



# North Branch Chicago River Watershed Workgroup 2022 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
- James Bernahl, Winnetka**  
Alternate: Emily Grimm
- Chuck Bodden, NSWRD**  
Alternate: Steve Waters

## Monitoring & Water Quality Impairment Abatement Committee

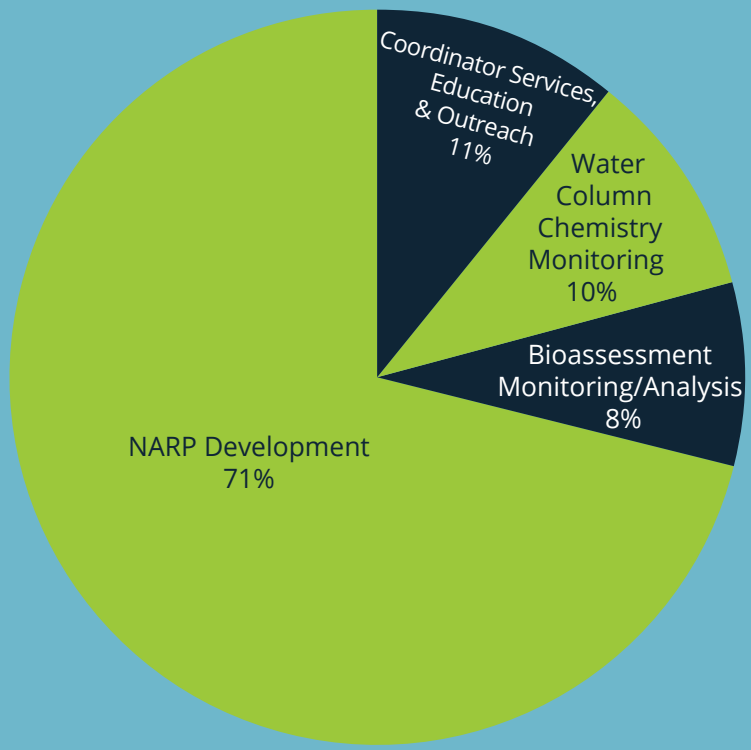
- Committee Chair**  
Rob Flood, NSWRD  
Alternate: Josephine Meincke
- Members-At-Large**  
Vacancy  
Alternate: Becky Collings
- Larry Bridges, ESDD**  
Alternate: Michele Mrachek
- Wally Dittrich, Lincolnshire**  
Alternate: Sam Barghi
- Christopher Johnson, Sierra Club**  
Alternate: Rosemary Heilemann
- Leonard Dane, Fehr Graham E&E**  
Alternate: Carrie Carter
- 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.

## 2022 NBWW Expenses



# 2022 Accomplishments

## NPDES Permitting

- Completed Year 4 monitoring data and analysis. The 2020-2021 Bioassessment & Water Quality Assessment Report is in progress. Final report to be completed in 2023.
- Compiled and submitted the March 1, 2021 - February 28, 2022 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 members.
- Updated the **2018-2023 NBWW Workplan scorecard**.
  - This scorecard can be used by watershed workgroup members as support for Part 5 of the NPDES ILR40 Permit requirements and measurable goals in Stormwater Management Program Plans.
- NBWW maintained the NBWW MS4 Resources page, [www.nbwwil.org/ms4-resources](http://www.nbwwil.org/ms4-resources).

