



Upper South Branch Kishwaukee Information & Education Plan, Monitoring Plan, & Milestones

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Key Discussion Topics

- Executive Summary
- Water Quality Monitoring Plan
- Report Cards
- Information & Education Plan

Source: Google



Executive Summary

Upper South Branch Kishwaukee River Watershed Improvement Plan

A Watershed-Based Guide to Protecting and Restoring Watershed Health



EXECUTIVE SUMMARY



Applied Ecological Services, Inc.

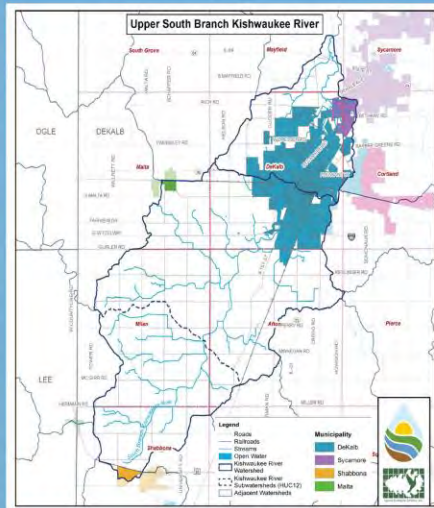
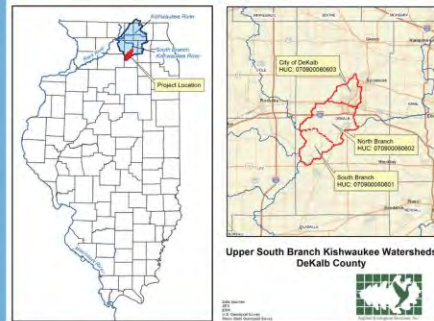
By Applied Ecological Services, Inc.
Summer 2020

Executive Summary

INTRODUCTION

People live, work, and play in their “watershed” every day. A watershed is best described as an area of land where surface water drains to a common location such as a stream, river, lake, or other body of water. The source of groundwater recharge to streams, rivers, and lakes is also considered part of a watershed. Despite the simple definition for a watershed, they are complex in that there is interaction between natural elements such as climate, surface water, groundwater, vegetation, and wildlife as well as human elements such as agriculture and urban development that produce polluted stormwater runoff, increases to impervious surfaces, altered stormwater flows, and degradation or fragmentation of natural areas. Other common names given to watersheds, depending on size, include basins, sub-basins, subwatersheds, and Subwatershed Management Units (SMUs).

The Upper South Branch of the Kishwaukee River watershed, at 98.8 square miles in size, is a large watershed located in central DeKalb County. It includes three HUC-12-scale watersheds: the South Branch South Branch Kishwaukee River (HUC 070900060601), the North Branch South Branch Kishwaukee River (HUC 070900060602), and the City of DeKalb - South Branch Kishwaukee River (HUC 070900060603). This watershed is all part of the South Branch Kishwaukee River which flows north and east and then west to its confluence with the Kishwaukee River southeast of Rockford before joining the Rock River. The Rock River then flows southwest to join the Mississippi near Moline, Illinois.



WATERSHED PLANNING



The watershed-based planning process is a collaborative effort involving voluntary stakeholders. The primary focus is to restore impaired waters and protect unimpaired waters by developing an ecologically-based management plan for the Upper South Branch Kishwaukee River watershed that focuses on improving water quality by protecting green infrastructure, creating protection policies, implementing ecological restoration, and educating the public. Another important outcome is to improve the quality of life for people in the watershed for current and future generations.

The primary purpose of this plan is to spark interest and give stakeholders a better understanding of the Upper South Branch Kishwaukee River watershed to promote and initiate plan recommendations that will accomplish the goals and objectives of this plan. This plan was produced via a comprehensive watershed-based planning approach that involved input from stakeholders and analysis of complex watershed issues by Applied Ecological Service’s watershed planners, ecologists, GIS specialists, and environmental engineers.



GOALS

- Goal 1:** Build stakeholder awareness of watershed issues through education and stewardship while increasing communication and coordination among stakeholders.
- Goal 2:** Protect and manage natural and cultural components of the Green Infrastructure Network and improve fish and wildlife habitat.
- Goal 3:** Improve surface water quality to meet water quality standards.
- Goal 4:** Encourage agricultural techniques and soil conservation practices that will protect and conserve topsoil, improve soil health, and protect our water resources.
- Goal 5:** Protect groundwater quantity and quality.
- Goal 6:** Manage and mitigate for existing and future structural flood problems.

