ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

2023-24

PARTNER PROGRAM AND PROJECT UPDATES

Urban Stormwater

Illinois Department of Agriculture

Illinois Environmental Protection Agency

Illinois Extension
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

Chicago Metropolitan Agency for Planning Technical Assistance

The Chicago Metropolitan Agency for Planning's, CMAP, Planning Technical Assistance Program supports communities throughout northeastern Illinois and aligns with the region's current long-range plan, ON TO 2050, and its principles of regional resilience, inclusive growth, and prioritized investment.

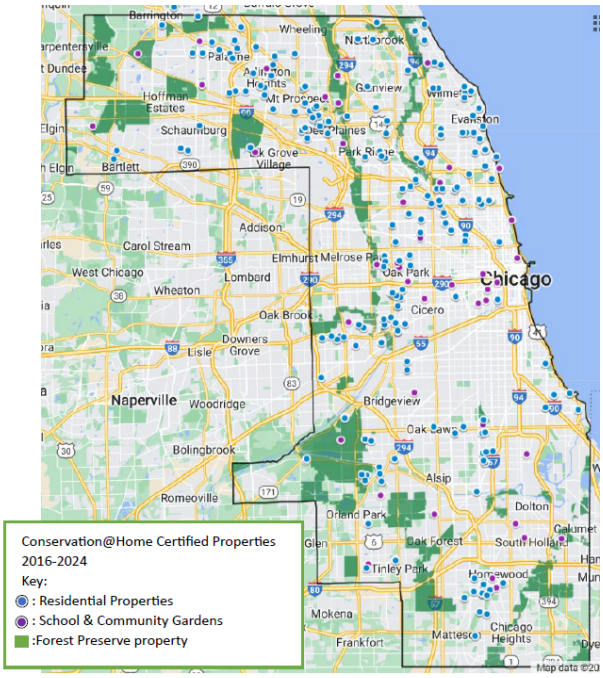
Since 2012, the Planning Technical Assistance Program has assisted communities in developing more than 300 projects with local governments, nonprofits, and intergovernmental organizations to address local issues at the intersection of transportation, land use, and housing, including the natural environment, economic growth, and community development. The program helps communities with planning projects that build local capacity, engage marginalized groups, and connect local partners with implementing agencies and capital funding for infrastructure investments. More information is available at https://cmap.illinois.gov/funding-assistance/planning-technical-assistance-program/.

During 2023 and 2024, several local plans were completed including comprehensive, corridor, neighborhood, subarea, and capital improvement plans, as well as a unified development ordinance. Each included topics relevant to urban stormwater management. The table below lists each completed project and its respective website. Visit the project websites for an overview of each project, public outreach and engagement activities, and links to interim reports and final documents.

Project	Publication/ adoption date	Project website
Sugar Grove Comprehensive Plan	May 2023	https://engage.cmap.illinois.gov/sugar-grove
Hickory Hills Comprehensive Plan	July 2023	https://engage.cmap.illinois.gov/hickory-hills-comprehensive-plan
River Grove Comprehensive Plan	July 2024	https://engage.cmap.illinois.gov/river-grove-comprehensive-plan
Butterfield Road Corridor Plan	December 2023	https://engage.cmap.illinois.gov/butterfield-road-corridor-plan
Avondale Neighborhood Plan	June 2023	https://engage.cmap.illinois.gov/avondale-neighborhood-plan
Calumet City Subarea Plan	May 2024	https://engage.cmap.illinois.gov/calumet-city-subarea-plan

Project	Publication/ adoption date	Project website
Dixmoor Capital Improvement Plan	August 2024	https://engage.cmap.illinois.gov/dixmoor-capital-improvement-plan
Lansing Capital Improvement Plan	August 2024	https://engage.cmap.illinois.gov/village-of-lansing-capital-improvement-plan
Waukegan Unified Development Ordinance	July 2024	https://engage.cmap.illinois.gov/waukeganudo

Conservation@Home



Initially developed by the Conservation Foundation, Conservation@Home encourages homeowners to establish forest preserve-friendly landscapes that minimize pollution and negative impacts on the environment while maximizing habitats for native species. University of Illinois Extension administers the program throughout the county and has connected with 279 residential properties and 47 school and community gardens since the creation of the program in 2016. The data and map demonstrate the reach of this program.

