



DuPage River Salt Creek Workgroup

DRSCW ILR40 Activities March 2024– March 2025

PART I. COVERAGE UNDER GENERAL PERMITS ILR40

Not applicable to the work of the DRSCW.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the DRSCW.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the DRSCW.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the DRSCW.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

DRSCW outreach activities for the reporting year ending March 31, 2025 included:

- The DRSCW and Salt Smart websites were updated and maintained during the reporting period and periodically updated with presentations and material (www.drscw.org).
- Public information available on the websites includes:
 - Chloride Fact Sheets aimed at mayors and managers, public works staff, commercial operators, and homeowners.
 - Model Salt Storage and Handling Ordinances and Policies.
 - Model Facilities Plan for Snow and Ice Control.
 - A fact sheet summarizing alternative deicing products.
 - Information of effective operating parameters for commonly used anti icing compounds.
 - Parking lots chloride application rate guidance example sheet and aide memoire.



- A brochure on coal tar sealants as a source of Polycyclic Aromatic Hydrocarbons (PAHs) aimed at homeowners (produced by the University of New Hampshire Stormwater Center).
- Fact sheets summarizing the presence of Hydrilla in Ginger Creek and steps to keep the invasive weed from spreading.
- Detailed reports on the biological and chemical conditions of area waterways.

Technical Presentations

Workgroup meetings: The Workgroup hosts bimonthly meetings where technical presentations are made on a variety of water quality topics and surface water management subjects. The audience consists of mainly stormwater and wastewater professionals but the public is welcome to attend. Presentations made during the period March 1, 2024 to March 31, 2025 are listed below. Selected presentations are made available on the DRSCW website and upon request. Technical presentations have also been approved by the IEPA as CEUs for the Wastewater Operator and Drinking Water Operator Certifications.

April 24, 2024 – PFAS Update. Presenter: Deanna Doohaluk, The Conservation Foundation.

April 24, 2024 -- Klein Creek Streambank Stabilization Project. Presenter: Greg Ulreich, Civil/Stormwater Engineer, Dept. of Engineering Services, Village of Carol Stream & Erin Pande, Ecological Services Lead, Engineering Resource Associates, Inc. (ERA)

June 26, 2024 – PFAS Update. Presenter: Nichole Schaeffer, PE, BCEE, Environmental Department Manager, Baxter & Woodman.

August 28, 2024 – The Spread of Round Goby in the Des Plaines and its Tributaries. Research and presentation created by Matt Sarver, Fish Ecologist, Midwest Biodiversity Institute (MBI), presented by Chris Yoder, Research Director, MBI.

August 28, 2024 – Mussel Matters: Saving Critical Species (Documentary Film). Creators & Producers: Lea Rodberry, The Conservation Foundation, and Jonathan Mullen, Forest Preserve District of DuPage County.

October 30, 2025 – What's Up with Winter? Presenter: Wilf Nixon, President, Professional Snowfighters Association.

December 4, 2024 – Lower DuPage River Stream Restoration Project. Presenter: Jennifer Hammer, Vice President of Land and Watershed Programs, The Conservation Foundation.



December 4, 2024 – Street Sweeping for Winter Chloride Reduction. Presenter: Alex Handel, Watershed Scientist, The Conservation Foundation and Stephen McCracken, Director DRSCW, The Conservation Foundation.

Other Water Quality Presentations or Workshops by the DRSCW

January 15, 2024 – The Road to Salt Reduction, The Adirondack Explorer, News Article. Author: Stephen McCracken and Hanna Miller, The Conservation Foundation.

January 24, 2024 – Update on the Master Plan for Salt Creek at Fullersburg Woods, River Prairie Group of the Sierra Club. Presenter: Deanna Doohaluk, The Conservation Foundation.

February 12, 2024 – Watershed Management to meet water quality goals, Water and Waste Management (WWM) Conference, Chanhga, Ahmedabad, Gujarat, India. Presenter: Stephen McCracken, The Conservation Foundation.

February 26, 2024 – Dam Removals in NE Illinois, RiverLife, Gail Borden Public Library, Elgin, Illinois. Presenter: Deanna Doohaluk, The Conservation Foundation

March 20, 2024 – Chlorides in our Waterways: Road Salt and Street Sweeping Initial Results, Chicago Area Waterways Chloride Workgroup (CAWCW) Membership Meeting. Presenter: Alex Handel and Stephen McCracken, The Conservation Foundation.

March 21, 2024 – Mussel Matters: Saving Critical Species in DuPage County, North Central College, Panel discussion on river resource quality. Presenter: Stephen McCracken, The Conservation Foundation.

May 14, 2024 – The Fullersburg Woods Dam Removal, Central States Annual Meeting, the Schaumburg Convention Center. Presenter: Deanna Doohaluk, The Conservation Foundation.

June 5, 2024 – Fullersburg Woods Dam Removal, presentation/site visit for the project requested by League of Woman Voters and Salt Creek Watershed Network (SCWN). Presenter: Deanna Doohaluk and Stephen McCracken, The Conservation Foundation.

July 30, 2024 – Chloride TMDLs and TLWQS in Illinois, National Academies Committee on Managing Pollutant Loads in Highway Stormwater Runoff. Presenter: Hanna Miller, The Conservation Foundation.

September 26, 2024 – MS4s and Chloride TMDLs (Request from IEPA and Association of Clean Water Administrators (ACWA). Presenters: Stephen McCracken, The Conservation Foundation and Mary Beth Falsey, DuPage County Stormwater Management.



DuPage River Salt Creek Workgroup

September 30, 2024 – Dam Removal and Restoration – local examples and successes, Meet The Conservation Foundation, Inland Real Estate Group of Companies, Inc. Presenters: Deanna Doohaluk and Stephen McCracken, The Conservation Foundation.

October 18, 2024 – Tour of Fullersburg Woods Dam Removal and Stream Restoration Project, Salt Creek Watershed Network. Presenter: Stephen McCracken, The Conservation Foundation

October 23, 2024 – DRSCW 2024 update, DuPage County Mayors and Managers. Presenter: Stephen McCracken, The Conservation Foundation

October 25, 2024 – Tour of Fullersburg Woods Dam Removal and Stream Restoration Project, TCF's Prairie Oak Society. Presenters: Deanna Doohaluk and Stephen McCracken, The Conservation Foundation

November 22, 2024 – Tour of Fullersburg Woods Dam Removal and Stream Restoration Project, MWRD Research and Development. Presenter: Stephen McCracken, The Conservation Foundation

January 23, 2025– Balancing Environmental and Historic Preservation Goals at Fullersburg Forest Preserve, Illinois Association of Parks Departments/Illinois Parks and Recreation Association Soaring to New Heights Conference. Presenters: Deanna Doohaluk, The Conservation Foundation and Tim Pollowy, Hey and Associates, Inc.

March 11, 2025 – Site Tour at Fullersburg Woods, Illinois Association of Floodplain and Stormwater Management Conference. Presenters: Deanna Doohaluk and Stephen McCracken, The Conservation Foundation, Tim Pollowy, Hey and Associates, and Erik Neidy, FPDDC

2. Public Involvement and Participation – No Activities

3. Illicit Discharge Detection and Elimination – No Activities

4. Construction Site Storm Water Runoff Control - No Activities

5. Post-Construction Storm Water Management in New Development and Redevelopment - No Activities

6. Pollution Prevention/Good Housekeeping for Municipal Operations – No Activities



Chloride Questionnaires

The DRSCW has attempted to track adoption of sensible salting BMPs in the program area since 2007. This is done as ambient chloride concentration monitoring; and while the ultimate indicator of success, it has proven an imperfect metric for tracking efficiency trends in winter salt use. Tracking target BMP adoption in the program area allows the DRSCW to evaluate the success of the chloride management workshops. Historically the public roads and parking lots/sidewalks workshops have covered the following practices:

- Winter weather tracking and planning
- Behavior of commonly used deicing compounds
- Product and chemical alternatives
- Equipment calibration training
- Application rates
- Equipment and salt application advancements
- Salt usage, storage and deicing best management practices
- Example salt use policies and management plans

The questionnaires also help identify topics for future workshops and form suppositions about salt use per unit of service expended inside the program area relative to 2006 levels. Questionnaires were distributed in 2007, 2010, 2012, 2014, 2016, and 2018. They were sent to approximately 80 municipal highway operations and public works agencies. A new questionnaire was due to be distributed in 2022 but was not completed due to a need to rework elements of the questionnaire. It is now due to be issued in May/June 2025.

Chloride Reduction Workshops

During the reporting period March 1, 2024 to March 31, 2025, nine (9) chloride reduction workshops were held. The workshops were held in person as well as in a webinar format allowing the groups to collaborate and host the workshops jointly. The workgroup staff for the DRSCW, LDRWC, Lower Des Plains Watershed Group (LDWG) and Chicago Area Waterways Chloride Workgroup (CAWCW) collaborated with staff from Lake County DOT and Health Dept. to coordinate the workshops. Registration was made available to agencies over a wide area of Illinois resulting in staff attending from Champaign, Cook, DuPage, Fulton, Kane, Kendall, Lake, McHenry and Will Counties. A list of attendees of the Public Roads Deicing Workshop (by County) is included in Attachment 1 and attendees of the Parking Lots & Sidewalks Deicing Workshop (by County) is included in Attachment 2.

The 2024 in-person Public Roads Winter Best Practices Workshops were held on Sept. 17, Sept. 24, and Oct. 3, 2024. Public Roads webinars were held on Oct. 8, Oct. 15, and Nov. 19, 2024. Staff from The Conservation Foundation were engaged to present the material. A registration



fee was required per person for the in-person workshops and per agency in order to view each webinar. The webinar links were shareable within an agency. A survey was provided at the end of each webinar to those who had signed in asking for the number of attendees from each agency and for an evaluation of the workshop. Evaluation surveys were also provided at the in-person workshops. The survey results indicated that a minimum of 870 persons attended the five 2024 Public Roads workshops. Certificates of attendance were provided to those who requested them. A link to the *Minnesota Snow and Ice Control: Field Book for Snowplow Operators* was provided to each registrant.

The Parking Lots and Sidewalks Winter Best Practices Workshop webinars were held on Sept. 26 and Nov. 13, 2024 and one in-person workshop was held on Oct. 1, 2024. The Workshops were presented by staff from The Conservation Foundation through the Salt Smart Collaborative. The survey results indicated that there was a minimum of 425 persons who attended the Workshops. Certificates of attendance were provided to those who requested them. The surveys provided an opportunity to provide an evaluation on the webinars. A link was sent to each registrant for the *Illinois Winter Maintenance Manual for Parking Lots and Sidewalks* developed by the Salt Smart Collaborative (developed in part by a Section 319 Grant issued by IEPA).

