10ZBBI
- Deer Crossing – Joliet, IL – McNaughton Development ILR10ZBLI
- Food N Fuel – US Route 6 – Joliet ILR10ZBTJ
- Gas N Wash Caton Farm and Ridge – Joliet ILR10ZBTM
- Joliet New Business – NBA 10002869 (WO1911215/3911215) ILR10ZBYA
- Joliet – VNA Health Care ILR10ZC67
- Joliet DG, LLC ILR10ZC9E
- Joliet Ottawa Water Main Improvements ILR10ZCI6
- Third Coast Intermodal Hub ILR10ZBM2
- Site Improvement Plans for Cadence Marshalling & Staging Yard ILR10ZBOL
- 2903 Schweitzer Industrial Development and Schweitzer Road Extension ILR10ZBR3

- Rock Run Crossings Ecolab and Spec Building ILR10ZBR5
- Gas N Wash Caton Farm and Ridge-Joliet ILR10ZBTM
- Kozol Brothers - Warehouse Addition ILR10ZBVX
- Joliet New Business - NBA 10002869 (WO 1911215/3911215) ILR10ZBYA
- 2700 Ellis Road ILR10ZC02
- Kingsmen Industrial Park ILR10ZC13
- Joliet DG, LLC ILR10ZC9E
- Logistics Network Group Cherry Hill (20917) ILR10ZCJA



Lower Des Plaines Watershed Group ILR40 Activities March 2022 – February 2023

PART I. COVERAGE UNDER GENERAL 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 2022-2023 included:

- The joint website for the LDWG and Lower DuPage River Watershed Coalition has been maintained with updated information for the general public on local water quality issues and what they can do to help, as well as more information on the monitoring program, outreach program, NARP and Chloride TLWQS. The new URL is www.LDPWatersheds.org
- Watershed Outreach materials were developed and shared with member throughout the year. The “Outreach Materials” page on the website includes all past and present watershed outreach materials for download. Materials are organized by topic to make it easier to see what is available. Materials for each topic include text for websites, newsletters, posters, blogs and social media posts. The website also has a blog page with blogs for all of the topics that members can link to. The blog page also provides a place for site visitors to find information. Examples of materials created are 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 Des Plaines watershed, LDWG is an active partner in the Salt Smart Collaborative.

Watershed outreach topics:

- Spring – Pollinator Friendly Lawn Care, Proper Paint Disposal, and Vehicle Fluid Leaks and Maintenance, Garden Refresh Garden Designs
- Summer – At-home car washing, Green Infrastructure Overview, Rain barrels, River Responsible, Pet Waste

- Fall – Proper leaf collection/disposal, Green Infrastructure: Bioswales, Fish in our local streams
- Winter – Using Brine at Home, Water Softener Tips, Tools for Snow Removal

LDWG also maintains a Facebook page and posts all materials developed so that communities can just share the posts if that is easier.

<https://www.facebook.com/lowerdesplaineswatershedgroup>

2. *Public Involvement and Participation* – LDWG worked 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.

The LDWG and Lower DuPage River Watershed Coalition worked with The Conservation Foundation on promoting being “River Responsible” and worked with the Forest Preserve District of Will County and several park districts to create new signs to be installed at canoe launches.

Figure 1. River Responsible Launch Signs



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*

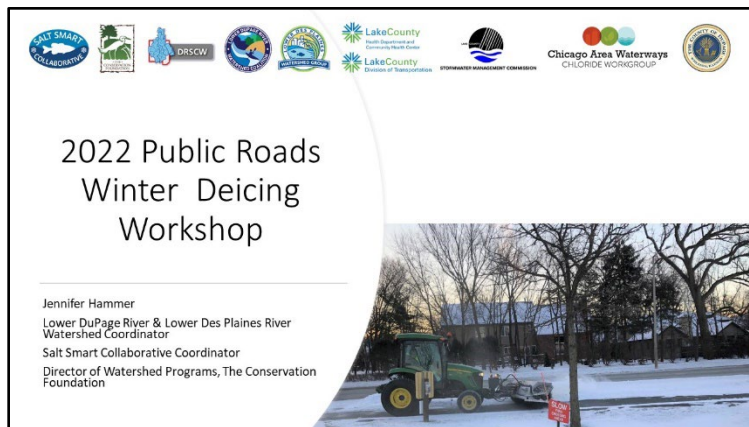
Chloride Reduction Workshops

In 2022 the LDWG partnered with Lower DuPage River Watershed Coalition, Chicago Area Waterways Chloride Workgroup, DRSCW, The Conservation Foundation and Lake County Stormwater/Health Department to jointly offer six Winter Deicing Workshops, four on Public Roads and two on Parking Lots and Sidewalks. Registration was widely advertised throughout northeastern Illinois. Accordingly, the webinars were attended by staff in DuPage, Will, Kane, Lake, McHenry, Boone, Cook and Winnebago counties as well as Milwaukee, WI.

Public Roads Deicing Workshops were held on September 27, October 5, October 6 and October 12, 2022. Fortin Consulting, Inc. from Minnesota was engaged to present the material. A registration fee was required per agency in order to participate in the training. The links were sharable so the webinars could be viewed individually or in groups. Based on polling results, a minimum of 644 people participated in the four workshops. The Parking Lots and Sidewalks Deicing Workshop were held on September 29 and October 11 with Fortin Consulting, Inc. presenting. Based on polling results a minimum of 262 people participated in the two workshops. 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. Questions from participants were entered into the chat and answered by Fortin Consulting staff, Workgroup staff as well as others participating in the training.



Figure 3. Welcome & Introduction to Parking Lots & Sidewalks Presentation, 2021.



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 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 mid-2022. 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 mid-2022. The remaining fourteen (14) tributaries were sampled in 2021 with a Bioassessment Report due in early 2023. 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 were 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 early 2023.

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 |
| Off year for sampling | 2022 | 0 |

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 exert 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 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.

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.

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.

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.

Figure 5. Lower Des Plaines River Bioassessment Stations. Year represents order of sampling within bioassessment 5-year cycle – 5th year no sampling.

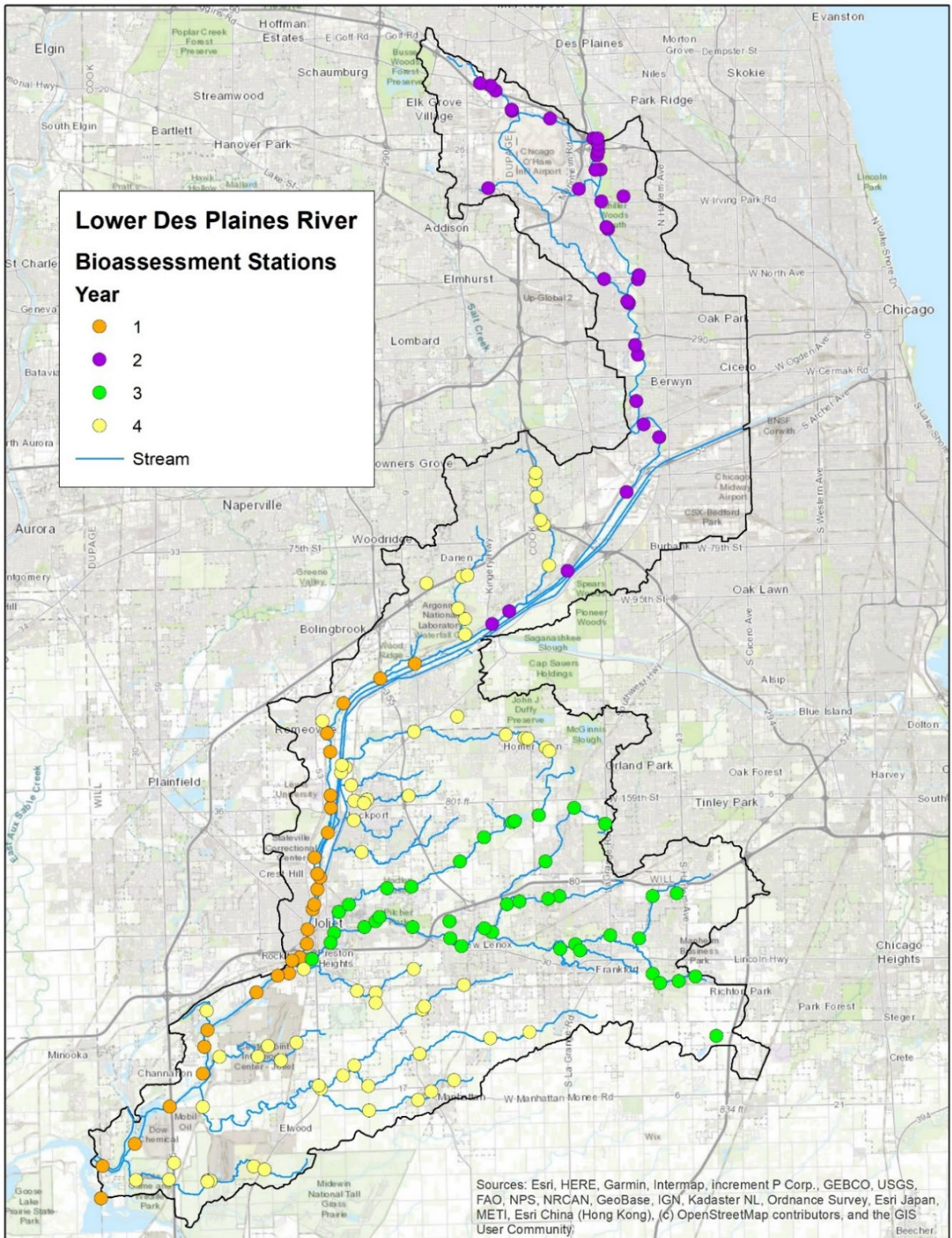
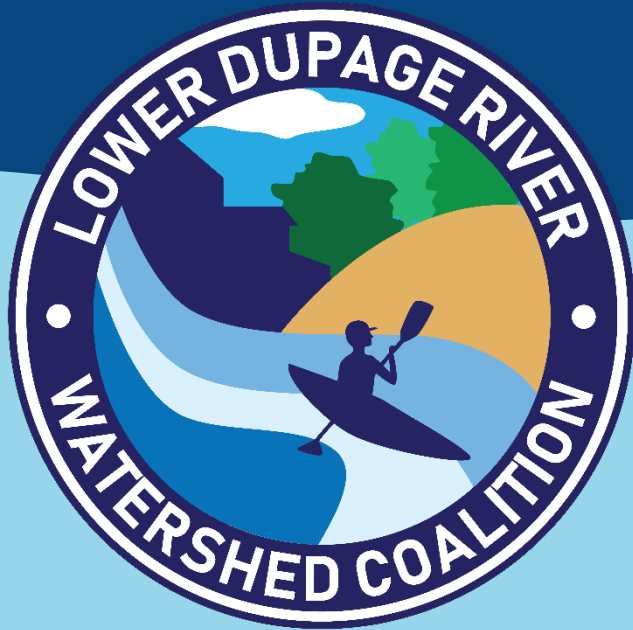


Table 2 Water Quality and sediment Parameters sampled as part of the LDWG Bioassessment Program.