2023-24 Update

Conservation @ Home Residential Membership Breakdown

	Applicants	Certified
2023	72	43
2024	52	30
Total to Date	29	153

Relevant Data for 2023-24:

- 1,425 volunteer hours on evaluations, outreach, and program development
- Promotional and education programs across Cook County to several partner organizations with 47 events for 1,977 participants

- 411 subscribers to the email newsletter with an average 63% open rate

DuPage County Water Quality Improvement Program

DuPage County Stormwater Management recognizes the financial burden a property owner may face when undertaking a project that improves regional water quality. Stormwater Management's Water Quality Improvement Program offers is a competitive grant that provides financial assistance for projects providing a regional water quality benefit to local waterways. The grant funds up to 25% of eligible construction costs for water quality improvement projects. DuPage County initiated the grant program in 2000. Nearly $6.6 million has been awarded to 112 projects such as permeable paver parking lots, green roofs, and native plants. The program has a current annual budget of $300,000 awarded yearly. DuPage County government agencies, organizations and individuals are eligible to receive funds under the grant.

A Water Quality Improvement Program Grant Story Map was created and provides information on the grant and application process. It also gives examples of eligible projects. Animated infographics, photos and descriptions of projects are shown. Examples include rain gardens, green roofs, permeable pavers, and streambank stabilization. The Story Map also includes an interactive map showing previously awarded projects along with photos and details on each.

For more information, see www.dupagecounty.gov/government/departments/stormwater_management/grants/water_quality_improvement_program.php.

Greater Chicago Watershed Alliance

The Greater Chicago Watershed Alliance, facilitated by Friends of the Chicago River, is a 42-member coalition of public agencies, non-profits, and private sector partners working to advance nature-based stormwater solutions for a climate-resilient Chicago-Calumet River watershed. Since its formation in 2020, the Watershed Alliance has secured $8 million in grants to advance programs and projects by pursuing joint funding opportunities and leveraging the Natural Solutions Tool.

In 2025, Friends of the Chicago River will officially take the lead of the Calumet Stormwater Collaborative, which was previously administered by the Metropolitan Planning Council. This transition will integrate the Calumet subwatershed group into the Watershed Alliance, strengthening regional stormwater management efforts.

Watershed Alliance 2024 accomplishments:

1. Transitioned leadership of the Calumet Stormwater Collaborative, marking the occasion with a series of field trips to explore stormwater management in action in Gary, Indiana, in Calumet City, Illinois, and in Riverdale, Illinois.
2. By pursuing joint funding opportunities and leveraging the Natural Solutions Tool, the Watershed Alliance has secured critical funding to advance programs, projects, and ongoing collaboration across the region.

3. Contributed to key policy initiatives, including providing input on the City of Chicago's Green Stormwater Infrastructure Strategy update and coordinating feedback on the Metropolitan Water Reclamation District's proposed amendments to the Watershed Management Ordinance.
4. Hosted the 20th anniversary Chicago River Summit: Linking Watersheds in collaboration with Chicago Wilderness Alliance, bringing together more than 150 experts to highlight watershed approaches to stormwater management.

Greater Egypt Stormwater Management Plan Development

Program Background and Planning

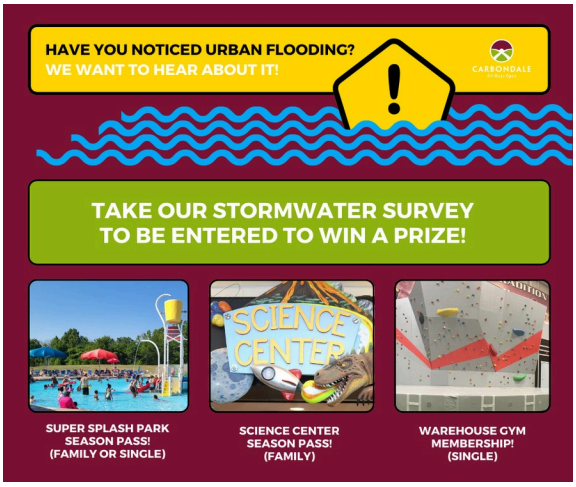
Many communities in Greater Egypt's jurisdiction have historically been subject to flash flooding and river flooding due to a combination of intense rainfall over a short period of time, steady rainfall over several days, and the poor drainage profile of the soil composition.