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THE PAST

A complex interaction existed between several ecological communities including prairies, savannas, woodlands, and wetlands prior to European settlement in the 1830s. The prairie-savanna landscape was maintained and renewed by frequent lightning strike fires, fires ignited by Native Americans, and grazing by bison and elk. Fires ultimately removed dead plant material, exposing the soils to early spring sun, and returning nutrients to the soil. Stream corridors and low wet depressions consisting of sedge meadow, marsh, and wet prairie were abundant. Where the City of DeKalb now sits, there were stretches of continuous woodlands along the banks of the Kishwaukee. Back then most precipitation was absorbed in upland prairie and savanna communities and within the extensive wetlands that existed along stream corridors. Infiltration and absorption of water was so great and the land so flat that most of the defined stream channels that exist today were simply wet prairies or wetland complexes.

"In the broad, billowy prairies, extending as far as the eye can reach, we have the element of vastness as in scarce any other land; we have a luxuriant sward of emerald greenness, clothing the whole land, down to the very margin of the waters; we have meandering streams, clear as crystal, now smooth, quiet and glassy, then ruffled by winds or rapids; we have clumps of trees, charming groves, disposed with an effect of beauty that might baffle a landscape gardener; now crowning the grassy height, now clothing the green slope with their pleasing shade. From the gentle heights of the rolling prairies, the country, even before the hand of man had broken its surface, wore the aspect of cultivated meadows and rich pasture grounds, irrigated by frequent rivulets."

Highlights from "History of DeKalb County Illinois",
Written by Henry Boles in 1868

THE PRESENT



European settlement resulted in drastic changes to the fragile ecological communities. Fires no longer occurred, prairie and wetlands were tilled under or drained for farmland or developed, and many channels/ditches were excavated through wet areas to further drain the land for farming purposes. The earliest aerial photographs, taken in 1939, depict the Upper South Branch Kishwaukee River watershed when row crop farming was the primary land use but before residential and commercial development seen today. Some of the woodland communities described along the Kishwaukee near DeKalb were still present in 1939 but farmland clearly replaced nearly all of the prairie and wetland communities. With the advent of farming came significant changes in stormwater runoff. By 1939 defined stream channels had formed or were created throughout the watershed.

Residential and commercial development replaced some of the farmland in and around DeKalb and Sycamore as development expanded around the city centers. Very few wetlands and virtually no woodlands remained by 2017 compared to pre-settlement conditions.



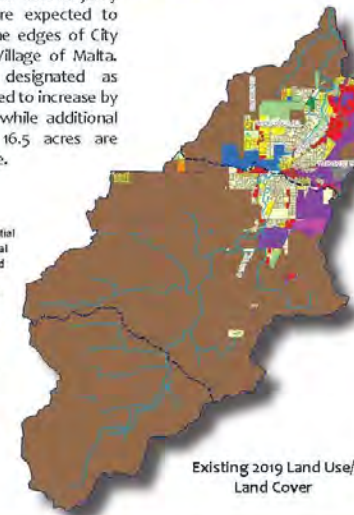
THE FUTURE

Predicted future land use changes shows the largest loss of a current land use/land cover is expected to occur on agricultural land where approximately 9,148.5 acres of the existing 50,404.7 acres (14.5% decrease) is expected to be converted mostly to residential areas as well as some other land uses. The majority of these changes are expected to occur surrounding the edges of City of DeKalb and the Village of Malta. Additionally, lands designated as open space are planned to increase by 1,410.9 acres (2.2%), while additional wetland losses of 16.5 acres are expected in the future.

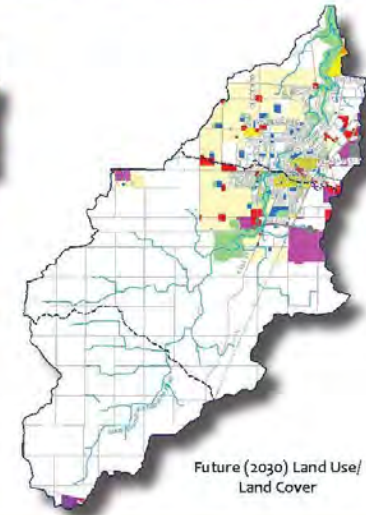


Current Land Use

- Agriculture
- Single Family Residential
- Multi-Family Residential
- Res/Commercial Mixed
- Commercial/Retail
- Industrial/Business Pk
- Industrial
- Municipal/Institutional
- Open Space
- Wetlands
- Transportation/Utility



Existing 2019 Land Use/
Land Cover



Future (2030) Land Use/
Land Cover

CHALLENGES & THREATS

Surface Water

- According to IL EPA's most recent 2018 Integrated Water Quality Report and Section 303(d) List, Upper South Branch Kishwaukee River (IEPA Segment Codes: IL_PQC-02 and IL_PQC-13) is considered impaired for Fish Consumption and Aesthetic Quality.
- Recent water quality data collected within the Upper South Branch Kishwaukee River indicates likely overall impairment from elevated total phosphorus, total nitrogen, and total suspended solids.