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



2022 Watershed Outreach Summary

2022 Outreach Materials



The Scoop on Road Salt: How Chlorides Impact the Environment

Road salt is an important tool for maintaining safe roads, but it has negative consequences for the environment, plants, and infrastructure.

[READ MORE](#)

LOWER DUPAGE RIVER WATERSHED COALITION LOWER DES PLAINES WATERSHED GROUP

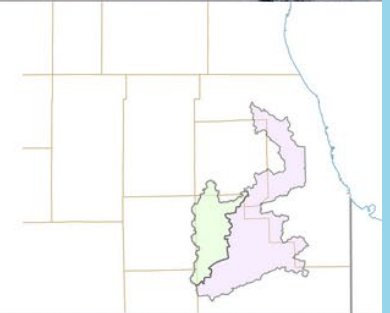
ABOUT US UNDERSTANDING OUR WATERSHED HOW YOU CAN HELP BLOG Q

OUR MISSION

Conserving and enhancing the rivers and streams that flow through our communities.

[LOWER DES PLAINES WATERSHED](#)

[LOWER DUPAGE WATERSHED](#)



Watershed U



Assessing Our Watershed



How You Can Help

www.LDPWatersheds.org

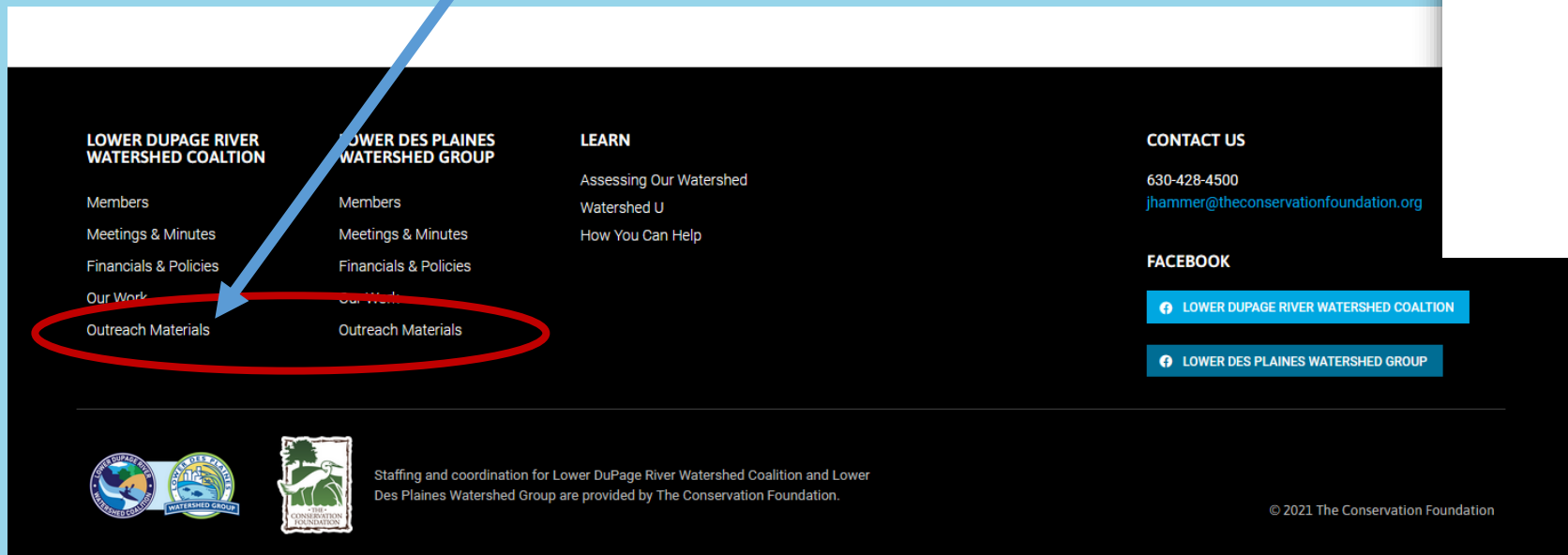
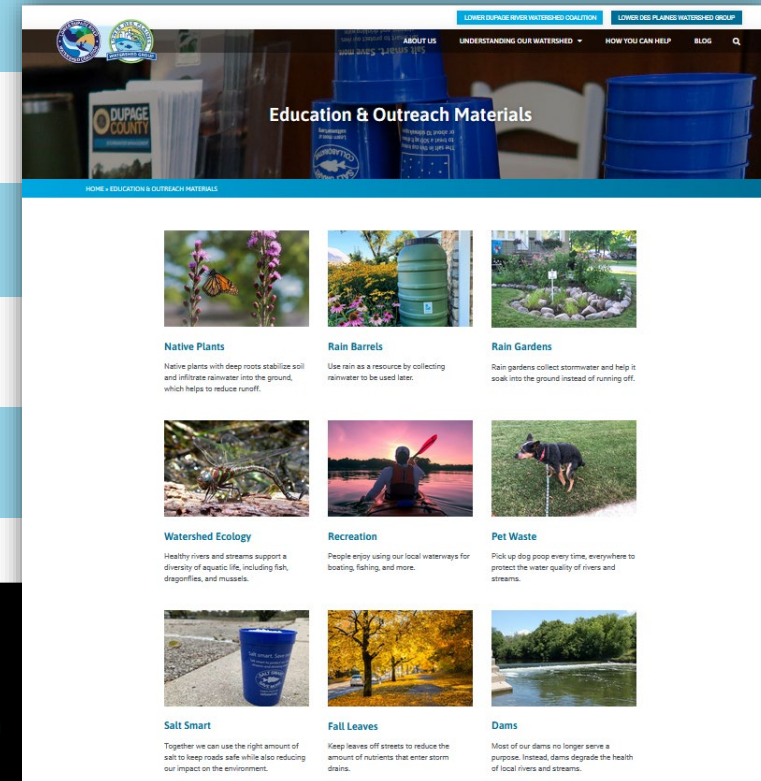


Outreach Materials

Where can I find outreach materials?

[LDPwatersheds.org/outreach](https://www.ldpwatersheds.org/outreach)

Bottom of any page on the website



All chloride-related materials are also available on www.saltsmart.org

Spring 2022 Outreach

Social Media Posts

Spring Topics:

- Pollinator-friendly lawn care
- Proper paint disposal
- Vehicle fluids, leaks, and maintenance

PROTECT YOUR HEALTH AND THE ENVIRONMENT.

Dispose of Household Hazardous Waste at a designated facility. Never dump chemicals down household drains or storm drains.



A properly maintained car protects the environment.

Fix vehicle leaks right away to protect clean water in rivers, streams, and lakes!

The next rainfall washes leaked oil, coolant, and other chemicals on pavement into storm drains.



FROM LAWN → TO HABITAT



Convert a section of turfgrass to a native plant garden!
Native plants clean and infiltrate stormwater and provide important food and habitat for birds, bees, and butterflies. Plus, you'll spend less time mowing your lawn!



RE-THINK YOUR LAWN.

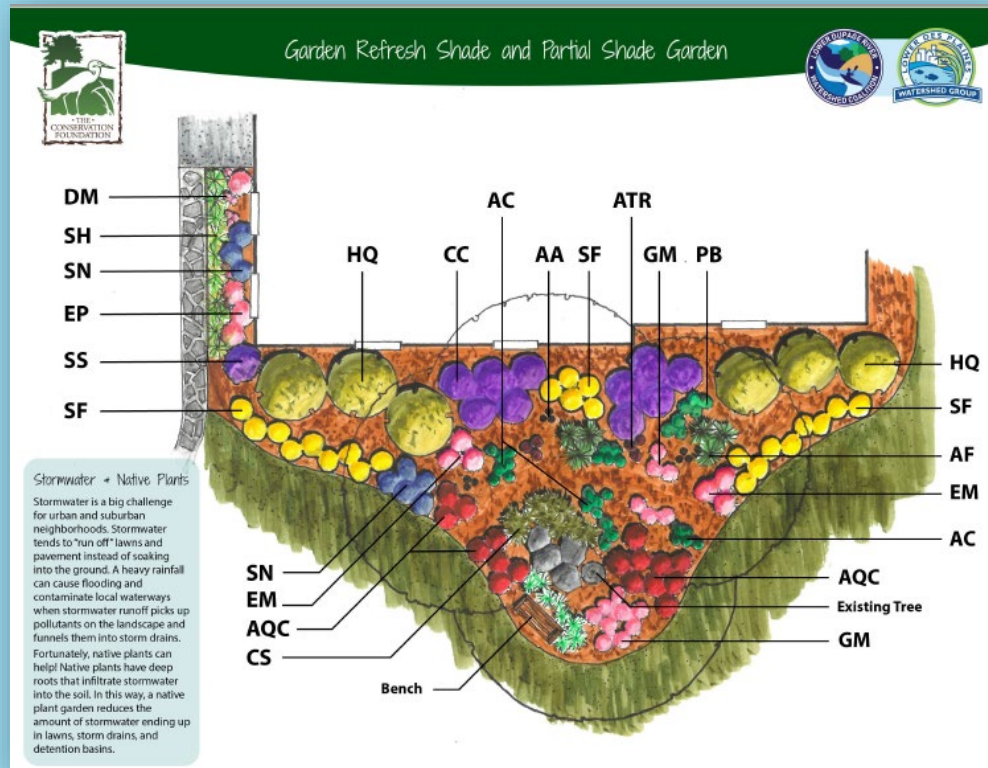
Your lawn can either discourage or help pollinators based on how you maintain it.

Reducing or eliminating herbicides and raising your mower to the highest setting will allow flowers in your lawn to bloom. These flowers are a crucial food source for bees in the spring!