Applications were made to the Delta Regional Authority's Strategic Planning Grant Program to construct plans for the cities of Carbondale and West Frankfort in southern Illinois. Upon receiving the award, planning began, guided by initial goals identified by participating cities:

- **Compile an inventory**, flood vulnerability score, and reporting protocol for existing stormwater infrastructure
- **Develop a strategy** for critical businesses, organizations, and landowners to mitigate flood property loss and value
- **Develop a standard** for decision-making related to stormwater infrastructure maintenance and new construction
- **Reduce stormwater runoff**, soil erosion, and associated pollution within the city
- **Minimize stormwater runoff**, soil erosion, and associated pollution in any new development projects
- **Maintain and restore stream channels** and floodplains when feasible
- **Compile a list** of recommendations including:
    - Code/ordinance revisions
    - Current Infrastructure improvements

Creation and implementation of the proposed Stormwater Management Plans would strengthen and insulate community members from extreme weather events and the other impacts of climate change. The plans will also lead to adaptation and mitigation measures necessary to foster a resilient community structurally, socially, and economically. Impacts from plan development will include but are not limited to:

1. **Mitigation of Flood Damage** including loss of life, livelihood, infrastructure, property, and the environment
2. **Reduction of Stormwater Runoff**, soil erosion, and associated pollution within the city and minimize impacts from development sites
3. **Promotion of Best Management Practices** for land development
4. **Improved Water Quality**
5. **Development of an Organizational and Regulatory Framework** to be shared with fellow communities in southern Illinois



Projects are ongoing and currently in the initial public outreach and education phases. The Carbondale stormwater management survey is gathering feedback on urban flooding and offering a prize drawing to survey participants.

Illinois Department of Transportation Stormwater Programs

The Illinois Department of Transportation maintains a chartered Stormwater Committee composed of members from a variety of backgrounds and individuals from other state agencies to help inform and guide policy creation, advise IDOT staff on stormwater issues should they arise, and oversee erosion control training for staff and consultants. The committee also regularly coordinates with other stormwater groups and initiates research through the Illinois Center for Transportation to study aspects of the stormwater management program and determine whether improvements can be made to best management practices.

IDOT will implement a Special Provision for plastic-free Erosion Control Blankets in August 2025 along with updated guidance in the IDOT's Bureau of Design and Environment Manual. In addition, IDOT has finished research on native vegetation mixes that may potentially expand the use of native species on IDOT right-of-ways.

For more information, see https://idot.illinois.gov/transportation-system/transportation-management/planning/other-plans/storm-water-management-plan.html.

Illinois Groundwork

In many Illinois communities, urbanization and larger storms have led to increased flooding. Green infrastructure, such as rain gardens and permeable pavement, can help reduce this flooding, but its effectiveness isn't always fully realized. Green infrastructure designs that integrate multidisciplinary research on native soil properties, water movement, and other factors can significantly improve results and cost-effectiveness. Incorporating these research results into University of Illinois Extension efforts can better support Illinois communities in managing flooding.

Illinois Extension and Illinois-Indiana Sea Grant developed Illinois Groundwork, a website based on multidisciplinary green infrastructure research and outreach. The website aims to enhance community knowledge and design capacity, providing stormwater professionals, local leaders, and residents with tools, research, and resources to support local decision-making. It guides users in incorporating soil data into green infrastructure design and offers task insights. Interactive tools include a green infrastructure sizing resource, a resource library with over 200 entries, and a Plant Finder featuring 138 plants with detailed information on soil, light, and moisture requirements.

From 2023-25, the Illinois Groundwork website underwent several updates to enhance its functionality and resources. New filters were added to the resource library, enhancing access to key materials for primary users. Funding has been secured for an upcoming update to the green infrastructure sizing tool, which will enhance its user-friendliness and effectiveness. A filter for Indiana native plant status was also added to the Plant Finder tool, which will be a featured resource in the "Planting Selection and Design" module of the Illinois-Indiana Sea Grant and University of Illinois Extension Rainscaping Education Program. This enhancement expands the tool's regional impact, enabling more effective plant selection across Illinois and Indiana. The Plant Finder also expanded to include 19 new plants and more will be added with the upcoming Rainscaping program updates, offering users improved species selection for their green infrastructure projects.

Explore the website at illinoisgroundwork.org.

Partners of this project include University of Illinois at Urbana-Champaign, Chicago Metropolitan Agency for Planning, Village of Midlothian, City of Calumet City, Illinois State Geological Survey, Illinois Department of Transportation, Metropolitan Planning Council, Illinois Coastal Management Program, Calumet Collaborative, Geosyntec Consultants, Smithgroup, The Openlands Project, and Friends of the Chicago River.

Illinois-Indiana Master Watershed Steward Program

The Illinois-Indiana Master Watershed Steward Program engages participants as stewards of natural ecosystems and resources through science-based education in their communities. Watershed Stewards promote healthy watersheds by increasing their understanding of potential causes of water resource degradation and providing the knowledge and tools they need to identify,

prevent, or resolve water quality problems. The curriculum focuses on topics such as water quality science and the impacts of climate change, invasive species, and agriculture on water bodies. The program toolkit provides all materials necessary to guide hosts and Master Watershed Steward participants through eight interactive sessions. Upon completion of the training, Master Watershed Stewards are prepared to engage in restoration science, community science, and community education programs with local partners.

