



NORTH BRANCH
CHICAGO RIVER
WATERSHED
WORKGROUP

North Branch Chicago River Watershed Workgroup 2023 Annual Newsletter

Executive Board

- President**
Brandon Janes, Deerfield
Alternate: Mark Olszewski
- Vice President**
Jack Bielak, Northbrook
Alternate: Jim Baxa
- Committee Chair**
Rob Flood, NSWRD
Alternate: Josephine Meincke
- Members-At Large**
Matt Ueltzen, LCFPD
Alternate: Nick Huber
- Robyn Flakne, Glenview
Alternate: Joe Kenney
- Chuck Bodden, NSWRD
Alternate: Steve Waters
- Emily Grimm, Winnetka
Alternate: Obaid Khalid

Monitoring & Water Quality Impairment Abatement Committee

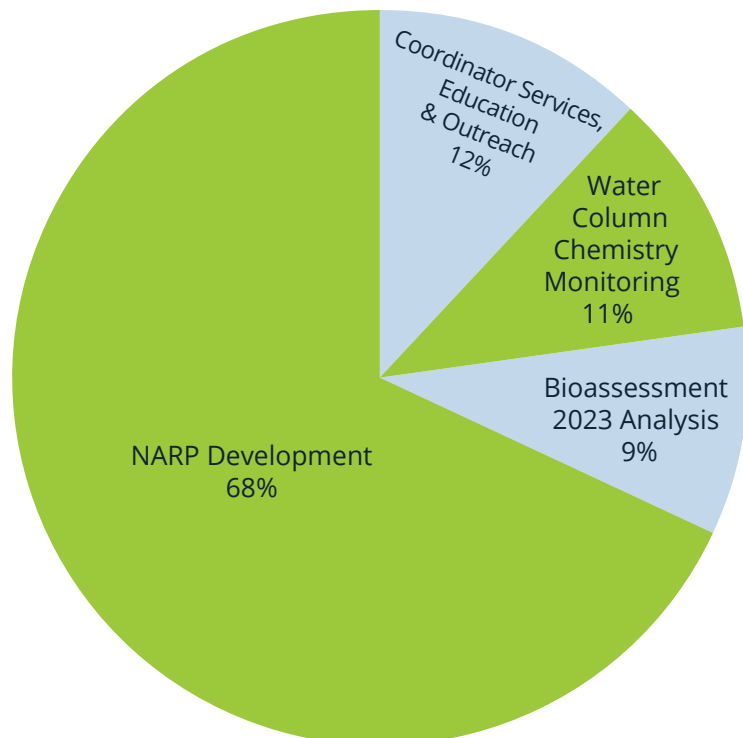
- Committee Chair**
Rob Flood, NSWRD
Alternate: Josephine Meincke
- Members-At-Large**
Anna Braum, FPDCC
Alternate: Becky Collings
- Larry Bridges, SCDD
Alternate: Michele Mrachek
- Wally Dittrich, Lincolnshire
Alternate: Ethan Hoffman
- Christopher Johnson, Sierra Club
Alternate: Rosemary Heilemann
- Leonard Dane, Fehr Graham E&E
Alternate: Karoline Qasem
- Alana Bartolai, LCHD
Alternate: James Fitzgerald

The North Branch Chicago River Watershed Workgroup (NBWW) is a voluntary, dues-paying organization. The workgroup is governed by bylaws, an elected Executive Board, and voting dues-paying members. The NBWW monitors water quality in the North Branch Chicago River watershed planning area upstream (north) of Dempster Street in Morton Grove, which includes the three subwatersheds: West Fork, Middle Fork, and Skokie River. In addition to meeting members' Illinois Environmental Protection Agency (Illinois EPA) National Pollutant Discharge Elimination System (NPDES) permit requirements, the NBWW can prevent duplicated monitoring efforts and will accomplish more with less! Membership dues are used to implement the water quality program, which includes: data collection, analysis, and identification of potential water quality impairments based on collected water quality data.

Workgroup Mission

To bring together a diverse coalition of stakeholders to preserve and improve water quality in the North Branch Chicago River and its tributaries through long term monitoring and gaining a better understanding of the stressors to the aquatic system.

2023 NBWW Expenses



2023 Accomplishments

NPDES Permitting

- The 2020-2021 Bioassessment & Water Quality Assessment Report has been completed and approved. The report can be found [here](#).
- Compiled and submitted the March 1, 2022 - February 28, 2023 annual report to the Illinois EPA to satisfy the National Pollution Discharge Elimination System (NPDES) water quality monitoring component of the annual permit reporting requirements for NBWW agency members.
- NBWW maintained the NBWW MS4 Resources page, www.nbwwil.org/resources.