Ambient Impact Monitoring

DRSCW's Chloride Education and Reduction Program has performed an in-depth analysis to detect trends in chloride loading within the water quality data collected since the beginning of program efforts.

The goal of the analysis is to gauge the impact, if any, of the chloride education program on chloride loadings and concentrations generated from DRSCW water quality data collected from 2009 to present. Such an analysis is challenging due to the influences of other variables that dictate the magnitude of chloride impact on water quality data, principally winter weather (see Figure 1 to Figure 6). The analysis is needed to account for this inherent variability to as great a degree as possible. To help accomplish this the DRSCW purchased 10 years of weather data (snow and ice precipitation data for numerous locations) from Weather Command / Murray and Trettel, Inc. The analysis steps for each site where winter chloride concentration data was available was:

- Calculation of estimated chloride concentrations from winter conductivity data
- Calculation of a warm weather regression value from summer concentration data and summer conductivity measures
- Calculation of estimated chloride summer concentrations



DuPage River Salt Creek Workgroup

- Creation of loading data (in pounds per day) from the estimated concentration data using USGS flow data
- Identification of ice events from the weather command data and “replacement” of such events with loadings observed under snow events with the same accumulation
- Graphing of loading and concentration data for each site

This analysis has been completed and phase one results have been produced. The report is being finalized and will be complete by Summer 2025.

Continuous Chloride Monitoring

When chlorides are present in elevated concentrations in rivers, they harm aquatic invertebrates, fish, and aquatic and terrestrial plants. High chloride concentrations in stormwater also corrode structures like bridges, increasing maintenance costs; and chlorides are very difficult to remove from water through treatment. In the DRSCW and LDRWC watersheds, the source of chloride violations in the rivers is from winter deicing applications. In an effort to understand and track chloride levels in the watershed, year-round conductivity monitoring is carried out.

Ambient conductivity monitoring is carried out at six (6) locations. All conductivity sites were originally installed to collect continuous DO and are situated for that effort rather than for chlorides. DRSCW chloride sites are positioned in the upper and lower sections of each watershed.

The upstream Salt Creek chloride site (Busse Woods) is at the upstream-most point of the Lower Salt Creek watershed (this site isn’t placed further upstream as it was selected to measure DO upstream of the watersheds POTWs). MWRD did not conduct ambient winter conductivity monitoring at the Salt Creek at Busse Woods site in 2021. The site was taken over by DRSCW for conductivity monitoring during the winter of 2022.

For the sites located within the DRSCW watersheds, conductivity concentrations are used to calculate chloride concentrations based on a linear relationship established by the DRSCW. Calculated Annual chloride concentrations for the winter months from 2008-2024 for six (6) sites are depicted in Figure 1 to Figure 6. The Daily Max represents the highest chloride daily value calculated from that year’s winter season. The Winter Average is the average of all measurements from the winter season. The Four-Day Average is the maximum value of the year’s four-day averages. Also shown are seasonal totals for winter snow and ice data. This



data is generated from data supplied by a contract with Weather Command/ Murray and Trettel, Inc. The data is specific to the areas proximate to the relative conductivity monitoring site.

Figure 1. Calculated Chloride Concentrations - Winter Months (2009-2024) for Salt Creek at Busse Woods Main Dam. Data was not collected in 2021.

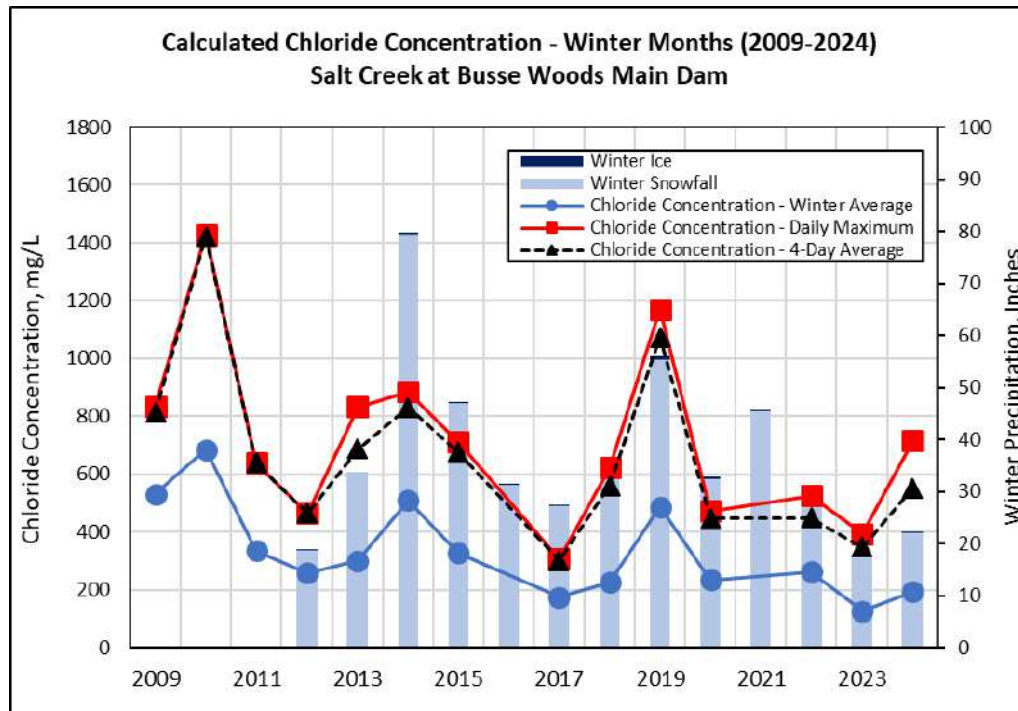


Figure 2. Calculated Chloride Concentrations - Winter Months (2008-2024) for Salt Creek at Wolf Road

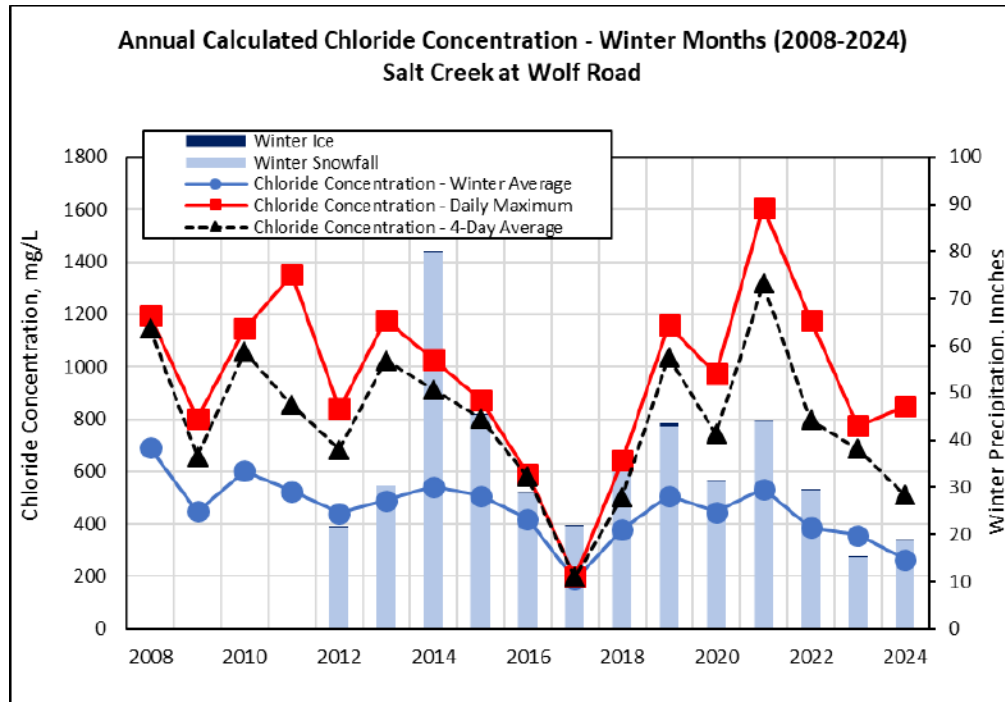


Figure 3. Calculated Chloride Concentrations - Winter Months (2008-2024) for the East Branch DuPage River at Army Trail Road

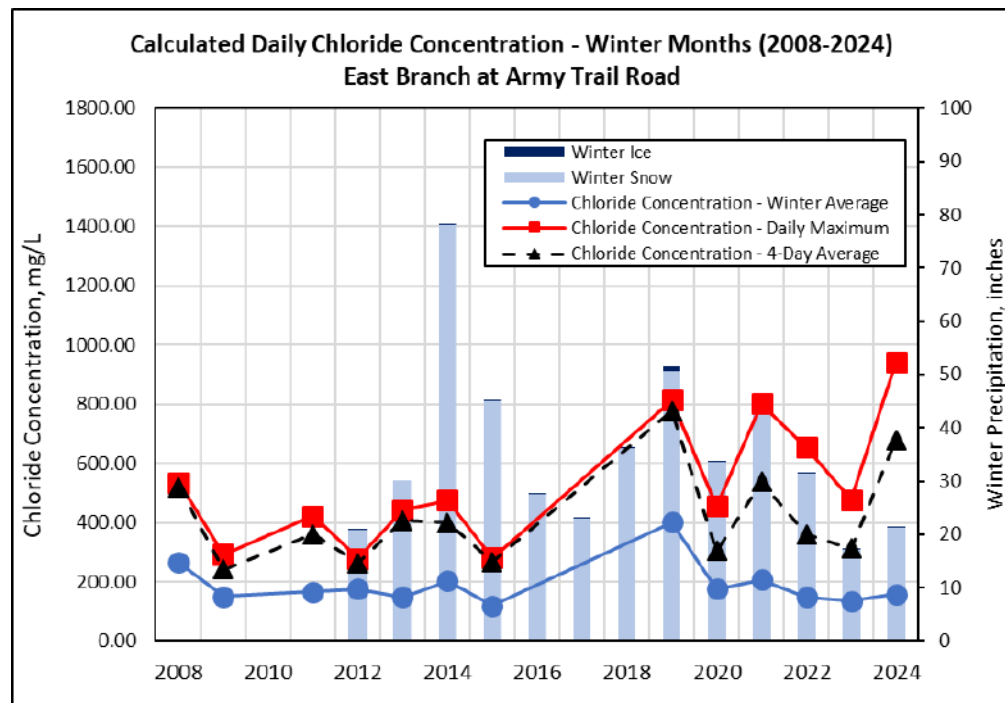




Figure 4. Calculated Chloride Concentrations - Winter Months (2008-2024) for the East Branch DuPage River at Hobson Road