This project also includes an optional Watershed Game, where participants learn about practices, plans, and policies that improve and protect the quality of a stream, lake, river or coastal region while making land use and management decisions in a fun, and low-stress environment. The object of this team-building simulation is for each participant or team to use limited financial resources to reduce excess nonpoint source pollution to levels that meet a clean water goal. The Watershed Game illustrates that cooperation is an essential part of managing water and land use. Participants learn to consider and involve all land uses within a watershed as they work to achieve their clean water goals.

Watershed Steward Program is offered statewide in Illinois and Indiana as a collaboration between Illinois-Indiana Sea Grant, University of Illinois Extension, and Purdue University Extension. The program can be delivered either in person or virtually. With eight sessions covering 20 hours of participant education, this program allows multiple Extension educators and partners to teach and engage with participants at either a county or regional scales. Additionally, educators can adapt the sessions to fit the needs and interests of their participants.

In 2024, Illinois Extension led a pilot Watershed Steward program in Boone County with 10 adult participants. Staff also led two stand-alone Watershed Game events for the East-Central Illinois Master Naturalists and the Illinois Native Plant Society.

Additionally, Purdue Extension, Illinois-Indiana Sea Grant, and Illinois Extension conducted train-the-trainer sessions with seven Illinois Extension staff in 2023 that included Watershed Game training. In 2024, 11 Illinois Extension staff from both states attended Illinois-Indiana Master Watershed Steward train-the-trainer.

For more information, see go.illinois.edu/WatershedStewards.

Partners of this project include Illinois-Indiana Sea Grant, University of Illinois Extension, Purdue University Extension, and National Oceanic and Atmospheric Administration.

Lawn to Lake Midwest

Through its Lawn to Lake program, Illinois-Indiana Sea Grant, IISG, surveyed Indiana residents about lawn care to learn their perspectives and share information about reducing the use of chemicals and water. The program promotes natural, low-input, lawn care practices to reduce the use of lawn care chemicals and water for lawn irrigation.

In 2023, an IISG intern surveyed Indiana residents to obtain baseline information about their practices, knowledge, attitudes, behaviors, and information needs regarding lawn care. The survey also provided information about reducing the use of chemicals and water in lawn care practices.

Of the 470 survey participants, 88% responded positively about environmentally friendly lawn care practices, indicating that they found them beneficial, and 68% found environmentally friendly lawn care practices to be enjoyable. The information from Indiana residents in this survey will supplement a 2019 survey conducted in Illinois and will guide further development of Lawn to Lake outreach tools and activities.

Partners:

- University of Illinois College of Agricultural, Consumer, and Environmental Sciences
- University of Illinois Extension
- Indiana Audubon Society
- Indiana Land Protection Alliance
- Indiana Lakes Management Society
- Indiana Gardening
- Indiana Backyard Gardeners
- Hoosier Sierra Club Members
- COPE Environmental Center
- Purdue Master Gardeners
- Purdue University Master Naturalists
- Purdue University Cooperative Extension Services

For more information and resources, visit lawntolakemidwest.org.

Rainscaping Education Program

University of Illinois Extension provides training to communities interested in building rain gardens, using the Rainscaping Education curriculum developed by Illinois-Indiana Sea Grant and Purdue University Extension. Landscape practices such as rain gardens, which direct stormwater to be absorbed by soils, are of continued interest among Extension clientele and conservation partners. Through workshops, Master Gardeners, Master Naturalists, and other community members learn about rain gardens and additional residential-scale green infrastructure techniques. Sessions cover an introduction to Rainscaping and rain gardens with specific modules for rain garden site selection and plant selection as well as garden design, installation, maintenance, and community engagement.

The program uses the flipped classroom model in which participants watch topic videos prior to each in-person training. The 15-hour in-person training offers deeper learning through hands-on activities, interactive discussions, and field trips to community Rainscaping projects. Participants gain hands-on experience by creating a demonstration rain garden with community partners in a public space. Custom-designed interpretive signs are available to be installed with each demonstration to promote education efforts. Participants are encouraged to attend as community teams to support public education programs and provide technical assistance for homeowners or small-scale public projects after completing the training. University of Illinois Extension offers the program collaboratively with

Purdue University Extension, coordinated by Illinois-Indiana Sea Grant. This partnership began in 2021.

The 2023 Illinois Extension program was offered in Rock Island County with 18 participants. In 2024, it was offered in Kane County with 17 participants. Each of the Rainscaping education program sites installed a community-based demonstration rain garden.

