

2023 Des Plaines River Watershed Workgroup (DRWW) Annual Accomplishments

The DRWW continues to fulfill the monitoring requirements of its members. According to the Illinois EPA, almost all the waterways within the Des Plaines River Watershed are impaired. The goal of the Workgroup is to improve water quality in the Des Plaines River and its tributaries through monitoring, project and best practices implementation, and education and outreach that will achieve attainment of water quality standards and designated uses for the watershed. The DRWW continues to address the NPDES regulatory requirements of its constituents, and provide professional development opportunities to members, stakeholders and constituents. DRWW welcomed a new member in 2023.

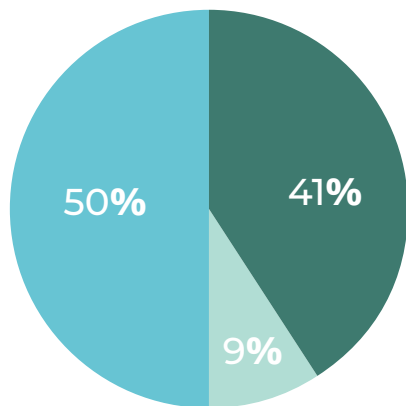
2023 Executive Board

- Paul Kendzior, President, Village of Libertyville
- Chuck Bodden, Vice-President, NSWRD
- Michael Talbett, Treasurer, Village of Kildeer
- Joel Sensenig, Secretary, Lake County Public Works
- Steve Waters, Monitoring Committee Chair, NSWRD
- Alana Bartolai, Lakes Committee Chair, LCHD
- Gary Glowacki, Member at Large, LCFPD

2023 Monitoring Committee

- Steve Waters, Chair, NSWRD
- Alana Bartolai, LCHD
- Austin McFarlane, LCPW
- Nick Huber, LCFPD
- Brian Kuebker, Village of Libertyville
- Rosemary Heilemann, Illinois Sierra Club
- James Bland, EPS, Inc

2023 DRWW Expenses



- Biological & Water Quality Monitoring (50%)
- Nutrient Assessment Reduction Plan (NARP) (41%)
- Administration, Education & Outreach (9%)

2023 Deicing Workshops

The DRWW continues to sponsor and support the Northeastern Illinois Regional Deicing Workshop. The deicing workshops focus training efforts on ways to keep public and private sector professionals up-to-date on best management practices for winter maintenance that safely reduces road salt use. The 2023 virtual workshops trained over 1,000 individuals in winter BMPs for both public roads and parking lots & sidewalks.



On September 20, 2023, the DRWW also supported a Deicing Calibration Day, which was the collaborative effort of several Lake County departments: Stormwater Management Commission, Health Department and Community Health Center, and Division of Transportation (LCDOT). This event focused on sharing hands-on experience to calibrate winter maintenance vehicles before the winter season hits Illinois. LCDOT staff demonstrated calibrating a vehicle for twenty-one participants, so they can practice responsible road salt use for their own vehicles. The participants also toured LCDOT's in-house liquid blending systems and operations to show the salt brine and beet juice winter maintenance alternatives.

Major Accomplishments

2015: The DRWW was officially formed and gained 18 members in the first year!

2016-2018: Illinois EPA awarded a Section 319 grant to develop a watershed-based plan. DRWW monitoring costs of \$279,000 were utilized as grant matching funds. The watershed plan was developed and completed with DRWW's input in June 2018 and approved by the Illinois EPA.

2019: The DRWW contracted with Geosyntec to develop a Preliminary NARP Workplan with a multi-year plan to complete the NARP in 2023, satisfying the POTW NPDES Special Condition permit requirements.

2020-2023: DRWW updated the bylaws and membership dues structure. The DRWW completed the three-year monitoring program based on the preliminary NARP Workplan recommendations. Contractor Geosyntec completed the DRWW NARP, and it was submitted to the Illinois EPA by the deadline.

Board & Committee Reports:

Executive Board

The DRWW Executive Board continues to work with the Monitoring Committee to make financial and technical decisions for the workgroup monitoring activities and to complete the DRWW NARP to the Illinois EPA by December 31, 2023. The DRWW continued sponsorship of the Regional Deicing Workshops and prepared the Integrated System Model (IPS) Model Report for public posting.