## Education & Outreach

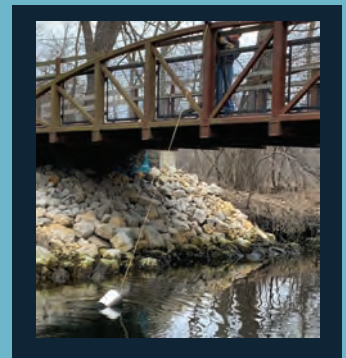
- NBWW held 21 meetings in 2022; 9 executive board, 4 general membership, and 8 monitoring & water quality impairment abatement committee meetings.
- Continued outreach to public-sector stakeholders –townships, park districts, drainage districts, school districts etc. to inform them of the Workgroup’s activities and invite them to become members.
- Continued support of the North Branch Chicago River Watershed-Based Plan update by utilizing NBWW’s 2018 - 2020 monitoring program as local match towards an Illinois EPA 319 grant.
- Maintained NBWW website; [www.nbwwil.org](http://www.nbwwil.org), for posting information on the workgroup and distributing updates to NBWW members and the public.

## 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.
- NBWW selected Geosyntec Consultants to complete a Nutrient Reduction & Assessment Plan (NARP) to the Illinois EPA by December 31, 2024.
  - The NARP is a requirement in the Special Conditions of the NPDES discharge permits for major publicly owned treatment works (POTWs) in Illinois.

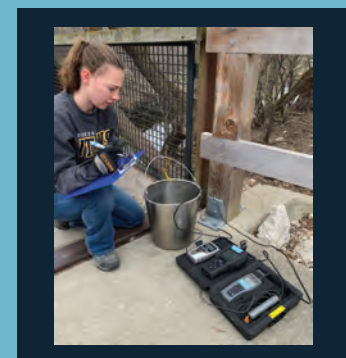
## Monitoring Activities Bioassessment & Sediment

Midwest Biodiversity Institute (MBI) was contracted to perform Year 4 bioassessment monitoring, data analysis and reporting. MBI performed macroinvertebrate sorting and identifications, data entry, quality assurance and control and compiling the Year 3 & 4 data into a bioassessment and water quality assessment report.



## Water Column Chemistry

North Shore Water Reclamation District (NSWRD) was contracted to conduct water column chemistry monitoring at all 25 Tier 1 & Tier 2 monitoring sites. NSWRD sampled water column chemistry four to six times a year in the months of February, May, July, August, September and October. All monitoring is conducted under an Illinois EPA approved NSWRD Quality Assurance Project Plan (QAPP) and the North Branch Chicago River Watershed QAPP.



# Nutrient Assessment & Reduction Plan

The NBWW wrapped up their first year of NARP work, consisting primarily of stream sampling at sites located throughout the watershed in the West Branch, Middle Fork, Skokie River and North Branch Chicago River mainstem to fill data gaps in stream data and previous sampling efforts. The collected data is used to better facilitate development of appropriate parameters for creating the in-stream water quality models that will be used to calibrate existing conditions and develop and simulate future watershed conditions and scenarios. Data is strategically collected in proximity to the two Publicly Operated Treatment Works (POTW) outfall locations to best understand the potential phosphorus impacts to the streams and relative watershed wide contribution to impairment. Field changes were necessary due to temporary outfall relocations, dry periods and high water conditions which initially delayed the installation of equipment at some sampling locations.

Analysis of the 2022 field data resulted in slight deviations from the original NARP Workplan, primarily the need to fully model the West Branch of the North Branch Chicago River in tandem with the Skokie River and considerations for resampling the Skokie River due to complexities associated with the high productivity within the Skokie Lagoon that was monitored due to the relocated outfall. High chlorophyll A, dissolved oxygen swings, and dissolved oxygen saturation potentially mask the effect of the NSWRD Clavey Road effluent necessitating the need to reevaluate data at the original outfall location outside the Skokie Lagoon. While some field data will be recollected and reassessed in 2023, the NARP scope of work will continue to move forward. The NBWW recently met with Illinois EPA to discuss the possibility of phasing the NARP process to better document ongoing progress and the possibility of extending the NPDES permit timeline for the Village of Deerfield and NSWRD's NBWW POTWs. The NBWW has submitted a formal letter to the Illinois EPA requesting an extension for the completion of the NARP from December 31, 2024 to December 31, 2025.