Garden Refresh - 2022 Outreach

Garden Refresh Native Plant Garden Designs



Plant List
 These plants do well with medium soil moisture. Water as needed during dry spells.

| | | | |
|--|---|---|---|
| A - <i>Amelanchier arborea</i> 'utumn Brilliance' Spiceberry Height: 20-25 feet Width: 20-25 feet Bloom Color: white Bloom Season: April-May | CC - <i>Conoclinium coelestinum</i> Blue Mistflower Height: 18-36 inches Width: 18-36 inches Bloom Color: blue Bloom Season: July-October | AA - <i>Echinacea purpurea</i> Purple Coneflower Height: 2-5 feet Width: 1.5-2 feet Bloom Color: pinkish Bloom Season: June-August | SF - <i>Solidago flexicaulis</i> Zigzag Goldenrod Height: 24-36 inches Width: 24-36 inches Bloom Color: gold Bloom Season: July-September |
| C - <i>Asarum canadense</i> Wild Ginger Height: 6-8 inches Width: 8-12 inches Bloom Color: brown Bloom Season: April-May | CP - <i>Carex pensylvanica</i> Common Oak Sedge Height: 8-12 inches Width: 18-24 inches Bloom Color: brown Bloom Season: April-May | GM - <i>Geranium maculatum</i> Wild Geranium Height: 18-24 inches Width: 18-24 inches Bloom Color: pink Bloom Season: April-June | SH - <i>Sporobolus heterolepis</i> Prairie Dropseed Height: 24-36 inches Width: 24-36 inches Bloom Color: brown Bloom Season: August-September |
| F - <i>Athyrium filix-femina</i> Lady Fern Height: 24-36 inches Width: 18-24 inches | CS - <i>Carex sprengei</i> Long-Beaked Sedge Height: 18-24 inches Width: 18-24 inches Bloom Color: green Bloom Season: May | HQ - <i>Hydrangea quercifolia</i> 'Ruby Slippers' Ruby Slippers Oakleaf Hydrangea Height: 5-8 feet Width: 5-10 feet Bloom Color: pinkish-white Bloom Season: May-June | SN - <i>Symphoricarpos novae-angliae</i> 'Purple Dome' New England Aster Height: 18-24 inches Width: 24-36 inches Bloom Color: purple Bloom Season: September-October |
| QC - <i>Aquilegia canadensis</i> Wild Columbine Height: 18-24 inches Width: 8-12 inches Bloom Color: red Bloom Season: April-June | DM - <i>Dodecatheon meadia</i> Shooting Star Height: 12-18 inches Width: 6-8 inches Bloom Color: pink Bloom Season: April-June | PB - <i>Polygonatum biflorum</i> Smooth Solomon's Seal Height: 24-36 inches Width: 12-18 inches Bloom Season: May-July | SS - <i>Symphoricarpos sp. 'Sofie'</i> Proud Berry Coralberry Height: 3-4 feet Width: 3-4 feet Bloom Color: pinkish-white Bloom Season: July-August |
| TR - <i>Arisaema triphyllum</i> Pick-in-the-Pulpit Height: 12-18 inches Width: 12-18 inches Bloom Color: green Bloom Season: April-May | EM - <i>Eurybia macrophylla</i> Big-Leafed Aster Height: 24-26 inches Width: 3-4 feet Bloom Color: purple Bloom Season: August-September | PP - <i>Podophyllum peltatum</i> Mayapple Height: 12-18 inches Width: 12-18 inches Bloom Color: white Bloom Season: April-May | SYS - <i>Symphoricarpos shortii</i> Short's Aster Height: 24-36 inches Width: 24-36 inches Bloom Color: purple Bloom Season: August-October |



If you're adding native plants and practicing water conservation techniques at home, you may be eligible for certification through **Conservation@Home**, a program of The Conservation Foundation that recognizes homeowners who are creating environmentally-friendly yards. Learn more at www.theconservationfoundation.org/conservation-home



Summer 2022 Outreach

Be River Responsible!

We all want to have a great time out on the water. Be River Responsible to keep the river enjoyable for everyone.



Know Before You Go

Check flow conditions before you head out. High flows can create strong currents and reduce head space under bridges.



Play It Safe

Bring water, protect yourself from the sun, wear a life preserver, and wear shoes that will protect you from sharp objects on the stream bed.



Be Respectful

Be mindful of landowners and other paddlers as you travel down the river. Stay off private property and keep noise to a reasonable level.



Float In, Float Out

Whatever you take into the river must come back to shore with you, including empty containers, leftover bait, and used fishing line.



Just Because It Floats...

...doesn't mean it's river worthy. Only use floating devices designed for use in rivers and streams.



Let Nature Be

Be safe and give wildlife their space.



Stop Aquatic Hitchhikers

Invasive aquatic species, like zebra mussels, change the natural ecosystem. When exiting the water, remove animals, plants, and mud from your equipment—and then drain any water in your boat or containers.



What's That Sign?



Private Property

Much of the land along the river is private property. If you see one of these signs, it's a reminder to float on. Get in and out of the river at public launches only.

Useful Information

Forest Preserve Police
Non-Emergency Phone Number:
815-727-6191

Forest Preserve Website:
ReconnectWithNature.org

For maps and more information
about water trails across the region,
visit paddlillinoiswatertrails.org.



Private Land Please Paddle On



Landowner Sign

River Launch Sign



Continued Pet Waste Campaign



Remind residents to scoop the poop to protect water quality!



Fall 2022 Outreach

Fall Topics:

- Tips for clearing fall leaves
- Green infrastructure: bioswales
- Fish in our local rivers and streams



FISH IN OUR RIVER
Golden Shiner



FISH IN OUR RIVER
Shorthead Redhorse



AVOID FLOODS THIS FALL. BE SMART ABOUT YOUR LEAVES.

Leaves often block storm drains. Take care of your leaves at home, and remove leaves from streets and storm drains before it's expected to rain.



5 BENEFITS OF BIOSWALES:

- 1 Help prevent flooding
- 2 Reduce stormwater runoff
- 3 Recharge groundwater
- 4 Beautify the neighborhood
- 5 Provide food and habitat for birds, bees, and butterflies



Winter 2022 Outreach

Social Media Posts

Tools for Snow Removal

SCRAPER

OR ICE CHOPPER

- For icy patches that cannot be cleared with a shovel or snow blower.
- Scrape under the edge of the ice or chop the ice into pieces.



BE SALT SMART WITH WATER SOFTENERS!

Water softener salt passes through water treatment plants and is discharged into local rivers. To reduce water contamination, choose a salt-efficient water softener or consider a saltless water conditioner instead.



Snow plows will push snow into driveways when clearing roads.

This is unavoidable. Snow plows can't clear roads efficiently after a storm any other way.

Shoveling snow back into the street is against ordinance and will create dangerous conditions at the end of your driveway.

TIP : Pile snow to the right of the driveway to reduce the amount of snow that plows push into your driveway.



Tools for Snow Removal

BROOM

- Easily clears powdery or fluffy snowfall before it's deep or compacted.
- Large push brooms are useful for driveways and sidewalks. Smaller brooms are helpful for steps and smaller walkways.



Winter 2022 Outreach

Posters




HELP US GET TO YOUR STREET FASTER

KEEP STREETS CLEAR FOR SNOW PLOWS!

 Cars and garbage bins in the street slow down snow plows and make it harder to clear streets. If there is a forecasted snow storm, please keep cars and garbage bins in the driveway if possible. Visit saltsmart.org to learn more.

Created by The Conservation Foundation for the Lower DuPage River Watershed Coalition and the Lower Des Plaines Watershed Group.

Keep Streets Clear poster



LOSE THE CRUNCH


LOVE THE LINES

TOO MUCH SALT!

ANTI-ICING IN PROGRESS

CRUNCH!

SALT BRINE APPLIED BEFORE STORMS HELPS CLEAR SNOW FASTER AND USES LESS SALT

 Anti-icing lines keep roads, parking lots, and sidewalks safe. Plus, they waste less salt and cause less environmental harm — more reasons to **#LOVETHELINES**. Visit saltsmart.org to learn more.

Anti-icing poster
#LoveTheLines



Where Should You Salt?

First, Remove as much snow and ice by shoveling, snow blowing, or scraping. Then, apply salt on icy patches and pathways where people often walk.

- ✓ Apply salt on areas where it tends to be icy and slippery.
- ✓ Apply salt on icy areas where your family and visitors often walk.
- ✗ There's no need to put down salt where people never walk.



Where to Salt Graphic



Winter – Salt Smart

Safe Driving Poster/Graphic

Stay Safe on Snowy Streets!
Winter Driving Tips

- Don't Cruise Control**
Tires may spin too fast on icy roads and cause you to lose control.
- Don't Crowd the Plow**
Give plow drivers space to clear the road. Never pass a snow plow.
- When There's Snow, Go Slow**
Drive slowly through snow to stay in control of your car.
- Keep Your Distance**
Stopping on ice requires a greater distance. Increase your following distance and begin stopping sooner.
- Wait It Out**
If it's an option, stay home until the roads are clear.
- Build in Extra Time**
Clearing off your car and driving safely through the snow adds more time to your commute.
- Be Prepared**
Keep a winter emergency kit in your trunk. Include items like a blanket, jumper cables, and a small shovel.

SALT SMART COLLABORATIVE
LOWER DUPAGE RIVER WATERSHED COALITION
DESIGNATED WATERSHED GROUP

Snow + Ice Removal FAQ

Salt smart. Save more.

Snow and Ice Removal Frequently Asked Questions

How does salt work to remove snow and ice?
Rock salt, or sodium chloride, works by lowering the freezing point of water, causing ice to melt even when the temperature is below water's normal freezing point of 32 degrees. For the salt to work, a heat source is needed. The heat source can be air temperature above 15 degrees Fahrenheit, heat from the sun or friction from car tires driving over the salt and ice.

When the temperature drops below 15 degrees, rock salt is no longer effective at removing snow and ice. At very low temperatures, use a blend formulated for low temperatures that contains calcium chloride or magnesium chloride to help melt ice.

When will the street in front of my house be plowed?
During a snow storm, road crews generally begin clearing streets according to the following priorities:
First priority street routes – high-volume roadways and access to hospitals, police stations and fire stations.
Second priority street routes – streets that lead directly onto first priority street routes.
Third priority street routes – neighborhood streets and cul-de-sacs.

Why do some streets have less snow and ice when plowing is done?
Snow and ice removal plans try to provide consistent service, but some residential streets will be clearer than others due to certain factors, such as: when during the snow storm it is plowed, the amount of traffic on the road before and after plowing, the pavement temperatures and the type of pavement surface.