Land Use

- Agricultural land use in the watershed is the single largest nonpoint source contributor of nitrogen (28%), phosphorus (37%), and sediment (53%) to streams, followed by streambank erosion and urban land use.
- While some farms in the watershed utilize conservation practices, much more prevalent use of these practices needs to be implemented throughout the watershed in order to achieve water quality targets.
- Urban land uses contribute the second highest nutrient loads after cropland areas, with 12% of nitrogen and 13% of phosphorus per year, as well as the third highest sediment load (7%).

Habitat

- Virtually no pre-settlement woodlands remain in the watershed; only 6% of pre-settlement wetlands remain.
- 81% of the riparian areas along streams and tributaries in the watershed are in poor condition or non-existent.
- Current development policy among the watershed communities does not adequately protect green infrastructure.

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IMPORTANT NATURAL AREAS

P.A. Nehring Forest

P.A. Nehring Forest wned and managed by the DeKalb County Forest Preserve District . The preserve is located on a floodplain next to the Upper South Branch of the Kishwaukee River and is comprised of an overgrown mesic woodland of mature oaks, maples, and basswood.

County Farm Woods

Formally a nursing home and dumpsite (neither of which remain on the property), County Farm Woods is a small 8.3-acre forest preserve owned buy the DeKalb County Forest Preserve and contains some of the oldest oak trees in DeKalb as well as a naturalized detention basin along the DeKalb Nature Trail and the Upper South Branch Kishwaukee River. It is comprised of a degraded oak woodland with many overcrowded young oak trees.

Elwood Park

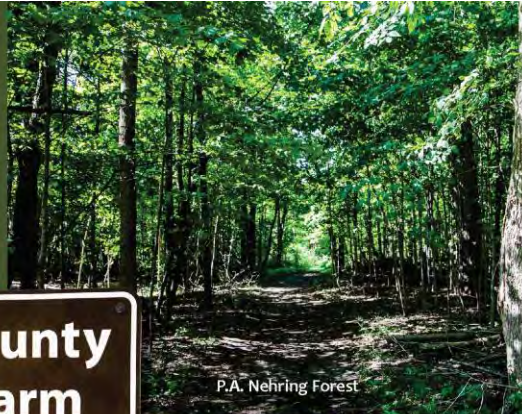
An 11.4-acre park on the Elwood House Museum property owned by the City of DeKalb Park District and honoring Isaac Ellwood, who was instrumental in the development of barbed wire. In addition to the historic house, the grounds contain formal gardens and a degraded, remnant oak woodland in need of maintenance and management.

Hopkin's Park

Hopkin's park is managed by the DeKalb Park District and contains 14.6 acres of turf grass under a remnant oak woodland. The park hosts the start of the DeKalb Nature trail which connects Hopkin's Park to Prairie Park. The park has many amenities, including a swimming pool, baseball field, basketball court, tennis court, playground, and flower garden

Prairie Park

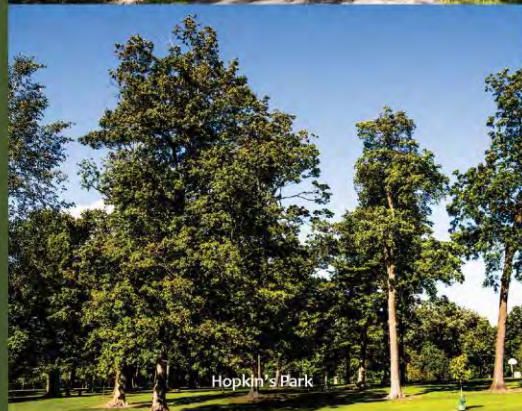
Prairie Park is a 106.3-acre park and the largest park in the watershed; it is managed by DeKalb Park District. Amenities at the park include a disc golf course, picnic tables, and walking trails. The park contains a degraded remnant oak woodland and prairie along the Upper South Branch Kishwaukee River and DeKalb Nature Trail.



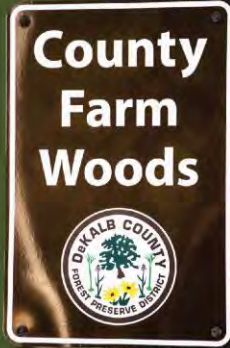
P.A. Nehring Forest



County Farm Woods



Hopkin's Park



AGRICULTURAL LAND MANAGEMENT

Agricultural land can be a significant contributor of nutrients and sediment to local streams when practices such as grass swales, filter strips, and reduced tillage farming are not in place. Observations made during Applied Ecological Service's, field inventory in late spring 2019 indicate that practices additional grass waterways or vegetated swales may be necessary in some fields. Implementing these practices where obviously eroded swales have been identified could significantly reduce pollutant loading.