Lakes Committee

The Lakes Committee continued to monitor the lakes within the watershed and coordinated outreach and education opportunities targeting topics including: lake management plans, invasive species, routine monitoring of lake and storm water inlets, nutrient reduction, and project implementation.

Lakes Committee Members:

- Alana Bartolai, Chair, and Gerry Urbanozo, Lake County Health Department
- Rob Flood, North Shore Water Reclamation District
- Tom Morthorst, Village of Third Lake
- Nick Huber, Lake County Forest Preserve District
- Brian Valleskey, Geosyntec Consultants, Inc.
- James Bland, EPS, Inc.

Monitoring/Water Quality Improvement Committee

The DRWW Monitoring & Water Quality Impairments Abatement Committee has met frequently with Geosyntec Consultants for updates and decisions for the completion of the Nutrient Assessment Reduction plan (NARP) Report. **The DRWW successfully submitted the DRWW NARP to the Illinois EPA on December 29, 2023; satisfying the Special Conditions of the POTW NPDES permit.**



The DRWW Monitoring Committee has continued to conduct water quality and bioassessment monitoring. 2023 monitoring data from this monitoring will be used in the NARP models and Integrated Prioritization System (IPS) to identify, validate, and prioritize water quality improvement projects. The DRWW Monitoring Committee will soon receive a draft 2022-2023 DRWW Water Quality Monitoring Report from MBI for review and feedback. The final report is estimated to be finalized in March 2024.

Nutrient Assessment Reduction Plan

The DRWW completed and submitted the Nutrient Assessment & Reduction Plan (NARP) to the Illinois EPA on December 29, 2023. The NARP, required by a special condition in the National Pollutant Discharge Elimination System (NPDES) permits of multiple DRWW members aims to address phosphorus-related impairments in waters receiving discharge from publicly owned treatment works (POTWs). The plan development includes four phases: 1. Conduct Data Analysis (Complete); 2. Develop Modeling Tools (Complete); 3. Evaluate Management Scenarios (Complete); 4. Implementation planning and Schedule.

In 2023, the modeling tools developed in 2022 were used to assess watershed management strategies (Phase 3) for evaluating management strategies to address phosphorus-related impairments. The key takeaways from this work are:

1. POTW total phosphorus reductions beyond 0.5 mg/L have minimal impact on water quality.
2. Upstream total phosphorus reductions reduce sestonic chlorophyll and improve dissolved oxygen during high flow periods.
3. Tributary total phosphorus reductions reduce sestonic chlorophyll in the mainstem river, but have minimal impact on dissolved oxygen.
4. A combined reduction in the load from POTWs, nonpoint sources, and upstream improves the water quality in the Des Plaines River.
5. Improving upstream dissolved oxygen addresses the impairment in the upper reaches of the Des Plaines River.

DRWW developed an implementation plan and schedule based on the above-described key takeaways. The implementation schedule with realistic milestones will allow the DRWW and other watershed stakeholders to pursue and utilize funds from public and private sources more effectively. A copy of the report is available on our website at drww.org.

DRWW Membership

30 Agency Members

- City of Lake Forest
- City of Park City
- City of Waukegan
- City of Zion
- Ela Township
- Fremont Township
- Illinois Department of Transportation
- Lake County
- Lake County Forest Preserve District
- Lake County Public Works
- Libertyville Township
- North Shore Water Reclamation District
- Vernon Township
- Village of Buffalo Grove
- Village of Deer Park
- Village of Deerfield
- Village of Grayslake
- Village of Green Oaks
- Village of Gurnee
- Village of Kildeer
- Village of Lake Zurich
- Village of Libertyville
- Village of Lincolnshire
- Village of Lindenhurst
- Village of Long Grove
- Village of Riverwoods
- Village of Round Lake Beach
- Village of Round Lake Park
- Village of Third Lake
- Village of Vernon Hills

11 Associate Members

- Applied Technologies, Inc.
- Christopher B. Burke Engineering
- EPS, Inc.
- Fehr Graham Engineering & Environmental
- Geosyntec
- Gewalt Hamilton
- Hey & Associates
- Lake County Stormwater Management Commission
- Sierra Club
- Vernon Hills Park District
- Village of Old Mill Creek

For additional information on the DRWW, visit www.drww.org.