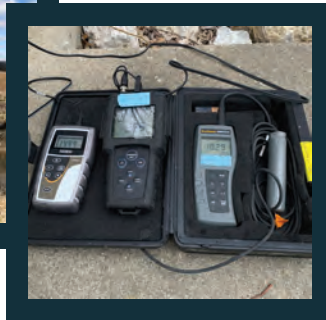
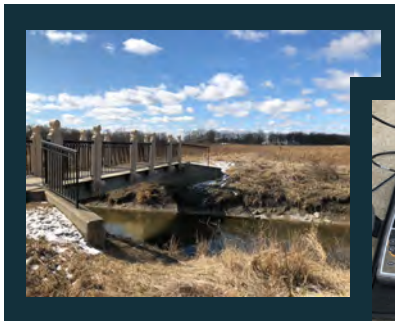
Water Quality Modeling

- MBI integrated Year 3 & 4 monitoring data into the Identification and Prioritization System Model (IPS Model). This model will be utilized to prioritize projects that will improve aquatic assemblages in a measurable and systemic manner.
- Geosyntec Consultants continues to work on the NBWW Nutrient Reduction Assessment Plan (NARP).
 - The NARP is a requirement in the Special Conditions of the NPDES discharge permits for major publicly owned treatment works (POTWs) in Illinois.

Monitoring Activities

Water Column Chemistry

North Shore Water Reclamation District (NSWRD) was contracted to conduct water column chemistry monitoring at all 25 monitoring sites. NSWRD sampled water column chemistry four to five times a year in the months of February, May, July, August, and September. All monitoring is conducted under an Illinois EPA approved NSWRD Quality Assurance Project Plan (QAPP) and the North Branch Chicago River Watershed QAPP.



Additional NARP Monitoring

North Shore Water Reclamation District staff deployed continuous monitoring data sondes in the Skokie River at three locations in 2023. One location was selected upstream of the Skokie Lagoons. The other locations were in the Skokie Lagoons and downstream of the Skokie Lagoons Dam. Continuous water quality data was collected from May through September. The data collected will be used to enhance the NARP water quality modeling and fill data gaps that were identified from the water quality data collection in 2022. The data collected will also be used to better understand the influence of the Skokie Lagoons on downstream water quality.

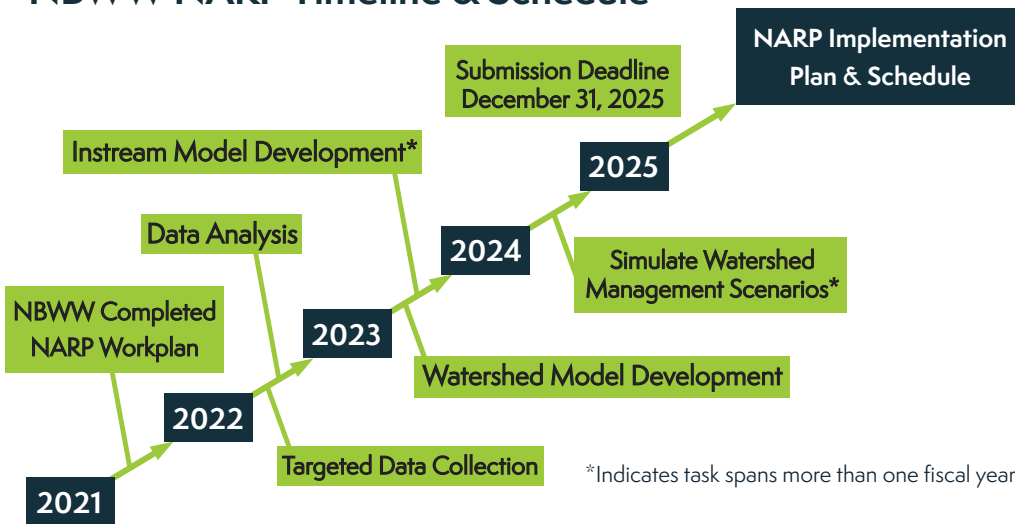
Education & Outreach

- NBWW held 14 meetings in 2023; 6 executive board, 2 general membership, and 6 monitoring & water quality impairment abatement committee meetings.
- Continued outreach to public-sector stakeholders –townships, park districts, drainage districts, school districts etc. to inform them of the Workgroup’s activities and invite them to become members.
- Continued support of the North Branch Chicago River Watershed-Based Plan update.
- Maintained NBWW website; www.nbwwil.org, for posting information on the workgroup and distributing updates to NBWW members and the public.

Nutrient Assessment Reduction Plan

The NBWW continues to work on the necessary components to develop the NARP for meeting the special condition in the NPDES permits. The work in 2023 included the development of an EPA SWMM watershed model to simulate the pollutant loading from non-point sources into the West Fork and Skokie River. The model was set up for the period of 2011 to 2022 using Lake County precipitation data, and to calibrate to observed flows (2012-2022) to ensure the model results match the reality reasonably well. This is the first step in the NARP modeling process, which requires the development of both watershed and instream models to simulate the impact of nutrient loading on water quality in the NBWW streams.

