DuPage River/Salt Creek
Special Conditions Report

March 31, 2026

Unloading of the Fawell fish ladder at the storage facility


Planting of perennial plants at Fullersburg Woods


Truck Calibration Workshop, DuPage County DOT - Wheaton, Illinois

DuPage River Salt Creek Workgroup

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Introduction and Participation DuPage/Salt Creek Special Conditions Report, March 30, 2026.

This report fulfills certain reporting requirements contained in DuPage River Salt Creek Workgroup's (DRSCW) and Lower DuPage River Watershed Coalition's (LDRWC) NPDES permits. The specific reporting requirements addressed herein include annual reporting on the progress of the projects listed in the Special Conditions, and certain baseline condition reporting for the Chloride Reduction Program.

Background – DuPage River Salt Creek Workgroup (DRSCW)

In 2015, the DRSCW submitted its Implementation Plan to the Illinois Environmental Protection Agency (IEPA). The adaptive management approach is based on high-resolution, comprehensive monitoring of chemical, biological, and physical characteristics of the watersheds. This monitoring provides the data needed to execute the "Plan-Do-Check-Act" methodology inherent to adaptive management. Analysis of the monitoring data provides insight into the highest-priority stressors that affect stream health and allows identification of projects or initiatives with the greatest potential to attain stream use goals. Monitoring also provides the feedback needed to properly assess the impacts of stream restoration projects and water quality initiatives to better formulate future activities.

The 2015 Implementation Plan was used to negotiate a Special Condition in the National Pollutant Discharge Elimination System (NPDES) permit for the watershed's major municipal WWTPs. The Special Condition covered two five-year permit cycles (10 years total); it set an effluent total phosphorus (TP) limit for WWTPs at 1.0 milligrams per liter (mg/L) required 10 years after the effective date of the initial permit for WWTPs using chemical treatment and 11 years after the effective date of the initial permit for WWTPs using biological treatment. Additionally, the Special Condition includes projects and activities as set out in the 2015 DRSCW Implementation Plan (Table 1 and Map 1).

Table 1. DRSCW Special Condition projects and activities per the 2022 NPDES Permit Special Condition

Project Name	Completion Date	Short-Term Objectives	Long-Term Objectives
Oak Meadows Golf Course Dam Removal	December 31, 2016 (Completed)	Improve dissolved oxygen (DO)	Improve fish passage
Oak Meadows Golf Course Stream Restoration	December 31, 2017 (Completed)	Improve aquatic habitat (Qualitative Habitat Evaluation Index (QHEI)), reduce inputs of nutrients and sediment	Raise macroinvertebrate Index of Biotic Integrity (mIBI)
Fawell Dam Modification	December 31, 2024 [1]	Modify dam to allow fish passage	Raise fish Index of Biotic Integrity (fIBI) upstream of structure

Project Name	Completion Date	Short-Term Objectives	Long-Term Objectives
Spring Brook Restoration and Dam Removal	December 31, 2020 (Completed)	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise mIBI and fIBI
Fullersburg Woods Dam Modification Concept Plan Development	December 31, 2016 (Completed)	Identify conceptual plan for dam modification and stream restoration	Build consensus among plan stakeholders
Fullersburg Woods Dam Modification	December 31, 2024 (Completed)	Improve DO, improve aquatic habitat (QHEl)	Raise mIBI and fIBI
Fullersburg Woods Dam Modification Area Stream Restoration	December 31, 2024 (Completed)	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise mIBI and fIBI
West Branch Physical Enhancement	December 31, 2023 (Completed)	Improve aquatic habitat (QHEI)	Raise mIBI and fIBI
Southern East Branch Stream Enhancement	December 31, 2024 [1]	Improve aquatic habitat (QHEl), reduce inputs of nutrients and sediment	Raise mIBI and fIBI
QUAL2Kw Modeling for West Branch, East Branch, and Salt Creek	December 31, 2023 (Completed)	Collect new baseline data and update model	Quantify improvements in watershed. Prioritize DO improvement projects for years beyond 2024
Nonpoint Source (NPS) Phosphorus Feasibility Analysis	December 31, 2021 (Completed)	Assess NPS performance from reductions leaf litter and street sweeping	Reduce NPS contributions to lowest practical levels
East Branch Phase II	December 31, 2028	Improve aquatic habitat (QHEI), reduce Inputs of nutrients and sediment	Raise mIBI and fIBI
Lower Salt Creek Phase II	December 31, 2028 (Completed) [2]	Improve aquatic habitat (QHEI), Remove fish barrier, reduce inputs of nutrients and sediment	Raise mIBI and fIBI
West Branch Restoration Project	December 31, 2028	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise mIBI and fIBI

[1] Changed to December 31, 2027 (Fawell) and 2028 (Southern East Branch), via petition to IEPA by the DRSCW

[2]Added to Fullersburg Woods Project footprint

Another requirement of the Special Conditions is that the member WWTPs participate in a watershed Chloride Reduction Program with the objective of optimizing public agency winter chloride compound application rates to decrease watershed-wide chloride loading.

In 2022, the Special Conditions were extended for an additional five-year permit cycle and provided additional funding from participating members for projects identified in the 2020 Implementation Plan. The 2022 Special Conditions also extended the effective date of the effluent TP limit for WWTPs at 1.0 mg/L for an additional three years. Four DRSCW members (Villages of Bartlett, Glendale Heights, West Chicago/Winfield Wastewater Authority and West Branch Water Reclamation District) chose to retain the original NPDES permit language and will be implementing a TP limit of 1.0 mg/L monthly average starting between 10/01/2025 and

08/02/2026. Twelve agencies operating 16 WWTPs have adopted the new conditions and an additional two WWTPs (Villages of Bensenville and Itasca) are already treating to 1.0 mg/L TP due to earlier plant expansions. These assessments between 2023 and 2025 (valued at $6,043,773) have been allocated to fund an expansion of the Fullersburg Woods Dam removal and stream restoration project (Section 1.5), the lower East Branch Stream Enhancement project (Section 1.7), and a not yet identified project on the West Branch of the DuPage River.

Table 2 includes a list of all DRSCW members and identifies their participation in both the 2015 Special Conditions and the 2022 Special Conditions. A copy of the 2022 DRSCW Special Conditions permit is included in Attachment 1.

Table 2. Participation in the DRSCW NPDES Permit Special Conditions 2025-2026

Agency Name	Facility Name	NPDES Permit Number	Membership Dues Paid 2025-26	Member Included in the 2015 Special Conditions	Assessment Paid for Paragraph 2 Table Project Funding for the 2022 Special Condition
Addison, Village of	A. J. LaRocca WTF	IL0027367	YES	YES	YES
Addison, Village of	Addison - North STP	IL0033812	YES	YES	YES
Bartlett, Village of	Bartlett WWTP	IL0027618	YES	YES	N/A
Bensenville, Village of	South STP	IL0021849	YES	YES*	N/A
Bloomingdale, Village of	Reeves WRF	IL0021130	YES	YES	YES
Bolingbrook, Village of	Bolingbrook #1	IL0032689	YES	YES	YES
Bolingbrook, Village of	Bolingbrook #2	IL0032735	YES	YES	YES
Carol Stream, Village of	Carol Stream WRC	IL0026352	YES	YES	YES
Downers Grove Sanitary District	Downers Grove S.D. – Wastewater Treatment Center	IL0028380	YES	YES	YES
DuPage County	Green Valley	IL0031844	YES	YES	YES
Elmhurst, City of	Elmhurst WRF	IL0028746	YES	YES	YES
Glenbard Wastewater Authority	Glenbard WWTP	IL0021547	YES	YES	YES
Glendale Heights, Village of	Glendale Heights WWTP	IL0028967	YES	YES	N/A
Hanover Park, Village of	Hanover Park STP	IL0034479	YES	YES	YES
Itasca, Village of	Itasca STP	IL0079073	YES	YES*	N/A
Metropolitan Water Reclamation District of Greater Chicago	Egan WRP	IL0036340	YES	YES	YES

Agency Name	Facility Name	NPDES Permit Number	Membership Dues Paid 2025-26	Member Included in the 2015 Special Conditions	Assessment Paid for Paragraph 2 Table Project Funding for the 2022 Special Condition
Metropolitan Water Reclamation District of Greater Chicago	Hanover WRP	IL0036137	YES	YES	YES
Roselle, Village of	J. Botterman WWTP	IL0048721	YES	YES	YES
Roselle, Village of	J. L. Devlin WWTP	IL0030813	YES	YES	YES
Salt Creek Sanitary District	Salt Creek Sanitary District STP	IL0030953	YES	YES	YES
West Branch Water Reclamation District (formerly known as Wheaton Sanitary District)	Wheaton Sanitary District WWTF	IL0031739	YES	YES	N/A
West Chicago, City of and Winfield, Village of	West Chicago/Winfield Wastewater Authority Regional WWTP	IL0023469	YES	YES	N/A
Wood Dale, City of	City of Wood Dale - North STP	IL0020061	YES	YES	YES
Wood Dale, City of	Wood Dale - South STP	IL0034274	YES	YES	YES

*The Bensenville South STP and Itasca STP only contributed funds to the Chloride/NIP/QUAL 2K/Trading Program (also known as the "studies" portion) of the 2015 Special Conditions funds as both facilities' NPDES permits already included a 1 mg/L for TP.
N/A means the agency does not have the condition included in its permit in this cycle.

Background – Lower DuPage River Watershed Coalition (LDRWC)

Similar to the DRSCW, the LDRWC has negotiated Special Conditions with the IEPA that includes projects and activities that are the sole responsibility of the LDRWC (Table 3) as well as those that are the joint responsibility of the LDRWC and DRSCW (Table *4*). Map 2 depicts the location of the physical projects in the LDRWC's Special Conditions.

Table 3. LDRWC Special Condition projects per Implementation Planning from 2016

Project Name	Completion Date	Short-Term Objectives	Long-Term Objectives
Hammel Woods Dam Removal	December 31, 2022(Completed)	Improve DO, reduce nuisance algae	Improve fish passage
DuPage River Stream enhancement South of 119th Street in Plainfield	December 31, 2025	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise mIBI and fIBI

Table 4. LDRWC/DRSCW Joint Activities

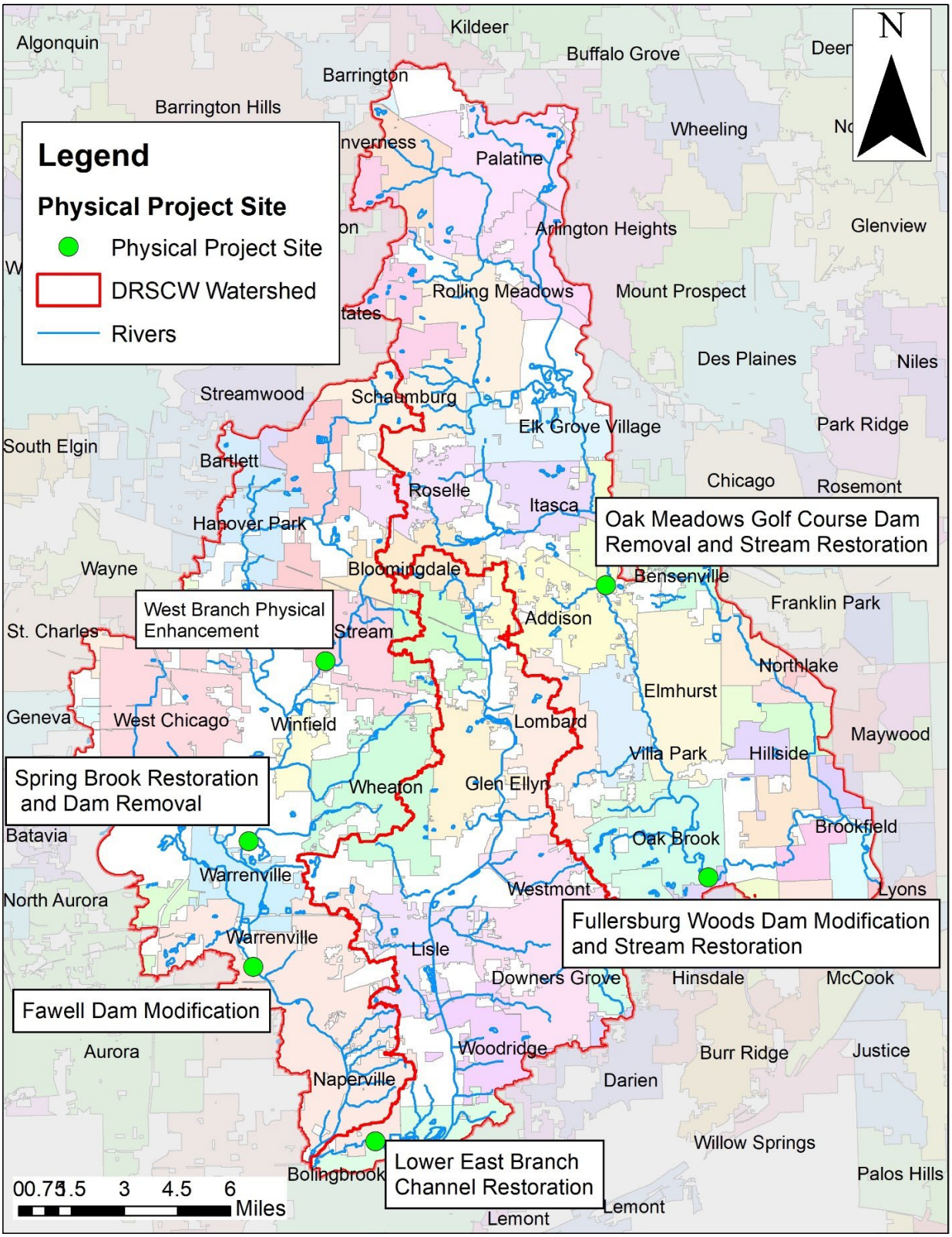
Project Name	Completion Date	Short-Term Objectives	Long-Term Objectives
Nonpoint Source (NPS) Phosphorus Feasibility Analysis	December 31, 2021 (Completed)	Assess NPS performance from reductions leaf litter and street sweeping	Reduce NPS contributions to lowest practical levels

In the LDRWC, three (3) WWTPs are already at 1 mg/l monthly average and two (2) WWTPs, Bolingbrook #3 and Naperville, will be moving to the 1 mg/l limit by 7/01/2030 and 12/31/2032, respectively. Crest Hill's TP schedule is being negotiated as part of their proposed plant expansion. Table 5 includes a list of all LDRWC members and identifies their participation in both the Special Conditions. A copy of the LDRWC permit Special Conditions is included in Attachment 2. Note: As the LDRWC Special Conditions differ between permit holders, the Special Condition for Bolingbrook STP#3 is included in the Attachment as a representation of the LDRWC's Special Conditions language.

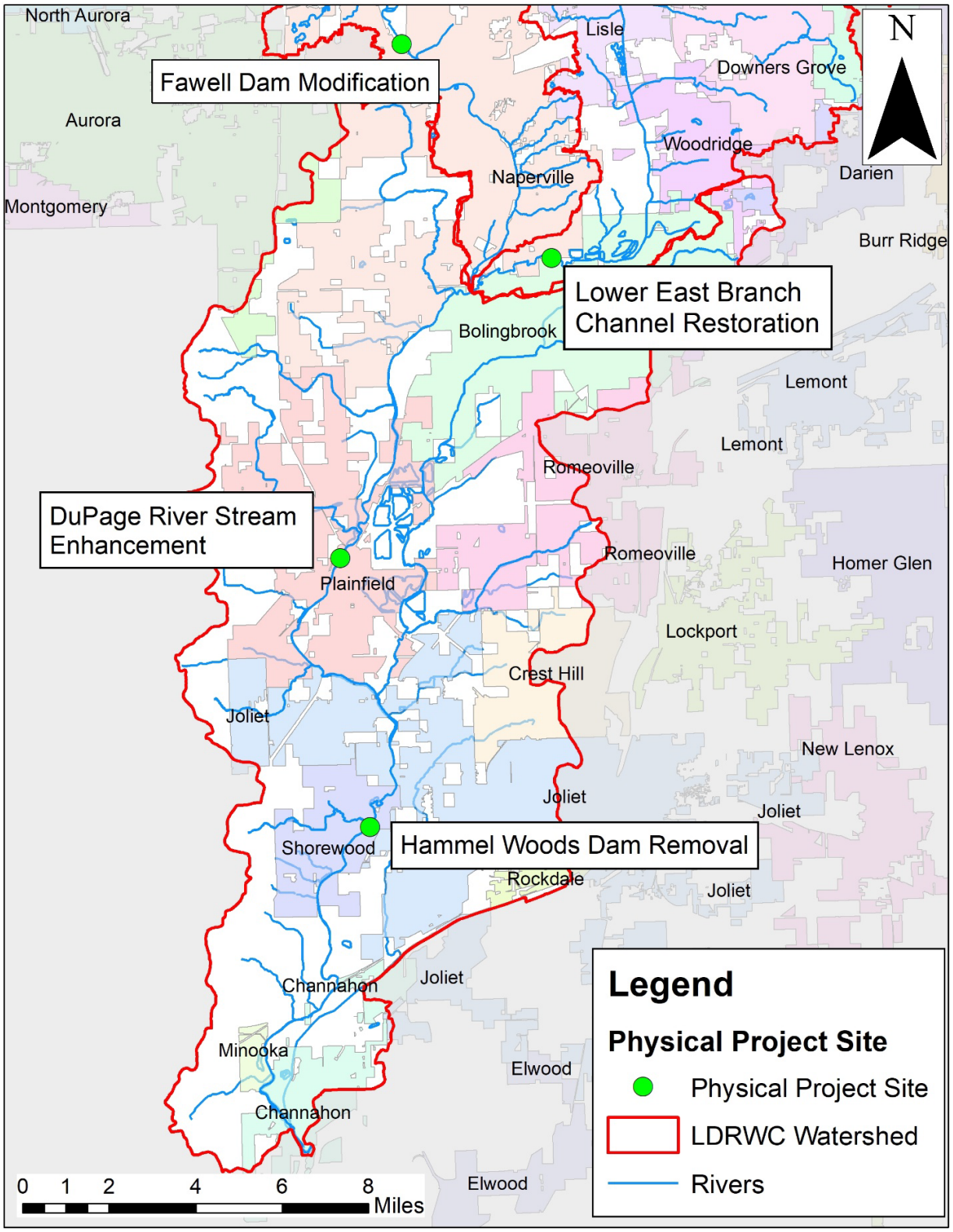
Table 5. Participation in the LDRWC NDPES Permit Special Conditions 2025-2026

Agency Name	Facility Name	NPDES Permit Number	Membership Dues Paid 2025-26	Assessment Paid for Paragraph 2 Table Project Funding*	Assessment Paid for the Chloride Reduction/NIP/QUAL 2k/Trading Program
Bolingbrook, Village of	Bolingbrook #3	IL0069744	YES	YES	YES
Crest Hill, City of	Crest Hill STP	IL0021121	YES	N/A*	YES
Joliet, City of	Aux Sable WWTP	IL0076414	YES	N/A	YES
Minooka, Village of	Minooka STP	IL0055913	YES	N/A	YES
Naperville, City of	Springbrook WRP	IL0034061	YES	YES	YES
Plainfield, Village of	Plainfield STP	IL0074373	YES	N/A	YES

*N/A means that the agency does not have that condition in its permit.