The Riverside Rain Garden in Rock Island County is a 75-square-foot demonstration garden within a larger park plan. Installed in partnership with the City of Moline, the rain garden is located near the park building, a highly visible location. An existing sidewalk provides easy viewing for park visitors and easy access to an educational sign referencing the garden. Illinois Master Gardeners and Master Naturalists partner with Friends of Riverside to maintain a few planting beds within the park. The rain garden is maintained as a University of Illinois Extension project.

In Kane County, a 750-square-foot rain garden was established at the Illinois Extension Office located in St. Charles. This site was chosen to help mitigate the stormwater flow from impervious surfaces at the county fairgrounds and Extension office while also improving the appearance of the area. This site is visible to the public from Randall Road and will be used for educational purposes, as well.

To further collaborative efforts and program sustainability, a train-the-trainer effort occurred at the end of 2023 with Illinois Extension and Purdue University Extension staff. Ten Extension Educators attended seven, one-hour sessions to learn how to host and teach the Rainscaping sessions.

For more information, see iiseagrant.org/work/sustainable-community-planning/programs-initiatives/purdue-rainscaping-education.

Red Oak Rain Garden

The Red Oak Rain Garden is a demonstration landscape on the University of Illinois Urbana-Champaign campus that absorbs stormwater, prevents flooding, improves water quality, provides wildlife habitat, and promotes well-being to visitors. It also increases green infrastructure literacy and is a model for how to design, build, and maintain rain gardens. University of Illinois Extension and Illinois-Indiana Sea Grant staff manage it and its associated programs with assistance from student and community volunteers.

The rain garden, which was completely renovated in 2019 and expanded in 2021, had additional plantings installed in 2024. At 13,000 square feet and home to 64 plant species, a majority of which are native to the area, the Red Oak Rain Garden has a rainfall storage capacity of nearly 27,000 gallons.

Education and outreach are key components to this initiative. Throughout 2023-24, approximately 2,500 people learned about stormwater management and the benefits of green infrastructure via presentations, tours, and outreach events. The garden's online engagement was robust with more than 24,000 website views, 7,900 blog and newsletter reads, and 700 followers on Facebook and 900 followers on Instagram. The team hosts a social media tournament, called Rain Garden Rumble, which takes an educational spin on a sports classic. In two years, the initiative reached 38,000 people to have the chance to play and learn about native plants, their benefits, and how to include them in home gardens.

Education is also incorporated via service-learning events that accomplish on-site maintenance. In 2023-24, a growing volunteer base participated in 38 hands-on trainings and lessons, many led by guest experts on native plants and rain garden management. To help volunteers better identify the rain garden's plants, a student intern created a virtual map in 2023. This map also educates rain garden visitors.

Additionally, the rain garden's design utilizes the concept of designing with maintenance in mind, which makes stewardship manageable for the volunteers. The Red Oak Rain Garden approach serves as a model for demonstration rain gardens built in Illinois through the Rainscaping Education program.

In 2024, the rain garden hosted its first "Illuminating Art in Nature" event. This event highlighted student talent and creativity, featuring a fine art ephemeral sculpture exhibit and 60 glowing jack-o'-lanterns throughout the fall brilliance of the rain garden, drawing nearly 400 attendees over two evenings. In 2023-24, the team continued working with the University Foundation to establish a long-term garden maintenance endowment, which is more than halfway to the goal.

For more information, see go.illinois.edu/RORG.

Partners included University of Illinois Urbana-Champaign Facilities & Services, Champaign County Master Gardeners, East-Central Illinois Master Naturalists, Champaign County Design and Conservation Foundation, Student Sustainability Committee, and the American Water Charitable Foundation.