Why did I see a truck driving in snow with its blade up?
Sometimes plow trucks need to drive with their blades up. Trucks may drive with blades up when traveling to or from their route locations or maintenance facility in order to drive at normal speeds and avoid wearing out the plow blade when not on routes. Also, some trucks use an underbody blade for smaller snowfalls or spreading deicing materials.

Why is the snow plow operator driving so quickly down my street?
It might appear that snow plows are driving too fast for road conditions. Plows drive at around 25 MPH to efficiently clear snow and ice. The loud sound of plowing, flashing lights on the vehicle, snow discharge and sparks from contact between the plow blade and uneven road roadways may make the plow truck appear to be driving faster than it is.

Why is snow pushed in front of my driveway?
Snow plows are designed to push snow to the side, so it is inevitable for snow to collect at the end of driveways and sidewalks during plowing. Plows will make multiple passes down your street, which can cause additional snow to pile up at the end of your driveway after you have shoveled. Residents are responsible for clearing snow at the end of their driveway and at sidewalk crossings if they have a corner lot. It is illegal to shovel snow back into the roadway as this creates unsafe driving conditions.

If my driveway is plowed in and I shovel the snow back into the street, can crews come by and clean it up?
No. Putting snow back into the street is illegal and unsafe.

saltsmart.org

Bookmark

SALT SMART COLLABORATIVE
SAVE MORE

Together we can protect our local waterways by using the right amount of salt while keeping roads, driveways and sidewalks safe.

4 Steps to Be Salt Smart

- 1 Shovel first.**
Clear all snow from driveways and sidewalks before it turns to ice.
- 2 Size up.**
More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for 500 sq ft of driveway or about 10 sidewalk squares.
- 3 Spread.**
Distribute salt evenly, not in clumps.
- 4 Switch.**
Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to a deicer formulated for colder temperatures.

SALT SMART COLLABORATIVE

Winter – Salt Smart

Cups and bookmarks are available now – contact Jennifer or Lea to put in your order




Scatter cups



Bookmarks



Winter – Salt Smart



Brine at Home V2
Unlisted


Will County Watersheds
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Making Brine at Home



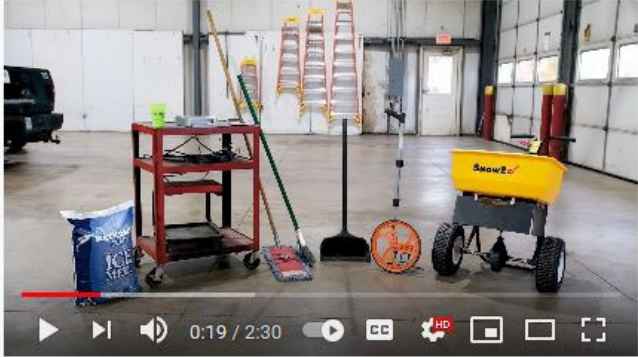
More Isn't Always Better | Salt Smart

39 views 1 like 0 comments SHARE SAVE ...

Will County Watersheds SUBSCRIBED

Apply salt sparingly this winter to protect the quality of rivers and streams in Illinois.
Learn more at <http://saltsmart.org/>

Fun PSA for Residents



How to Calibrate a Walk Behind Salt Spreader

45 views 3 likes 0 comments SHARE SAVE ...

Will County Watersheds SUBSCRIBED

Salt needs to be spread at the correct application rate to effectively melt ice and to prevent wasting resources and water pollution. You'll need to calibrate your broadcast spreader to make sure it's at the right application rate.

Salt Spreader Calibration Tutorial



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Lower Des Plaines Watershed Group

Send message
Typically replies in days

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Photos [See all photos](#)

Water Saving Tip: Monitor your water bill for any irregular water usage. A higher than average water bill may indicate that you have a leak, a clogged toilet, or an outdoor faucet.

Water Saving Tip: Switching to a low-flow showerhead and limiting shower time can save up to 2.8 gallons of water per minute.

Water Saving Tip: Landscaping with plants that need less water. Perennial plants often have very little water when established.

WATER SOFTENERS ARE A SOURCE OF SALT CONTAMINATION IN LOCAL WATERWAYS. Wastewater treatment plants discharge treated water into creeks and rivers. However, not local water treatment plants are unable to remove salt from water, so all the salt that's added to your water softens ends up in rivers.

Tools for Snow Removal: **SALT**

- Use after you have cleared as much snow and ice as possible with other tools.
- Don't waste salt. Scatter salt with spreaders or granules. A thick layer of salt won't melt the snow faster.
- More Salt Does Not Mean More Safe.

Tools for Snow Removal: **SHOVEL**

- Great for managing dry to medium-wet snow.
- Comes in many different designs. Some are suited to pushing snow. Others have an ergonomic handle to reduce back strain.

Tools for Snow Removal: **SCRAPER** OR ICE CHOPPER

- For icy patches that cannot be removed with a shovel or snow blower.
- Scrapes under the edge of the ice or chips the ice away.

Tools for Snow Removal: **SNOW BLOWER**

- Can save hours of work in the winter if you have a large driveway.
- Can come with a big price tag, especially for models powered by gas or electricity.

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SALT SMART COLLABORATIVE

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Lower DuPage River Watershed Coalition

Naperville, IL, United States, Illinois

(630) 428-4500

ldpwatersheds.org

Star not yet rated (1 Review)

Lower DuPage River Watershed Coalition
October 25, 2022 · 🌐

Bioswales are vegetated channels that collect and infiltrate stormwater into the soil. They reduce runoff, recharge groundwater, and can be planted with beautiful native flowers. Learn more about bioswales in our blog at <https://ldpwatersheds.org/bioswales-reduce-flooding-and.../>

Photos [See all photos](#)

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5 BENEFITS OF BIOSWALES:

- 1 Help prevent flooding
- 2 Reduce stormwater runoff
- 3 Recharge groundwater
- 4 Beautify the neighborhood
- 5 Provide food and habitat for birds, bees, and butterflies

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Will County Watershed YouTube Channel

The screenshot displays the YouTube channel page for "Will County Watersheds". The channel name is "Will County Watersheds" with the handle "@willcountywatersheds7949", 6 subscribers, and 35 videos. The channel description reads: "The Lower DuPage River Watershed Coalition brings together municipalitie...".

The video grid shows the following content:

- December 2022:** "Membership Meeting" (43:02), titled "GMT20221201 155945 Recording 1920x1080", 12 views, 3 months ago.
- September 2022:** "Membership Meeting" (43:54), titled "September 2022 Membership Meeting | Lower Des Plaines River Watershed Group", 18 views, 5 months ago.
- July 2022:** "Membership Meeting" (40:02), titled "July 2022 Membership Meeting | Lower Des Plaines Watershed Group", 24 views, 7 months ago.
- May 2022:** "Membership Meeting" (1:05:09), titled "May 2022 Member Meeting | Lower Des Plaines Watershed Group", 29 views, 9 months ago.
- March 2022:** "Membership Meeting" (37:47), titled "Membership Meeting March 2022".
- January 2022:** "Membership Meeting" (1:20:38), titled "Membership Meeting January 2022".
- January 2022:** "Membership Meeting" (1:23:06), titled "Membership Meeting January 2022".

The channel navigation tabs include HOME, VIDEOS, PLAYLISTS, COMMUNITY, CHANNELS, and ABOUT. The left sidebar shows navigation options like Home, Shorts, Subscriptions, Library, History, Your videos, Watch later, and a list of subscriptions including "The Conservation F...", "Forest Preserve Dis...", and "Journey to the M...".



Lower DuPage River Watershed Coalition ILR40 Activities March 2022 – February 2023

PART I. COVERAGE UNDER GENERAL 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

LDRWC outreach activities for 2021-2022 included:

- The joint website for the LDRWC and Lower Des Plaines Watershed Group has been maintained with updated information for the general public on local water quality issues and what they can do to help, as well as more information on the monitoring program, outreach program, NARP and Chloride TLWQS. The new URL is www.LDPWatersheds.org
- Watershed Outreach materials were developed and shared with member throughout the year. The “Outreach Materials” page on the website includes all past and present watershed outreach materials for download. Materials are organized by topic to make it easier to see what is available. Materials for each topic include text for websites, newsletters, posters, blogs and social media posts. The website also has a blog page with blogs for all of the topics that members can link to. The blog page also provides a place for site visitors to find information. Examples of materials created are 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, LDRWC is an active partner in the Salt Smart Collaborative.

Watershed outreach topics:

- Spring – Pollinator Friendly Lawn Care, Proper Paint Disposal, and Vehicle Fluid Leaks and Maintenance, Garden Refresh Garden Designs
- Summer – At-home car washing, Green Infrastructure Overview, Rain barrels, River Responsible, Pet Waste

- Fall – Proper leaf collection/disposal, Green Infrastructure: Bioswales, Fish in our local streams
- Winter – Using Brine at Home, Water Softener Tips, Tools for Snow Removal

LDRWC also maintains a Facebook page and posts all materials developed so that communities can just share the posts if that is easier. <https://www.facebook.com/lowerdupageriverwc>

2. *Public Involvement and Participation* – LDRWC worked 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.

The LDRWC and Lower Des Plaines Watershed Group worked with The Conservation Foundation on promoting being “River Responsible” and worked with the Forest Preserve District of Will County and several park districts to create new signs to be installed at canoe launches.

Figure 1. River Responsible Launch Signs



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

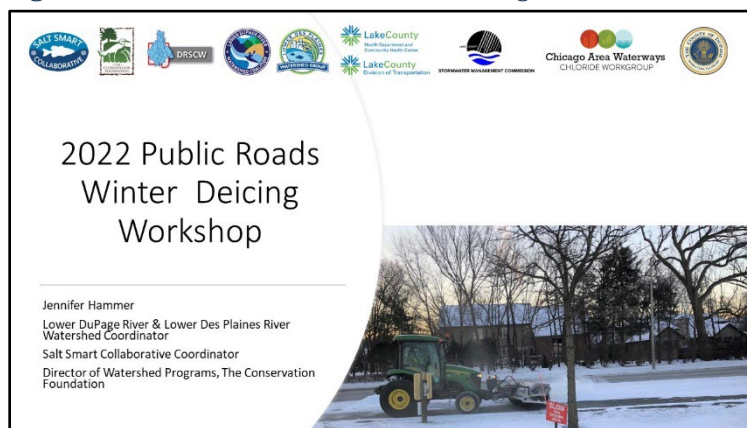
Chloride Reduction Workshops

In 2022 the LDWG partnered with Lower DuPage River Watershed Coalition, Chicago Area Waterways Chloride Workgroup, DRSCW, The Conservation Foundation and Lake County Stormwater/Health Department to jointly offer six Winter Deicing Workshops, four on Public Roads and two on Parking Lots and Sidewalks. Registration was widely advertised throughout northeastern Illinois. Accordingly, the webinars were attended by staff in DuPage, Will, Kane, Lake, McHenry, Boone, Cook and Winnebago counties as well as Milwaukee, WI.