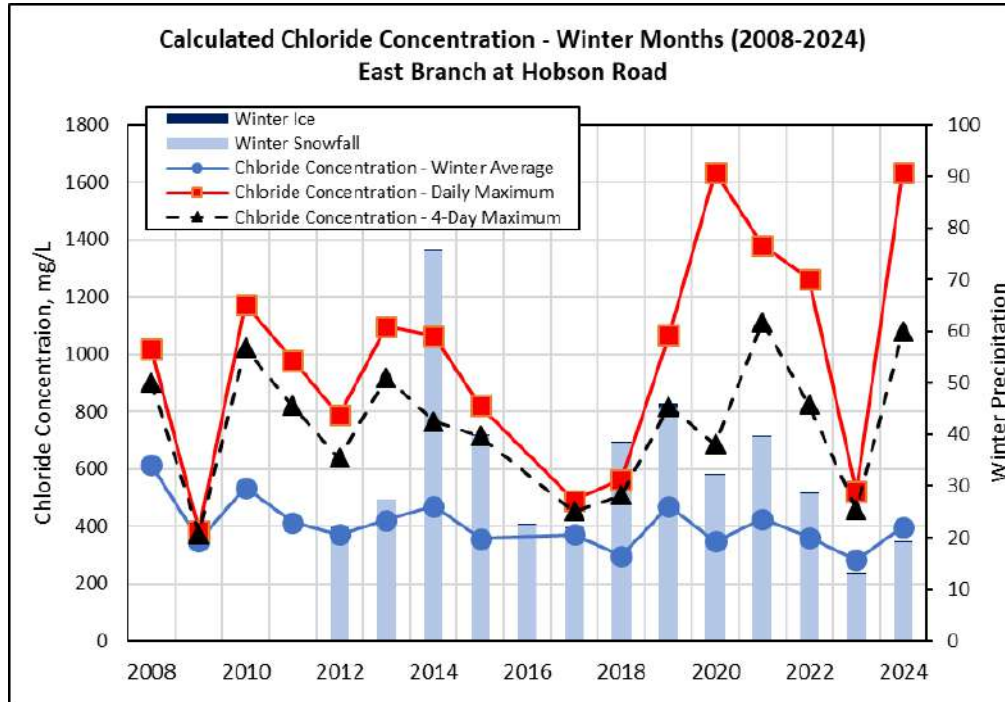


Figure 5. Calculated Chloride Concentrations - Winter Months (2008-2024) for the West Branch DuPage River at Arlington Drive

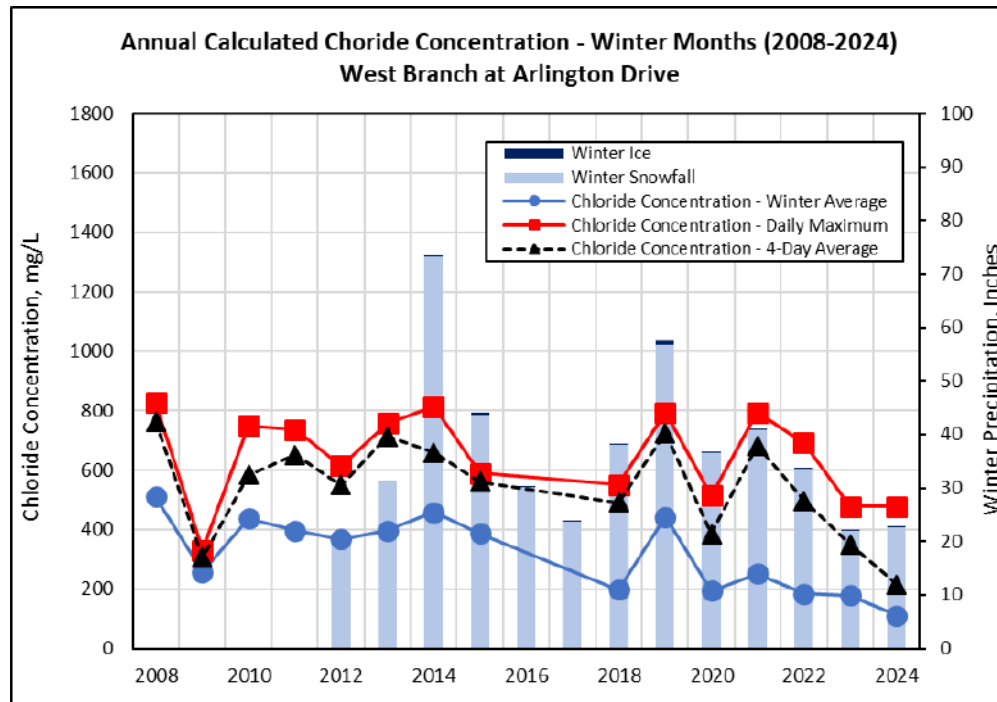
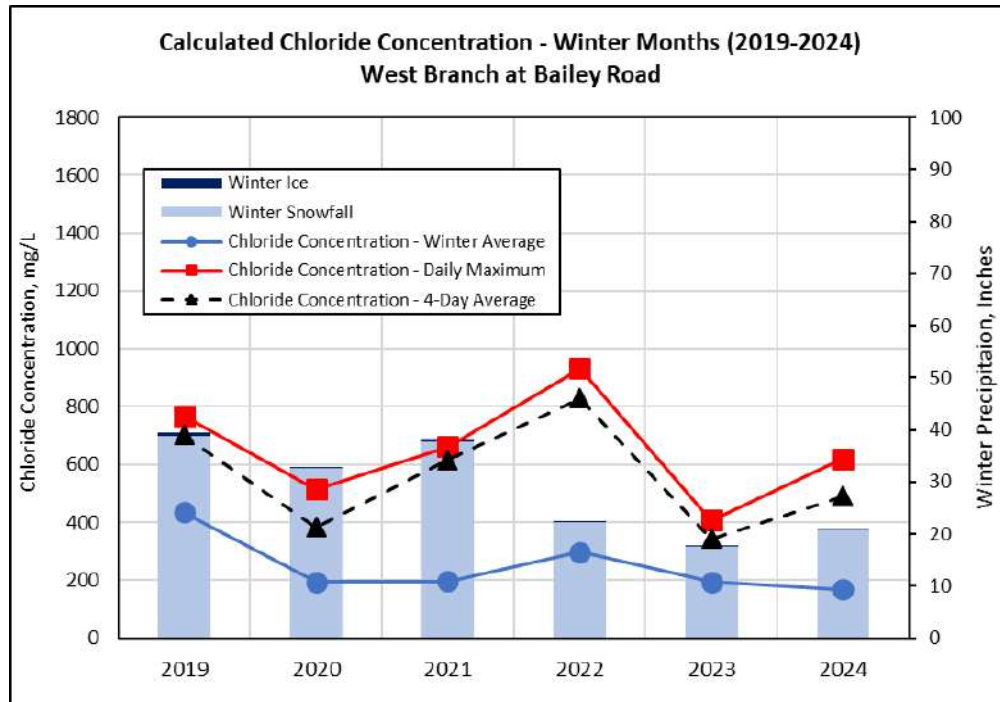




Figure 6. Calculated Chloride Concentrations - Winter Months (2019-2024) for the West Branch DuPage River at Bailey Road



C. Qualifying State, Country or Local Program

Not applicable to the work of the DRSCW.

D. Sharing Responsibility

This report outlines the activities conducted by the DRSCW 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.

E. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the DRSCW.



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 DRSCW 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.)

The DRSCW water quality monitoring program is made up of four components: 1) Bioassessment; 2) Continuous DO monitoring; 3) Expanded DO monitoring, and 3) Continuous Chloride Monitoring. Components 1-3 are discussed below and component 4 was discussed in the previous section of this report.

BIOASSESSMENT

Overview and Sampling Plan

A biological and water quality survey, or “biosurvey”, 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 DRSCW bioassessment is the latter. The DRSCW bioassessment program began in 2007 with sampling in the West Branch DuPage River, East Branch DuPage River and Salt Creek watersheds. From 2009-2016, each watershed was sampled on a 3-year rotation beginning with the West Branch DuPage River watershed in 2006. Beginning in 2017, the watersheds were sampled in a four-year rotation to allow time for the report writing and program assessment. As of 2023, the DRSCW watersheds will be sampled on a six-year rotation. The bioassessment program functions under a quality assurance plan agreed on with the Illinois Environmental Protection Agency (<http://drscw.org/wp/bioassessment/>). Table 1 details the bioassessment sampling dates for each DRSCW watershed.



Table 1. Bioassessment sampling dates for the DRSCW watershed

Watershed	Sampling Completed (year)	Sampling Scheduled (year)
East Branch DuPage River	2007, 2011, 2014, 2019, 2023	2029
West Branch DuPage River	2007, 2009, 2012, 2015, 2020	2027
Salt Creek	2007, 2010, 2013, 2016, 2021	2025

The DRSCW 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 and Salt Creek watersheds to track and understand changes through time in response to abatement actions or other influences.

The data collected under the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. These 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 DRSCW at <http://drscw.org/wp/bioassessment/>. 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 to help determine and prioritize remedial projects (<http://drscw.org/wp/project-identification-and-prioritization-system/>).

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exude an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or “pour point” of the watershed (Level 1 site), then continues by deriving each subsequent “panel” at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in seven drainage area levels in each of the three watersheds, starting at the largest



DuPage River Salt Creek Workgroup

(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 2.

Table 2. Number of sampling sites in the DRSCW project area.

Method/Protocol	West Branch DuPage River (2020)	East Branch DuPage River (2023)	Salt Creek (2021)	Reference Sites (2006- 2021)	Total Sites
Biological sampling					
Fish	42	46*	65*	13	166
Macroinvertebrates	42	45*	65*	13	165
QHEI	42	46*	65*	13	166
Water Column Chemical/Physical Sampling					
Nutrients**	42	39	57	6	144
Water Quality Metals	30	22	34	6	92
Water Quality Organics	18	11	17	6	52
Sediment Sampling	23	15	27	6	71

*Includes sites sampled as part of pre-project monitoring for the physical projects.

**Also included indicators of organic enrichment and ionic strength, total suspended solids (TSS), DO, pH and temperature. Also, in 2019, 2020 and 2023, chlorophyll A was included as a nutrient parameter.

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.