NBWW NARP Timeline & Schedule



NBWW is also in the process of evaluating the data collected by the NSWRD in the Skokie Lagoon for 2023. Due to the potential complexity and nutrient dynamics taking place within the Skokie Lagoon, NSWRD deployed monitoring equipment above, within, and below the Skokie Lagoon to better understand how the impoundment may be influencing water quality downstream in the Skokie River. This monitoring data will be used to better inform the instream model.

NBWW Membership Benefits

NBWW membership dues provide significant cost savings to the watershed and individual communities.

Collaborative watershed monitoring and reporting

General NPDES Permit No. ILR40, Part V, Item A.b.x

- NBWW has designed and implemented a watershed monitoring program.
- NBWW assesses the water quality of the water bodies and the sources of pollutants.
- Monitoring data is analyzed and summarized into a comprehensive report to meet Illinois EPA annual submittal requirements.

Over \$200,000 saved every year

General NPDES Permit No. ILR40, Part V, Item A, Section 2b

- An individual monitoring program managed by a MS4 community costs upwards of \$10,000 annually.
- NBWW's annual water quality and bioassessment monitoring program costs \$82,000 on average.
- Collectively, the workgroup (29 member permit holders) saves the watershed over \$200,000 annually.

MS4 permit compliance for chlorides

General NPDES Permit No. ILR40, Part III, Item D

- If permittee performs any deicing activities that can cause or contribute to a violation of an applicable State chloride water quality standard:
 - Permittee shall participate in any watershed group(s) organized to implement control measures.
 - Reduce the chloride concentration in any receiving stream in the watershed.

Minimum Control Measures (MCM) Scorecard

www.nbwwil.org/reports-and-data

- NBWW provides members with an annual scorecard evaluation for applicable MCMs of the NPDES ILR40 permit requirements.
- The scorecard indicates specific NBWW activities to "Corresponding MS4 MCMs", which can be reflected as measurable goals in permittees' Stormwater Management Program Plan (SMPP) as well as annual facility inspection report.

NBWW Members

2023 Annual Membership Dues \$211,891 & 48 NBWW Members

33 Agency Members

- City of Evanston
- City of Highland Park
- City of Lake Forest
- City of North Chicago
- City of Park City
- City of Waukegan
- Cook County
- Cook County Dept. of Trans. & Highways
- Forest Preserve District of Cook County
- Illinois Department of Transportation
- Lake County
- Lake County Division of Transportation
- Lake County Forest Preserve District
- Libertyville Township
- North Shore Water Reclamation District
- Skokie Consolidated Drainage District
- Union One Middle Fork DD
- Union One West Fork DD
- Vernon Township
- Village of Bannockburn
- Village of Deerfield
- Village of Glencoe
- Village of Glenview
- Village of Green Oaks
- Village of Lincolnshire
- Village of Morton Grove
- Village of Niles
- Village of Northbrook
- Village of Northfield
- Village of Riverwoods
- Village of Skokie
- Village of Wilmette
- Village of Winnetka

15 Associate Members

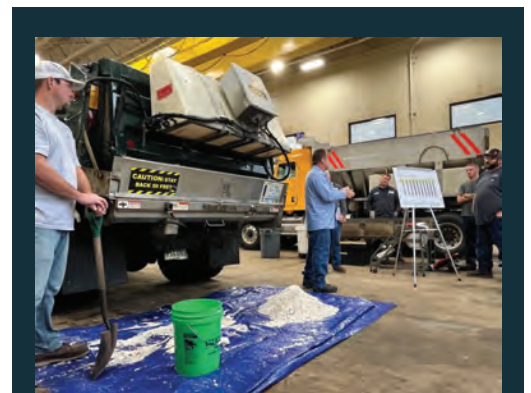
- Chicago Botanical Garden
- Christopher Burke Engineering
- Deerfield Park District
- Engineering Resource Associates Consultants
- Fehr Graham Engineering & Environmental
- Friends of the Chicago River
- Geosyntec Consultants
- Gewalt Hamilton
- Hey & Associates
- Illinois Sierra Club
- Integrated Lakes Management
- Lake County Stormwater Management Commission
- Lake Forest Open Lands
- Metropolitan Water Reclamation District of Greater Chicago
- Stantec

2023 Deicing Workshops

The NBWW continues to sponsor and support the Northeastern Illinois Regional Deicing Workshop (since 2021). The deicing workshops focus training efforts on ways to keep public and private sector professionals up-to-date on best management practices (BMPs) 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 NBWW also supported a Deicing Calibration Day, which was the collaborative effort of several Lake County departments: Stormwater Management Commission, Health Department, 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.