Map 1. Map of DRSCW Physical Projects set out in the Special Conditions



Map 2. Map of LDRWC Physical Projects set out in the Special Conditions

Chapter 1 Physical Projects

The Special Conditions identifies stream restoration and dam modification projects that must be completed by the DRSCW and/or LDRWC. The current DRSCW 2026-27 Budget and Four-Year Financial Plan and the LDRWC Three-Year Financial Plan identifies project expenses and funds allocated for each of the physical projects. Map 1 shows the DRSCW physical projects covered in this section; and Map 2 shows the LDRWC physical projects covered in this section.

1.1 Oak Meadows Golf Course Dam Removal and Stream Restoration

- Special Conditions Completion Date – December 31, 2016 (dam removal), December 31, 2017 (stream restoration)
- Project Status – Dam removal and stream restoration are complete. The 5-year post-project monitoring phase was completed in 2019. Future monitoring of the project area was integrated into bioassessment program and sites were sampled in the Summer of 2025. Salt Creek's next bioassessment is scheduled tentatively for the Summer of 2031.

1.1.1 Site Description

The 2016 Annual Report provided a site description.

1.1.2 Design Characteristics

The 2016 Annual Report described the Project's design characteristics.

1.1.3 Permitting Requirements

The 2016 Annual Report includes details on the Project's permitting requirements.

1.1.4 Project Implementation

The 2017 Annual Report details the project implementation.

1.1.5 Project Impact Evaluation

The DRSCW and Midwest Biodiversity Institute (MBI) developed a monitoring plan to assess the restoration work conducted by the Forest Preserve District of DuPage County (FPDDC) and DRSCW contractors at the Preserve at Oak Meadows restoration project site. Biological and habitat data from the previous watershed surveys conducted by MBI in Salt Creek prior to 2016 were used as the pre-restoration condition baseline (SC34 and SC35). Post-restoration biological and habitat sampling added two new sites (SC35A and SC35B) beginning in late August 2017 and continued in 2018, 2019 and 2021 to assess project effectiveness. The post-restoration assessment included four biological monitoring sites with a fifth site located upstream at Lionwood Park (SC40) that served as an upstream control site which is typical of Salt Creek water quality and habitat and representative of pre-restoration water quality

conditions. In 2025, the post-project monitoring sites were integrated into the Salt Creek Bioassessment and sampled.

Table 6 Is a summary of pre- and post-projection biological and habitat data collected at the Preserve at Oak Meadows in 2014, 2017, 2018, 2019, 2021, and 2025. Figure 1 to Figure 3 depict the pre- and post-project QHEI (Figure 1), mIBI scores (Figure 2), and fIBI scores (Figure 3). A map of the sampling locations is included in Map 3 .

Table 6. Pre-(2014) and Post-Project (2017, 2018, 2019, 2021, 2025) Biological and Habitat Data collected at the Preserve at Oak Meadows

Site ID	River Mile	Drainage Area (sq. mi.)	Fish IBI	MIwb	mIBI	QHEI	Attainment Status
Salt Creek 2025							
SC40	24.5	73.68	19	5.8	27.3	58.5	Non-Poor
SC34	23.5	74.51	18	6.9	50.1	71.0	Non-Poor
SC35	23	74.76	18	7.1	21.7	70.0	Non-Poor
SC35B	22.8	74.96	16	6.1	42.5	64.0	Non-Poor
SC35A	22.7	75.11	16	7.3	35.0	67.0	Non-Poor
SC23	22.5	81.7	21	6.7	20.6	62.0	Non-Poor
Salt Creek 2021							
SC40	24.5	73.68	18	5.7	32.6	52.5	Non-Poor
SC34	23.5	74.51	16	6.6	42.4	77.0	Non-Poor
SC35	23	74.76	18	7.4	30.2	77.5	Non-Poor
SC35B	22.8	74.96	14	7.2	40.2	72.0	Non-Poor
SC35A	22.7	75.11	15	6.2	42.4	72.8	Non-Poor
SC23	22.5	81.7	17	7.0	34.2	46.0	Non-Poor
Salt Creek 2019							
SC40	24.5	73.68	18	7.5	34.6	54.5	Non-Poor
SC34	23.5	74.51	16	8.1	43.8	71.5	Non-Poor
SC35	23	74.76	17	7.6	32.9	74.0	Non-Poor
SC35B	22.8	74.96	19	8.2	40.2	72.0	Non-Poor
SC35A	22.7	75.11	15	6.9	46.5	67.5	Non-Poor
Salt Creek 2018							
SC40	24.5	73.68	17	8.0	34.4	58.0	Non-Poor
SC34	23.5	74.51	14	7.2	38.5	71.5	Non-Poor
SC35	23	74.76	17	6.9	28.9	71.5	Non-Poor
SC35B	22.8	74.96	17	7.2	33.8	71.5	Non-Poor
SC35A	22.7	75.11	17	6.7	38.4	65.5	Non-Poor
Salt Creek 2017							
SC40	24.5	73.68	14	7.1	32.0	64.5	Non-Poor
SC34	23.5	74.51	15	6.3	36.0	67.0	Non-Poor
SC35	23	74.76	14	5.9	29.7	69.5	Non-Poor
SC35B	22.8	74.96	13	6.7	33.1	71.5	Non-Poor
SC35A	22.7	75.11	-	-	33.9	-	(Non-Fair)
Salt Creek 2014							
SC34	23.5	74.51	16	5.2	20.2	54.0	Non-Poor
SC35	23	74.76	13	5.3	15.5	60.5	Non-Poor
SC35A	22.7	75.11	-	-	12.1	-	(Non-Poor)
IPS Narrative Category			**fIBI**		**mIBI**	**QHEI**	**AQLU Status**
Excellent			≥50		>73	>84.5	FULL
Good			>41-49		41.8-72.9	>75.9	FULL
Fair			30-<41		30-41.7	<75.9	PARTIAL
Poor			>15-29		>15-29	<50.1	NON-Fair
Very Poor			≤15		≤15	<25.0	NON-Poor

Figure 1. Pre-(2013 and 2014) and Post-Project (2017, 2018, 2019, 2021, 2025) QHEI Scores at the Preserve at Oak Meadows. (green shading denotes project area)

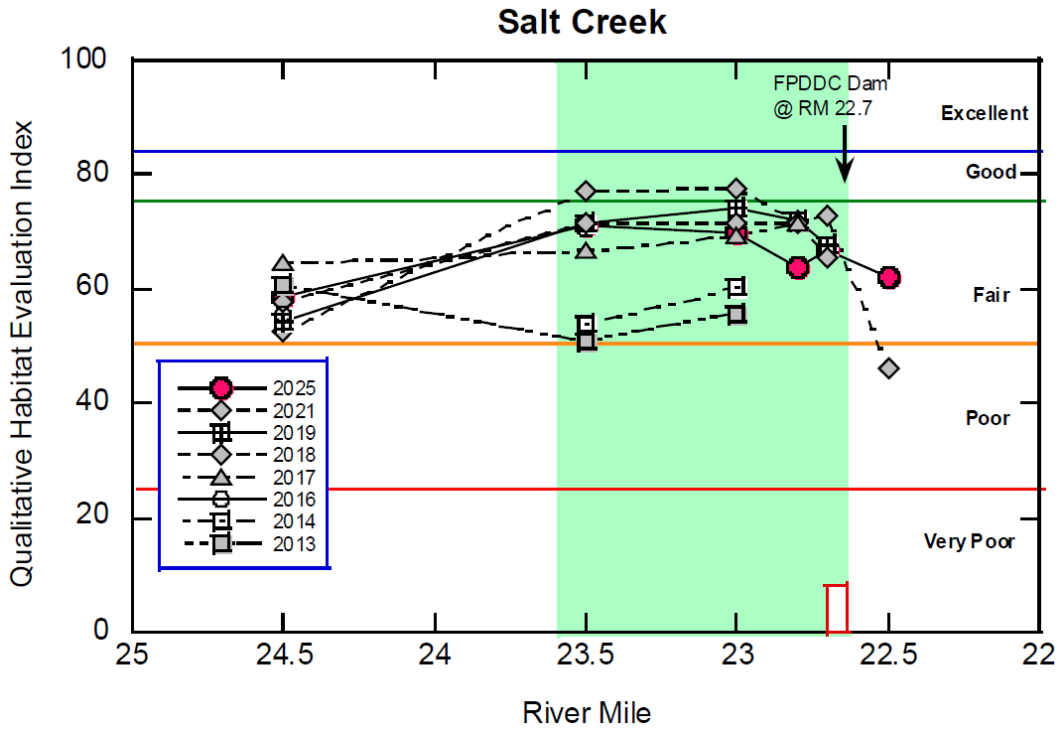


Figure 2. Pre-(2013 and 2014) and Post-Project (2017, 2018, 2019, 2021, 2025) mIBI Scores at the Preserve at Oak Meadows. (green shading denotes project area)

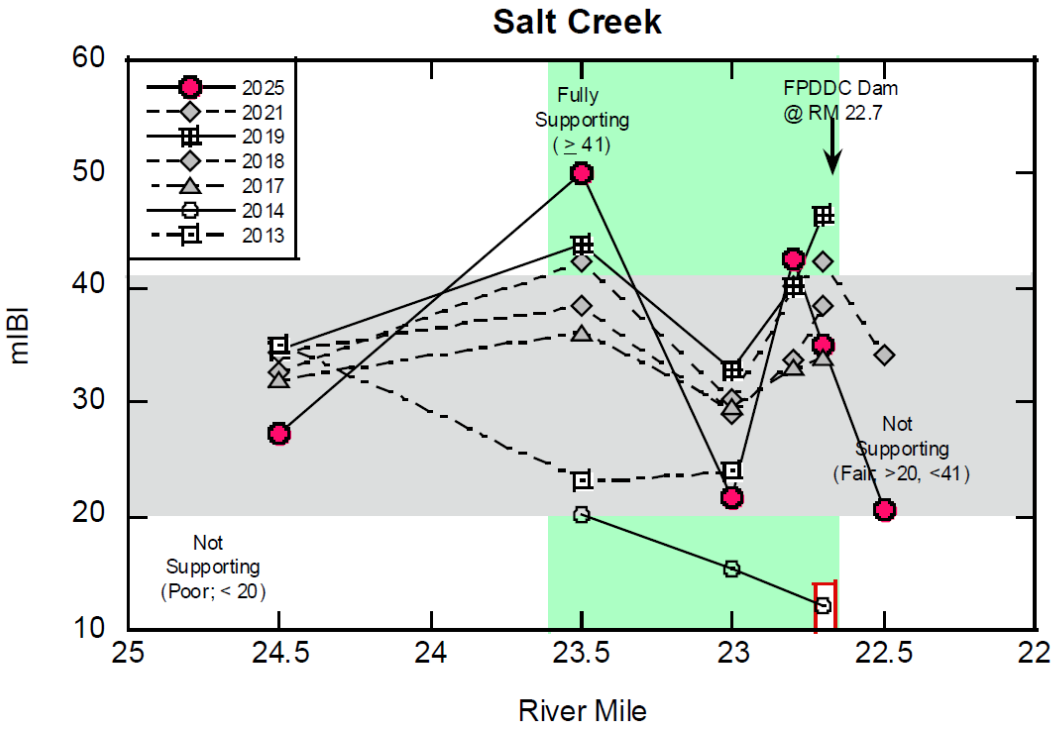
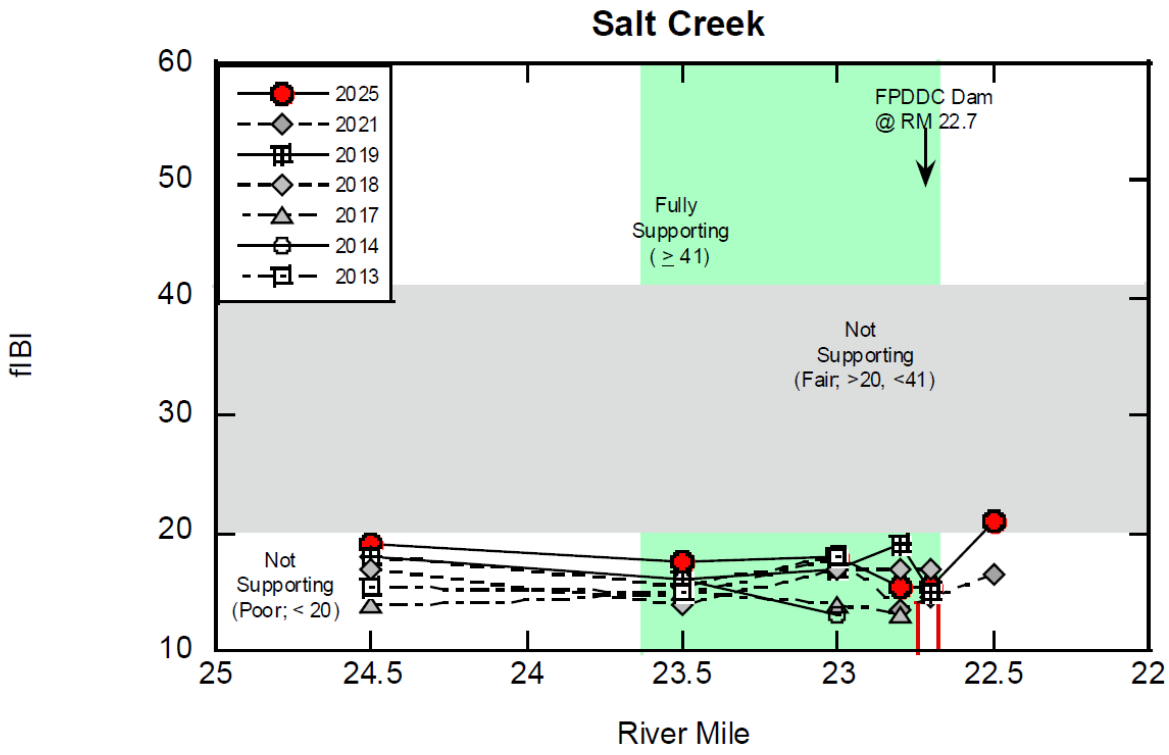
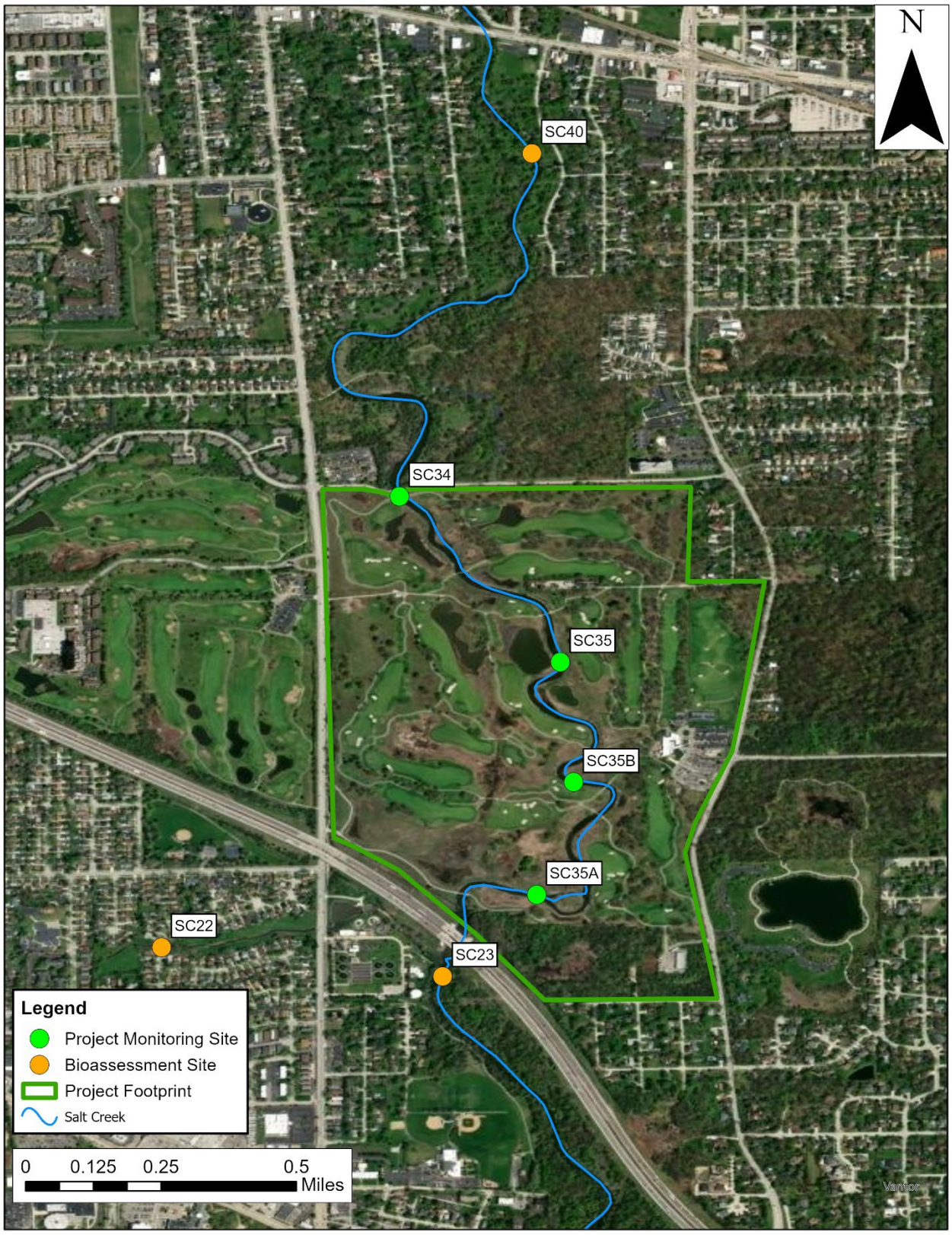


Figure 3. Pre-(2013 and 2014) and Post-Project (2017, 2018, 2019, 2021, 2025) fIBI Scores at the Preserve at Oak Meadows. (green shading denotes project area)





Map 3. Pre- and Post-Project Monitoring Sites at the Preserve at Oak Meadows

1.2 Fawell Dam Modification

- Special Conditions Listed Completion Date – December 31, 2027 (modified in December 2026 in agreement with the IEPA)
- Status – Ladder constructed and in storage. Compilation of bid packets underway.

The objective of the project is to allow fish passage for twelve (12) target species through the Fawell Dam. The DRSCW has been collaborating with DuPage County Stormwater Management (DC SWM) and the Forest Preserve District of DuPage County (FPDDC) on this project. DRSCW has budgeted $1,295,036 for design, construction, and monitoring of this project.

1.2.1 Site Description

The 2017 Annual Report provided a site description.

1.2.2 Design Characteristics

Detail of the core design was provided in the 2020, 2021, and 2022 Annual Reports.

1.2.3 Permitting Requirements

The permits listed below are required for the Fawell Dam Modification. Status as of March 15, 2026, is included.

- U.S. Army Corps of Engineers (USACOE) Nationwide Permit (LRC-2024-169) – The application was submitted in March 2024, and the permit was received on September 25, 2024.
    - SHPO Review– SHPO has issued a signoff letter stating that the project does not rise to the level of an adverse impact on either the dam or the adjacent Preserve.
    - Illinois Historic Preservation Agency Section 106 Clearance – Not Applicable
    - U.S. Fish & Wildlife Service Section 7 Consultation – Completed in Summer 2021, No Effect Determination was received on January 16, 2024.
    - KDSCWD – Signoff on the SESC plan by the KDSWCD is a requirement of the US ACOE Nationwide Permit. A permit application and fee covering the SESC review was submitted to the KDSWCD in mid-September 2024. Signoff on the SESC Plans from KDSWCD was received on October 9, 2024.