No bioassessment was conducted in 2024. However, at the time of the 2023 DRSCW MS4 Activities Report, the macroinvertebrate results for the 2023 East Branch DuPage River bioassessment were not available and are included in this report. Other results (Fish, Habitat and Water Chemistry) for the 2023 East Branch DuPage River Bioassessment are included in the 2023 DRSCW MS4 Activities Report dated May 8, 2024. A list of the sampling sites included in the 2023 East Branch DuPage River bioassessment is provided in [Table 3](#) and a map of the 2023 East Branch DuPage River bioassessment sites can be found in Map 2. Detailed analysis of all results for the East Branch DuPage River, the West Branch DuPage River and Salt Creek and their tributaries and can be found at <http://drscw.org/wp/bioassessment/>.

The fish and macroinvertebrate results are presented as Illinois EPA 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. Dr. James Karr formulated the IBI concept in 1981.



DuPage River Salt Creek Workgroup

Table 3. 2023 East Branch DuPage River Bioassessment Sampling Sites and Frequency of Sampling

Site Number	River	Latitude	Longitude	Frequency of Sampling during the 2023 Bioassessment							
				Biological Sampling	QHEI	Demand/ Nutrient	Sulfate	Metals	Organics	Sediment	Oil/ Grease
EB01	Trib to E. Branch	41.722101	-88.066886	1	1	2					
EB02	Crabtree Creek	41.742488	-88.063466	1	1	2					
EB03	Prentiss Creek	41.771559	-88.070854	1	1	4		2			
EB04	Prentiss Creek	41.768255	-88.023438	1	1	2					
EB05	Tributary #6	41.76552	-88.083446	1	1	2					
EB06	Rott Creek	41.794673	-88.108805	1	1	2					
EB07	St. Joseph Creek	41.799053	-88.066105	1	1	6	1	4		1	1
EB08	St. Joseph Creek	41.793726	-88.022307	1	1	4		2			
EB09	Tributary to St. Joseph Creek	41.78139	-88.011301	1	1	8		2			
EB10	St. Joseph Creek	41.786345	-87.988384	1	1	2					
EB11	Willoway Brook	41.813363	-88.093695	1	1	2					
EB12	E. Branch DuPage River	41.817551	-88.070101	1	1	6		6	1	1	
EB13	Lacey Creek	41.826345	-88.047659	1	1	4		2			
EB14	Lacey Creek	41.81926	-88.015041	1	1	2					
EB15	Glencrest Creek	41.845416	-88.048384	1	1	4		2			
EB17	22nd Street Trib	41.845135	-88.027971	1	1	2					
EB19	E. Branch DuPage River	41.871131	-88.041521	1	1	6		6	1	1	
EB20	Tributary to E. Branch DuPage	41.890928	-88.047683	1	1	2					
EB21	E. Branch DuPage River	41.898823	-88.048586	1	1	6		4	1	1	
EB22	Armitage Creek	41.910852	-88.06102	1	1	2					
EB23	E. Branch DuPage River	41.917873	-88.05177	1	1	6	1	4	1	1	
EB24	Army Trail Creek	41.931177	-88.052038	1	1	2					
EB25	E. Branch DuPage River	41.93661	-88.060411	1	1	2		2			
EB26	E. Branch DuPage River	41.904841	-88.048033	1	1	6		6		1	
EB29	E. Branch DuPage River	41.941631	-88.062479	1	1	12					
EB30	E. Branch DuPage River	41.844856	-88.042741	1	1	6	1	6	1	1	
EB31	E. Branch DuPage River	41.793944	-88.079133	1	1	6	1	6	1	1	
EB32	E. Branch DuPage River	41.758824	-88.072293	1	1	12	1	6	1	1	
EB33	E. Branch DuPage River	41.736857	-88.067816	1	1	12		6	1	1	
EB34	E. Branch DuPage River	41.712035	-88.088376	1	1	12		6	1	1	
EB35	E. Branch DuPage River	41.718178	-88.070535	1	1	12		6	1	1	
EB36	E. Branch DuPage River	41.886264	-88.042288	1	1	6		6		1	
EB37	E. Branch DuPage River	41.77118	-88.076897	1	1	6		4			
EB38	E. Branch DuPage River	41.714391	-88.112161	1	1	8					
EB39	E. Branch DuPage River	41.712349	-88.093981	1	1	12		6		1	
EB41	E. Branch DuPage River	41.7109	-88.12797	1	1	12	1	6	1	1	
EB40	E. Branch DuPage River	41.744	-88.068	1	1	8					
EB42	E. Branch DuPage River	41.88555	-88.043055	1	1						
EB43	E. Branch DuPage River	41.732252	-88.067222	1	1						
EB12A	E. Branch DuPage River	41.81911	-88.065277	1	1						
EB43A	E. Branch DuPage River	41.726811	-88.069166	Fish Only	1						
EB44	E. Branch DuPage River	41.712517	-88.099181	1	1						
EB45	E. Branch DuPage River	41.711974	-88.082386	1	1						
EB46	E. Branch DuPage River	41.714518	-88.073918	1	1						
EBAR	E. Branch DuPage River	41.935171	-88.05843			6					
EBHL	E. Branch DuPage River	41.8257	-88.05316			6					

MACROINVERTEBRATES

Methodology

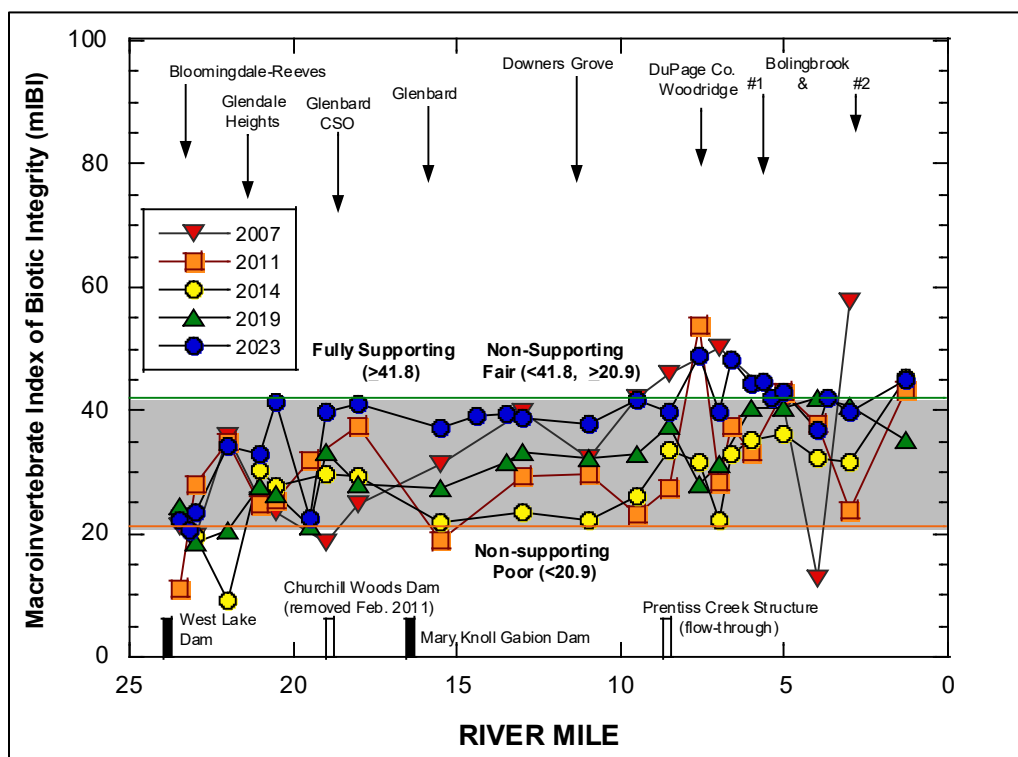
The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded 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

East Branch DuPage River

Macroinvertebrate assemblage conditions throughout the East Branch DuPage River watershed are in primarily in the fair range in watershed with several sites in the good range in the lower portion of the watershed (Figure 7).

Figure 7. Macroinvertebrate IBI scores in the East Branch DuPage River in 2007, 2011, 2014, 2019, and 2023 relation to municipal POTW dischargers and tributaries





DISSOLVED OXYGEN (DO) MONITORING

Background and Methodology

The Illinois Environmental Protection Agency (IEPA) report, Illinois 2004 Section 303(d) List, listed dissolved oxygen (DO) as a potential impairment in Salt Creek, and the East and West Branches of the DuPage River. The report suggested that the DO levels in selected reaches of these waterways might periodically fall to levels below those required by healthy aquatic communities.

All rivers and creeks in DuPage County are classified as General Use Waters. The present water quality standards for dissolved oxygen in General Use Waters is:

1. During the period of March through July
 - a. 5.0 mg/L at any time; and
 - b. 6.0 mg/L as a daily mean averaged over 7 days.
2. During the period of August through February,
 - a. 3.5 mg/L at any time;
 - b. 4.0 mg/L as a daily minimum averaged over 7 days; and
 - c. 5.5 mg/L as a daily mean averaged over 30 days.

Following listing on the 303 (d) list two (2) DO TMDLs were prepared by the IEPA for Salt Creek and the East Branch of the DuPage River in 2004 and two (2) DO TMDLs were prepared for the West Branch DuPage River and Spring Brook #1 in 2019. In response to the TMDLs, the DRSCW committed to develop and manage a continuous long-term DO monitoring plan for the project area in order to assess the nature and extent of the DO impairment and to allow the design of remedial projects. The continuous DO data is also used to assess the impact of DO improvement projects such as the Churchill Woods and Oak Meadow dam removals.

In 2023, the DRSCW in collaboration with DuPage County Stormwater Management gathered continuous DO data via water quality sondes at four (4) sites on Salt Creek (SCBW, SCOM, SCBR SCFW), five (5) sites on the East Branch DuPage River (EBAR, EBCB, EBHL, EBHR, EBWL), and five (5) sites on the West Branch DuPage River (WBAD, WBBR, WBWD, WBMG, WBNPV) that will be utilized in the calibration and verification of the updated QUAL2Kw models. The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) also typically monitors one (1) additional location on Salt Creek. All sondes are deployed from May through October and collected DO, temperature, conductivity, and pH on an hourly basis. The continuous DO monitoring program functions under a quality assurance plan agreed on with the IEPA (<http://drscw.org/wp/dissolved-oxygen/>). Details on the site location are included in Table 4 and site locations for 2024 are included on Map 3.