Public Roads Deicing Workshops were held on September 27, October 5, October 6 and October 12, 2022. Fortin Consulting, Inc. from Minnesota was engaged to present the material. A registration fee was required per agency in order to participate in the training. The links were sharable so the webinars could be viewed individually or in groups. Based on polling results, a minimum of 644 people participated in the four workshops. The Parking Lots and Sidewalks Deicing Workshop were held on September 29 and October 11 with Fortin Consulting, Inc. presenting. Based on polling results a minimum of 262 people participated in the two workshops. 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. Questions from participants were entered into the chat and answered by Fortin Consulting staff, Workgroup staff as well as others participating in the training.



Figure 3. Welcome & Introduction to Parking Lots & Sidewalks Presentation, 2021.



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 and 2021. 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 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 are posted on the LDRWC at <https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/reports-resources/>. 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 exert 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 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 5.

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 4. Lower DuPage River Watershed bioassessment monitoring sites for 2015, 2018 and 2021

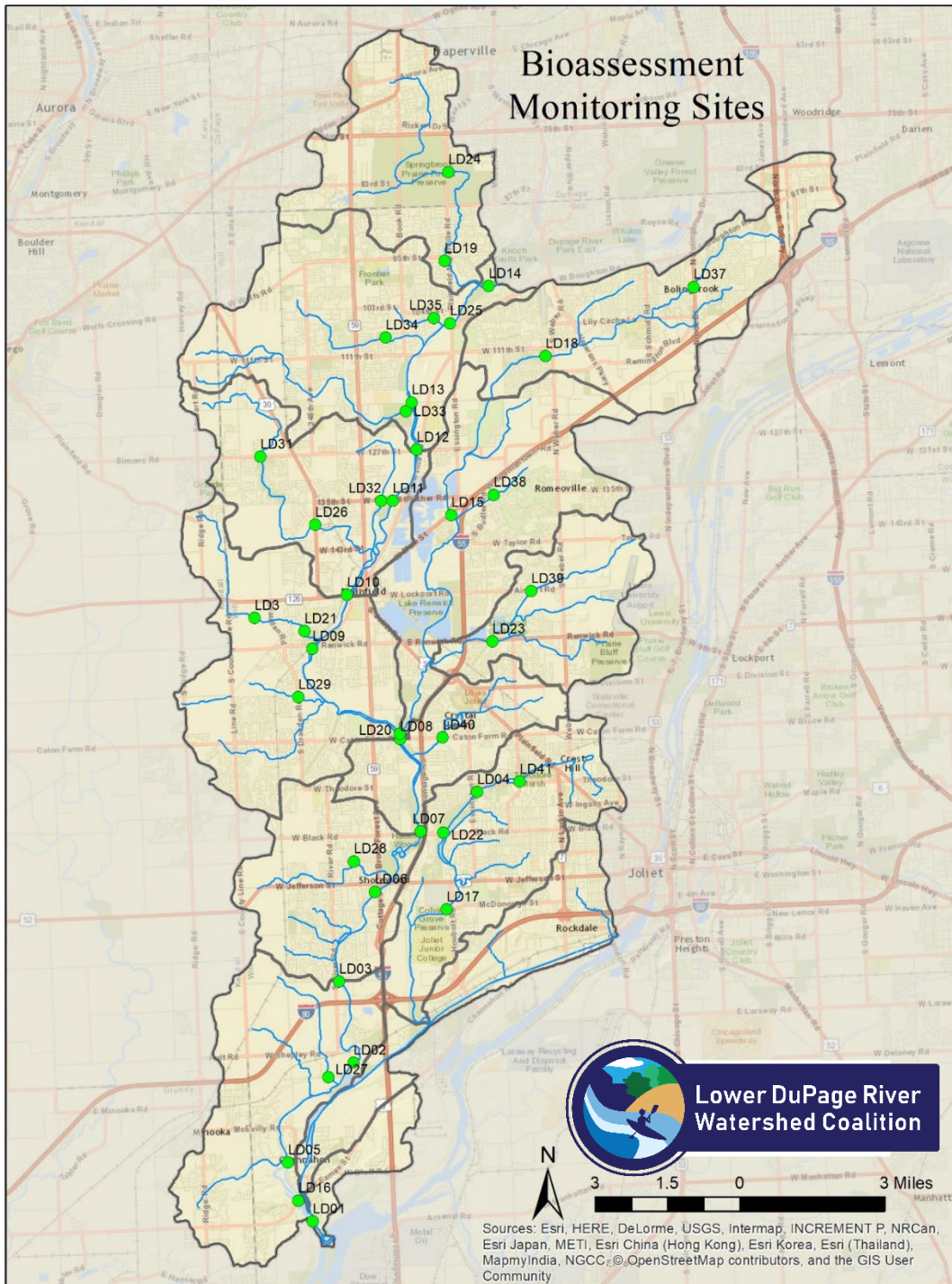


Table 1. Number of sampling sites in the LDRWC project area.

| Method/Protocol | Lower DuPage River (2012) | Lower DuPage River (2015, 18 & 21) |
|---|---------------------------|------------------------------------|
| 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 of organic enrichment and ionic strength, total suspended solids (TSS), DO, pH and temperature. Chlorophyll a sampling was added in 2021.

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 from the 2018 Bioassessment. Information on the tributaries and detailed analysis of all results can be found at <https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/reports-resources/> Results from the 2021 bioassessment will be available later in 2023.

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 produces 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.

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 5. 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.

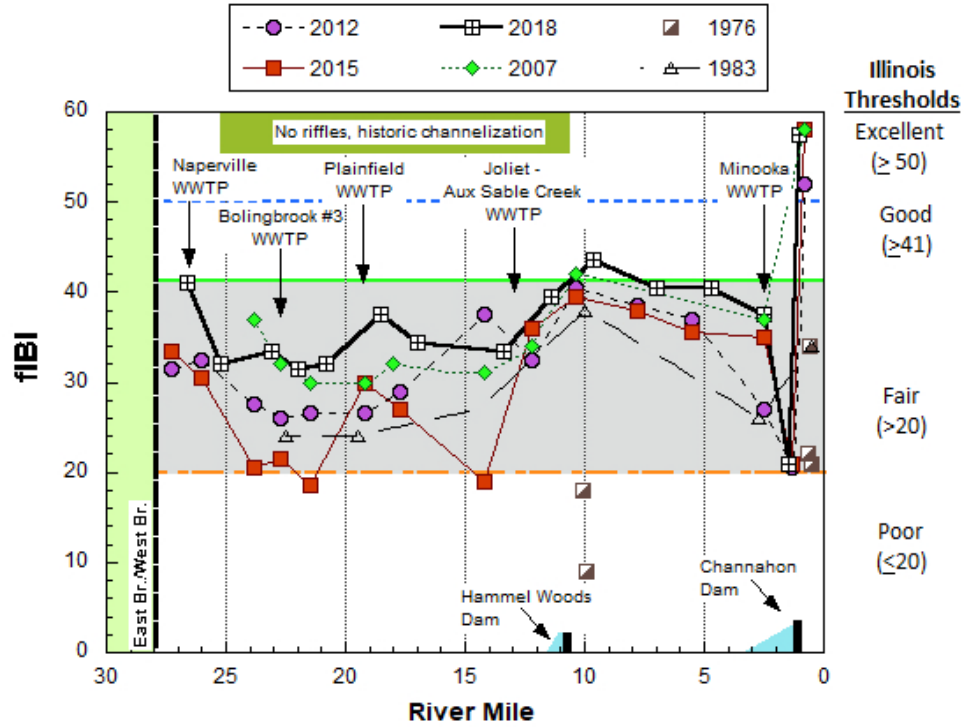
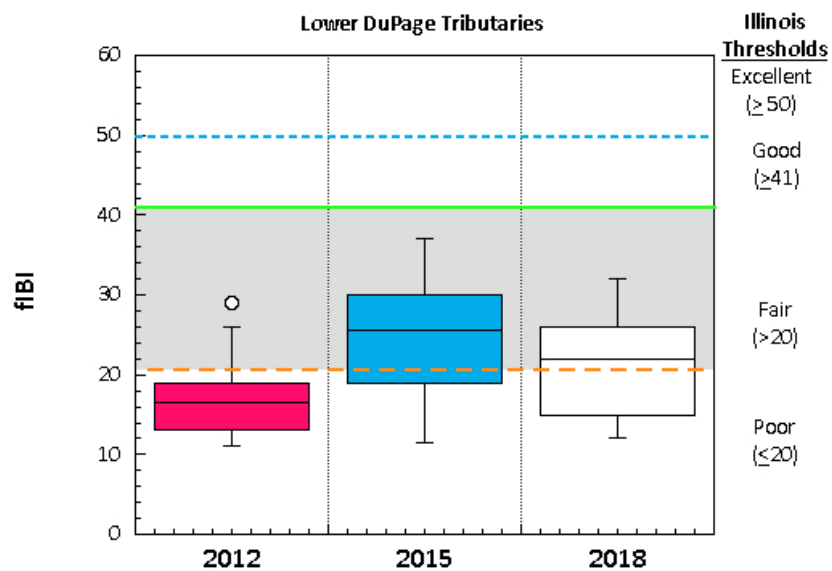


Figure 6. Box and whisker plot of fIBI scores from Lower DuPage River tributary sites in 2012, 2015, and 2018



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.