## What are the NBWW Membership Benefits for My Community?

NBWW membership dues provide significant cost savings to the watershed and individual communities. If an MS4 community performed monitoring individually, costs would be based on a number of factors but the minimum requirement would at least be two monitoring sites. What does the cost comparison look like?

- The cost to MS4 communities managing an individual monitoring program is estimated at upwards of \$10,000 for upstream and downstream monitoring sites (General NPDES Permit No. ILR40, Part V, Item A, Section 2b), bidding, contract management, reporting and data formatting for permitting and monitoring requirements.
- The cost to NBWW for annual water column chemistry and biological assessments is \$87,500 for the entire watershed, which equates to roughly \$3,500 per monitoring site and includes 25 sites in the monitoring program. Our membership includes 24 Illinois EPA permit holders, which if performed independently, would cost approximately \$240,000. Collectively, the economy of scale provided by the workgroup and its membership save the watershed upwards of \$150,000 in yearly monitoring.

Other quantifiable advantages of your membership include the following:

- Monitoring data is analyzed and summarized into a comprehensive report, and formatted to meet Illinois EPA annual submittal requirements.
- The permittee may choose to work collaboratively with other permittees and/or a watershed group to design and implement a watershed or sub-watershed-scale monitoring program that assesses the water quality of the water bodies and the sources of pollutants. Such programs shall include elements which assess the impacts of the permittee's storm water discharges and/or the effectiveness of the BMPs being implemented. (General NPDES Permit No. ILR40, Part V, Item A.b.x).
- MS4 permit compliance for chlorides is met – If the permittee performs any deicing activities that can cause or contribute to a violation of an applicable State chloride water quality standard, the permittee shall participate in any watershed group(s) organized to implement control measures which will reduce the chloride concentration in any receiving stream in the watershed. (General NPDES Permit No. ILR40, Part III, Item D).



# NBWW Members

2022 Annual Membership Dues \$224,835 & 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 Div. of Trans. & Highways
- East Skokie Drainage District
- Forest Preserve District of Cook County
- Illinois Department of Transportation
- Lake County
- Lake County Division of Transportation
- Libertyville Township
- North Shore Water Reclamation 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
- West Skokie Drainage District

## 15 Associate Members

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

## 2022 Deicing Workshops

The North Branch Chicago River Watershed Workgroup 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 2022 virtual workshops trained over 900 individuals in winter BMPs for both public roads and parking lots & sidewalks. 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.

Some tips to reduce road salt usage include:

- Remove snow as quickly as possible after a storm.
- Remove as much snow and ice as possible before using road salt.
- Do not use road salt when pavement temperatures are less than 15 F.
- Evenly spread road salt so granules are approximately 2-3 inches apart.
- Do not pile road salt or apply it to dry pavement or vegetation.
- Sweep up undissolved road salt after all ice and snow has been removed.
- Address known drainage problems such as leaking downspouts, roofs dripping onto steps, discharges to sidewalks, and low spots in parking lots or driveways during warm weather



# NBWW 2023 Goals

## NPDES Permitting

- Perform and analyze fifth-year watershed monitoring results and implement the 2023 NBWW Monitoring Strategy.
- Compile the March 1, 2022 - February 28 2023 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 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.
  - NBWW will be deploying three datasondes in the Skokie River system. One within the Skokie Lagoons, one just downstream of the Willow Road dam (SR-8), and one further downstream after the location of the NSWRD Clavey Road outfall discharge (SR-18). The additional 2023 sampling should give NBWW more accurate data to differentiate between the effects of the Skokie Lagoons and the point source discharge of the NSWRD Clavey Rd POTW.
- Begin 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.
- Refine the NBWW monitoring strategy as needed.

## 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 implementation of the North Branch of the Chicago River Watershed-Based Plan Update through the NBWW general membership meetings and workgroup adoption.
- Support and sponsorship local deicing education and outreach efforts meeting NBWW bylaw goals and objectives.