- Illinois Department of Natural Resources
    - EcoCat Request – Updated Signoff received January 16, 2024.
    - Major Modification of Existing Dam Permit Application submittal – Application pending submission (Based on past discussions and the revised design, this permit may be combined with the Floodway Construction Permit). Plans were submitted to IDNR in December 2024 but confirmation has been received that they view the project as a Dam Modification as opposed to a Floodway Construction project.

- Floodway Construction Permit – Separate Floodway Construction Permit not anticipated to be required based on IDNR feedback.

- Illinois Environmental Protection Agency Permits
  - IEPA - As the project is under one acre of disturbance, an IEPA ILR10 for this item is not required.

- DuPage County Stormwater Management Certification and Building Permit
  - DuPage County Stormwater Management Certification and Building Permit – The permit application has been submitted and combined the components of the Corps submittal and IDNR-OWR dam modifications submittal. It also incorporates the memorandum of understanding (MOU) with DuPage County (signed November 2023).

1.2.4 Design Progress Report

During 2025, multiple meetings were held between BK Riverfish (the ladder designer), Triangle Fabrication (BK Riverfish's chosen fabrication agent), V3 Consultants and the DRSCW, with the objective of optimizing the design and its anchors to the culvert. Technical shop drawings were produced in the summer of 2025 and fabrication was completed in January 2026 (see Plate 1). Dry fitting of the segments was completed at the fabricator's yard and the pieces were then moved to a storage facility.

Plate 1. Finished sections at the fabricator's establishment. Note the capture net framework on top of the segments.

Next Steps:

- Finalize IDNR permit.
- Authorize material purchase and start of fabrication.
- DCSWM will issue bid for ladder placement contract. Review needs for contract support with DC SWM. (Designer is contracted to work with DC SWM on installation but additional support may be required).
- Dry fitting of fabricated sections delivered on-site in coordination with DC SWM placement schedule.
- Installation supervised by County with assistance from BK Riverfish.
- Testing of fish passage through system.

1.2.5 Project Impact Evaluation

Post-project, both fIBI and individual fish species will be sampled upstream of the site and compared to historical data. The upstream and downstream sites were sampled in 2020 as part of the DRSCW's rolling basin assessment. A new downstream site was added in 2025 (sampled by staff from the FPDDC) to investigate the presence of species found immediately downstream of the structure.

The project's budget includes design and purchase of a custom fish capture net for the upstream fish exit. This will allow direct monitoring of any fish that make their way through the system.

1.3 Spring Brook Restoration and Dam Removal (Spring Brook Phase 2)

- Special Conditions Listed Completion Date – December 2019
- Status – Construction is complete. Post-project monitoring was completed in 2025 as Year 5 of the scheduled 5-year post-project monitoring was completed. Future monitoring of the project area will be integrated into bioassessment program and the next West Branch DuPage River bioassessment is scheduled for the Summer of 2027.

The project is being managed by the Forest Preserve District of DuPage County (FPDDC); construction, permitting, and long-term monitoring is being funded by the FPDDC, the Illinois State Toll Highway Authority (ISTHA), and the DRSCW.

Post-project survey results: Spring Brook Phase 2 has met its post-project targets for QHEI and fIBI both within the project footprint and at sites monitored as part of the post-project impact evaluation.

1.3.1 Site Description

The 2020 Annual Report provided a site description.

1.3.2 Design Characteristics

The 2020 Annual Report provided a detailed description of the Project's design.

1.3.3 Permitting Requirements

The 2020 Annual Report includes details on the Project's permitting requirements.

1.3.4 Project Implementation

The 2020 Annual Report details the project implementation.

1.3.5 Project Impact Evaluation

The DRSCW, Midwest Biodiversity Institute (MBI), and the FPDDC developed a monitoring plan to assess the restoration work conducted by the FPDDC, ISTHA, and DRSCW contractors at the Spring Brook Phase 2 project location. Pre- and post-project monitoring includes five (5) sites. Three (3) of the sites (WB10, WB10C, and WB10D) are located within the project footprint with the remaining two (2) sites (10A and 10B) being located downstream of the project. The downstream sites serve as control sites that share the same annual water quality and flow variation as the upstream (restored) sites. It should also be noted that the location of WB10 has moved between the pre- and post-project sampling. As part of the project, a new stream channel was constructed for the portion of Spring Brook situated downstream of the former location of the Arrow Road dam and the former channel was converted to wetlands. Prior to 2020, WB10 was located on the original channel. As part of the post-project monitoring, WB10 was relocated to the newly constructed channel immediately upstream of the pedestrian bridge. Table 7 is a summary of pre- and post- project biological and habitat data collected at Spring Brook Phase 2 in 2018, 2021, 2022, 2023, 2024, and 2025. Figure 4 to Figure 6 depict the pre- and post-project QHEI (Figure 4); mIBI scores (Figure 5); and fIBI scores (Figure 6). A map of sampling locations is included in Map 4. A summary of the post-project monitoring results will be provided at the end of the 5-year post-project monitoring period and will be included in this section of the 2026 Annual Report for Spring Brook Phase 2. It is also important to note that the 2025 construction activities associated with the Spring Brook Phase 3 Stream Restoration Project were occurring in the vicinity of Site 10A. The Spring Brook Phase 3 Stream Restoration Project includes minor excavation and placement of boulders, cobble, and gravel in the creek banks, boulder installation in the creek channel to improve habitat, replacement of a trail bridge, and riparian habitat restoration.

Table 7. Pre- (2018) and Post- (2021, 2022, 2023, 2024, 2025) Project Biological and Habitat Data collected at Spring Brook Phase 2

Site ID	River Mile	Drainage Area (sq mi.)	fIBI	mIBI	QHEI	Aquatic Life Use Attainment Status (AQLU)
Spring Brook 2025						
WB10D*	1.51	6.00	32	31.0	82.25	NON-Fair
WB10C*	1.12	6.30	32	31.2	49.50	NON-Fair
WB10*	0.71	6.80	30	33.6	82.50	NON-Fair
WB10B	0.30	6.90	34	36.9	73.50	NON-Fair
WB10A	0.10	7.00	38	38.1	76.00	NON-Fair
Spring Brook 2024						
WB10D*	1.51	6.00	35	44.9	77.8	PARTIAL
WB10C*	1.12	6.30	30	37.4	38.5	NON-Fair
WB10*	0.71	6.80	33	39.0	78.5	NON-Fair
WB10B	0.30	6.90	34	36.6	56.5	NON-Fair
WB10A	0.10	7.00	37	47.9	66.5	PARTIAL
Spring Brook 2023						
WB10D*	1.51	6.00	29	38.2	75.0	NON-Fair
WB10C*	1.12	6.30	30	32.2	40.0	NON-Fair
WB10*	0.71	6.80	26	40.9	73.5	NON-Fair
WB10B	0.30	6.90	35	47.6	60.0	PARTIAL
WB10A	0.10	7.00	32	44.8	67.5	PARTIAL
Spring Brook 2022						
WB10D*	1.51	6.00	30	45.3	70.3	PARTIAL
WB10C*	1.12	6.30	26	27.2	36.0	NON-Fair
WB10*	0.71	6.80	31	39.1	73.5	NON-Fair
WB10B	0.30	6.90	19	49.5	50.5	NON-Poor
WB10A	0.10	7.00	31	52.6	65.0	PARTIAL
Spring Brook 2021						
WB10D*	1.51	6.00	30	33.2	78.5	NON-Fair
WB10C*	1.12	6.30	24	23.3	48.0	NON-Fair
WB10*	0.71	6.80	22	33.1	81.0	NON-Fair
WB10B	0.30	6.90	27	44.6	64.0	PARTIAL
WB10A	0.10	7.00	27	52.3	68.0	PARTIAL
Spring Brook 2018						
WB10D*	1.51	6.00	29	29.5	54.0	NON-Fair
WB10C*	1.12	6.30	18	29.1	34.0	NON-Poor
WB10*	0.71	6.80	25	42.8	69.5	PARTIAL
WB10B	0.30	6.90	11	51.6	51.7	NON-Poor
WB10A	0.10	7.00	15	56.0	56.0	NON-Poor
Category			**fIBI**	**mIBI**	**QHEI**	**AQLU Status**
Excellent			>50	>73	>84.5	FULL
Good			>41-49	41.8-72.9	>75.9	FULL
Fair			20-<41	20.9-41.7	<75.9	PARTIAL
Poor			<20	<20.9	<50.1	NON-Fair
Very Poor					<25.0	NON-Poor

*Sites are located within the Project footprint.

Figure 4. Pre- (2018) and Post-(2021, 2022, 2023, 2024, 2025) Project QHEI Scores at Spring Brook Phase 2 (yellow zone denotes footprint of the project).

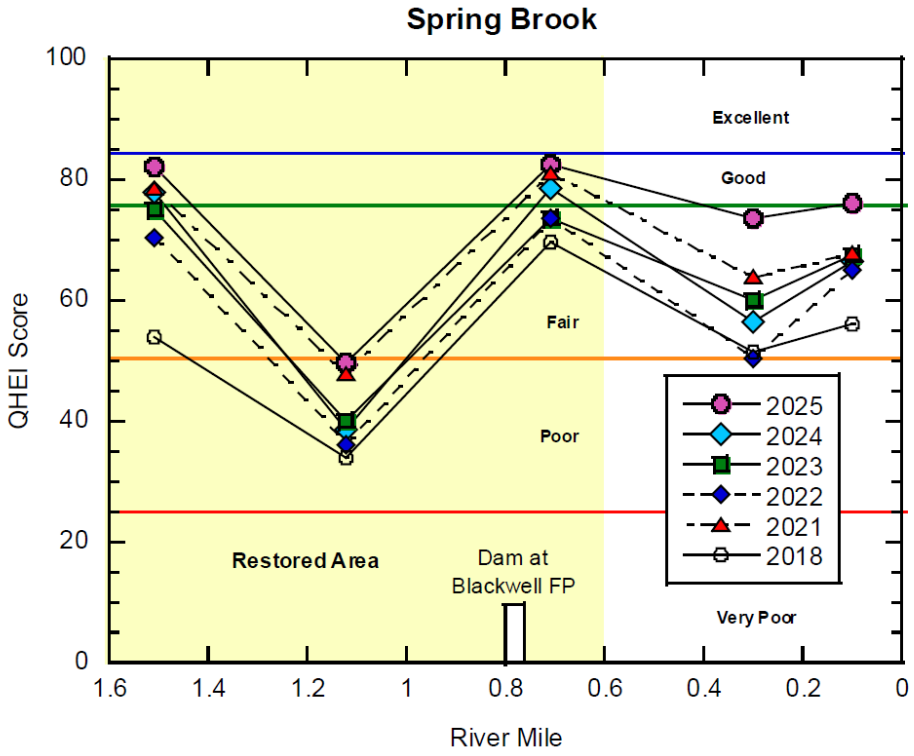


Figure 5. Pre- (2018) and Post-(2021, 2022, 2023, 2024, 2025) Project mIBI Scores at Spring Brook Phase 2 (yellow zone denotes footprint of the project).

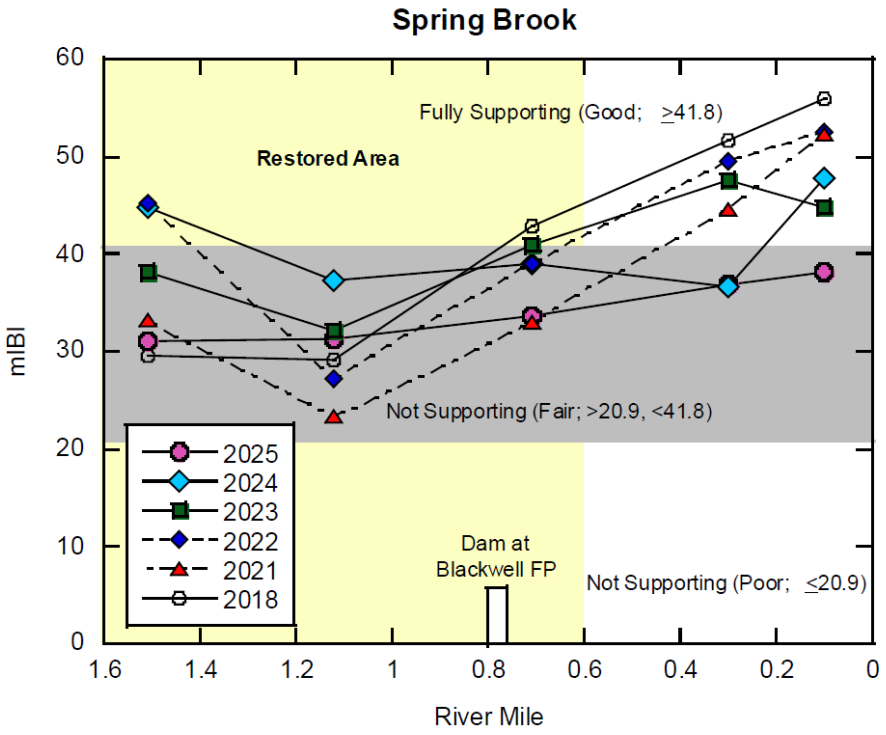
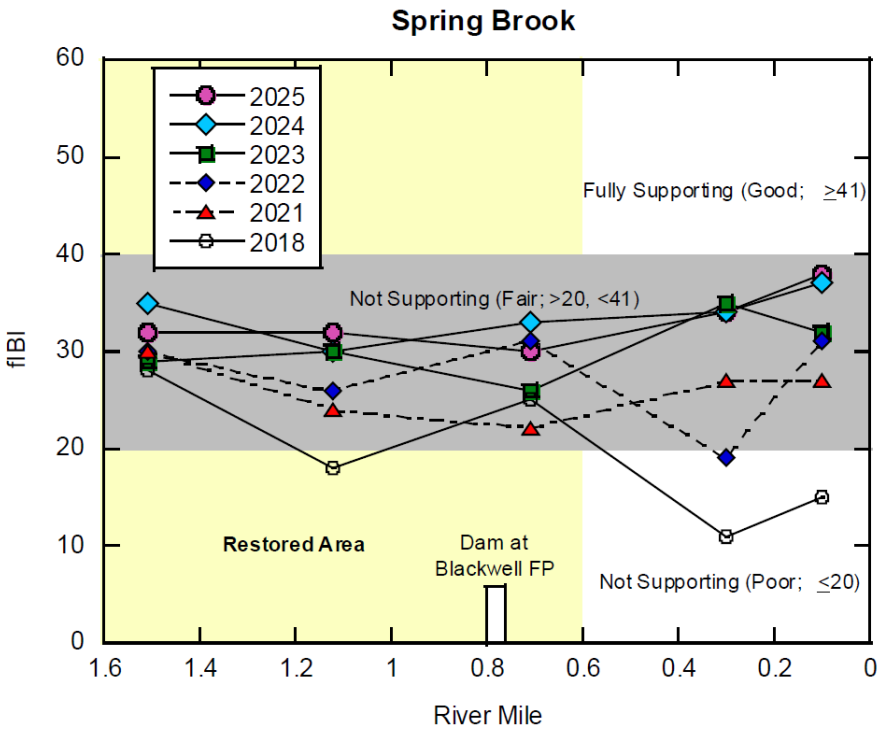
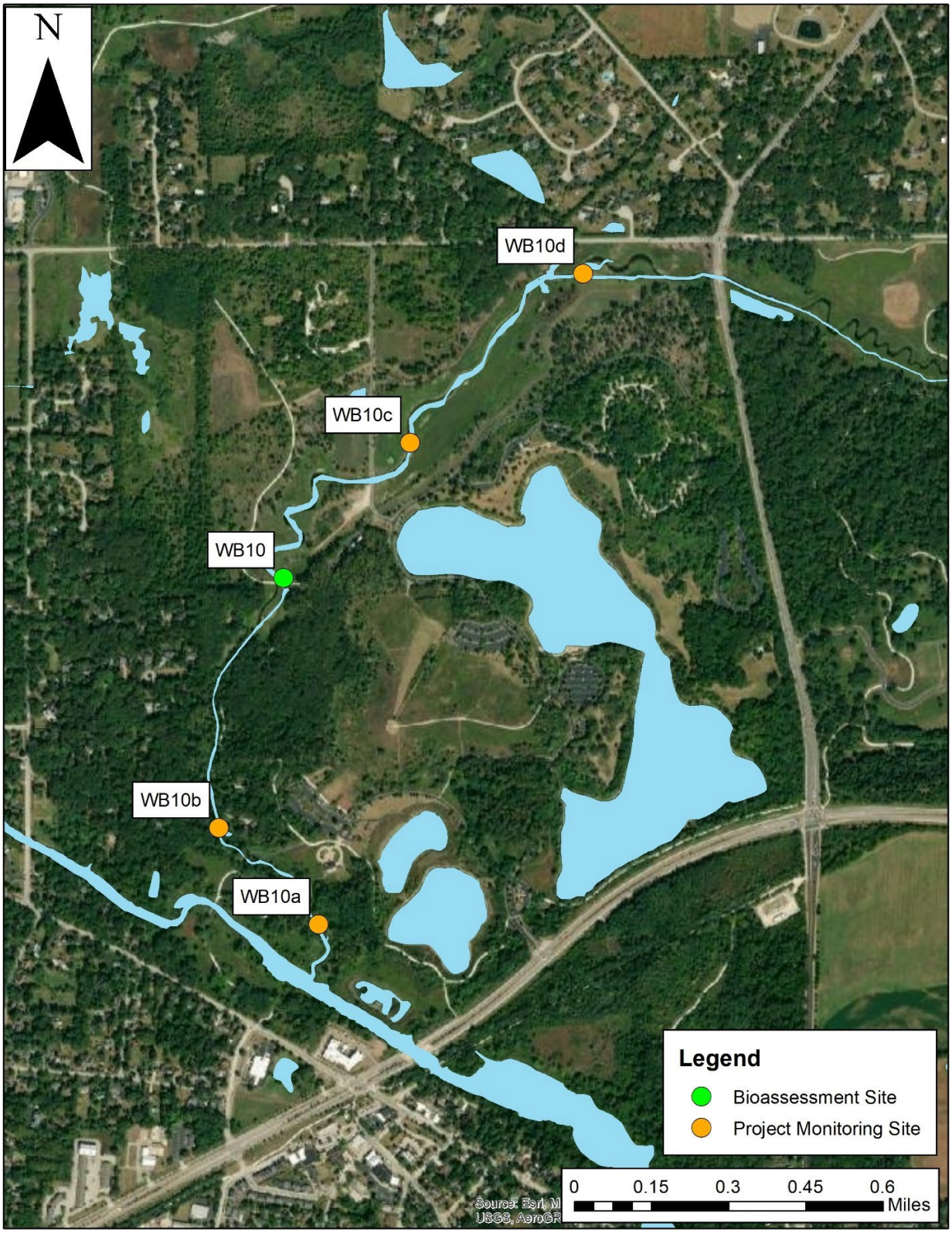


Figure 6. Pre- (2018) and Post-(2021, 2022, 2023, 2024) Project fIBI Scores at Spring Brook Phase 2 (yellow zone denotes footprint of the project).





Map 4. Pre-and Post-Project Monitoring Sites at Spring Brook Phase 2

1.4 Fullersburg Woods Dam Modification Concept Plan Development

- Special Conditions Listed Completion Date – December 2016
- Status – Complete (December 2016)

The DRSCW submitted the Fullersburg Woods Dam Modification Concept Plan to the IEPA on December 2016. The 2017 Annual Report included details on the findings of the Fullersburg Woods Dam Modification Concept Plan.