DuPage River Salt Creek Workgroup

Results

Results of the continuous DO monitoring conducted in the summer of 2024 is included in Figure 8 to Figure 15 for the following sites: WBAD, WBBR, WBWD, WBMG, WBAR, EBCB, SCOM, and SCBR. Data for WBNPV, EBHL, EBHR, EBWL, SCBW, and SCWR was not available at the time of this report. Once available an addendum will be issued and the data will also be included in the 2025 DRSCW MS4 Activities Report. No data was collected at SCFW in 2024 due to construction activities associated with the Master Plan for Salt Creek at Fullersburg Woods which included the removal of the Graue Mill Dam and the restoration of 1.25 miles of Salt Creek.

Table 4. 2024 Continuous DO monitoring locations in the DRSCW watersheds

Site ID	Stream Name	River Mile	Latitude	Longitude	Location
WBAD	W. Br. DuPage River	29.9	41.9750	-88.1386	Arlington Drive
WBBR	W. Br. DuPage River	11.7	41.825268	-88.179456	Butterfield Road
WBWD	W. Br. DuPage River	11.1	41.82027	-88.17212	Downstream of former Warrenville Grove Dam
WBMG	W. Br. DuPage River	8.6	41.795928	-88.187263	Upstream of former McDowell Grove Dam
WBNPV	W. Br. DuPage River	3.0	41.74029	-88.126879	Downstream Bailey Road
EBAR	E. Br. DuPage River	23.0	41.935171	-88.05843	Army Trail Road
EBCB	E. Br. DuPage River	18.8	41.88510	-88.04110	Crescent Boulevard
EBHL	E. Br. DuPage River	14.0	41.82570	-88.05316	Hidden Lake Preserve
EBHR	E. Br. DuPage River	8.5	41.76800	-88.07160	Hobson Road
EBWL	E. Br. DuPage River	3.8	41.712315	-88.094842	Whalon Lake
SCBW	Salt Creek	29.4	42.01630	-88.00061	Downstream of Busse Woods Dam (MWRDGC)
SCOM	Salt Creek	23.0	41.941279	-87.983363	Upstream of former Oak Meadows Dam
SCBR	Salt Creek	16.1	41.864686	-87.95073	Butterfield Road
SCFW	Salt Creek	11.1	41.825493	-87.93158	Fullersburg Woods impoundment
SCWR	Salt Creek	8.1	41.82576	-87.90045	Wolf Road (MWRDGC)

Figure 8. 2024 Dissolved Oxygen plot for the West Branch DuPage River at Arlington Drive (WBAD)

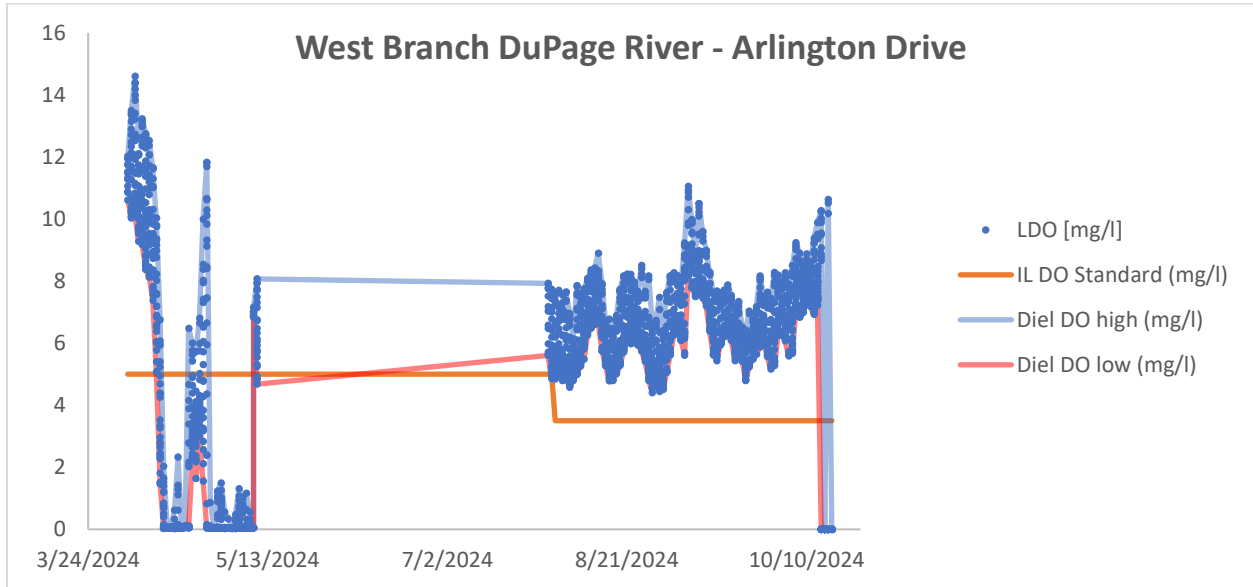


Figure 9. 2024 Dissolved Oxygen plot for the West Branch DuPage River at Butterfield Road (WBBR)

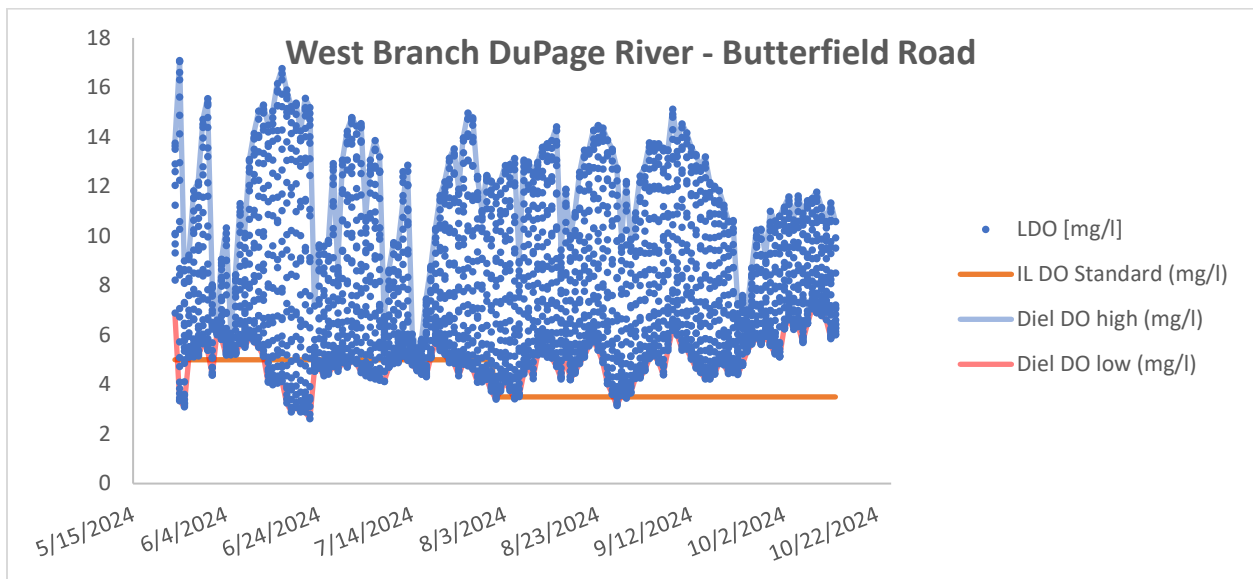


Figure 10. 2024 Dissolved Oxygen plot for the West Branch DuPage River downstream of former Warrenville Grove Dam (WBWD)

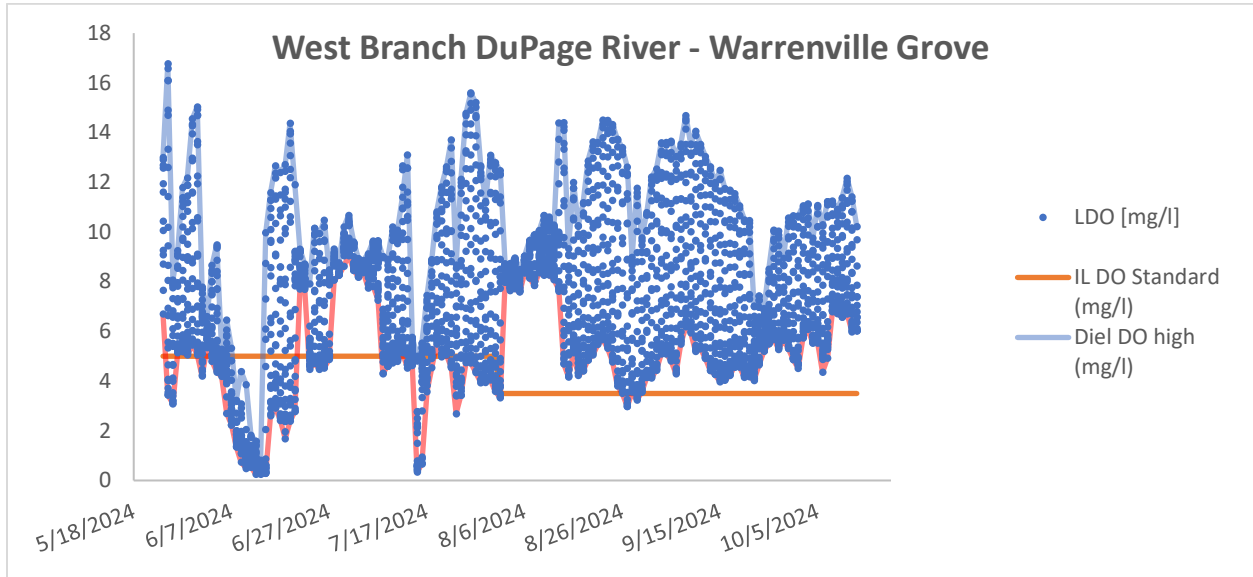


Figure 11. 2023 Dissolved Oxygen plot for the West Branch DuPage River upstream of former McDowell Grove Dam (WBMG)