The NBWW encourages members to look for ways to reduce road salt use while ensuring safe travel on transportation surfaces. Check out the [Salt Smart Collaborative](#) and [Lake County](#) for resources to use and share on winter deicing BMPs.



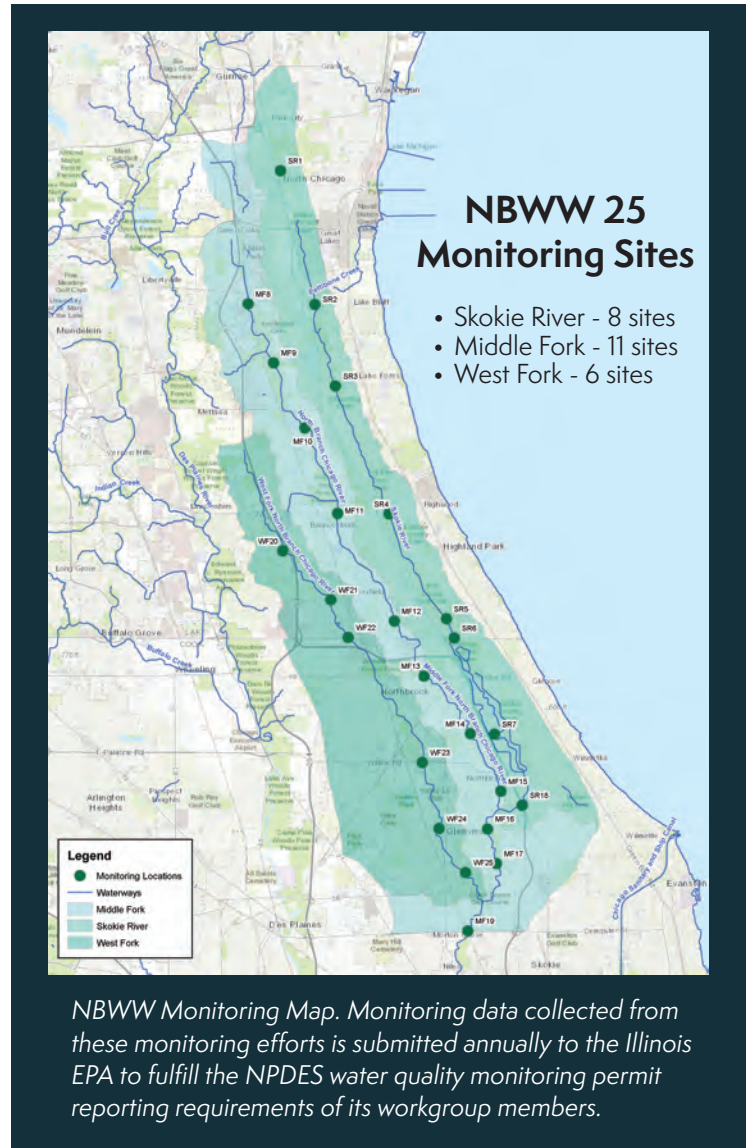
2024 Workgroup Goals

NPDES Permitting

- Perform and analyze fifth-year watershed monitoring results and implement the NBWW Monitoring Strategy.
- Compile the March 1, 2023 - February 28 2024 NBWW monitoring data in a format to be included in an annual report prepared to satisfy the NPDES water quality monitoring permit reporting requirements.
- Update, as needed, the NOI NBWW monitoring strategy spreadsheet for water column chemistry, fish, macroinvertebrates, habitat and sediment chemistry.
- Develop a database of monitoring data including fish, macroinvertebrates, habitat, and water and sediment chemistry.

Water Quality Modeling

- Receive approval from the Illinois EPA for a 2025 (one-year) extension for the NBWW NARP POTW submissions.
 - Continue working with Geosyntec Consultants to develop the NBWW NARP.
 - Finish the instream model.
 - Simulate watershed management scenarios.
- Participate in MBI's IPS Model training with regional workgroups to use monitoring data and assessment results with water quality management goals and objectives in order to better guide decision-making at regional and local watershed scales.
- Update the NBWW monitoring strategy as needed.
- Contract with a consultant to create an Annual Water Quality Summary Report based on NBWW monitoring data.



Education & Outreach

- Continue to host meetings that provide education and outreach targeted towards achieving attainment of water quality standards and designated uses for the watershed.
 - Support the North Branch Watershed Planning Committee and the North Branch Watershed Consortium through fostering general membership forums.
 - Support SMC with the adoption and implementation of the North Branch of the Chicago River Watershed-Based Plan Update.
- Support and sponsor local deicing education and outreach efforts meeting NBWW bylaw goals and objectives.