1.5 Fullersburg Woods Dam Modification and Stream Restoration and Salt Creek Phase II

- Special Conditions Listed Completion Date – December 31, 2024 (dam removal) and December 31, 2024 (stream restoration)
- Status – Outreach and Education Campaign is ongoing (started 2017)complete. Master Planning process was completed in 2020. Project Construction is complete. Year One (of Five) of Monitoring and Management was conducted in 2025. Post-project monitoring also began in 2025.

The Fullersburg Woods Dam Modification and Stream Restoration Project and Salt Creek Phase 2 Project are located on the Salt Creek within the Fullersburg Woods Forest Preserve, Village of Oak Brook, DuPage County, Illinois. The Projects are collectively referred to as the Fullersburg Woods Dam Modification and Stream Restoration Project. The Project's objectives were to raise QHEI above its pre project average of 47.45, raise fIBI at the sites upstream of the dam above its pre project average score of 14.0, raise mIBI above its pre project average score of 25.5 for approximately 1.25 river miles and to improve dissolved oxygen (DO) in the impoundment, as compared to the 2007-2018 data set. The DRSCW has been collaborating with FPDDC and the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) on this project. DRSCW budgeted $10,280,722 for design, construction and monitoring of this project.

1.5.1 Site Description

The 2018 Annual Report provided details on the Project's site description.

1.5.2 Research and Public Outreach

The 2021 Annual Report provided details on the Research and Public Outreach activities conducted between 2016 and 2021. All reports and materials developed as part of the research and public outreach phase of the Fullersburg Woods Dam Modification and Stream Restoration Project were maintained at the Project's website at RestoreSaltCreek.org. As construction is complete, the RestoreSaltCreek.org website has been archived.

1.5.3 Design Characteristics

The 2020 Annual Report provided the Project's design characteristics.

1.5.4 Permitting Requirements

The 2023 Annual Report provided details on the Permitting Requirements for the Project.

1.5.5 Design Progress Report

1.5.5.1. Phase 1: Development of the Concept Master Plan for Salt Creek at Fullersburg Woods

The 2021 Annual Report describes all work conducted as part of the development of a Concept Master Plan for Salt Creek at Fullersburg Woods. The Concept Master Plan was completed in September 2021.

1.5.5.2 Phase 2: Concept Master Plan for Salt Creek at Fullersburg Woods Final Design and Preparation of Contract Bid Documents

The 2023 Annual Report describes all work conducted as part of the final design and contract bidding. In early January 2021, the DRSCW entered into a contract with Hey and Associates, Inc. for the final design engineering and preparation of contract bid documents for the Project.

1.5.6 Project Implementation

The 2023 and 2024 Annual Report provide details on the construction on the Master Plan for Salt Creek at Fullersburg Woods began in November 2023 and concluded December 2024 when substantial completion on the project was met.

Activities in the Spring and Summer of 2025 focused on two areas: 1) Installation of plant plugs and 2) Monitoring and Management (M&M). 2025 was Year 1 of the 5-year regulatory M&M as required by the Section 404 permit.

Initial permanent seeding occurred between October and December 2024 of all areas except the Butler Woods slope, located on the northwest portion of the site, which was permanent seeded and hydro-mulched in April 2025 due to the steeper grade. Monthly weed control sweeps throughout the site and an installation of 49,641 native plants during the 2025 growing season along with pre-existing seed banks resulted in far higher indicator values than typically found for first year restoration Floristic Quality Assessments. Native mean C values were all over 3.5, and native FQI values were all over 20 across each community (Riparian Wetland Conversion NMC of 3.57 and NFQI of 36.26, Riparian Wetland Enhancement NMC of 3.90 and NFQI of 42.53, Upland Enhancement NMC of 4.15 and NFQI of 53.77). The transect monitoring results aligned more closely to first year restoration values, but are anticipated to increase as management continues. Plate 2 to Plate 7 are photographs of some of the maintenance and management activities conducted at Fullersburg Woods in Summer 2025.

Of the performance standards applicable for 2025 (Year 1), a total of two of four have been met; the Upland Enhancement community had sparser cover due to higher than expected canopy cover and garlic mustard (*Alliaria petiolata*) as a dominant species, which will continue to be addressed in 2026 with a more shade tolerant supplemental seed mix and continued weed control efforts. It should be noted however, that an additional three performance standards not yet applicable were also met in 2025, being native mean C 3.5 or greater and native FQI of 20 or greater.

Future management during 2026 includes, conditions allowing, a potential prescribed burn in early winter/early spring, supplemental seeding, continued weed control, high (6-8" height) mowing, and native plants, trees and shrubs installations. With these continued efforts, each native vegetation community within Fullersburg Woods is anticipated to become further established.

Plate 2. Photograph of the Hydroseeding of the Steep Slope at Fullersburg Woods (April 15, 2025)

Plate 3. Photograph of Broadleaf Herbicide Application at Fullersburg Woods (April 24, 2025)

Plate 4. Photograph of the Planting of Perennial Plants at Fullersburg Woods (June 24, 2025)

Plate 5. Photograph of the Planting of Perennial Plants at Fullersburg Woods (June 26, 2025)

Plate 6. Photograph of Brush Cutting at Fullersburg Woods (June 28, 2025)

Plate 7. Photograph of the Irrigation of the Perennial Plant Installation at Fullersburg Woods (July 3, 2025)

1.5.7 Project Impact Evaluation

The DRSCW, Midwest Biodiversity Institute (MBI), and the FPDDC developed a monitoring plan to assess the impacts of the restoration work at the Fullersburg Woods dam removal and stream restoration project location. Pre- and post-project monitoring includes seven (7) sites. Four (4) of the sites (SC56b, SC56a, SC53, and SC53a) are located within the project footprint. One (1) site (56a) is located upstream of the Old Oakbrook dam (whose removal/modification may be considered as a future project); and two (2) sites, SC56 and SC52, serve as control sites that share the same annual water quality and flow variation as the upstream (restored) sites. SC56 is a control site located upstream of the project and SC52 is a control site located downstream of the project. Table 8 is a summary of pre- (2019, 2020, and 2021)-and post-(2025) project biological and habitat data collected at Fullersburg Woods. Figure 7 to Figure 9 depict the pre- and post-project QHEI (Figure 7); mIBI scores (Figure 8); and fIBI scores (Figure 9). A map of sampling locations is included in Map 5 .

The Project's objectives were to raise QHEI above its pre project average of 47.45, raise fIBI at the sites upstream of the dam above its pre project average score of 14.0, raise mIBI above its pre project average score of 25.5 for approximately 1.25 river miles of Salt Creek. Within one (1) year of the completion of the project's construction, the QHEI (2025 QHEI score of 77-90.5), and fIBI objectives (2025 fIBI scores of 26-33) have been met at all sites within the project

footprint. The mIBI objectives have been met at three (current scores of 34.3-43.2) of the four sites. It is expected that the mIBI at SC56C will continue to improve as vegetation is established within the Project and will meet the objectives in future years of post-project sampling. It is important to note that all QHEI scores within the Project footprint are now classified as "good" and one site SC56B has a macroinvertebrate score of 43.2 meeting the Illinois General Use Attainment standard.

In addition to raising fIBI scores, the Project has an objective to increase fish passage to the twenty (20) miles of the Salt Creek mainstem and its tributaries located upstream of the removed Fullersburg Woods (Graue Mill) dam. Pre-project monitoring data identified sixteen (16) species of native fish that were historically blocked by the dam. Post-project assessments in 2025 identified eight (8) species that have moved into Salt Creek above the former dam location. These species include the blackside darter, logperch, smallmouth bass, rosyface shiner, central stoneroller, emerald shiner, northern pike, and the horney head chub. It should also be noted that the other eight (8) species previously confined below the dam were not identified anywhere in the Salt Creek watershed in 2025.

Table 8. Pre- (2019, 2020, 2021) and Post- (2025) Project Biological and Habitat Data collected at Fullersburg Woods

Site ID	River Mile	Drainage Area (sq. mi.)	fIBI	mIBI	QHEI	Attainment Status
Salt Creek 2025						
SC56	12.5	109.8	20	34.2	56.5	NON-Fair
SC56A	12.2	109.8	18	22.3	43.0	Non-Poor
SC56B*	11.7	113.6	26	43.2	90.5	PARTIAL
SC56C*	11.3	113.6	27	22.3	77.0	NON-Fair
SC53*	11.0	114.0	29	41.1	78.2	NON-Fair
SC53A*	10.8	114.0	33	34.3	79.8	NON-Fair
SC52	10.5	114.0	32	34.5	67.6	NON-Fair
Salt Creek 2021						
SC56	12.5	109.8	14	30.1	56.0	Non-Poor
SC56A	12.2	109.8	16	36.7	62.0	Non-Poor
SC56B*	11.7	113.6	12	-	50.0	Non-Poor
SC56C*	11.3	113.6	13	28.1	50.3	Non-Poor
SC53*	11.0	114.0	16	28.7	46.0	Non-Poor
SC53A*	10.8	114.0	13	19.7	43.5	Non-Poor
SC52	10.5	114.0	28	45.0	82.8	PARTIAL
Salt Creek 2020						
SC56	12.5	109.8	12	30.1	49.0	Non-Poor
SC56A	12.2	109.8	15	26.2	58.0	Non-Poor
SC56B*	11.7	113.6	16	-	61.0	Non-Poor
SC56C*	11.3	113.6	16	29.5	55.0	Non-Poor
SC53*	11.0	114.0	14	24.7	49.5	Non-Poor
SC53A*	10.8	114.0	12	22.7	44.0	Non-Poor
SC52	10.5	114.0	28	31.1	85.5	Non-Fair
Salt Creek 2019						
SC56	12.5	109.8	17	14.6	44.5	Non-Poor
SC56A	12.2	109.8	15	27.6	42.5	Non-Poor
SC56B*	11.7	113.6	16	-	53.5	Non-Poor
SC56C*	11.3	113.6	15	28.5	57.0	Non-Poor
SC53*	11.0	114.0	14	20.3	54.5	Non-Poor
SC53A*	10.8	114.0	13	13.2	49.5	Non-Poor
SC52	10.5	114.0	30	47.4	72.0	PARTIAL
IPS Narrative Category			**fIBI**	**mIBI**	**QHEI**	**AQLU Status**
Excellent			≥50	>73	>84.5	FULL
Good			>41-49	41.8-72.9	>75.9	FULL
Fair			30-<41	30-41.7	<75.9	PARTIAL
Poor			>15-29	>15-29	<50.1	NON-Fair
Very Poor			≤15	≤15	<25.0	NON-Poor

*Sites located within the Project footprint.

Figure 7. Pre- (2019, 2020, 2021) and Post- (2025) Project QHEI scores at Fullersburg Woods

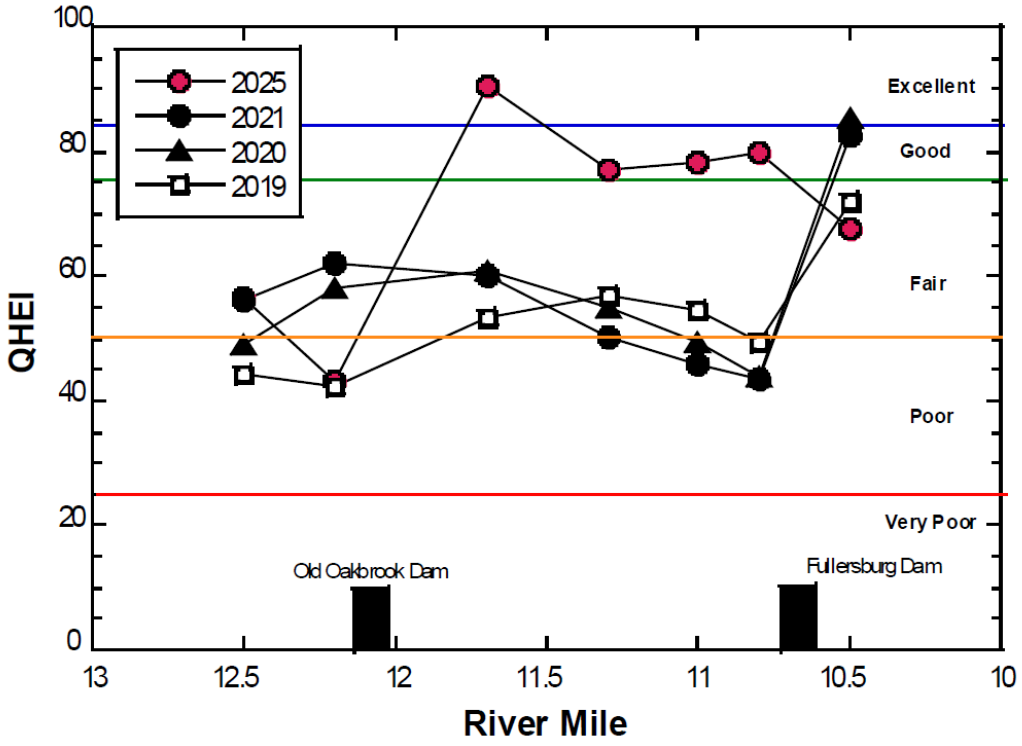


Figure 8. Pre- (2019, 2020, 2021) and Post- (2025) Project mIBI scores at Fullersburg Woods

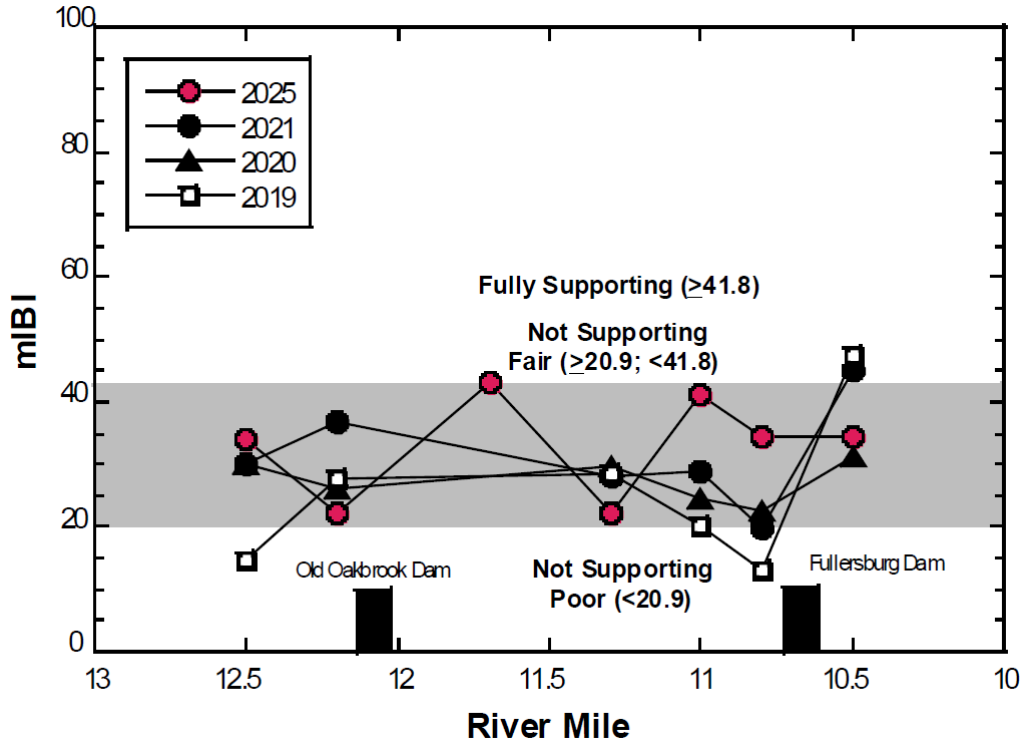
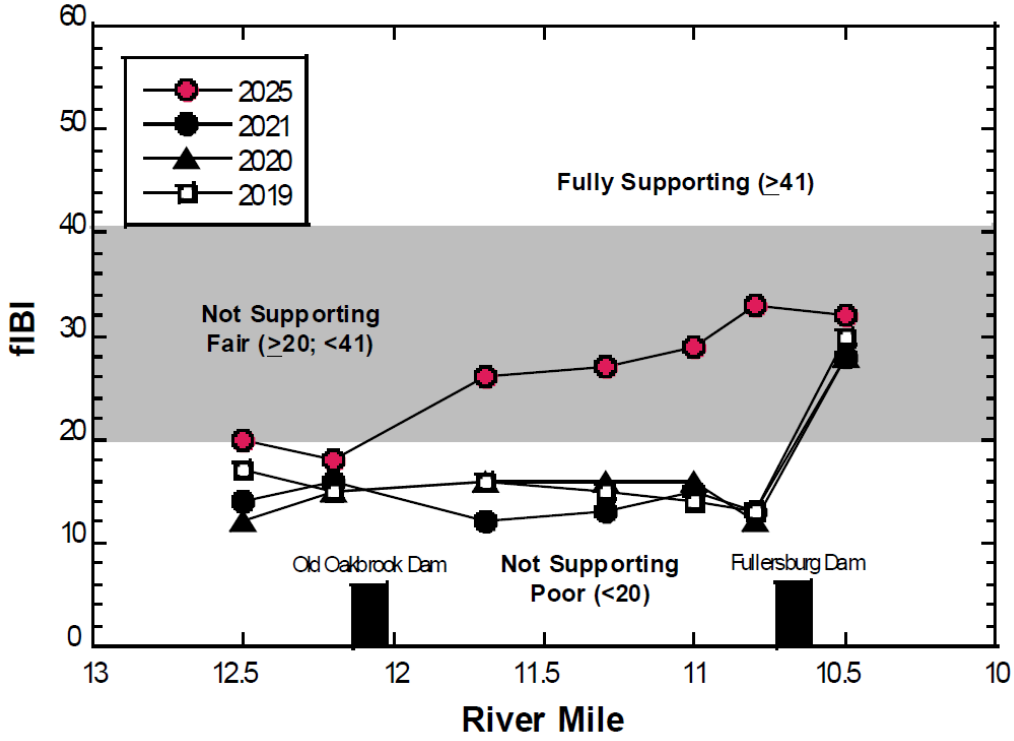


Figure 9. Pre- (2019, 2020, 2021) and Post- (2025) Project fIBI scores at Fullersburg Woods



Map 5. Pre-(2019, 2020, 2021) and Post-(2025) Project Monitoring Sites at the Fullersburg Woods Dam Removal and Stream Restoration Project

1.6 West Branch Physical Enhancement – Klein Creek Section 1 Streambank Stabilization Project

- Special Conditions Listed Completion Date – December 31, 2023. Site is downstream of a 319 funded project which is included in the monitoring footprint (see Table 9 and Map 6 below).
- Status — Construction was completed in 2022. Plugs, trees, and shrubs were installed in 2023. Post-project monitoring began in 2024 and Year 2 of Post-project monitoring was conducted in 2025.

The DRSCW has a Memorandum of Understanding (MOU) with the Village of Carol Stream to fund the river resource improvement elements of the Klein Creek Section 1 Streambank Stabilization -- Section I. Klein Creek is a tributary to the West Branch of the DuPage River. The objectives of the Project are to raise QHEI above its current score of 41.25 and to raise fIBI and mIBI scores in Klein Creek. The DRSCW budgeted $1,249,623 for the Project's construction and three years of post-project monitoring. Construction funding was also provided by the Village of Carol Stream.

1.6.1 Site Description

The 2021 Annual Report provides a site description.

1.6.2 Design Characteristics

The 2021 Annual Report provided the Project's design characteristics.

1.6.3 Permitting Requirements

The 2021 Annual Report included details on the Project's permitting requirements. All required permits for the projects were obtained prior to the start of construction in 2022.