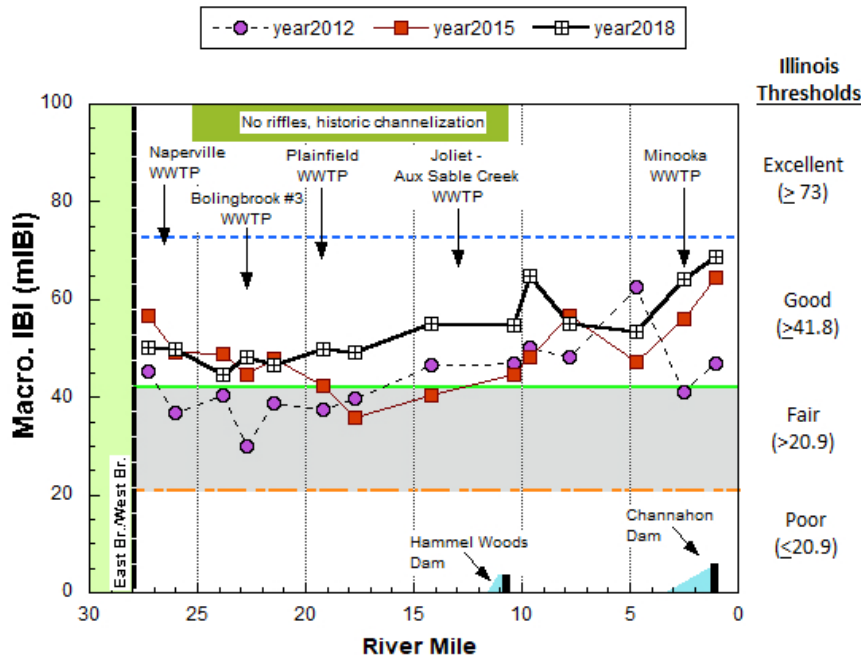
Results

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 <https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/reports-resources/>

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 7. 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 <https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/reports-resources/>

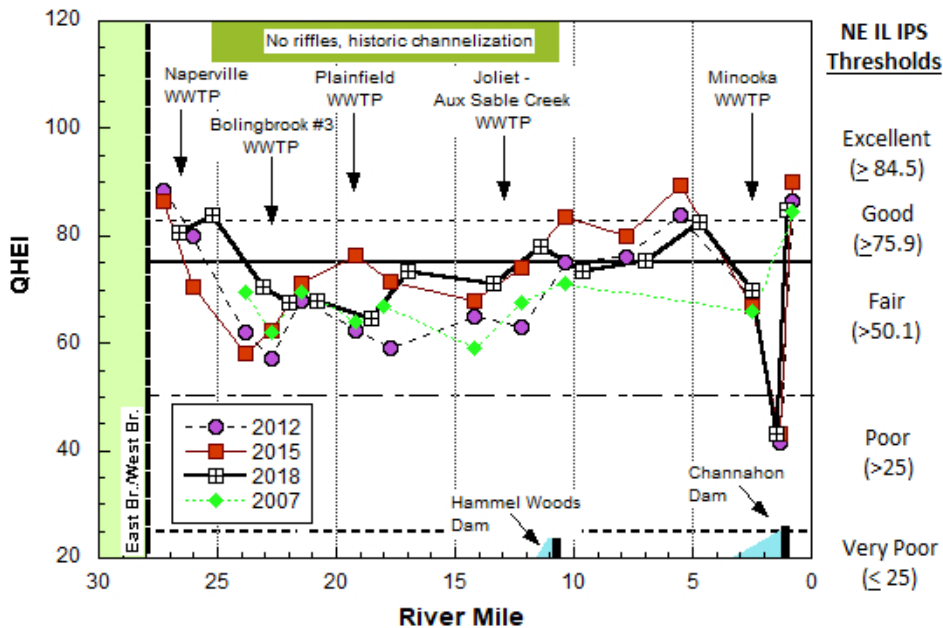
The physical habitat of a stream is a primary determinant of biological quality. Streams in the glaciated Midwest, left in their natural state, typically possess riffle-pool-run sequences, high

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, 2018 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 have been identified to improve habitat and dissolved oxygen levels within this reach. The first project was completed in 2021 to remove the Hammel Woods dam. The second project location will be located between Lockport Street and Renwick Road in Plainfield. A design, engineering and permitting contract was signed in February of 2022. Site survey work was completed in the summer of 2022 and conceptual plans and associated modeling are being reviewed. Final design, engineering, permitting and bid package will be completed in spring/summer of 2023. Construction of stream restoration project is anticipated to begin by the end of 2023 or spring of 2024.

Figure 8. 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 <https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/reports-resources/>

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

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

Results

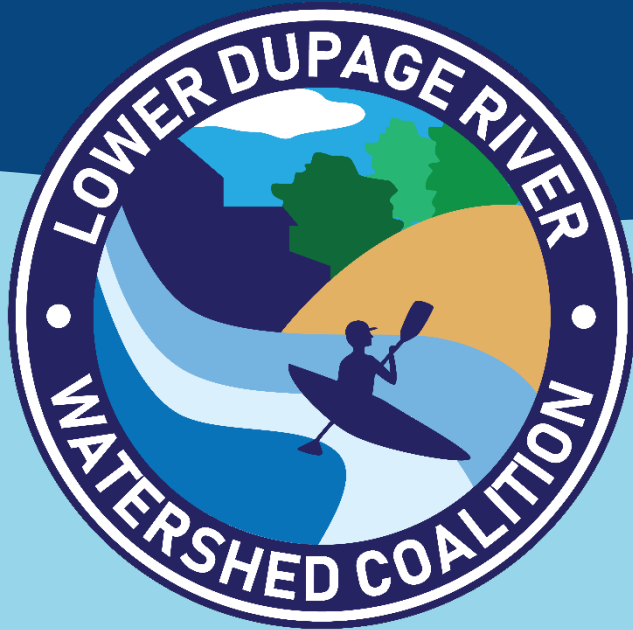
The discussion presented below focuses on the constituents listed in the MS4 permit: total suspended solids, total nitrogen, total phosphorus, and chlorides. Total nitrogen is presented as

ammonia, nitrate, and total kjeldahl nitrogen (TKN). Fecal coliform sampling was added to the 2021 bioassessment.

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. This likely originated in the upper part of the watershed. The full 2018 Bioassessment Report is available at <https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/reports-resources/>

Results from the 2021 Bioassessment will be available in late 2023.



2022 Watershed Outreach Summary

2022 Outreach Materials



The Scoop on Road Salt: How Chlorides Impact the Environment

Road salt is an important tool for maintaining safe roads, but it has negative consequences for the environment, plants, and infrastructure.

[READ MORE](#)

LOWER DUPAGE RIVER WATERSHED COALITION LOWER DES PLAINES WATERSHED GROUP

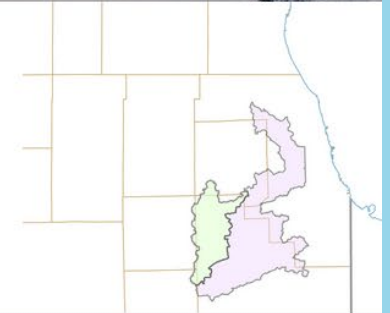
ABOUT US UNDERSTANDING OUR WATERSHED HOW YOU CAN HELP BLOG Q

OUR MISSION

Conserving and enhancing the rivers and streams that flow through our communities.

[LOWER DES PLAINES WATERSHED](#)

[LOWER DUPAGE WATERSHED](#)



Watershed U



Assessing Our Watershed



How You Can Help

www.LDPWatersheds.org



Outreach Materials

Where can I find outreach materials?

LDPwatersheds.org/outreach

Bottom of any page on the website

The screenshot shows the footer of the website with two columns of navigation links. The 'Our Work' link in both columns is circled in red. The footer also includes contact information, social media links for Facebook, and logos for the Lower DuPage River Watershed Coalition, Lower Des Plaines Watershed Group, and The Conservation Foundation.

| LOWER DUPAGE RIVER WATERSHED COALITION | LOWER DES PLAINES WATERSHED GROUP | LEARN | CONTACT US |
|--|-----------------------------------|-------------------------|--|
| Members | Members | Assessing Our Watershed | 630-428-4500 |
| Meetings & Minutes | Meetings & Minutes | Watershed U | jhammer@theconservationfoundation.org |
| Financials & Policies | Financials & Policies | How You Can Help | FACEBOOK |
| Our Work | Our Work | | LOWER DUPAGE RIVER WATERSHED COALITION |
| Outreach Materials | Outreach Materials | | LOWER DES PLAINES WATERSHED GROUP |

Staffing and coordination for Lower DuPage River Watershed Coalition and Lower Des Plaines Watershed Group are provided by The Conservation Foundation.

© 2021 The Conservation Foundation

The screenshot shows the 'Education & Outreach Materials' page with a grid of nine categories: Native Plants, Rain Barrels, Rain Gardens, Watershed Ecology, Recreation, Pet Waste, Salt Smart, Fall Leaves, and Dams. Each category has a small image and a brief description.

- Native Plants:** Native plants with deep roots stabilize soil and infiltrate rainwater into the ground, which helps to reduce runoff.
- Rain Barrels:** Use rain as a resource by collecting rainwater to be used later.
- Rain Gardens:** Rain gardens collect stormwater and help it soak into the ground instead of running off.
- Watershed Ecology:** Healthy rivers and streams support a diversity of aquatic life, including fish, dragonflies, and muscels.
- Recreation:** People enjoy using our local waterways for boating, fishing, and more.
- Pet Waste:** Pick up dog poop every time, everywhere to protect the water quality of rivers and streams.
- Salt Smart:** Together we can use the right amount of salt to keep roads safe while also reducing our impact on the environment.
- Fall Leaves:** Keep leaves off streets to reduce the amount of nutrients that enter storm drains.
- Dams:** Most of our dams no longer serve a purpose. Instead, dams degrade the health of local rivers and streams.

All chloride-related materials are also available on www.saltsmart.org

Spring 2022 Outreach

Social Media Posts

Spring Topics:

- Pollinator-friendly lawn care
- Proper paint disposal
- Vehicle fluids, leaks, and maintenance



PROTECT YOUR HEALTH AND THE ENVIRONMENT.

Dispose of Household Hazardous Waste at a designated facility. Never dump chemicals down household drains or storm drains.

This post features a photograph of a storage cabinet filled with various household cleaning products like bleach and disinfectant. The text is overlaid on a white background.



A properly maintained car protects the environment.

Fix vehicle leaks right away to protect clean water in rivers, streams, and lakes!

The next rainfall washes leaked oil, coolant, and other chemicals on pavement into storm drains.

This post shows a close-up of a storm drain grate with a white arrow pointing to it. The background is a blurred image of a car's undercarriage.



FROM LAWN → TO HABITAT

Convert a section of turfgrass to a native plant garden! Native plants clean and infiltrate stormwater and provide important food and habitat for birds, bees, and butterflies. Plus, you'll spend less time mowing your lawn!

This post is a split-image showing a green lawn on the left and a garden of colorful native flowers on the right. The text is in a white box at the top.