Watershed-Based Planning

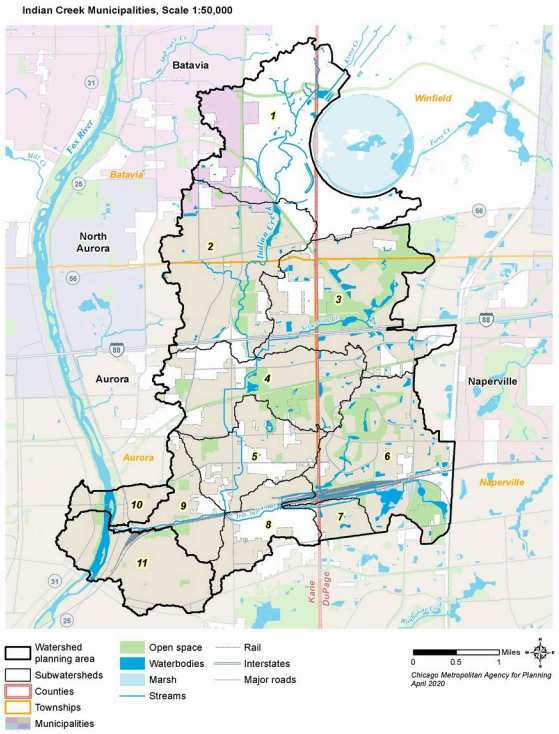
Watershed planning looks at the big picture of how land use and human activities influence surface water quality in a local geographic region and downstream. Working together, communities, agencies, and organizations inventory current conditions, identify recommended practices, and create shared goals and strategy that seeks to improve water quality, protect ecosystems, and build resilience to climate change. Watershed-based plans meet the U.S. Environmental Protection Agency's nine planning elements and assess watershed conditions while outlining actions to restore impaired waters and protect water quality from nonpoint source pollution. Plans address recommended practices in all three Nutrient Loss Reduction Strategy, NLRS, sectors: agriculture and non-point sources, point sources, and urban stormwater sources. Plans are typically developed in partnership with local government agencies, businesses, nonprofits, and residents. Watershed-based plans are tracked in the Resource Management Mapping Service available at www.rmms.illinois.edu. Fully implementing watershed-based plans could lead to non-point source pollution control in urban and rural watersheds, resulting in significant improvements in water quality across Illinois.

Below are examples of watershed-based plans developed or being developed by NLRS partners that feature urban stormwater best management practices. These plans strive to identify the causes and sources of water body impairment and propose solutions, such as streambank stabilization, green infrastructure, and educational programs to reduce nutrient and other pollutant loading.

Chicago Metropolitan Agency for Planning

In support of Illinois EPA's Illinois Water Quality Management Plan, the Chicago Metropolitan Agency for Planning, CMAP, offers technical assistance, coordination, and participation in water quality planning and implementation activities in collaboration with communities, agencies, organizations, and other stakeholders throughout CMAP's seven-county northeastern Illinois region. This includes:

- Development of watershed-based plans.
- Assistance to others developing watershed-based plans or implementing recommendations of Illinois EPA-approved plans.
- Participation in stormwater management and green infrastructure initiatives, water resource monitoring, and public outreach and education programs.



This work aims to improve and protect water quality in northeastern Illinois.

During 2023, CMAP completed development of a watershed-based plan for a 16-square-mile area that drains to Indian Creek and the adjoining Fox River in northeastern Illinois. The planning area is located across eastern Kane and western DuPage counties and involved numerous planning partners including the cities of Aurora and Batavia, counties of Kane and DuPage, Fox River Study Group, Fox River Ecosystem Partnership, Fermilab, and Fox Metro Water Reclamation District.

Indian Creek and the Fox River are classified as impaired waterways by Illinois EPA for several pollutants including fecal coliform, chloride, phosphorus, total suspended solids, and algae. Causes of impairment include urban runoff/storm sewers, combined sewer overflows, impacts from hydrostructure flows/dams, and streambank erosion. Recommended watershed protection and improvement measures include local plan and policy updates, urban stormwater infrastructure retrofits, streambank stabilization, riparian buffer establishment and restoration, chloride reduction strategies, water quality monitoring, and public education and outreach activities and programs. The Indian Creek Watershed-based Plan is under review for approval by Illinois EPA. More information can be found at engage.cmap.illinois.gov/indian-creek-watershed-based-plan.

Another fundamental role of CMAP staff is providing water quality planning and management technical assistance and facilitating information sharing among partner agencies, organizations, and citizen stakeholders throughout the region. Throughout 2023 and 2024, CMAP staff participated in the meetings and activities of more than 40 watershed, county, regional, state, and national groups focused on water quality planning, protection, education, and improvement functions. In 2023 and 2024, CMAP:

- Served on the advisory committee for the development or update of three watershed-based plans:
- Upper Salt Creek Watershed-based Plan led by The Conservation Foundation.
- Woods Creek Watershed-based Plan Update led by Village of Algonquin.
- Upper West Branch DuPage River Watershed-based Plan led by DuPage County Stormwater Management.
- Assisted the Greater Kane County Chapter of Wild Ones in planning for their Down to the Creek winter webinar series focusing on watersheds, runoff, and BMPs. Presented on water quality and watershed-based planning during their February 2024 webinar, attended by 84 people and viewed 140 times over the following year.
- Helped the Association for the Wolf Lake Initiative explore partnerships and funding opportunities to develop an Illinois-Indiana bi-state, nine-minimum element watershed-based plan, and presented on CMAP's role in areawide water quality management and watershed-based planning at the 8th Annual Wolf Lake Watershed Advisory Committee Meeting as part of a watershed planning panel in November 2024.
- Helped develop content and provided the layout for an informational brochure for the Tyler Creek Watershed Coalition, as well as assisted in stream chloride monitoring.
- Presented about the Tyler Creek watershed and 2008 watershed-based plan in collaboration with Kane County Environmental & Water Resources staff at the Tyler Creek Watershed Coalition's annual membership meeting in October 2023.
- Conducted field visits and assisted Dixie Creek watershed stakeholders in Dundee Township with potential stream corridor restoration approaches and grant opportunities.
- Assisted several local governments and organizations with grant applications to develop watershed-based plans or implement water quality best management practices identified in watershed-based and other local plans and provided a CMAP letter of support to accompany such grant applications.
- Presented on CMAP's role in areawide water quality management and watershed-based planning at the Friends of the Chicago River/Greater Chicago Watersheds Alliance 2024 Chicago River Summit as part of a watershed managers panel in November 2024.
- Served on the advisory group for Illinois Department of Natural Resource's Coastal Water Quality Trends Analysis being conducted by the Illinois State Water Survey.
- As a member of the state's Hydrilla Task Force, participated in early detection/rapid response field reconnaissance, public outreach and education efforts, grant application development, and other mitigation planning for the control of *Hydrilla verticillata* in a tributary to Salt Creek in DuPage County.
- Provided technical assistance support to continuing Illinois Volunteer Lake Monitoring Program participants at three lakes in the region: Lake Charles in DuPage County, Lake Killarney in McHenry County, and Virginia Lake in Cook County.
- Collaborated with the Lake County Health Department, Greater Egypt Regional Planning & Development Commission, the National Great Rivers Research & Education Center, the Illinois EPA, and stakeholder advocates to develop a framework and explore partnership and funding opportunities to reestablish a statewide citizen science-based lake monitoring program.

DuPage County Stormwater Management

Since 2015, DuPage County has been working to create water quality-based watershed plans to include the nine key elements published in the Handbook for Developing Watershed Plans to Restore and Protect Our Waters (EPA 841-B-08-002). Seven Watershed Plans for Impaired Waterways have been successfully completed and approved by the U.S. and Illinois Environmental Protection Agency so far, including Klein Creek, Kress Creek, St. Joseph Creek, Sawmill Creek, Winfield Creek, the East Branch DuPage River, and the Lower Salt Creek Watershed Plan which was completed in partnership with Chicago Metropolitan Agency for Planning. DuPage County's goal is to create, implement, and keep current water quality-based watershed plans for all its impaired waterways.

The Upper West Branch DuPage River Watershed-based Plan is currently in progress. Utilizing a 604b grant in the amount of $125,600 from the Illinois Environmental Protection Agency, DuPage County Stormwater Management began working on this plan in 2024. The plan is being developed in partnership with local government agencies, businesses, non-profits, and residents. The Upper West Branch DuPage River is over 30,040 acres in size and is located in western DuPage County with the headwaters extending into Cook County. The West Branch DuPage River has been classified as an impaired waterway by the Illinois EPA for several nutrient related pollutants including total phosphorus, nitrogen, total suspended solids, and dissolved oxygen. This plan strives to identify the causes and sources of impairment and propose solutions such as streambank stabilization, green infrastructure, and educational programs to improve loadings of nutrients as well as other pollutants into the West Branch DuPage River. In 2024 DuPage County staff collected field data on the stream, lakes, and basins, and created maps and compiled data for the watershed. A Steering Committee was established and includes representatives from municipalities, townships, non-profits, school districts, and other organizations such as the Illinois Tollway and the Forest Preserve District of DuPage County. In late 2024, the County coordinated a large outreach effort mailing information to 4,000 stakeholders in the watershed. The mailing described the watershed planning process and requested input on conditions of the Upper West Branch. The next steps will involve working closely with Steering Committee and stakeholder members to identify critical areas and identify projects to reduce pollutant loads and improve the water quality of the Upper West Branch. The plan is expected to be completed by the end of 2025.

Greater Egypt Regional Planning and Development Commission

The Greater Egypt Regional Planning and Development Commission serves as southern Illinois' Areawide Water Quality Management Planning Agency. This title was delegated by the Illinois EPA under the Illinois Water Quality Management Plan. Through the plan, the Environmental Planning Department with Greater Egypt conducts various water quality planning initiatives and community education and outreach about water quality.

- One watershed-based plan inventory and assessment was completed during this reporting period for the Little Grassy Creek watershed. The Little Grassy Creek Watershed-based Inventory and Assessment was forwarded to Illinois EPA in 2024. Partners include U.S. Forest Service Shawnee National Forest, U.S. EPA, Illinois EPA, U.S. Fish and Wildlife Service, Crab Orchard National Wildlife Refuge, Little Grassy Campground & Marina, and landowners and businesses within the watershed.