1.6.4 Project Implementation

The 2024 Annual Report included details on the construction of the Klein Creek Section 1 Streambank Stabilization Project. In summary, the project included the removal of streambank and channel grading along Klein Creek and the installation of streambank and instream practices including vegetated rock toe, toe wood with rock, habitat wood, habitat boulders, rock substrate areas, and stream barbs, as well as the installation of native vegetation and erosion control blanket for stabilization of the stream bed and protection of stormwater structures. All construction activities including seeding and planting were completed in 2023.

Activities in 2025 focused on the maintenance and monitoring (M&M) at the Klein Creek Section 1 Streambank Stabilization Project. The naturalized areas included in the M&M activities include 16.76 acres of upland prairie/economy prairie, 3.74 acres of open riparian area, 1.44 acres of sedge meadow, and 0.93 acres of shallow emergent area. Overall, the

naturalized areas comprise approximately 22.87 acres on the project site. All M&M activities are conducted by ENCAP Incorporated (ENCAP).

The primary objective of the M&M program is to track the success of natural area development over the 3-year period of regularly scheduled monitoring sessions. The M&M program documents changes in the plant community composition between years and reveals the need for management changes to improve or maintain natural area quality. The results from the monitoring effort are used by the USACE and Village of Carol Stream to determine if the restoration efforts have been successful. Specific goals of the monitoring program are to determine the vitality of species planted, the diversity of species growing on-site relative to the planted mixture, the degree of coverage by native and non-native/invasive species, and to list any recommendations for remedial action. In particular, annual vegetative cover should increase to levels prescribed by the USACE and Village of Carol Stream. If this is not achieved, supplemental planting or other measures may be required to bring the site into compliance. A general goal of the monitoring effort is to reveal the potential for problems that may affect the growth and persistence of the plantings, and to provide recommendations for resolving or reducing these problems.

The list below summarizes the M&M activities conducted during 2025 at the Klein Creek Section 1 Streambank Stabilization Project:

- **April:** The Eco Prairie zone was interseeded with native seed and temporary oats (*Avena sativa*).
- **May:** Approved herbicide was used to treat reed canary grass, thistle, teasel, crown vetch, brome, and Kentucky bluegrass. All shrub areas were re-flagged, and wood posts/protection fence was repaired throughout the site.
- **June:** Approved herbicide was used to treat cheat grass (*Bromus tectorum*), reed canary grass, bird's foot trefoil, and thistle. Tractor and hand mowing of non-native/invasive annuals occurred to reduce their spread throughout the site. Spring monitoring and data collection occurred at the end of the month.
- **July:** Rings were cut around the shrubs, the shrubs were watered, and mulch was installed around the shrubs. Approved herbicide was used to treat reed canary grass, thistle, teasel, brome, bird's foot trefoil, and purple loosestrife. The previously mowed areas were overseeded with native prairie seed. Several areas were cut for removal of annual weeds. A total of 724 supplemental plugs were installed along the streambank.
- **August:** Several areas were cut for removal of annual weeds. Approved herbicide was applied to purple loosestrife, thistle, bird's foot trefoil, reed canary grass, cattails, ragweed, and common reed. Stream monitoring and data collection occurred at the end of the month.
- **September:** Cattails and Common Reed were hand-wicked with approved herbicide. Approved herbicide was used to treat reed canary grass, purple loosestrife, thistle, woody re-sprouts, bindweed, and bird's foot trefoil. Non-native/invasive annuals were

selectively cut. Fall monitoring and data collection occurred at the beginning of the month.

- **October:** Cut burn breaks throughout the site in anticipation of conducting a prescribed burn. *A prescribed burn was not conducted this fall as conditions were not appropriate.*

The Klein Creek Streambank Stabilization - Section I project has exceeded expectations for its third year of restoration. Planted species and native species from the seed soil bank are highly abundant and will continue to increase in coverage in future years. The In-Stream Structures, Upland Restoration Zones and Wetland Restoration Zones have all met the designated third year performance standards for 2025.

A site field meeting was held on September 26, 2025 with ENCAP, Inc., USACE, ERA, Carol Stream, Earthwerks, Inc. During this meeting, the team walked the site and evaluated it based on the performance standards for vegetation and stream channel stability. It was agreed that all areas were meeting the performance standards, and all areas were stable. The USACE agreed to sign-off on this project upon receipt of the final 2025 report.

1.6.5 Project Impact Evaluation

The DRSCW, MBI, and the Village of Carol Stream developed a monitoring plan to assess the restoration work conducted by the Village of Carol Stream at the Klein Creek Streambank Stabilization Project. Biological and habitat data were collected in 2021 (pre-project) and 2024 and 2025 (post-project) at two (2) sites within the proposed project limits: WB19B and WB19C. Sites WB19, 19A, and 19B were collected upstream of the proposed project limits and are located within the limits of a second project being designed and constructed by Carol Stream. Site WB16 is located outside the project limits of both the Klein Creek Section 1 Stream Bank Stabilization Project and Carol Stream's other project and was also sampled to serve as downstream control site that is typical of Klein Creek water quality. Table 9 is a summary of pre- and post- project biological and habitat data collected at Klein in 2021, 2024, and 2025. and fIBI scores (Figure 12). A map of sampling locations is included in Figure 10 to Figure 12 depict the pre- and post-project QHEI (Figure 10); mIBI scores (Figure 11); Map *6*. A summary of the post-project monitoring results will be provided at the end of the 5-year post-project monitoring period and will be included in this section of the 2028 Annual Report for the Klein Creek Streambank Stabilization Project.

Table 9. Pre- (2020) and Post- (2024, 2025) Project Biological and Habitat Data collected at the Klein Creek Section 1 Streambank Stabilization Project. Note site 19 A is in a 319 funded project.

Site ID	Fish/Macro River Mile	Drainage Area (sq mi)	fIBI	mIBI	QHEI	Aquatic Life Use Attainment Status (AQLU)
Klein Creek 2025						
WB19	3.60/3.60	5.3	17	36.3	47.0	NON-Poor
WB19A	2.97/2.97	8.36	24	30.5	63.0	NON-Fair
WB19B*	2.57/2.57	8.59	23	39.0	68.0	NON-Fair
WB19C*	2.44/2.44	8.64	19	41.9	68.0	NON-Poor
WB16	1.00/1.00	10.43	28	49.1	80.5	PARTIAL
Klein Creek 2024						
WB19	3.60/3.60	5.3	20	26.28	41.0	NON-Poor
WB19A	2.97/2.97	8.36	17	35.63	60.0	NON-Poor
WB19B*	2.57/2.57	8.59	19	37.66	56.0	NON-Poor
WB19C*	2.44/2.44	8.64	16	39.16	64.0	NON-Poor
WB16	1.00/1.00	10.43	22	47.23	79.8	PARTIAL
Klein Creek 2021						
WB19	3.60/3.60	5.3	16	20.8	36.8	NON-Poor
WB19A	2.97/2.97	8.36	14	21	43.0	NON-Poor
WB19B*	2.57/2.57	8.59	17	14.2	41.5	NON-Poor
WB19C*	2.44/2.44	24.3	14.2	24.3	41.0	NON-Poor
WB16	1.00/1.00	33	19	33	76.0	NON-Poor
Category			**fIBI**	**mIBI**	**QHEI**	**AQLU Status**
Excellent			>50	>73	>84.5	FULL
Good			>41-49	41.8-72.9	>75.9	FULL
Fair			20-<41	20.9-41.7	<75.9	PARTIAL
Poor			<20	<20.9	<50.1	NON-Fair
Very Poor					<25.0	NON-Poor

*Sites are located within the project footprint.

Figure 10. Pre- (2021) and Post-(2024, 2025) Project QHEI Scores at the Klein Creek Section 1 Streambank Stabilization Project

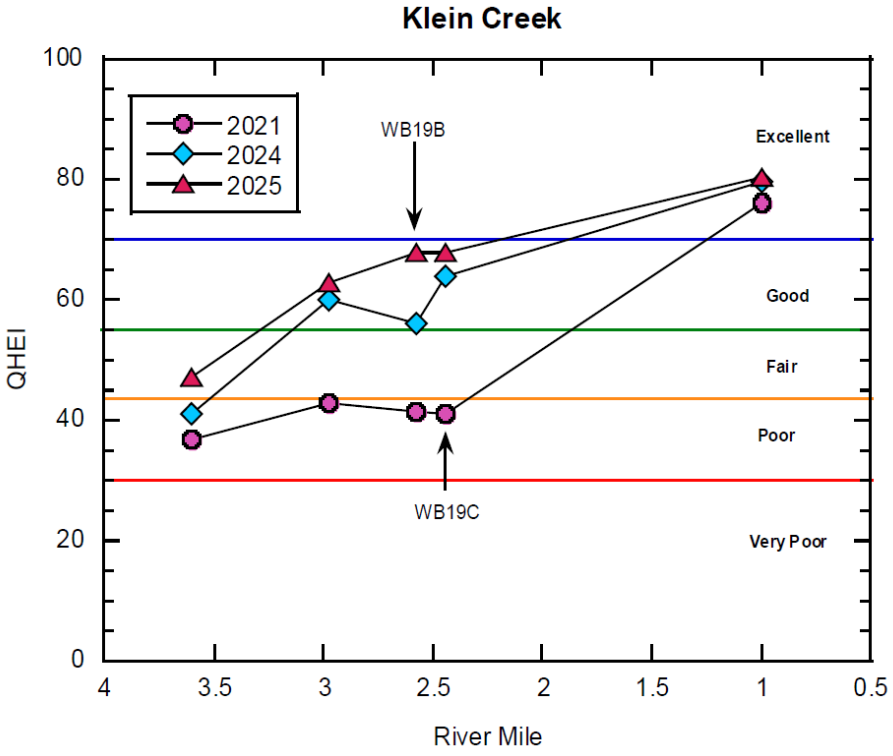


Figure 11. Pre- (2021) and Post-(2024, 2025) Project mIBI Scores at the Klein Creek Section 1 Streambank Stabilization Project

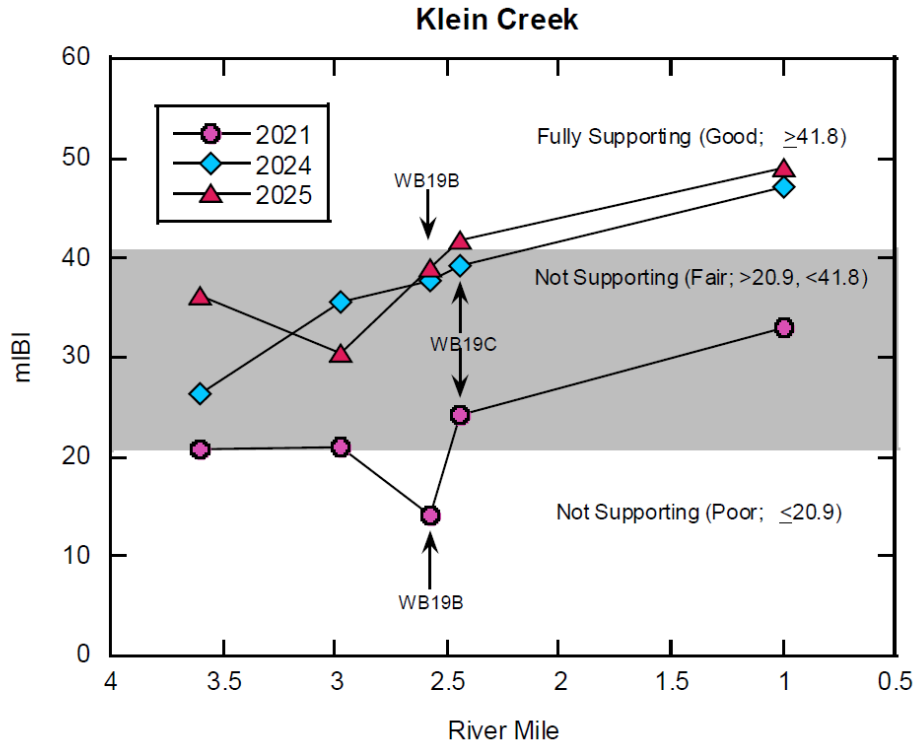
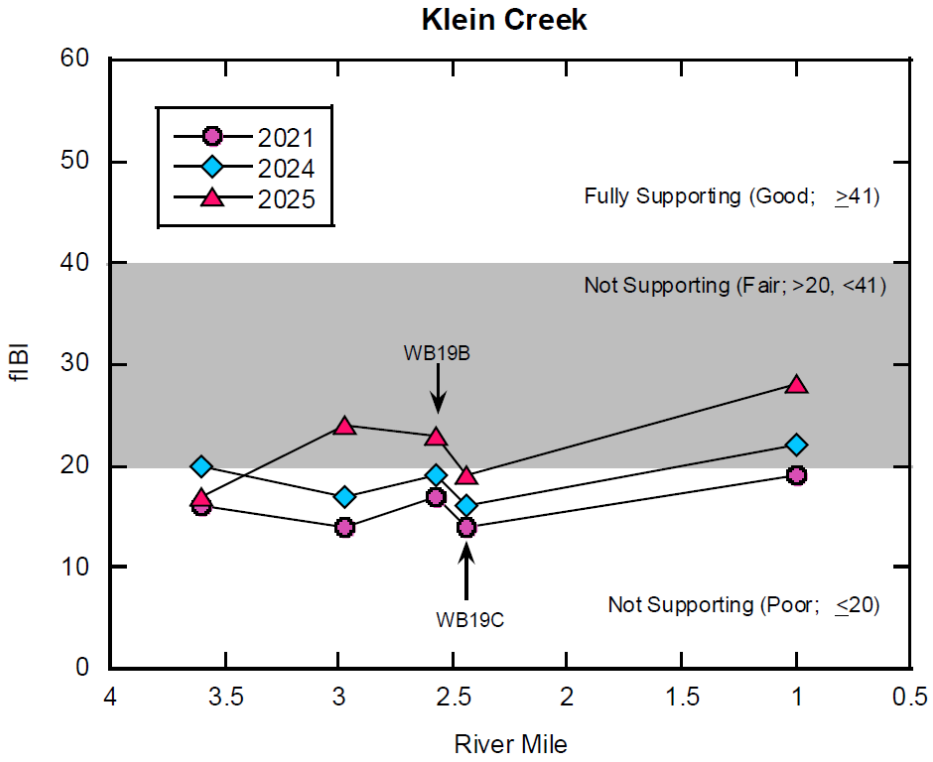
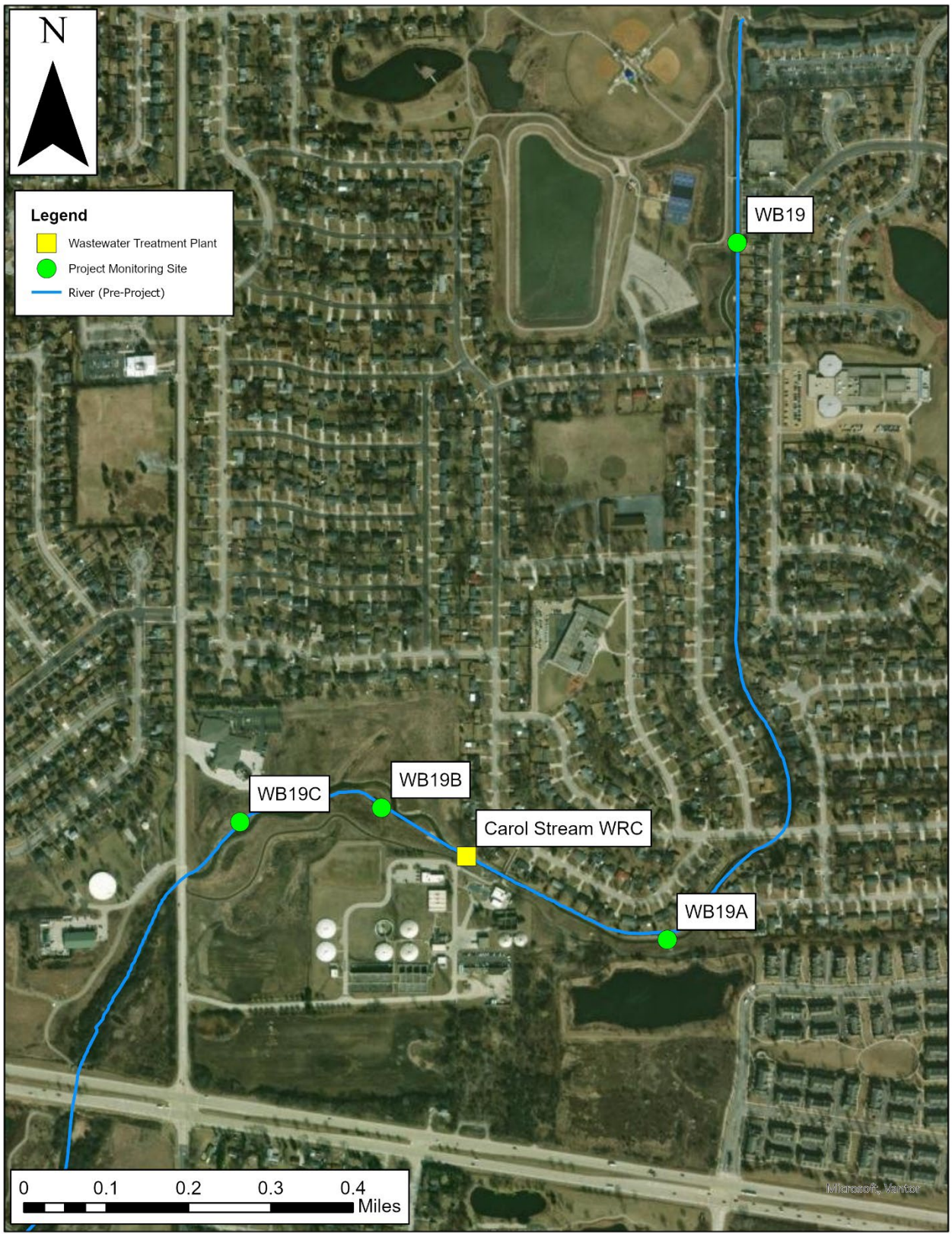


Figure 12. Pre- (2021) and Post-(2024, 2025) Project fIBI Scores at the Klein Creek Section 1 Streambank Stabilization Project





Map 6. Pre-and Post-Project Monitoring Sites at the Klein Creek Section 1 Streambank Stabilization Project. WB16 , the control site, is downstream of the area shown in the map.

1.7 Southern East Branch Stream Enhancement and East Branch Phase II

- Special Conditions Listed Completion Date – December 31, 2027
- Status – Final Design/Construction is in progress and is scheduled for completion in 2025-2026.

The Southern East Branch Stream Enhancement and East Branch Phase II (referred to collectively as the Southern East Branch Stream Enhancement Project) are located on the East Branch DuPage River between its intersection with Royce Road and its intersection with Washington Street in the Village of Bolingbrook and City of Naperville, Will County, Illinois. The Projects' objectives are to raise QHEI above its current score of 65, raise fIBI above its current score of 29.0, and raise mIBI above its current score of 38 throughout the length of the project. The DRSCW will be collaborating with the Forest Preserve District of Will County (FPDWC), the Village of Bolingbrook and City of Naperville, and the Bolingbrook and Naperville Park Districts for this project (referred to collectively as the partners). The DRSCW has budgeted $6,400,000 for design, construction, and monitoring of this project.

1.7.1 Site Description

The 2021 Annual Report provided a site description.

1.7.2 Design Characteristics

The 2021 Annual Report described the Project's design characteristics.