RE-THINK YOUR LAWN.

Your lawn can either discourage or help pollinators based on how you maintain it.

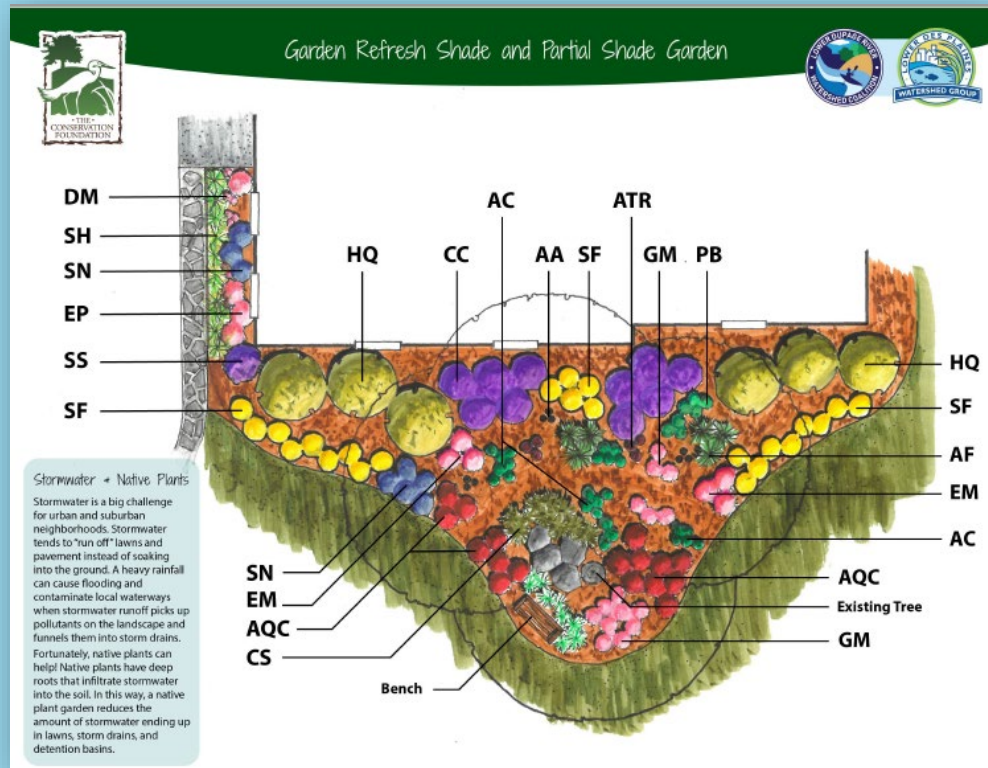
Reducing or eliminating herbicides and raising your mower to the highest setting will allow flowers in your lawn to bloom. These flowers are a crucial food source for bees in the spring!

This post features a close-up photograph of a bee on a white flower against a green background.



Garden Refresh - 2022 Outreach

Garden Refresh Native Plant Garden Designs



Plant List
 These plants do well with medium soil moisture. Water as needed during dry spells.

| | | | |
|--|---|---|---|
| A - <i>Amelanchier arborea</i> 'utumn Brilliance' Spiceberry Height: 20-25 feet Width: 20-25 feet Bloom Color: white Bloom Season: April-May | CC - <i>Conoclinium coelestinum</i> Blue Mistflower Height: 18-36 inches Width: 18-36 inches Bloom Color: blue Bloom Season: July-October | AA - <i>Echinacea purpurea</i> Purple Coneflower Height: 2-5 feet Width: 1.5-2 feet Bloom Color: pinkish Bloom Season: June-August | SF - <i>Solidago flexicaulis</i> Zigzag Goldenrod Height: 24-36 inches Width: 24-36 inches Bloom Color: gold Bloom Season: July-September |
| C - <i>Asarum canadense</i> Wild Ginger Height: 6-8 inches Width: 8-12 inches Bloom Color: brown Bloom Season: April-May | CP - <i>Carex pensylvanica</i> Common Oak Sedge Height: 8-12 inches Width: 18-24 inches Bloom Color: brown Bloom Season: April-May | GM - <i>Geranium maculatum</i> Wild Geranium Height: 18-24 inches Width: 18-24 inches Bloom Color: pink Bloom Season: April-June | SH - <i>Sporobolus heterolepis</i> Prairie Dropseed Height: 24-36 inches Width: 24-36 inches Bloom Color: brown Bloom Season: August-September |
| F - <i>Athyrium filix-femina</i> Lady Fern Height: 24-36 inches Width: 18-24 inches | CS - <i>Carex sprengei</i> Long-Beaked Sedge Height: 18-24 inches Width: 18-24 inches Bloom Color: green Bloom Season: May | HQ - <i>Hydrangea quercifolia</i> 'Ruby Slippers' Ruby Slippers Oakleaf Hydrangea Height: 5-8 feet Width: 5-10 feet Bloom Color: pinkish-white Bloom Season: May-June | SN - <i>Symphoricarpos novae-angliae</i> 'Purple Dome' New England Aster Height: 18-24 inches Width: 24-36 inches Bloom Color: purple Bloom Season: September-October |
| QC - <i>Aquilegia canadensis</i> Wild Columbine Height: 18-24 inches Width: 8-12 inches Bloom Color: red Bloom Season: April-June | DM - <i>Dodecatheon meadia</i> Shooting Star Height: 12-18 inches Width: 6-8 inches Bloom Color: pink Bloom Season: April-June | PB - <i>Polygonatum biflorum</i> Smooth Solomon's Seal Height: 24-36 inches Width: 12-18 inches Bloom Season: May-July | SS - <i>Symphoricarpos sp. 'Sofie'</i> Proud Berry Coralberry Height: 3-4 feet Width: 3-4 feet Bloom Color: pinkish-white Bloom Season: July-August |
| TR - <i>Arisaema triphyllum</i> Pick-in-the-Pulpit Height: 12-18 inches Width: 12-18 inches Bloom Color: green Bloom Season: April-May | EM - <i>Eurybia macrophylla</i> Big-Leafed Aster Height: 24-26 inches Width: 3-4 feet Bloom Color: purple Bloom Season: August-September | PP - <i>Podophyllum peltatum</i> Mayapple Height: 12-18 inches Width: 12-18 inches Bloom Color: white Bloom Season: April-May | SYS - <i>Symphoricarpos shortii</i> Short's Aster Height: 24-36 inches Width: 24-36 inches Bloom Color: purple Bloom Season: August-October |



If you're adding native plants and practicing water conservation techniques at home, you may be eligible for certification through **Conservation@Home**, a program of The Conservation Foundation that recognizes homeowners who are creating environmentally-friendly yards. Learn more at www.theconservationfoundation.org/conservation-home



Summer 2022 Outreach

Be River Responsible!

We all want to have a great time out on the water. Be River Responsible to keep the river enjoyable for everyone.



Know Before You Go

Check flow conditions before you head out. High flows can create strong currents and reduce head space under bridges.



Play It Safe

Bring water, protect yourself from the sun, wear a life preserver, and wear shoes that will protect you from sharp objects on the stream bed.



Be Respectful

Be mindful of landowners and other paddlers as you travel down the river. Stay off private property and keep noise to a reasonable level.



Float In, Float Out

Whatever you take into the river must come back to shore with you, including empty containers, leftover bait, and used fishing line.



Just Because It Floats...

...doesn't mean it's river worthy. Only use floating devices designed for use in rivers and streams.



Let Nature Be

Be safe and give wildlife their space.



Stop Aquatic Hitchhikers

Invasive aquatic species, like zebra mussels, change the natural ecosystem. When exiting the water, remove animals, plants, and mud from your equipment—and then drain any water in your boat or containers.



What's That Sign?



Private Property

Much of the land along the river is private property. If you see one of these signs, it's a reminder to float on. Get in and out of the river at public launches only.

Useful Information

Forest Preserve Police
Non-Emergency Phone Number:
815-727-6191

Forest Preserve Website:
ReconnectWithNature.org

For maps and more information
about water trails across the region,
visit paddlillinoiswatertrails.org.



Private Land Please Paddle On



Landowner Sign

River Launch Sign



Continued Pet Waste Campaign



Remind residents to scoop the poop to protect water quality!



Fall 2022 Outreach

Fall Topics:

- Tips for clearing fall leaves
- Green infrastructure: bioswales
- Fish in our local rivers and streams



FISH IN OUR RIVER

Golden Shiner



FISH IN OUR RIVER

Shorthead Redhorse



**AVOID FLOODS
THIS FALL.
BE SMART ABOUT
YOUR LEAVES.**

Leaves often block storm drains. Take care of your leaves at home, and remove leaves from streets and storm drains before it's expected to rain.



**5 BENEFITS OF
BIOSWALES:**

- 1 Help prevent flooding
- 2 Reduce stormwater runoff
- 3 Recharge groundwater
- 4 Beautify the neighborhood
- 5 Provide food and habitat for birds, bees, and butterflies



Winter 2022 Outreach

Social Media Posts

Tools for
Snow Removal

SCRAPER

OR ICE CHOPPER

- For icy patches that cannot be cleared with a shovel or snow blower.
- Scrape under the edge of the ice or chop the ice into pieces.



BE SALT SMART WITH WATER SOFTENERS!

Water softener salt passes through water treatment plants and is discharged into local rivers. To reduce water contamination, choose a salt-efficient water softener or consider a saltless water conditioner instead.



Snow plows will push snow into driveways when clearing roads.

This is unavoidable. Snow plows can't clear roads efficiently after a storm any other way.

Shoveling snow back into the street is against ordinance and will create dangerous conditions at the end of your driveway.

TIP: Pile snow to the right of the driveway to reduce the amount of snow that plows push into your driveway.



Tools for
Snow Removal

BROOM

- Easily clears powdery or fluffy snowfall before it's deep or compacted.
- Large push brooms are useful for driveways and sidewalks. Smaller brooms are helpful for steps and smaller walkways.



Winter 2022 Outreach

Posters




HELP US GET TO YOUR STREET FASTER

KEEP STREETS CLEAR FOR SNOW PLOWS!

 Cars and garbage bins in the street slow down snow plows and make it harder to clear streets. If there is a forecasted snow storm, please keep cars and garbage bins in the driveway if possible. Visit saltsmart.org to learn more.

Created by The Conservation Foundation for the Lower DuPage River Watershed Coalition and the Lower Des Plaines Watershed Group.

Keep Streets Clear poster



LOSE THE CRUNCH


TOO MUCH SALT!