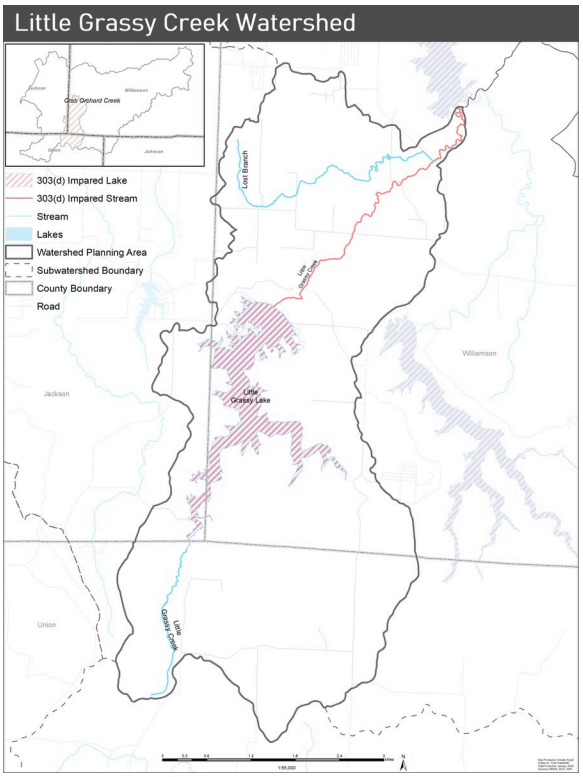
- Utilizing funding from the Illinois EPA 604b Water Quality Management Planning grants, work began on the Reese Creek Watershed-based Plan. This watershed features two waterbodies on the 303d List which include impairment of phosphorus. Work will begin in the spring of 2025 and work on the inventory and assessment will be ongoing.

For more information, see GreaterEgypt.org/watershed-based-planning.

Little Grassy Creek Watershed-based Inventory and Assessment

The Little Grassy Creek Watershed is a Hydrologic Unit Code (HUC) 12 watershed (071401060805). This report will reference the Little Grassy Creek Watershed as the planning, or study area. The Little Grassy Creek planning area encompasses 15,667 acres, or around 24.5 square-miles.

The Little Grassy Creek Watershed is comprised of two waterbodies that have been identified on the IEPA's 303(d) List of Impaired Waters. This list includes waterbodies that do not meet water quality standards. Causes of these impairments in the watershed include mercury, nickel, flow alterations and low flow.



The largest land use category in the Little Grassy Creek planning area is forest coverage. There are three distinct classifications in this category including deciduous, evergreen, and mixed forest, which in total covers 11,217 acres, or 71.6% of the planning area. Deciduous forest covers the largest land area of 10,059 acres (64.2%) of the watershed. The full breakdown of each land use classification can be seen in the table. The remaining land uses in the watershed are developed areas (4%), open water (6.3%), barren land (.02%), grassland/herbaceous (.35%), pasture/hay (10.7%), cultivated crops (4.88%), and wetlands (2.1%).

To further characterize the waterbodies in the Little Grassy Creek watershed, an assessment was conducted to identify certain impairments of waterbodies. Components assessed included the extent of channelization, condition of riparian area, and the extent of streambank and shoreline erosion. Assessment methods included physical field evaluations, analyses of aerial photography from 1938 to 2019, and remote analysis utilizing an unmanned aircraft system.

Little Crab Orchard Creek- Crab Orchard Creek Subwatershed

Extent of Erosion	None or Low		Moderate		High	
	Reaches	%	Reaches	%	Reaches	%
Upper Little Grassy Creek	11	85%	2	15%	0	0%
Lower Little Grassy Creek	5	26%	3	16%	11	58%
Lost Branch Creek	17	100%	0	0%	0	0%

As the inventory of the watershed was underway, staff learned that other agencies, including the U.S. Army Corps of Engineers and U.S. Fish and Wildlife, were conducting separate investigations into the watershed. This included draining the lake to conduct a structural analysis of the dam and Little Grassy Road. With these large impacts, the remaining Little Grassy Watershed-based Plan and activities were put on hold indefinitely.

Reese Creek Watershed-based Plan

The Greater Egypt Regional Planning and Development Commission has an active role in the development of watershed-based plans in southern Illinois. Utilizing funding from the Illinois EPA 604b Water Quality Management Planning grants, work began on the Reese Creek Watershed-based Plan. This watershed features two waterbodies on the 303d List which include impairment of phosphorus. Work will begin in the spring of 2025 and work on the inventory and assessment will be ongoing.