1.7.3 Permitting Requirements

Permit coordination for the Project has not yet started. At a minimum, it is anticipated coordination with the following agencies will be required:

- US Army Corps of Engineers (US ACOE)
- United States Fish and Wildlife Service
- Illinois Department of Natural Resources (IDNR)
- Illinois Environmental Protection Agency (IEPA)
- Will County Stormwater Commission
- Will-Cook Soil and Water Conservation District

1.7.4 Design Progress Report

The 2021 Annual Report provides details on the "Lower East Branch River Stream Restoration Project, DuPage & Will Counties, IL Conceptual Design Report" prepared by inter-fluve.

In early 2022, the ACOE notified the DRSCW that reaches 2-4 of the Lower East Branch Stream Enhancement Project was eligible for funding under the Section 206 Aquatic Restoration Program for FY23-24. The project had been on hold until the federal funding was available to the DRSCW. However, since the project has yet to receive federal funding, the DRSCW

proceeded with the final design and preparation of bid documents for the project during the 2025-2026 reporting year.

In November 2025, the DRSCW signed an updated contract with inter-fluve to complete the final design, permitting, and preparation of the bid documents for reaches 2-4 of the Lower East Branch Stream Enhancement Project. Work completed between November 2025 and March 2026 includes the development of 1D and 2D hydraulic modes for the project area and preliminary work on the 75% design plans. It is expected that the final design plans,bid documents and all required permits will be completed by March 2027.

1.7.5 Project Impact Evaluation

The DRSCW and MBI developed a monitoring plan to assess the pre- project conditions at the Southern East Branch Stream Enhancement Project. No pre-project biological and habitat data was collected in 2024 and 2025. A summary of the pre-project monitoring data collected in 2021 and 2023, along with data collected during 2008, 2011, 2014, and 2019 bioassessments within the project footprint, was included in the 2023-24 DRSCW/LDRWC Annual Report.

1.8 Hammel Woods Dam Modification

- Special Conditions Listed Completion Date – December 31, 2022
- Status – Complete. The Hammel Woods dam was removed in Summer 2021 and the Project is complete. Post-project monitoring is on-going. Year 1 of post-project monitoring was completed in 2021, and Year 2 of post-project monitoring was completed in 2022. Year 3 of post-project monitoring is scheduled for 2026.

The Hammel Woods Dam was located on the Lower DuPage River within the Hammel Woods Forest Preserve, Shorewood, Will County, Illinois. The objective of the Project was to increase fIBI at sites located upstream of the dam. Fish sampling conducted both upstream and downstream of the dam in 2012-2018 indicated that the Hammel Wood Dam blocked eight species, including central mudminnow, grass pickerel, mimic shiner, yellow bass, northern sunfish, slenderhead darter, pumpkinseed sunfish, and log perch, from accessing the DuPage River watershed upstream of the dam. The LDRWC collaborated with the Forest Preserve District of Will County on the Hammel Woods Dam Modification Project. The LDRWC spent $611,270.76 on the project design and construction and has $15,000 budgeted for post-project monitoring.

1.8.1 Site Description

The 2017 Annual Report provided a site description.

1.8.2 Design Characteristics

The 2017 Annual Report provided the Project's design characteristics.

1.8.3 Permitting Requirements

The 2020 Annual Report includes details on the Project's permitting requirements.

1.8.4 Project Implementation

The 2021 Annual Report details the Project's implementation.

1.8.5 Project Impact Evaluation

The LDRWC and MBI developed a monitoring plan to assess the removal of the Hammel Woods Dam. Fish and habitat pre- and post-project monitoring were completed at four (4) sites in 2019, 2021, and 2022 and was detailed in the 2022 Annual Report. No post-project sampling was conducted in 2023, 2024, and 2025. The next post-project sampling is scheduled to be conducted in conjunction with the Lower DuPage bioassessment schedule for the summer of 2026.

1.9 DuPage River Stream Enhancement

- Special Conditions Listed Completion Date – December 31, 2025
- Status – Construction is on-going and substantial completion is expected to be met by March 31, 2025. Planting of perennial plants and trees is scheduled for Spring 2025; and Year 1 of Monitoring and Maintenance will be 2025.

The Lower DuPage River Stream Restoration Project is located on the mainstem of the DuPage River between Route 126 and Renwick Road, Village of Plainfield, Will County, Illinois. The objectives of the Project are to raise QHEI, fIBI and mIBI scores in Lower DuPage River. The LDRWC budgeted $2,250,000 for the construction of the Project.

1.9.1 Site Description

The 2021 Annual Report provided a site description.

1.9.2 Design Characteristics

Preliminary concept plans and associated hydraulic modeling are complete. Details on this effort were included in the 2023 Annual Report.

1.9.3 Permitting Requirements

The permits listed below are required for the DuPage River Stream Enhancement Project. All project permits have been received as listed below.

- US Army Corps of Engineers (US ACOE) (LRC-2023-0742)
  - Application approved on May 31, 2024
  - Authorized as NWP 13 (Bank Stabilization) and NWP 27 (Aquatic Habitat Restoration)
- Illinois Historic Preservation Agency Section 106 Clearance (SHP LOG #019020524)

    - Compliance letter provided on May 2, 2024
- U.S. Fish & Wildlife Service Section 7 Consultation –
    - Completed USFWS self-documenting Section 7 Consultation in 2022
    - Additional work and memo provided on July 25, 2023
- Illinois Department of Natural Resources (IDNR)
    - EcoCat Request – Signoff Received on May 31, 2022
    - Floodway Constriction Permit submitted on November 22, 2023 and approved on April 3, 2024
- Illinois Environmental Protection Agency (IEPA)
    - NPDES Permit for Construction (ILR10) – ILR10ZE4I
        - Review / approval letter on May 20, 2024
        - Notice of Intent – Will be submitted by contractor upon award
- Will County Stormwater Commission
    - Delegated to Village of Plainfield. The Village of Plainfield sent an email on May 10, 2024 saying that it is approved.
- Village of Plainfield Building and Stormwater Permits
    - Application submitted on January 18, 2024 – Pending
    - The Village of Plainfield sent an email on May 10, 2024 saying that stormwater permits were approved.
- Will-Cook Soil and Water Conservation District
    - Soil erosion and sediment control (SESC) – approved on July 11, 2024

1.9.4 Design Progress Report and Project Implementation

1.9.4.1 Design Progress Report

The 2022-2024 Annual Reports provided details on the Project's design progress and characteristics.

1.9.4.2 Project Implementation

Construction of the Lower DuPage Stream Enhance project began in October 2024 and continued to the middle of March 2025 when substantial completion was met. Work was divided into several major phases, including invasive brush and tree removal, northwest bank remediation, in-stream structure installation, swale construction, and seeding. Details on the construction of the Project through substantial completion can be found in the 2024 Annual Report.

Activities in 2025 focused on maintenance and management activities including the planting of trees and perennial species, herbicide treatment of invasive/non-native herbaceous species and non-native woody species, and installing deer protection and goose deterrents.

Table 10 includes a summary of the 2025 Growing Season Maintenance and Monitoring Activities at the Lower DuPage River Stream Enhancement Project.

Table 10. Summary of the 2025 Growing Season Maintenance and Monitoring Activities at the Lower DuPage River Stream Enhancement Project

Date	Management Activity
May 2025	Native trees were planted.
	Mulch and deer protection were installed.
	Native trees were watered.
May 20, 2025	Herbicide application on reed canary grass and turf grass with grass selective herbicide.
June 13, 2025	Follow-up herbicide treatment of reed canary grass with grass selective herbicide
	Treatment of woody invasive resprouts including buckthorn and honeysuckle.
June 24, 2025	Mowing of the site.
September 5, 2025	Mowing of the site.
	Selective cutting and stump treatment of buckthorn and locust. Stumps were treated with water based broadleaf selective herbicide.
	Phragmites treatment in the southern part of the site with a non-selective herbicide.
September 9-12, 2025	Installation of perennial plants and goose deterrent.
	Perennial plants were watered (at planting and then weekly for three weeks post installation)
September 17, 2025	Hand wick herbicide application on phragmites in Swale 1

The following management activities were conducted outside of the growing season (ending in end of September).

- October 14, 2025 – Spot mowing on invasive weeds within tree cages
- October 22, 2025 – Herbicide application on reed canary grass and turf grass within the native seed areas with a grass selective herbicide.

Following one year of monitoring and maintenance, the project was evaluated to determine if the Year 1 (2025) performance criteria were met:

1. **Native Seeding:** Minimum eighty percent (80%) total areal vegetative coverage by cover crop and/or nonweedy native species, and not less than seventy percent (70%) areal vegetative coverage by cover crop and/or non-weedy native species within any one hundred square feet (100 SF) plot.

   The Project did not meet the native seeding performance. Native seeding was approximately 40-50% as of September 2025. This is likely due to the late germination of native seeding caused by late season installation and dry conditions during the 2025 growing season. In addition, areas S1 and SE1 underperformed with less than 70% cover

within any 100 SF plot. This is likely due to soil compaction caused by turf grass previously planted in these areas followed by monoculture growth of non-native spotted knot weed.

2. **Perennial Plants:** 100% survivorship of all planted plugs or a dense mass of non-weedy native vegetation, as determined by the Engineer.

   Perennial plugs were planted September 9-12th of 2025. Plant survivorship was observed twice during the 2025 season, an 80% survivorship was recorded two weeks after the initial installation, and 75% survivorship was observed in October. Plugs planted close to the bottom of the swales had a higher success rate compared to the ones planted on the upland flats. Final survivorship assessment of the perennial plantings will be conducted in Spring 2026.

3. **Trees:** 100% survivorship and in the same general condition and health as when they were planted.

   Tree planting was successful with 100% of all trees healthy and adjusting well after supplemental watering.

4. **Stone and coarse woody debris installations:** Structures are in place and functioning as intended when installed.

   All stone structures remained in place and functioned as intended during the 2025 season.

Based on the results of the 2025 Monitoring and Management activities, supplemental seeding in the underperforming native seeding areas is scheduled for Winter 2026. Additionally, invasive weed control is proposed through foliar herbicide application on perennial invasives such as reed canary grass, lesser celandine and non-native woody species throughout the 2026 growing season. Selective mowing throughout the entire site in 2026 is also proposed to control annual invasive species via brushcutters or walk behind mower A hand wick herbicide application is recommended on any remaining phragmites in late summer 2026. Lastly, if the species matrix is suitable after the growing season, a control burn is recommended for the Fall of 2026.

1.9.5 Project Impact Evaluation

The LDRWC and MBI developed a monitoring plan to assess the DuPage River Stream Enhancement Project. Macroinvertebrates, fish and habitat monitoring were completed at four (4) sites in 2022 as part of pre-project monitoring and is detailed in the 2022 Annual Report. No pre-project sampling was conducted in 2023 and 2024. Post-project sampling will begin 2026.

Chapter 2 Chloride Reduction Program

The Special Conditions Paragraph 3 requires NPDES holder participation in a watershed Chloride Reduction Program either directly or through the DRSCW and/or LDRWC. This section summarizes the DRSCW and LDRWC Chloride Reduction Program activities in 2025-2026.

2.1 Technical Workshops

In 2007, the DRSCW held its first deicing workshop to highlight new deicing methods, NPDES water quality goals, and best management practices in order to reduce chlorides and costs. During the following years, the DRSCW offered an additional workshop that targeted contractors responsible for snow and ice management of parking lots and sidewalks. Since 2007, the DRSCW has executed workshops every year targeting personnel responsible for 1) public roads and 2) parking lots and sidewalks. The programs have provided training and resources for numerous attendees from multiple agencies (Plate 8).

Beginning in Fall 2020 the workshops were held as webinars. Since 2024, based on feedback from some attendees, in-person workshops were offered again in addition to those held in a webinar workshop format. Also, since 2020 the workgroup staff for the DRSCW, LDRWC, Lower Des Plaines 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 has been available to agencies over a wide area of northeastern Illinois resulting in staff attending from Cook, DuPage, Kane, Kendall, Lake, McHenry and Will Counties.

The 2025 in-person Public Roads Winter Best Practices Workshops were held on Sept. 16, Sept. 23, and Sept. 30, 2025. Public Roads webinars were held on Sept. 25, Oct. 7, and Nov. 12. 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 1005 persons attended the six 2025 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.

Plate 8. PowerPoint Slide from Nov. 12, 2025 Public Roads

The Parking Lots and Sidewalks Winter Best Practices Workshop were held on Oct. 2, Oct. 14 (Plate 9), and Nov. 13, 2025, all in a webinar format. The Workshops were presented by staff from The Conservation Foundation through the Salt Smart Collaborative. The follow-up surveys provided an opportunity to provide an evaluation of the webinars. Survey results indicated that there was a minimum of 268 persons who attended the Workshops. Certificates of attendance were provided to those who requested them. 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).

Plate 9. PowerPoint Slide from Oct. 14, 2025 Parking Lots & Sidewalks

Illinois RiverWatch Chloride Watchers Program

Illinois RiverWatch is a statewide biological monitoring program that provides volunteers a hands-on opportunity to become stewards of our local waterways by monitoring stream habitat and water quality. Winter Chloride Watcher volunteers collect and test water samples from local waterways for chloride on a monthly basis between November and May.

The Conservation Foundation partnered with the Illinois RiverWatch Network (RiverWatch) to expand RiverWatch's Winter Chloride Watchers program in Northeast Illinois for the 2025-2026 winter season. Inclusive of both The Conservation Foundation and RiverWatch, 179 volunteers submitted 1,480 chloride results from 261 sites across 24 counties in IL. Within the DuPage River and Salt Creek Watersheds, over 600 samples were collected from the East and West Branches of the DuPage River, Salt Creek, and their respective tributaries.

LDRWC's Seasonal Educational Materials

During this reporting period, the LDRWC shared seasonal educational materials for members to use in residential and commercial outreach efforts (Plate 10). The materials are available through their website https://ldpwatersheds.org/outreach/salt-smart/ and through the Salt Smart Collaborative website at www.saltsmart.org. The LDRWC is one of the lead collaborators for SaltSmart.org. Materials included blog posts, supporting social media graphics, posters, handouts, and plastic cups for spreading salt correctly and a bookmark with information for residents. Both websites advertise the Winter Best Practices Workshops.

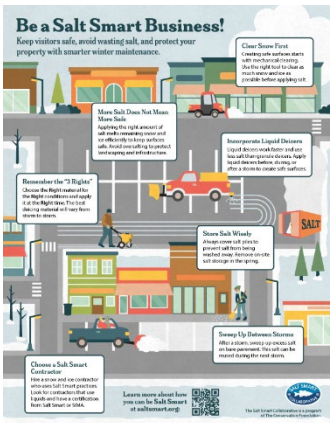


Plate 10. Outreach graphic for social media platforms,

2.2 Tracking BMP Adoption

2.2.1 Chloride Questionnaire

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 questionnaire for winter 2025/6 has been generated and distributed.

2.2.2 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 13 to Figure 18). The analysis is needed to account for this inherent variability to as great a degree as possible. To help accomplish this the DRSCW purchased 17 years of weather data (snow and ice precipitation data for numerous locations) from Weather Command / Murray and Trettel, Inc. For each site where winter chloride concentration data was available the analysis steps were:

- Calculation of estimated chloride concentration 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
- 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 was completed in 2024. Study results indicate that chloride concentrations have decreased over the study period in almost all DRSCW stream monitoring locations in both warm and cold weather conditions. The study suggests that the education and reduction efforts, the resulting community chloride application rate reductions, and enhanced community salt management best management practices (BMPs) have resulted in lower local chloride concentrations over the past decade. However, as Figure 13 to Figure 18 show, weather is still the largest determinant of instream chloride concentrations.

When chlorides are present in elevated concentrations in rivers, they harm aquatic invertebrates, fish, and aquatic and terrestrial plants. High chloride concentrations in stormwater 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 main source of elevated chlorides 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 monitoring of conductivity is carried out at seven (7) locations. All conductivity sites were originally installed to collect continuous DO and are situated for that effort rather than for chlorides. Six (6) locations are in the DRSCW program area (5 sites monitored by the DRSCW and 1 site monitored by MWRD), and one (1) site in the LDRWC program area (monitored by the LDRWC). DRSCW chloride sites are positioned in the upper and lower sections of each watershed. The LDRWC site is located near the confluence of the Lower DuPage and the Des Plaines.

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 watershed's 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 2008-2025 for six (6) sites are depicted in Figure 13 to Figure 18. 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. Weather data during the winter seasons of 2008-09, 2009-10, and 2010-11 are less complete than more recent years. During those early years, weather data was not collected at every target city during every event. Winter precipitation during those years is likely underreported from actual snow/icefall.

In the LDRWC watershed, conductivity data was only recently collected as of Winter 2021 (Fall 2020 to Winter 2021) at Shorewood. For the site at Shorewood, conductivity concentrations are used to calculate chloride concentrations based on a linear relationship established by the LDRWC. It should be noted that only limited chloride grab samples were available to develop the linear relationship; and the LDRWC is collecting additional chloride grab samples to further refine this relationship. Calculated annual chloride concentrations at Shorewood for the winter months from 2020 to 2025 are presented in Figure 19.

Figure 13. Calculated Chloride Concentrations - Winter Months (2009-2025) for Salt Creek at Busse Woods Main Dam. Data was not collected in 2021.