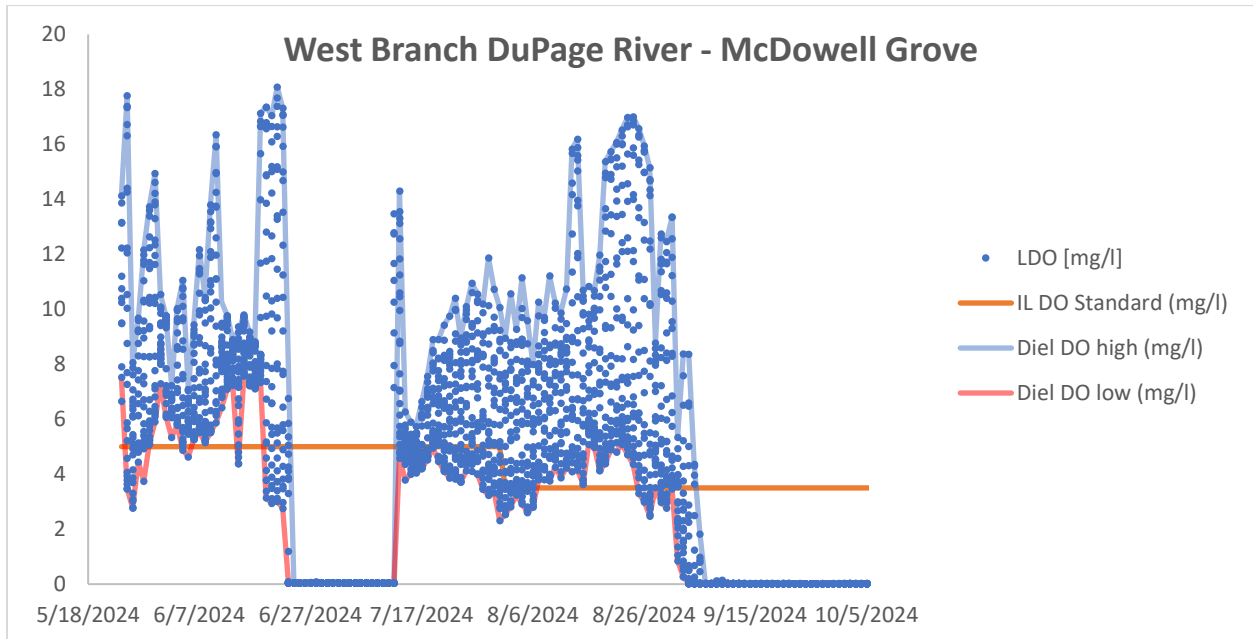


Figure 12. 2023 Dissolved Oxygen plot for the East Branch DuPage River at Army Trail Road (WBAR)

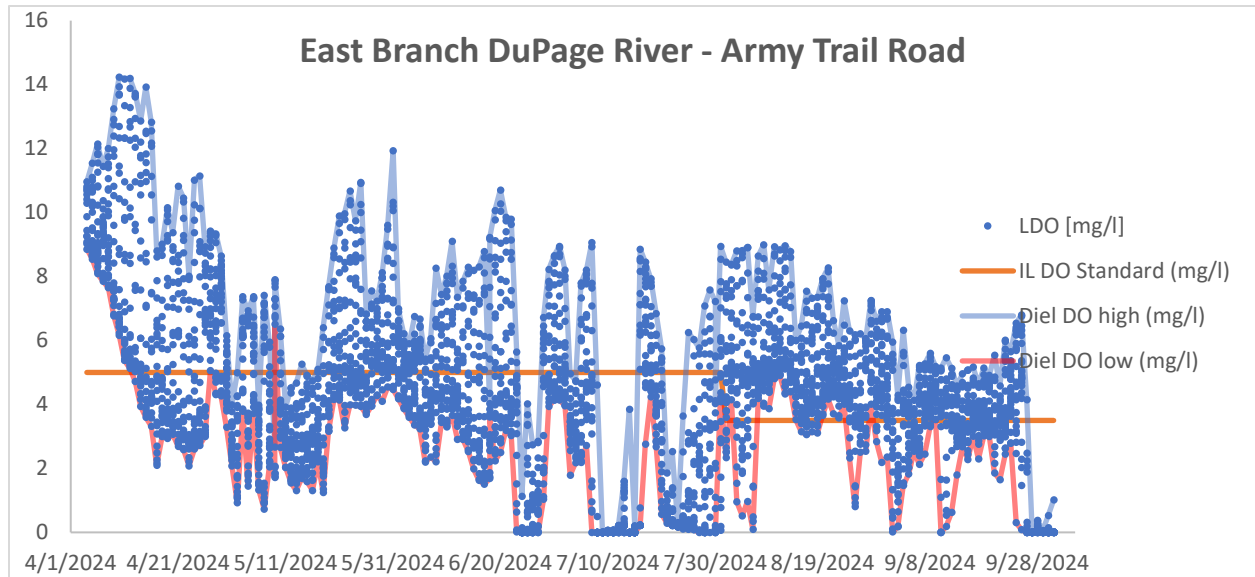


Figure 13. 2023 Dissolved Oxygen plot for the East Branch DuPage River at Crescent Boulevard (EBCB)

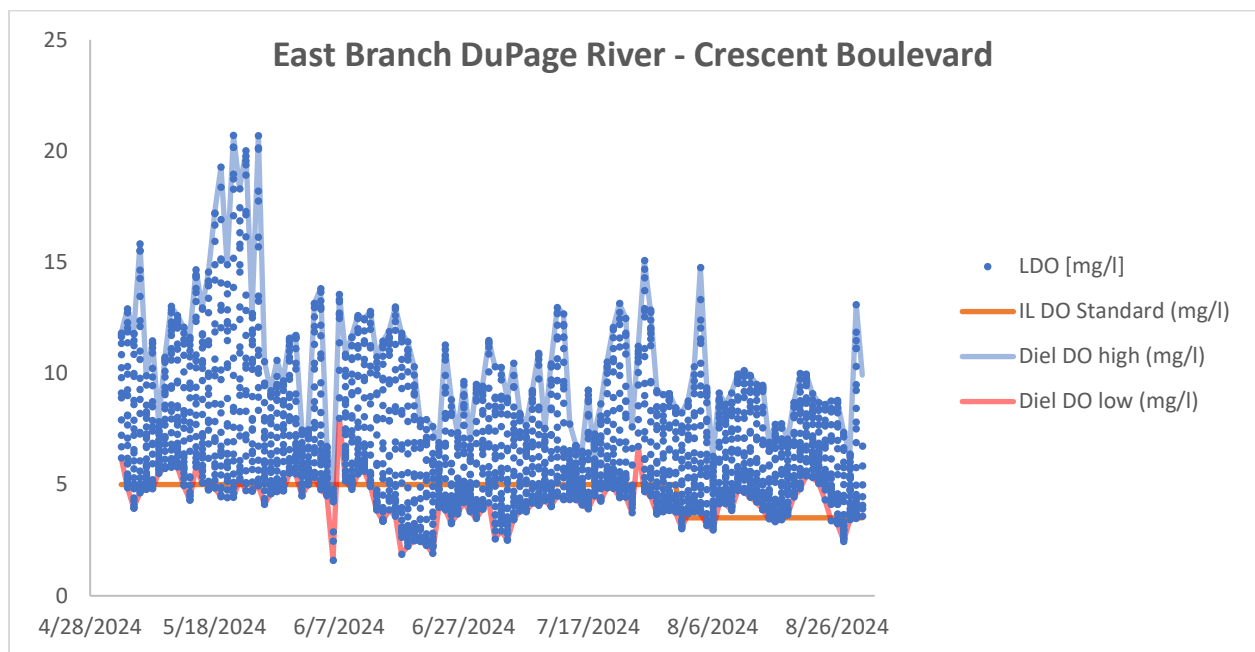


Figure 14. 2023 Dissolved Oxygen plot for Salt Creek upstream of former Oak Meadows Dam (SCOM)

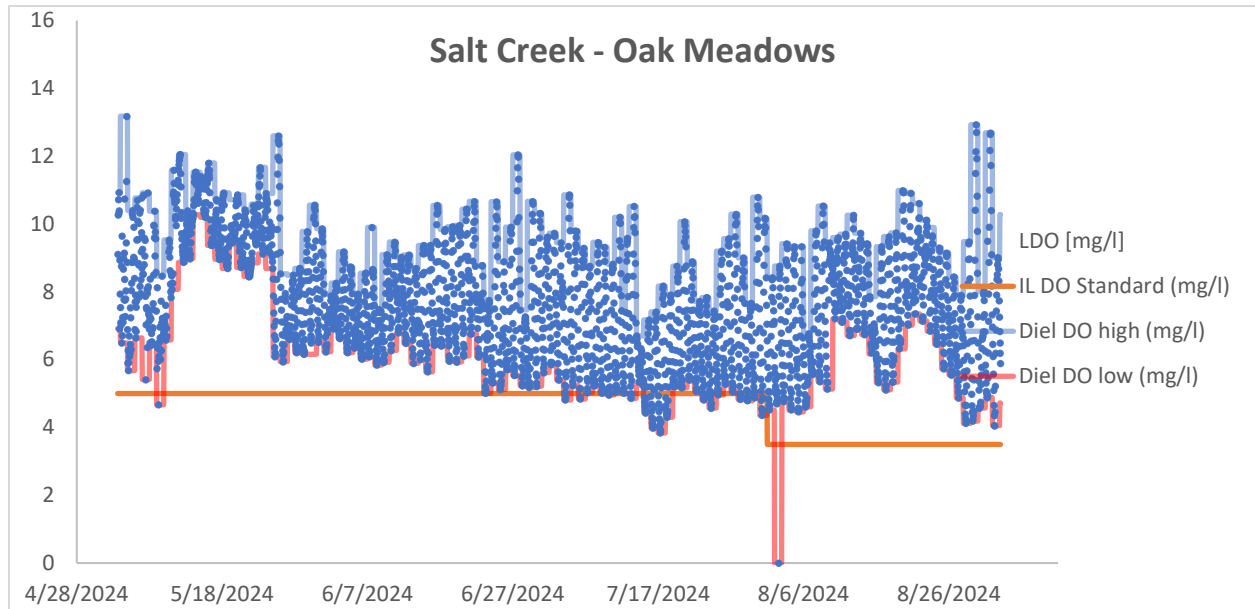
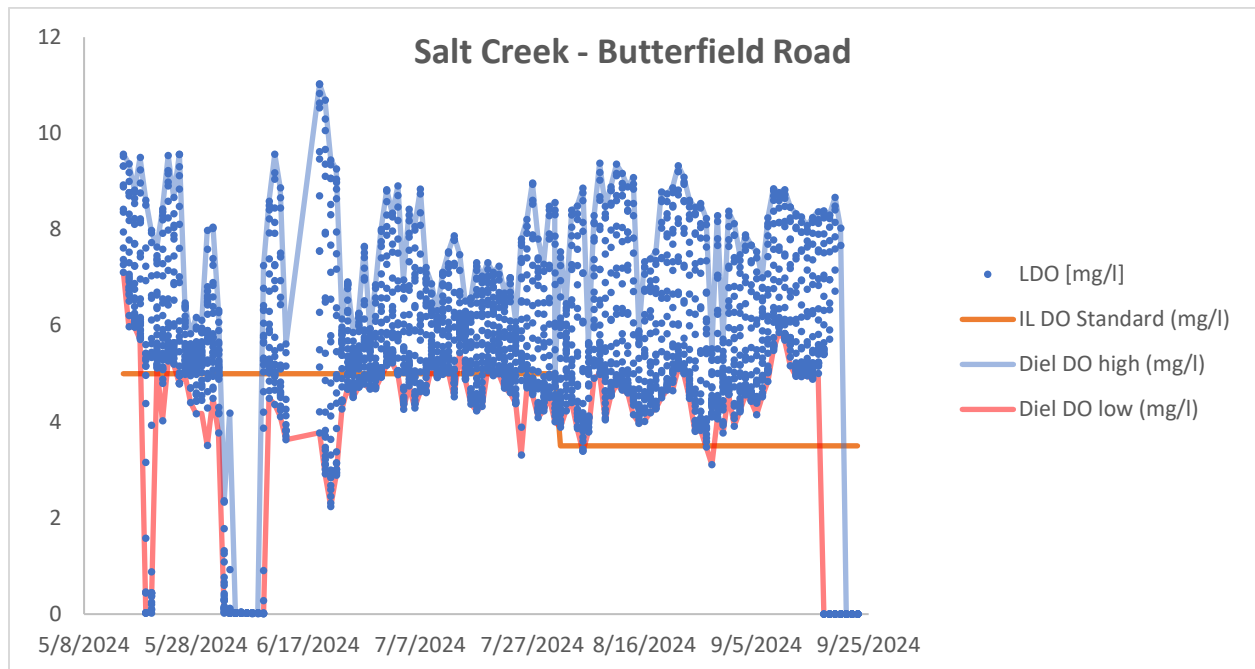