LOVE THE LINES

ANTI-ICING IN PROGRESS

CRUNCH!

SALT BRINE APPLIED BEFORE STORMS HELPS CLEAR SNOW FASTER AND USES LESS SALT

 Anti-icing lines keep roads, parking lots, and sidewalks safe. Plus, they waste less salt and cause less environmental harm — more reasons to **#LOVETHELINES**. Visit saltsmart.org to learn more.

Anti-icing poster
#LoveTheLines



Where Should You Salt?

First, Remove as much snow and ice by shoveling, snow blowing, or scraping. Then, apply salt on icy patches and pathways where people often walk.

- ✓ Apply salt on areas where it tends to be icy and slippery.
- ✓ Apply salt on icy areas where your family and visitors often walk.
- ✗ There's no need to put down salt where people never walk.



Where to Salt Graphic



Winter – Salt Smart

Safe Driving Poster/Graphic

Stay Safe on Snowy Streets!
Winter Driving Tips

Don't Cruise Control
Tires may spin too fast on icy roads and cause you to lose control.

Don't Crowd the Plow
Give plow drivers space to clear the road. Never pass a snow plow.

When There's Snow, Go Slow
Drive slowly through snow to stay in control of your car.

Keep Your Distance
Stopping on ice requires a greater distance. Increase your following distance and begin stopping sooner.

Wait It Out
If it's an option, stay home until the roads are clear.

Build in Extra Time
Clearing off your car and driving safely through the snow adds more time to your commute.

Be Prepared
Keep a winter emergency kit in your trunk. Include items like a blanket, jumper cables, and a small shovel.

SALT SMART COLLABORATIVE
LOWER DUPAGE RIVER WATERSHED COALITION
DES PLAINES WATERSHED GROUP

Snow + Ice Removal FAQ

Salt smart. Save more.

Snow and Ice Removal Frequently Asked Questions

How does salt work to remove snow and ice?
Rock salt, or sodium chloride, works by lowering the freezing point of water, causing ice to melt even when the temperature is below water's normal freezing point of 32 degrees. For the salt to work, a heat source is needed. The heat source can be air temperature above 15 degrees Fahrenheit, heat from the sun or friction from car tires driving over the salt and ice.

When the temperature drops below 15 degrees, rock salt is no longer effective at removing snow and ice. At very low temperatures, use a blend formulated for low temperatures that contains calcium chloride or magnesium chloride to help melt ice.

When will the street in front of my house be plowed?
During a snow storm, road crews generally begin clearing streets according to the following priorities:
First priority street routes – high-volume roadways and access to hospitals, police stations and fire stations.
Second priority street routes – streets that lead directly onto first priority street routes.
Third priority street routes – neighborhood streets and cul-de-sacs.

Why do some streets have less snow and ice when plowing is done?
Snow and ice removal plans try to provide consistent service, but some residential streets will be clearer than others due to certain factors, such as: when during the snow storm it is plowed, the amount of traffic on the road before and after plowing, the pavement temperatures and the type of pavement surface.

Why did I see a truck driving in snow with its blade up?
Sometimes plow trucks need to drive with their blades up. Trucks may drive with blades up when traveling to or from their route locations or maintenance facility in order to drive at normal speeds and avoid wearing out the plow blade when not on routes. Also, some trucks use an underbody blade for smaller snowfalls or spreading deicing materials.

Why is the snow plow operator driving so quickly down my street?
It might appear that snow plows are driving too fast for road conditions. Plows drive at around 25 MPH to efficiently clear snow and ice. The loud sound of plowing, flashing lights on the vehicle, snow discharge and sparks from contact between the plow blade and uneven road roadways may make the plow truck appear to be driving faster than it is.

Why is snow pushed in front of my driveway?
Snow plows are designed to push snow to the side, so it is inevitable for snow to collect at the end of driveways and sidewalks during plowing. Plows will make multiple passes down your street, which can cause additional snow to pile up at the end of your driveway after you have shoveled. Residents are responsible for clearing snow at the end of their driveway and at sidewalk crossings if they have a corner lot. It is illegal to shovel snow back into the roadway as this creates unsafe driving conditions.

If my driveway is plowed in and I shovel the snow back into the street, can crews come by and clean it up?
No. Putting snow back into the street is illegal and unsafe.

saltsmart.org

Bookmark

SALT SMART COLLABORATIVE
SAVE MORE

Together we can protect our local waterways by using the right amount of salt while keeping roads, driveways and sidewalks safe.

4 Steps to Be Salt Smart

- 1 Shovel first.**
Clear all snow from driveways and sidewalks before it turns to ice.
- 2 Size up.**
More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for 500 sq ft of driveway or about 10 sidewalk squares.
- 3 Spread.**
Distribute salt evenly, not in clumps.
- 4 Switch.**
Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to a deicer formulated for colder temperatures.

SALT SMART COLLABORATIVE

Winter – Salt Smart

Cups and bookmarks are available now – contact Jennifer or Lea to put in your order




Scatter cups



Bookmarks



Winter – Salt Smart



Brine at Home V2
Unlisted


Will County Watersheds
6 subscribers

Analytics Edit video

0 likes 0 dislikes Share Save ...

4 views 2 months ago
Show more

Making Brine at Home



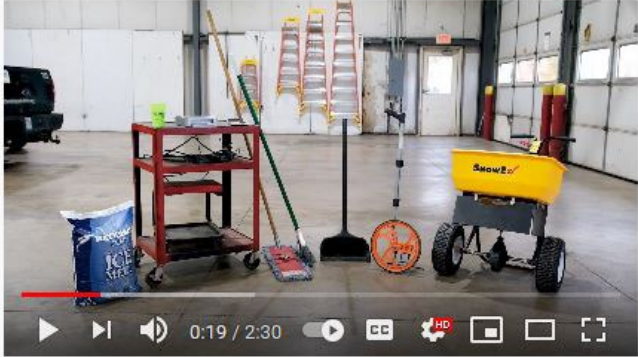
More Isn't Always Better | Salt Smart

39 views 1 like 0 comments SHARE SAVE ...

Will County Watersheds SUBSCRIBED

Apply salt sparingly this winter to protect the quality of rivers and streams in Illinois.
Learn more at <http://saltsmart.org/>

Fun PSA for Residents



How to Calibrate a Walk Behind Salt Spreader

45 views 3 likes 0 comments SHARE SAVE ...

Will County Watersheds SUBSCRIBED

Salt needs to be spread at the correct application rate to effectively melt ice and to prevent wasting resources and water pollution. You'll need to calibrate your broadcast spreader to make sure it's at the right application rate.

Salt Spreader Calibration Tutorial



Connect With Us on Facebook!

Lower Des Plaines Watershed Group
Write a comment...

Lower Des Plaines Watershed Group
January 10 · 🌐

Shovels are a great all-around tool for clearing snow from driveways and sidewalks. Remember to shovel as much snow and ice as possible before scattering salt over remaining icy patches. Find more ideas for clearing snow at home in our blog at <https://ldpwatersheds.org/tools-for-clearing-snow-at-home/>

Tools for Snow Removal

SHOVEL

- Great for managing dry to medium-wet snow.
- Comes in many different designs. Some are suited to pushing snow. Others have an ergonomic handle to reduce back strain.

SALT SMART COLLABORATIVE

Photos: Water Saving Tip (Monitor your water bill...), Water Saving Tip (Switching to low-flow...), Water Saving Tip (Landscaping with plants...), WATER SOFTENERS ARE A SOURCE OF SALT CONTAMINATION IN LOCAL WATERWAYS, Tools for Snow Removal SALT, Tools for Snow Removal SNOW BLOWER, Tools for Snow Removal SCRAPER OR ICE CHOPPER.

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Lower DuPage River Watershed Coalition
Naperville, IL, United States, Illinois
(630) 428-4500
ldpwatersheds.org
Star not yet rated (1 Review) ⓘ

Lower DuPage River Watershed Coalition
October 25, 2022 · 🌐

Bioswales are vegetated channels that collect and infiltrate stormwater into the soil. They reduce runoff, recharge groundwater, and can be planted with beautiful native flowers. Learn more about bioswales in our blog at <https://ldpwatersheds.org/bioswales-reduce-flooding-and.../>

5 BENEFITS OF BIOSWALES:

- 1 Help prevent flooding
- 2 Reduce stormwater runoff
- 3 Recharge groundwater
- 4 Beautify the neighborhood
- 5 Provide food and habitat for birds, bees, and butterflies

Photos: Water Saving Tip (Monitor your water bill...), Water Saving Tip (Switching to low-flow...), Water Saving Tip (Landscaping with plants...), WATER SOFTENERS ARE A SOURCE OF SALT CONTAMINATION IN LOCAL WATERWAYS, Tools for Snow Removal SALT, Tools for Snow Removal SNOW BLOWER, Tools for Snow Removal SCRAPER OR ICE CHOPPER, Tools for Snow Removal SHOVEL.

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Will County Watershed YouTube Channel

The screenshot shows the YouTube channel page for "Will County Watersheds". The channel name is "Will County Watersheds" with the handle "@willcountywatersheds7949", 6 subscribers, and 35 videos. The channel description is "The Lower DuPage River Watershed Coalition brings together municipalitie...". The page features a navigation menu on the left with options like Home, Shorts, Subscriptions, Library, History, Your videos, Watch later, and Lower Des Plaines... The main content area displays a grid of videos under the "VIDEOS" tab, sorted by "Recently uploaded". The videos are titled "Membership Meeting" and are organized by month: December 2022, September 2022, July 2022, May 2022, March 2022, and January 2022. Each video thumbnail includes the "Lower Des Plaines Watershed Group" logo and a duration indicator. The video titles and descriptions are as follows:

- December 2022:** "Membership Meeting" (43:02), GMT20221201 155945 Recording 1920x1080, 12 views • 3 months ago.
- September 2022:** "Membership Meeting" (43:54), September 2022 Membership Meeting | Lower Des Plaines River Watershed Group, 18 views • 5 months ago.
- July 2022:** "Membership Meeting" (40:02), July 2022 Membership Meeting | Lower Des Plaines Watershed Group, 24 views • 7 months ago.
- May 2022:** "Membership Meeting" (1:05:09), May 2022 Member Meeting | Lower Des Plaines Watershed Group, 29 views • 9 months ago.
- March 2022:** "Membership Meeting" (37:47), Lower Des Plaines Watershed Group.
- January 2022:** "Membership Meeting" (1:20:38), Lower Des Plaines Watershed Group.