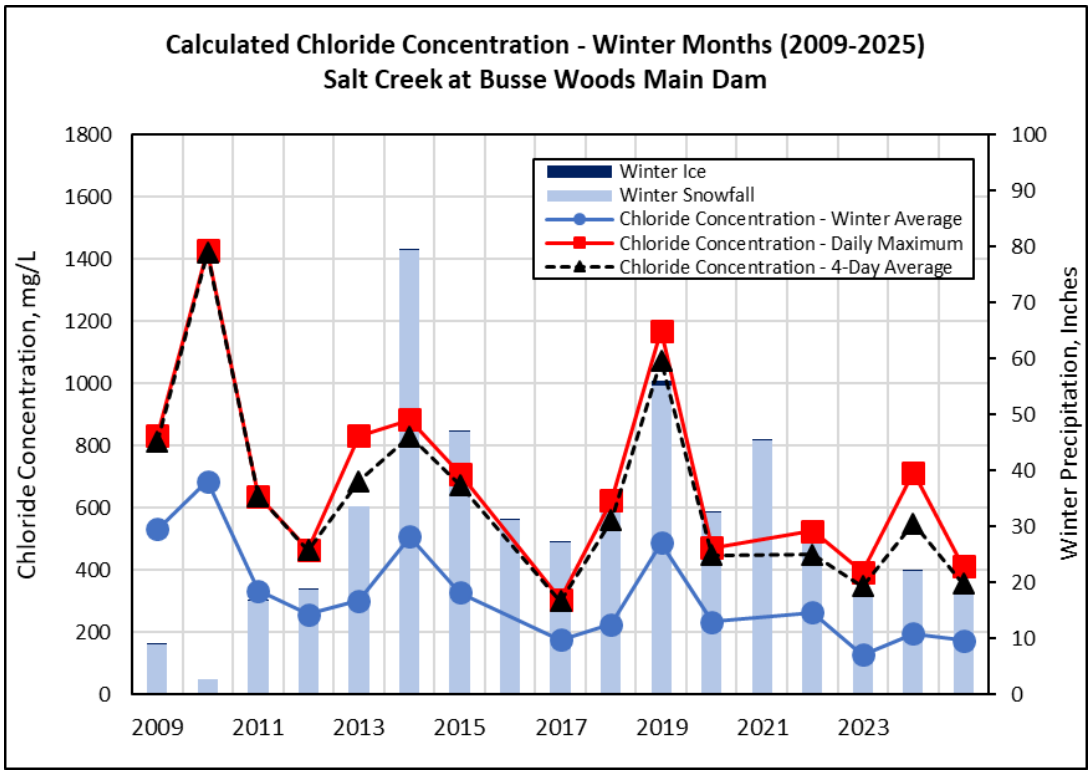


Figure 14. Calculated Chloride Concentrations - Winter Months (2008-2025) for Salt Creek at Wolf Road

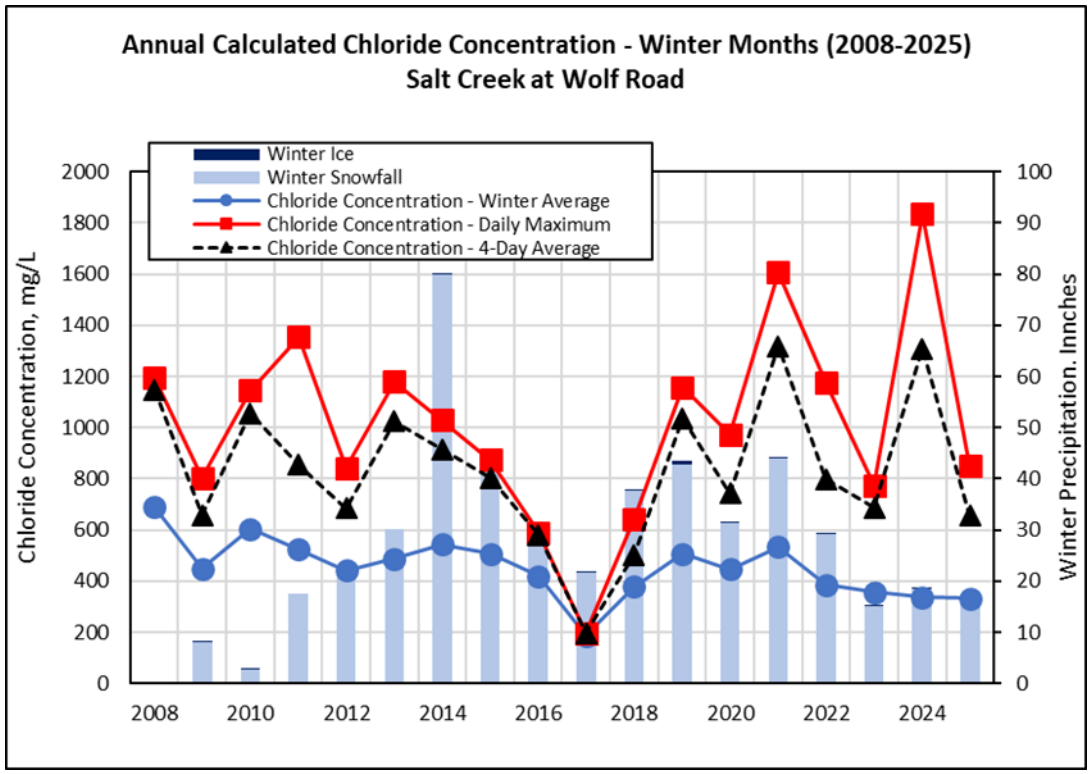


Figure 15. Calculated Chloride Concentrations - Winter Months (2008-2025) for the East Branch DuPage River at Army Trail Road

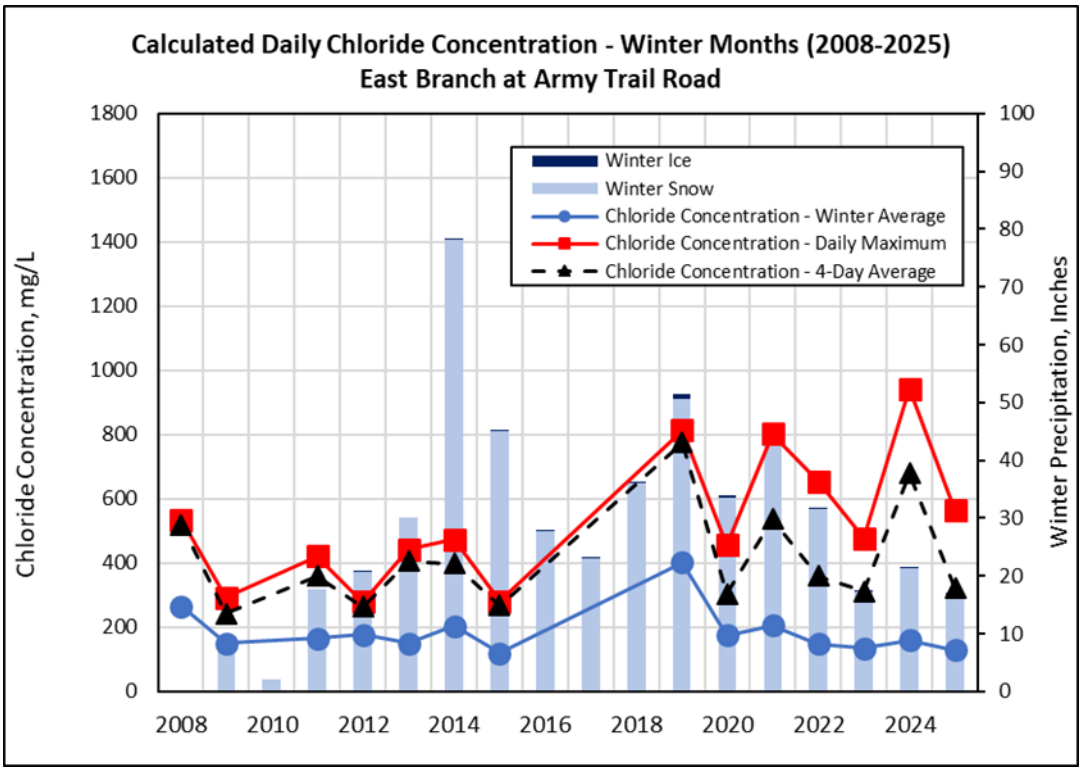


Figure 16. Calculated Chloride Concentrations - Winter Months (2008-2025) for the East Branch DuPage River at Hobson Road

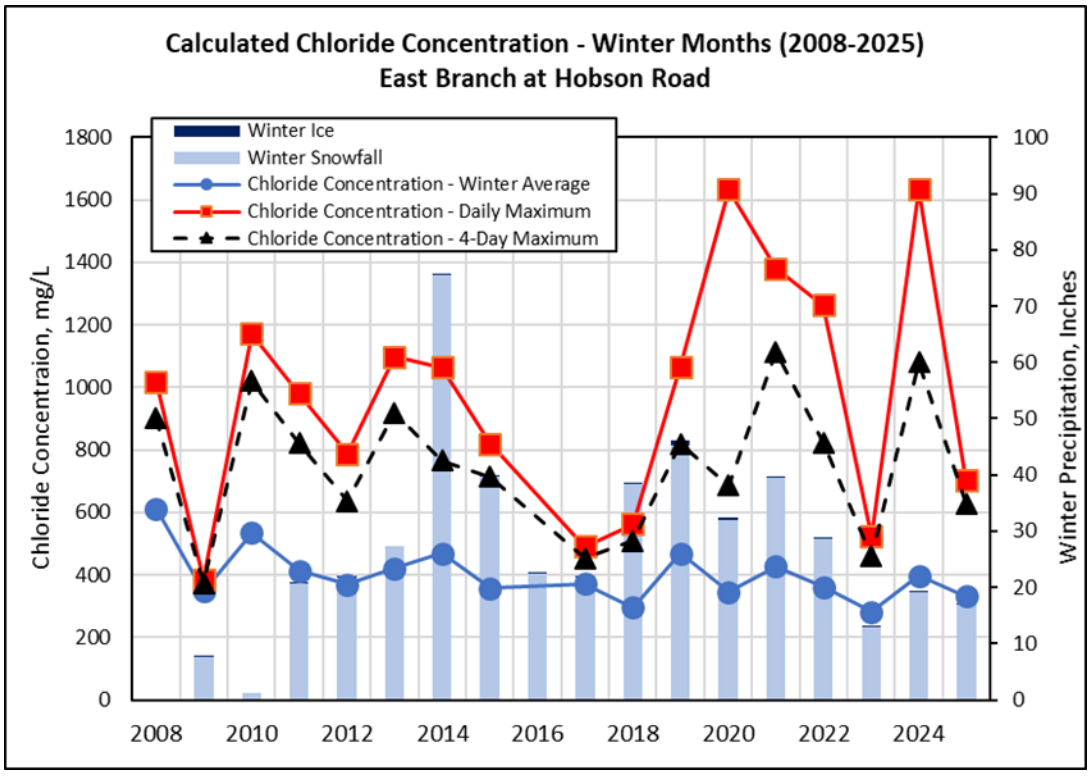


Figure 17. Calculated Chloride Concentrations - Winter Months (2008-2025) for the West Branch DuPage River at Arlington Drive

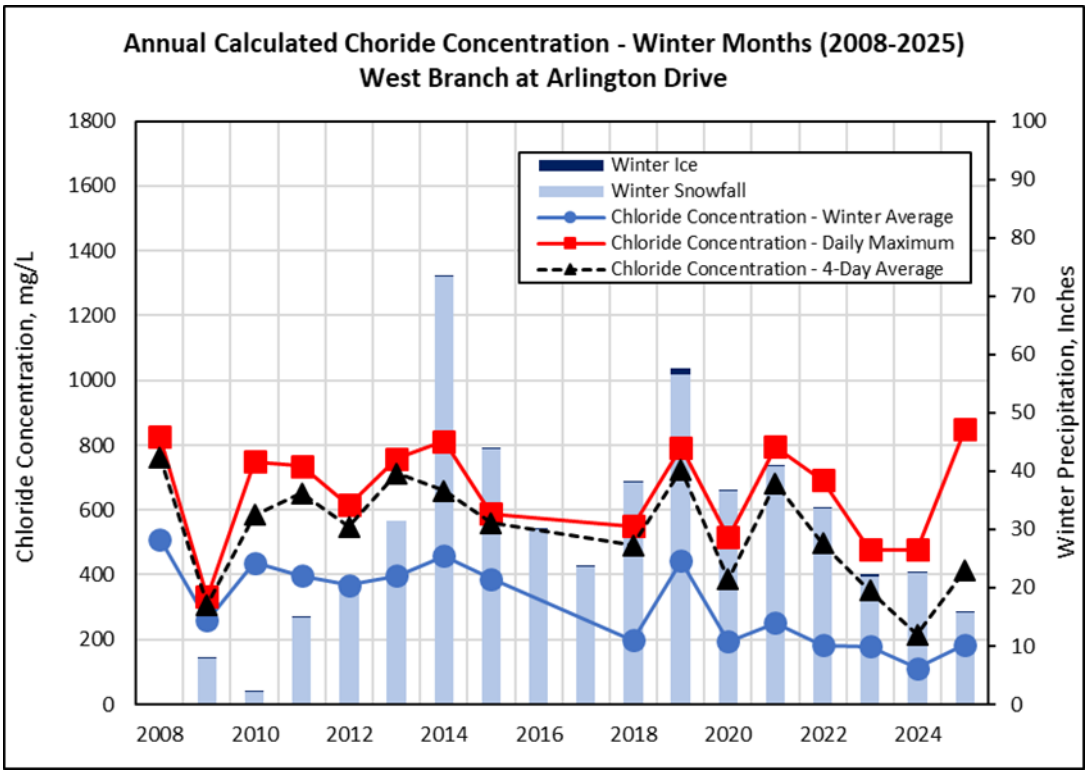


Figure 18. Calculated Chloride Concentrations - Winter Months (2019-2025) for the West Branch DuPage River at Bailey Road

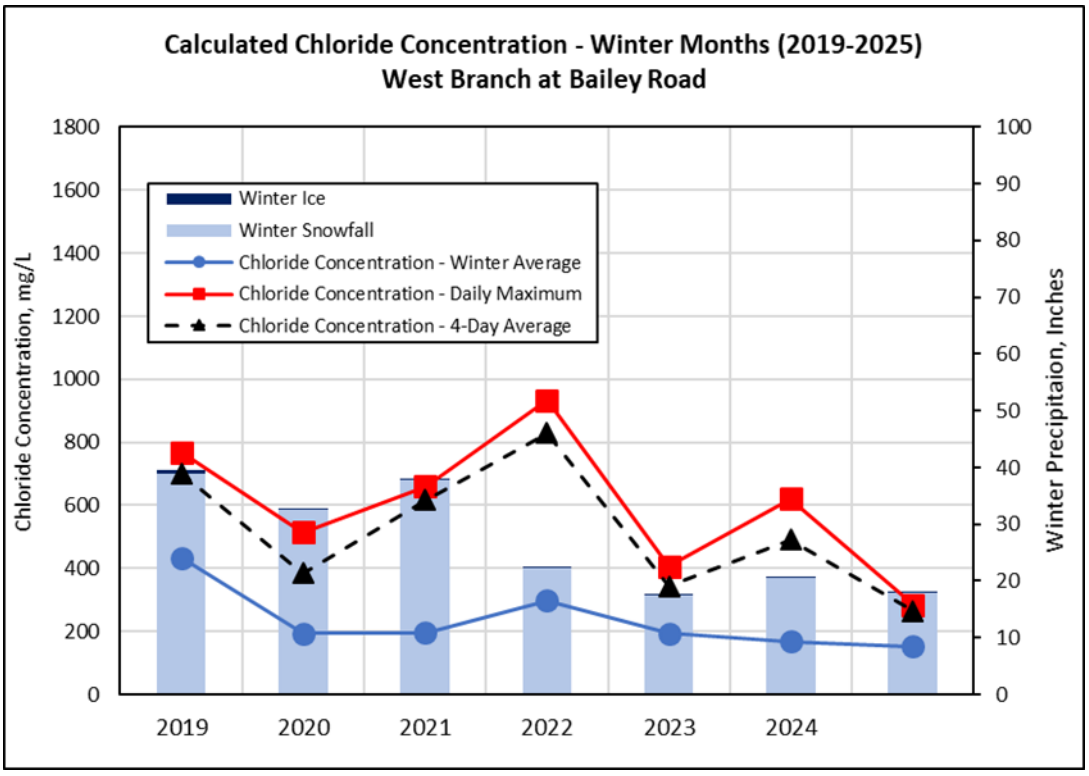
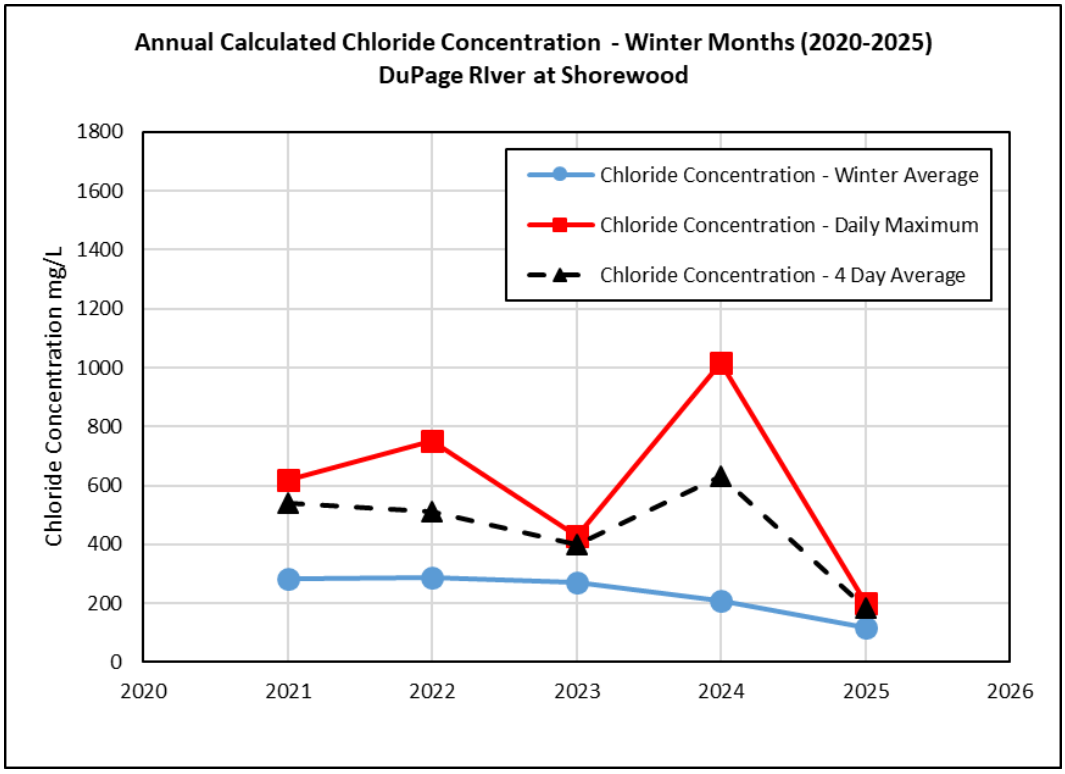


Figure 19. Calculated Chloride Concentrations - Winter Months (2020-2025) for the Lower DuPage River at Shorewood



2.2.3 Measuring Chloride Concentrations in Street Sweeping Debris

Analysis of data collected in previous years has shown a high-level of heterogeneity in results. This variation was found not just between samples, but between samples and their corresponding duplicates.

The results, sample collection, and laboratory methodologies were reviewed with experts from the Cold Climate Stormwater Center of Excellence (of which DRSCW is participating member) and have come up with revised procedures. Data collection will recommence in 2026.

Chapter 3 Nutrient Implementation Plan

A Special Conditions Paragraph requires NPDES holders in the DRSCW and LDRWC to develop a Nutrient Implementation Plan (NIP) for the watershed that identifies phosphorus input reductions by point source discharges, non-point source discharges, and other measures necessary to remove DO and offensive condition impairments, and to meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203. The Special Conditions also identifies additional studies to be completed by the watershed workgroups. The NIP was submitted to the Illinois Environmental Protection Agency (IEPA) on December 28, 2023 and can be found at https://drscw.org/activities/project-identification-and-prioritization-system/ and https://ldpwatersheds.org/about-us/lower-dupage-river-watershed-coalition/our-work/narp/

3.1 NIP Summary and Next Steps

The NIP was submitted to the IEPA by the DRCSW and the LDRWC on December 28, 2023. The instream threshold used in the NIP is derived from a relationship between TP concentrations and biota (fish species, macroinvertebrate taxa and their indices of biotic integrity) that was established by a multivariate analysis published by the watershed groups in 2023 . The analysis, which drew on paired biological, chemical, and physical data from 640 sites in Northeast Illinois, found that fish species and the Fish Index of Biotic Integrity (fIBI) were more sensitive to TP concentration variation than were the macroinvertebrate taxa and the Macroinvertebrate Index of Biotic Integrity (mIBI). The 75th percentile of sites supporting a fIBI range of 41 and 49 (meeting and exceeding the General Use standard for aquatic life) and hosting two or more TP sensitive species (species in the 25th Percentile of TP fish species rank ordered by decrease in weighted average number of individuals as TP concentrations increased) was found to correspond to a TP concentration of 0.11 - 0.277 milligrams per liter (mg/L).