Figure 15. 2023 Dissolved Oxygen plot for Salt Creek at Butterfield Road (SCBR)





EXPANDED DO MONITORING

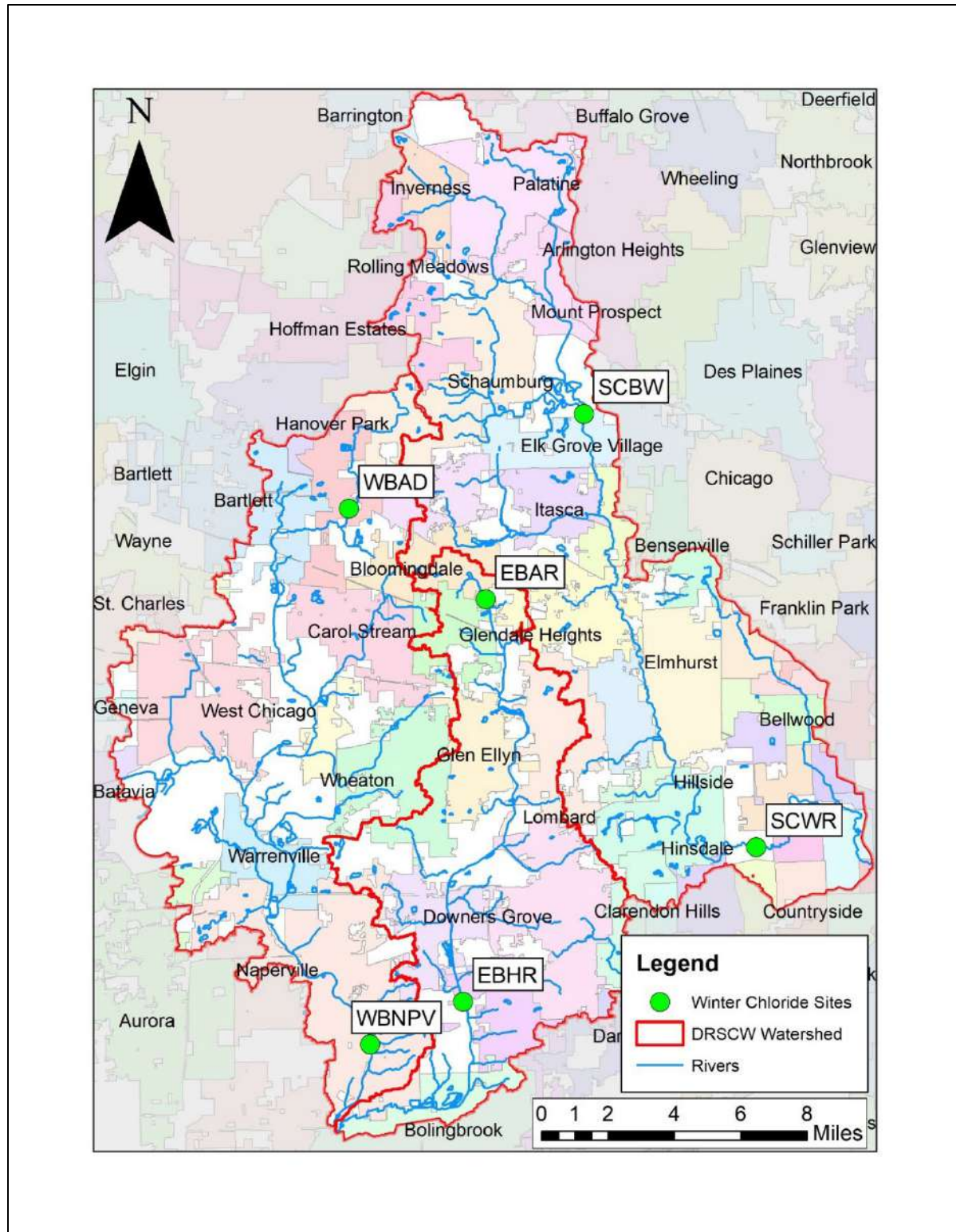
In 2019, the DRSCW began their expanded DO Monitoring Program as a means to collect additional data to support the calibration/validation of the QUAL2Kw models and to support the development of the Nutrient Implementation Plan (NIP). This program is coordinated with the Bioassessment Program (see Table 5 for schedule). No Expanded DO sampling was conducted in 2024.

Table 5. Schedule for Expanded DO Monitoring

Basin	Year of Expanded DO Monitoring Completed	Year of Expanded DO Monitoring Scheduled
East Branch DuPage River	2019, 2023	2029
West Branch DuPage River	2020	2027
Salt Creek	2021	2025



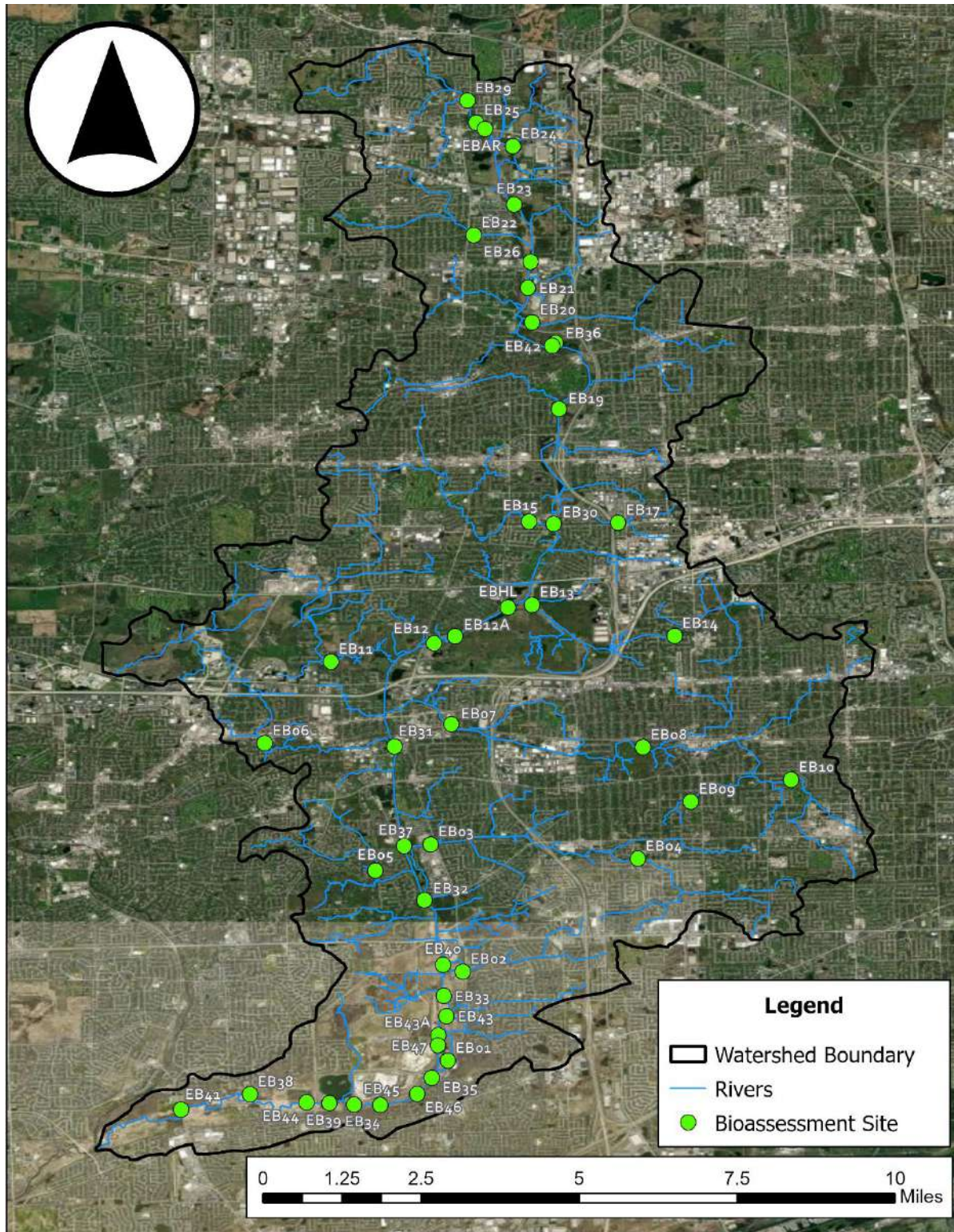
DuPage River Salt Creek Workgroup



Map 1. Ambient chloride monitoring sites in the DRSCW watershed (2024)