Modeling was conducted using the QUAL2Kw platform to identify potential management scenarios that would decrease ambient instream TP concentrations below the identified TP watershed threshold. Ultimately, the suite of scenarios modeled demonstrated that an effluent TP permit limit of 0.35 mg/L (for an effective effluent concentration of 0.28 mg/L) for wastewater treatment plants (WWTPs) along Salt Creek and the West and East Branches of the DuPage River and an effluent TP permit limit of 0.5 mg/L (for an effective effluent concentration of 0.4 mg/L) for WWTPs along the Lower DuPage River would be sufficient to achieve the local threshold value satisfactorily. The NIP recommended that the following effluent limits be adopted:

- WWTPs discharging to Salt Creek and the East and West Branches of the DuPage River adopt an effluent limit of 0.35 mg/L TP (leading to an effective mean effluent

concentration of 0.28 mg/L, assuming a 20% margin of safety) seasonal geometric mean for warm weather months (May–October) as part of an annual 0.50 mg/L TP geometric mean;

- WWTPs discharging to the mainstem of the Lower DuPage River adopt an effluent limit of 0.50 mg/L TP (leading to an effective mean effluent concentration of 0.4 mg/L, assuming a 20% margin of safety) for warm weather months as an annual geometric mean, rolling 12-month basis; and
- The Crest Hill STP, which discharges to a tributary on the Lower DuPage River, adopt the 0.35 mg/L TP limit.

Additionally, as the modeled reductions of effluent TP concentrations did not show meaningful improvements in predicted minimum and mean DO concentrations due in part to localized persistence of low gradients or flow restrictions which also factor into existing DO impairments, the NIP also recommends that targeted physical projects focused on eliminating DO sags and improving instream habitat continue to be implemented in the DuPage River and Salt Creek watersheds.

A schedule for the implementation of TP removal at each of WWTPs is included in the NIP. A schedule of special assessments to fund the physical projects is also included in the NIP.

Throughout 2025 and early 2026, the DRSCW and LDRWC continued discussions with the IEPA and environmental advocacy groups (EAGs), including the Sierra Club and the Mississippi River Collaborative, on integrating the NIP recommendations into member WWTPs' NPDES permits.

In November 2025, the IEPA issued 30-Day Draft NPDES Permits for two DRSCW WWTPs (Elmhurst and Wood Dale North) and one LDRWC POTW (Plainfield) that include the NIP recommendations in their Special Conditions. The IEPA has received comments on the Draft NPDES Permits from the Sierra Club and a joint letter from the Environmental Law and Policy Center (ELPC), Prairie Rivers Network, and Mississippi River Collaborative. The DRSCW and LDRWC have prepared a response to the comments and submitted it to the IEPA in March 2026.

It is the goal of the DRSCW and the LDRWC to have the NIP recommendations included in the members' NPDES permits by the end of second quarter 2026.

Attachment 1

DRSCW Special Condition

SPECIAL CONDITION 17. DuPage River/Salt Creek Special Requirements

A. The Permittee shall participate in the DuPage River Salt Creek Workgroup (DRSCW). The Permittee shall work with other watershed members of the DRSCW to determine the most cost-effective means to remove dissolved oxygen (DO) and offensive condition impairments in the DRSCW watersheds.

B. The Permittee shall ensure that the following projects and activities set out in the Revised DRSCW Implementation Plan (June, 2021), are completed (either by the permittee or through the DRSCW) by the scheduled dates set forth below; and that the short term objectives are achieved for each by the time frames identified below:

Project Name	**Completion Date**	**Short Term Objectives**	**Long Term Objectives**
Oak Meadows Golf Course dam removal	December 31, 2016 (Completed)	Improve DO	Improve fish passage
Oak Meadows Golf Course stream restoration	December 31, 2017 (Completed)	Improve aquatic habitat (QHEI), reduce Inputs of nutrients and sediment	Raise miBI
Fawell dam Modification	December 31, 2024	Modify dam to allow fish passage	Raise fiBi upstream of structure
Spring Brook Restoration and dam removal	December 31, 2020 (Completed)	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and flBi
Fullersburg Woods Dam modification concept plan development	December 31, 2016 {Completed)	Identify conceptual plan for dam modification and stream restoration	Build consensus among plan stakeholders
Fullersburg Woods Dam modification	December 31, 2024	Improve DO, improve aquatic habitat (QHEI)	Raise miBi and fiBi
Fullersburg Woods area stream restoration	December 31, 2024	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
West Branch Physical Enhancement (Klein Creek)	December 31, 2023 {Completed)	Improve aquatic habitat (QHEI)	Raise miBi andfiBi
Southern East Branch Stream Enhancement	December 31, 2024	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi andfiBi
QUAL 2w West Branch, East Branch and Salt Creek	December 31, 2023	Collect new baseline data and update model	Quantify improvements in watershed. Prioritize DO Improvement projects for years beyond 2024.
NPS Phosphorus Feasibillty Analysis	December 31, 2021 (Complete)	Assess NPS performance from reductions leaf litter and street sweeping	Reduce NPS contributions to lowest practical levels
East Branch Phase II	December 31, 2028	Improve aquatic habitat (QHEI), reduce Inputs of nutrients and sediment	Raise miBi andFiBi
Lower Salt Creek Phase 2	December 31, 2028	Improve aquatic habitat (QHEI), Remove fish barrier, reduce inputs of nutrients and sediment	Raise miBi and fiBi
West Branch Restoration Project	December 31, 2028	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi

C. The Permittee shall participate in implementation of a watershed Chloride Reduction Program, either directly or through the DRSCW. The program shall work to decrease DRSCW watershed public agency chloride application rates used for winter road safety, with the objective of decreasing watershed chloride loading. An annual report on the annual implementation of the program identify ing the practices deployed, chloride application rates, estimated reductions achieved, analyses of watershed chloride loads, precipitation, air temperature conditions and relative performance compared to a baseline condition shall be submitted electronically to EPA.PrmtSpecCondtns@illinois.gov with "IL0028380 Special Condition 17.C" as the subject of the email and posted to the DRSCW's website by March 31 of each year. The annual report shall reflect the Chloride Abatement Program performance for the preceding year (example: 2019-20 winter season report shall be submitted no later than March 31, 2021). The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW permittees and may be submitted as part of a combined annual report with paragraph D below.

D. The Permittee shall submit an annual progress report on the projects listed in the table of paragraph B above. The report shall be submitted electronically to EPA.PrmtSpecCondtns@illinois.gov with "IL0028380 Special Condition 17.D" as the subject of the email and posted to the DRSCW's website by March 31 of each year. The report shall include project implementation progress. The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW permittees.

E. The Permittee shall maintain and implement any recommendations from its Phosphorus Discharge Optimization Plan in accordance with the schedule set forth in the Plan. Annual progress reports on the optimization of the existing treatment facilities shall be submitted electronically to EPA.PrmtSpecCondtns@illinois.gov with "IL0028380 Special Condition 17.E" as the subject of the email and posted to the permittees website by March 31 of each year. If the permittee's plan does not already include a schedule, the permittee shall include a schedule for the implementation of any optimization measures recommended by the plan in the permittee's annual progress report due the March 31 one year after the permit becomes effective. As part of the plan, the Permittee shall continue to evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not be limited to, an evaluation of the following optimization measures:

1. WWTF influent reduction measures.
   a. Evaluate the phosphorus reduction potential of users.
   b. Determine which sources have the greatest opportunity for reducing phosphorus (i.e., industrial, commercial, institutional, municipal and others).
      i. Determine whether known sources (i.e., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
      ii. Evaluate implementation of local limits on influent sources of excessive phosphorus.

2. WWTF effluent reduction measures.
   a. Reduce phosphorus discharges by optimizing existing treatment processes without causing non-compliance with permit effluent limitations or adversely impacting stream health.
      i. Adjust the solids retention time for biological phosphorus removal.
      ii. Adjust aeration rates to reduce dissolved oxygen and promote biological phosphorus removal.
      iii. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
      iv. Minimize impact on recycle streams by improving aeration within holding tanks.
      v. Adjust flow through existing basins to enhance biological nutrient removal.
      vi. Increase volatile fatty acids for biological phosphorus removal.

F. Total phosphorus in the effluent shall be limited as follows:

1. If the Permittee will use chemical precipitation to achieve the limit, the effluent limitation shall be 1.0 mg/L on a monthly average basis, effective XXXX, or in accordance with the implementation schedule included in the Nutrient Implementation Plan unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program or limit pursuant to paragraphs F.3 thru F.8 below.

2. If the Permittee will primarily use biological phosphorus removal to achieve the limit, the effluent limitation shall be 1.0 mg/L monthly average to be effective XXXX, or in accordance with the implementation schedule included in the Nutrient Implementation Plan unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program or limit pursuant to paragraphs F.3 thru F.8 below.

3. The Permittee demonstrates that the Limit is not technologically feasible; or

4. The Permittee demonstrates the Limit would result in substantial and widespread economic or social impact. Substantial and widespread economic impacts must be demonstrated using applicable USEPA guidance, including but not limited to any of the following documents: 1. Interim Economic Guidance for Water Quality Standards, March 1995, EPA-823-95-002; 2. Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development, February 1997, EPA-832—97-004; 3. Financial Capability Assessment Framework for Municipal Clean Water Act Requirements, November 24, 2014; or

5. If the Nutrient Implementation Plan determines that a greater phosphorus reduction is necessary, then the Permittee shall meet the phosphorus limit identified in the Nutrient Implementation Plan in accordance with the schedule set out therein, prioritized

among all watershed needs; or

6. If the DRSCW has developed and implemented a trading program for POTWs in the DRSCW watersheds, providing for reallocation of allowed phosphorus loadings between two or more POTWs in the DRSCW and Lower DuPage Watershed Coalition watersheds, that delivers the same results of overall watershed phosphorus point-source reduction and loading anticipated from the uniform application of the applicable 1.0 mg/L monthly average effluent limitation, or other allocation identified in the Nutrient Implementation Plan, whichever is more stringent, among the POTW permits in the DRSCW watersheds and removes DO and offensive condition impairments and meets the applicable dissolved oxygen criteria in 35 Ill. Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 Ill. Adm. Code 302.203.; or

7. If the DRSCW has demonstrated and implemented an alternate means of reducing watershed phosphorus loading to a comparable result that removes DO and offensive condition impairments and meets the applicable dissolved oxygen criteria in 35 Ill. Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 Ill. Adm. Code 302.203.; or

8. If the Limit is demonstrated not to be technologically (e.g., no space available) or economically feasible, which shall be determined by an economic feasibility analysis by the date herein stipulated, but is feasible within a long timeline, then the permit shall include a compliance schedule requiring the discharger to comply with the phosphorus effluent limit as soon as possible, consistent with 40 C.F.R. § 122.47 (1), made applicable to Illinois at 40 C.F.R. § 123.25 (a)(18).

G. The Permittee shall monitor the wastewater effluent, consistent with the monitoring requirements on Page 2 of this permit, for total phosphorus, dissolved phosphorus, nitrate/nitrite, total Kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated), alkalinity and temperature at least once a month. The Permittee shall monitor the wastewater influent for total phosphorus and total nitrogen at least once a month. The results shall be submitted on electronic DMRs (NetDMRs) to the Agency unless otherwise specified by the Agency.

H. The Permittee shall submit electronically to EPA.PrmtSpecCondtns@illinois.gov with “IL0028380 Special Condition 17.H” as the subject of the email and post to the DRSCWs website by December 31, 2023 a Nutrient Implementation Plan (NIP) for the DRSCW watersheds that identifies phosphorus input reductions by point source discharges, non-point source discharges and other measures necessary to remove DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 Ill. Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 Ill. Adm. Code 302.203. The NIP shall also include a schedule for implementation of the phosphorus input reductions and other measures. The Permittee may work cooperatively with the DRSCW to prepare a single NIP that is common among DRSCW permittees. Progress reports shall be submitted every year until completion and submission of the NIP. The DRSCW may prepare a single progress report for all DRSCW permittees and may be submitted as part of a combined annual report with paragraph D above. The Agency will renew or modify the NPDES permit as necessary to incorporate NIP requirements.

Attachment 2

LDRWC Special Condition

Bolingbrook STP#3 Special Condition XX.

1. The Permittee shall participate in the DuPage River Salt Creek Workgroup (DRSCW) and the Lower DuPage River Watershed Coalition (LDRWC). The Permittee shall work with other watershed members of the DRSCW and LDRWC to determine the most cost effective means to remove dissolved oxygen (DO) and offensive condition impairments in the DuPage River Salt Creek watershed.

2. The Permittee shall ensure that the following projects and activities set out in the DRSCW and LDRWC Implementation Plan (April 16, 2015), are completed (either by the permittee or through the DRSCW/LDRWC) by the schedule dates set forth below; and that the short term objectives are achieved for each by the time frames identified below. This condition may be modified to include additional projects due to participation in the Lower DuPage River Watershed Coalition.

Project Name	**Completion Date**	**Short Term Objectives**	**Long Term Objectives**
Oak Meadows Golf Course dam removal	December 31, 2016	Improve DO	Improve fish passage
IPS Tool/Project Identification Study	December 31, 2017	Improve DO	Improve fish passage
Oak Meadows Golf Course stream restoration	December 31. 2017	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi
Fawell Dam Modification	December 31, 2018	Modify dam to allow fish passage	Raise fiBi upstream
Hammel Woods Dam removal	December 31, 2019	Improve DO, reduce nuisance algae	Raise miBi and fiBi
Spring Brook Restoration and dam removal	December 31, 2019	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Fullersburg Woods dam modification concept plan development	December 31, 2016	Identify conceptual plan for dam modification and stream restoration	Build consensus among plan
Fullersburg Woods dam modification	December 31, 2021	Improve DO, improve aquatic habitat (QHEI)	Raise miBi and fiBi
Fullersburg Woods dam modification area stream restoration	December 31, 2022	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Southern West Branch Physical Enhancement	December 31, 2022	Improve aquatic habitat (QHEI)	Raise miBi and fiBi

Southern East Branch Stream Enhancement	December 31, 2023	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Hammel Woods Dam to 119th Street in Plainfield Stream Enhancement	December 31, 2023	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
QUAL 2K East Branch and Salt Creek	December 31, 2023	Collect new baseline data and update model	Quantify improvements in watershed. Identify next round of projects for
NPS Phosphorus Feasibility Analysis	December 31, 2021	Assess NPS performance from reductions leaf litter and street sweeping	Reduce NPS contributions to lowest practical levels

3. The Permittee shall participate in implementation of a watershed Chloride Reduction Program, either directly or through the DRSCW/LDRWC. The program shall work to decrease DRSCW/LDRWC watershed public agency chloride application rates used for winter road safety, with the objective of decreasing watershed chloride loading. The Permittee shall submit an annual report on the annual implementation of the program identifying the practices deployed, chloride application rates, estimated reductions achieved, analyses of watershed chloride loads, precipitation, air temperature conditions and relative performance compared to a baseline condition. The report shall be provided to the Agency by March 31 of each year reflecting the Chloride Abatement Program performance for the preceding year (example: 2015-16 winter season report shall be submitted no later than March 31, 2017). The Permittee may work cooperatively with the DRSCW/LDRWC to prepare a single annual progress report that is common among DRSCW/LDRWC permittees.

4. The Permittee shall submit an annual progress report on the projects listed in the table of paragraph 2 above to the Agency by March 31 of each year. The report shall include project implementation progress. The Permittee may work cooperatively with the DRSCW/LDRWC to prepare a single annual progress report that is common among DRSCW/LDRWC permittees.

5. The Permittee shall develop a written Phosphorus Discharge Optimization Plan. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor low cost facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The permittee's evaluation shall

include, but not necessarily be limited to, an evaluation of the following optimization measures:

a. WWTF influent reduction measures.
    i. Evaluate the phosphorus reduction potential of users.
    ii. Determine which sources have the greatest opportunity for reducing phosphorus (e.g., industrial, commercial, institutional, municipal, and others).
        1. Determine whether known sources (e.g., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
        2. Evaluate implementation of local limits on influent sources of excessive phosphorus.

b. WWTF effluent reduction measures.
    i. Reduce phosphorus discharges by optimizing existing treatment processes without causing non-compliance with permit effluent limitations or adversely impacting stream health.

        1. Adjust the solids retention time for biological phosphorus removal.
        2. Adjust aeration rates to reduce DO and promote biological phosphorus removal.
        3. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
        4. Minimize impact on recycle streams by improving aeration within holding tanks.
        5. Adjust flow through existing basins to enhance biological nutrient removal.
        6. Increase volatile fatty acids for biological phosphorus removal.

6. Within 24 months of the effective date of this permit, the Permittee shall finalize the written Phosphorus Discharge Optimization Evaluation Plan and submit it to IEPA. The plan shall include a schedule for implementing all of the evaluated optimization measures that can practically be implemented and include a report that explains the basis for rejecting any measure that was deemed impractical. The schedule for implementing all practical measures shall be no longer than 36 months after the effective date of this permit. The Permittee shall implement the measures set forth in the Phosphorus Discharge Optimization Plan in accordance with the schedule set forth in that Plan. The Permittee shall modify the Plan to address any comments that it receives from IEPA and shall implement the modified plan in accordance with the schedule therein.

   Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 24 months from the effective date of the permit.

7. The Permittee shall, within 24 months of the effective date of this permit, complete a feasibility study that evaluates the timeframe, and construction and O & M costs of reducing phosphorus levels in its discharge to a level consistently meeting a limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L utilizing a range of treatment technologies including, but not necessarily limited to, biological phosphorus removal, chemical precipitation, or a combination of the two. The study shall evaluate the construction and O & M costs of the different treatment technologies for these limits on a

monthly, seasonal, and annual average basis. For each technology and each phosphorus discharge level evaluated, the study shall also evaluate the amount by which the Permittee's typical household annual sewer rates would increase if the Permittee constructed and operated the specific type of technology to achieve the specific phosphorus discharge level. Within 24 months of the effective date of this Permit, the Permittee shall submit to the Agency and the DRSCW/LDRWC a written report summarizing the results of the study.

8. Total phosphorus in the effluent shall be limited as follows:

    a. If the Permittee will use chemical precipitation to achieve the limit, the effluent limitation shall be 1.0 mg/L on a monthly average basis, effective 10 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within 10 years of the effective date of this permit.
    b. If the Permittee will primarily use biological phosphorus removal to achieve the limit, the effluent limitation shall be 1.0 mg/L monthly average to be effective 11 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within 11 years of the effective date of this permit.
    c. The Agency may modify this permit if the DRSCW has developed and implemented a trading program for POTWs in the DRSCW/LDRWC watersheds, providing for reallocation of allowed phosphorus loadings between two or more POTWs in the DRSCW/LDRWC watersheds, that delivers the same results of overall watershed phosphorus point-source reduction and loading anticipated from the uniform application of the applicable 1.0 mg/L monthly average effluent limitation among the POTW permits in the DRSCW watersheds and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.
    d. The Agency may modify this permit if the DRSCW/LDRWC has demonstrated and implemented an alternate means of reducing watershed phosphorus loading to a comparable result within the timeframe of the schedule of this condition and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.

9. The Permittee shall monitor the wastewater effluent, consistent with the monitoring requirements on Page 2 of this permit, for total phosphorus, dissolved phosphorus, nitrate/nitrite, total Kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated), alkalinity and temperature at least once a month. The Permittee shall monitor the wastewater influent for total phosphorus and total nitrogen at least once a month. The results shall be submitted on NetDMRs to the Agency unless otherwise specified by the Agency.

10. The Permittee shall submit a Nutrient Implementation Plan (NIP) for the DRSCW watersheds that identifies phosphorus input reductions by point source discharges, non-point source discharges and other measures necessary to remove DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203. The NIP shall also include a schedule for implementation of the phosphorus input reductions and other measures. The Permittee may work cooperatively with the DRSCW to prepare a single NIP that is common among DRSCW and LDRWC permittees. The NIP shall be submitted to the Agency by December 31, 2023.