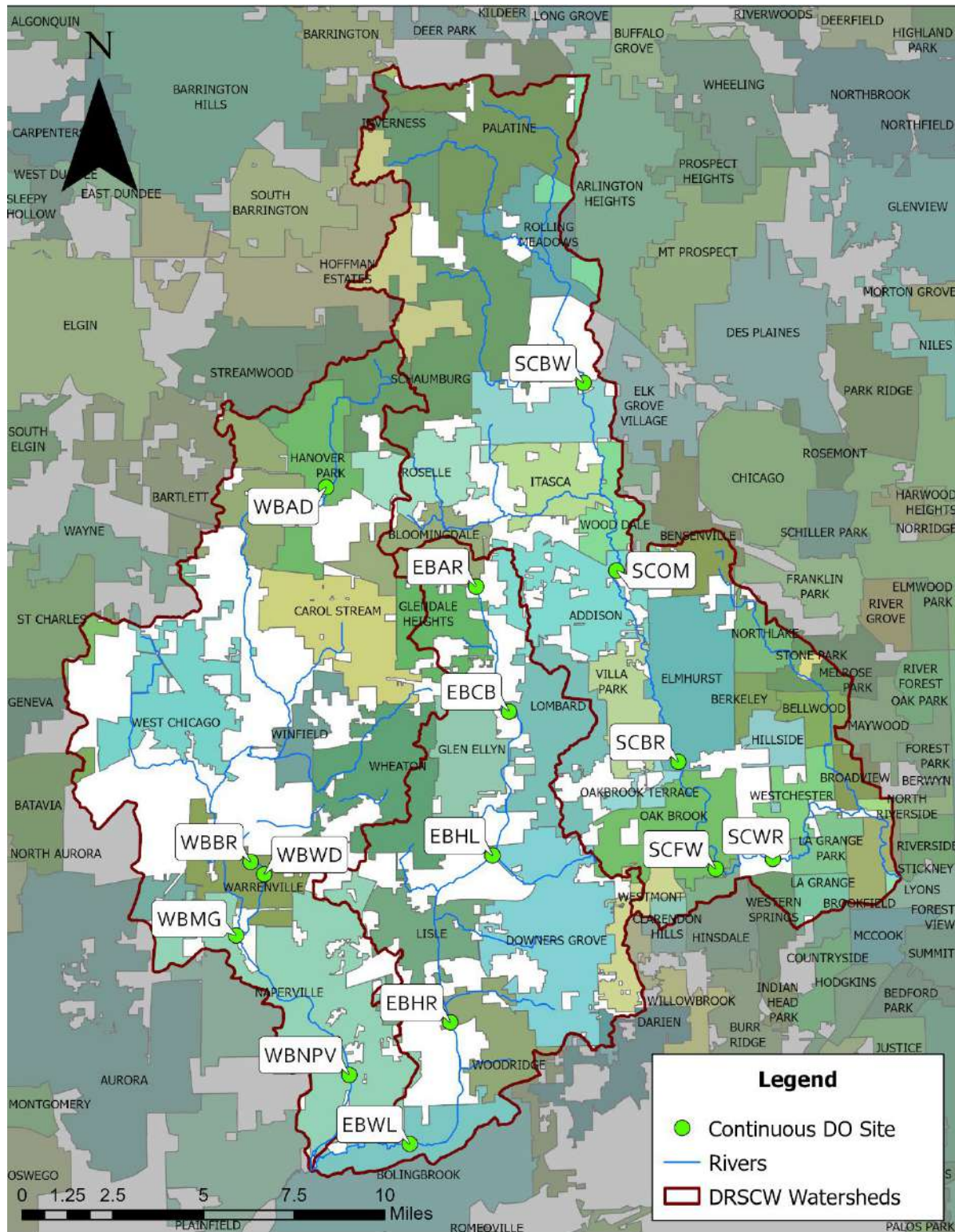
DuPage River Salt Creek Workgroup



Map 2. Bioassessment sites in the East Branch Bioassessment (2023)



DuPage River Salt Creek Workgroup



Map 3. Continuous DO monitoring sites in the DRSCW watersheds (2024)



DuPage River Salt Creek Workgroup

Attachment 1

2024 Public Roads Workshop
Attendees List

2024 Public Roads Workshop Attendees by County

Date	Workshop	City	County
Oct. 8	Public Roads	Champaign	Champaign
Oct. 15	Public Roads	Cook County DOT	Cook
Sept. 24	Public Roads	DGO Premium Services Co	Cook
Oct. 8	Public Roads	Flossmoor	Cook
Oct. 3	Public Roads	Glenwood	Cook
Oct. 8	Public Roads	Hoffman Estates	Cook
Oct. 3	Public Roads	Homewood	Cook
Oct. 8	Public Roads	Metropolitan Water Reclamation District of Greater Chicago	Cook
Oct. 15	Public Roads	Metropolitan Water Reclamation District of Greater Chicago	Cook
Sept. 24	Public Roads	Morton Grove	Cook
Oct. 3	Public Roads	Orland Park	Cook
Sept. 24	Public Roads	Palatine Township Road District	Cook
Oct. 8	Public Roads	Palos Heights	Cook
Oct. 8	Public Roads	Park Forest	Cook
Oct. 3	Public Roads	Richton Park	Cook
Oct. 15	Public Roads	Richton Park Public Works	Cook
Oct. 15	Public Roads	Skokie	Cook
Oct. 8	Public Roads	South Holland	Cook
Oct. 3	Public Roads	Tinley Park	Cook
Oct. 15	Public Roads	Wilmette	Cook
Oct. 15	Public Roads	Addison	DuPage
Oct. 8	Public Roads	Addison Township	DuPage
Sept. 17	Public Roads	Aurora	DuPage/Kane
Oct. 8	Public Roads	Bloomington Township	DuPage
Oct. 15	Public Roads	Downers Grove	DuPage
Oct. 15	Public Roads	Downers Grove Twnshp	DuPage
Oct. 15	Public Roads	Forest Preserve District of DuPage County	DuPage
Oct. 8	Public Roads	Glen Ellyn	DuPage
Oct. 8	Public Roads	Glendale Heights	DuPage
Oct. 8	Public Roads	Milton Township	DuPage
Oct. 8	Public Roads	Oak Brook	DuPage
Oct. 8	Public Roads	Roselle	DuPage
Oct. 15	Public Roads	Village of Glen Ellyn	DuPage
Sept. 17	Public Roads	Warrenville	DuPage
Sept. 24	Public Roads	Warrenville	DuPage
Oct. 15	Public Roads	Wayne Township	DuPage
Oct. 8	Public Roads	Winfield Township	DuPage
Oct. 8	Public Roads	York Township	DuPage
Oct. 8	Public Roads	Avon	Fulton
Oct. 8	Public Roads	Minooka	Grundy/Kendall/Will
Oct. 8	Public Roads	Elgin	Kane
Sept. 17	Public Roads	Plano	Kendall
Oct. 8	Public Roads	Beach Park	Lake
Oct. 8	Public Roads	Ela Township	Lake
Oct. 8	Public Roads	Fremont Township	Lake
Oct. 15	Public Roads	Grant Township Highway Department	Lake
Sept. 24	Public Roads	Gurnee Public Works	Lake
Sept. 24	Public Roads	Hawthorne Woods	Lake
Sept. 24	Public Roads	Island Lake	Lake/McHenry
Sept. 24	Public Roads	Lake County DOT	Lake

2024 Public Roads Workshop Attendees by County

Date	Workshop	City	County
Sept. 24	Public Roads	Libertyville	Lake
Sept. 24	Public Roads	Lindenhurst	Lake
Sept. 24	Public Roads	Round Lake	Lake
Sept. 24	Public Roads	Round Lake Park	Lake
Sept. 24	Public Roads	Volo	Lake
Sept. 24	Public Roads	Warren Township Highway	Lake
Sept. 24	Public Roads	Wauconda	Lake
Sept. 24	Public Roads	Wauconda Township	Lake
Oct. 8	Public Roads	McHenry Township	McHenry
Sept. 17	Public Roads	Illinois DOT	Multiple
Sept. 24	Public Roads	Illinois DOT	Multiple
Oct. 3	Public Roads	Illinois DOT	Multiple
Oct. 15	Public Roads	Illinois Tollway	Multiple
Oct. 15	Public Roads	Bolingbrook	Will
Oct. 8	Public Roads	Channahon	Will
Oct. 8	Public Roads	Lockport	Will
Oct. 8	Public Roads	Midlothian	Will
Oct. 15	Public Roads	Midlothian	Will
Oct. 3	Public Roads	Mokena	Will
Oct. 8	Public Roads	Romeoville	Will
Oct. 15	Public Roads	Romeoville	Will
Oct. 8	Public Roads	Shorewood	Will



DuPage River Salt Creek Workgroup

Attachment 2

2024 Parking Lots & Sidewalks
Workshop Attendees List

2024 Parking Lots & Sidewalks Workshop Attendees by County

Date	Workshop	City	County
Sept. 26	Parking Lots & Sidewalks	Champaign Public Works	Champaign
Sept. 26	Parking Lots & Sidewalks	Cook County	Cook
Sept. 26	Parking Lots & Sidewalks	Forest Preserve District Cook County	Cook
Sept. 26	Parking Lots & Sidewalks	Metropolitan Water Reclamation District of Greater Chicago	Cook
Sept. 26	Parking Lots & Sidewalks	Park Forest	Cook
Oct. 1	Parking Lots & Sidewalks	Metropolitan Water Reclamation District of Greater Chicago	Cook
Oct. 1	Parking Lots & Sidewalks	Streamwood Park District	Cook
Sept. 26	Parking Lots & Sidewalks	DuPage County Facilities Mgmt	DuPage
Sept. 26	Parking Lots & Sidewalks	DuPage County Stormwater Mgmt	DuPage
Sept. 26	Parking Lots & Sidewalks	St. Daniel the Prophet Catholic Church, Wheaton	DuPage
Oct. 1	Parking Lots & Sidewalks	Fox Valley Park District	Kane
Sept. 26	Parking Lots & Sidewalks	Buffalo Grove Park District	Lake/Cook
Sept. 26	Parking Lots & Sidewalks	Hawthorn Woods	Lake
Sept. 26	Parking Lots & Sidewalks	Lake County FPD	Lake
Sept. 26	Parking Lots & Sidewalks	Lake County Health Dept.	Lake
Oct. 1	Parking Lots & Sidewalks	Lake County Health Dept.	Lake
Sept. 26	Parking Lots & Sidewalks	Lake Villa	Lake
Sept. 26	Parking Lots & Sidewalks	North Shore WRD	Lake
Oct. 1	Parking Lots & Sidewalks	Vernon Hills Park District	Lake
Oct. 1	Parking Lots & Sidewalks	Waukegan Park District	Lake
Oct. 1	Parking Lots & Sidewalks	Crete Monee School District	Will
Sept. 26	Parking Lots & Sidewalks	Romeoville	Will