Recommended agricultural BMPs include:

- Conservation tillage
- Principles of soil health
- Regenerative agriculture
- Subsurface (tile) drainage best management practices and bioreactors
- Vegetated swales
- Waste (manure) management

Additional conservation practices and increases in the extent of reduced tillage practices in the Upper South Branch Kishwaukee River watershed are necessary to reduce cropland pollutant loading. Within the Programmatic Action Plan, AES recommends encouraging the 39% (19,658 acres) of cropland landowners already participating in low residue tillage (30-59% residue) to increase residue to 60% or more on their lands. This change alone could reduce watershed wide pollutant loads by 16,912 lbs/year of nitrogen, 7,506 lbs/year of phosphorus, and 3,025 tons/year of sediment. configuration, and crop management practices already in place. The Watershed-Plan includes a list of general practices that should be implemented throughout the watershed where practicable.

There are numerous agricultural measures and funding sources that can be utilized by farmers to implement practices on their land to improve water quality and soil health, while reducing soil and nutrient losses. Many recommended programs are offered through the DeKalb County Soil and Water Conservation District (SWCD), U.S. Department of Agriculture (USDA) Natural Resource Conservation Program (NRCS), and Farm Service Agency (FSA).

More information on all of these practices can be found in the full watershed plan document at: <http://www.dekalbcountywatersheds-il.org>.



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GREEN INFRASTRUCTURE & YOUR BACKYARD

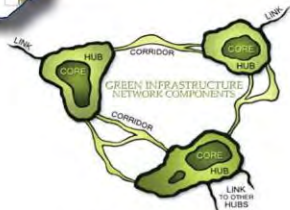
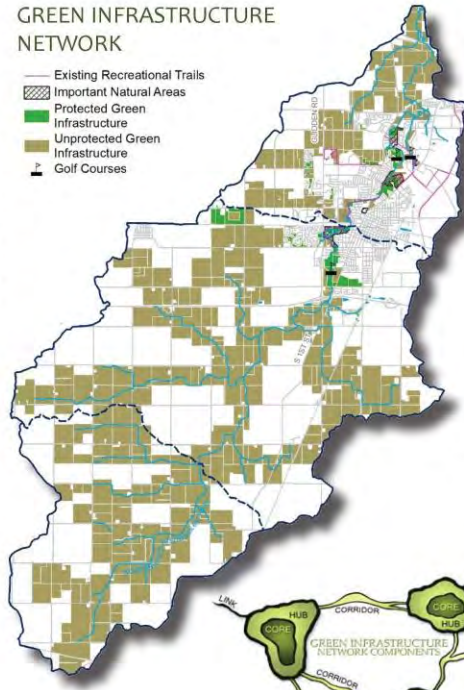
A Green Infrastructure Network is a connected system of natural areas and other open space that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to wildlife and people. The network is made up of hubs and linking corridors. Hubs generally consist of the largest and least fragmented areas such as P.A. Nehring Forest Preserve, Hopkin's Park, Prairie Park, and County Farm Woods. Corridors are generally formed by private agricultural or residential parcels along the Upper South Branch Kishwaukee River and its tributaries. Corridors are extremely important because they provide habitat conduits between hubs. However, most parcels forming corridors are not ideal green infrastructure until landowners embrace the idea of managing stream corridors or creating backyard habitats.

Any property owner can improve green infrastructure. Create a safe place for wildlife by providing a few simple things such as food, water, cover, and a place for wildlife to raise their young. The National Wildlife Federation's Certified Wildlife Habitat® and the Conservation Foundation's Conservation@Home programs can help you get started.

Creating a rain garden, or a small vegetated depression, to capture water is another way of promoting infiltration while beautifying your yard and providing additional habitat. Disconnecting your roof downspouts and capturing that runoff in rain barrels not only reduces the amount of runoff entering streams, but also serves as a great source of water for irrigating your yard.

GREEN INFRASTRUCTURE NETWORK

- Existing Recreational Trails
- ▨ Important Natural Areas
- Protected Green Infrastructure
- Unprotected Green Infrastructure
- ⚡ Golf Courses



Source: greeninfrastructure.net

If a portion of a stream runs through your backyard, here are some tips to help properly manage your piece of the green infrastructure network:

1. **A NATURAL, MEANDERING STREAM IS A HAPPY STREAM**
Work with experts to restore degraded streams.
2. **REMOVE NON-NATIVE SPECIES**
Identify and remove plants that are out of place (see photo guide, right).
3. **PLANT NATIVE VEGETATION**
Plants adapted to the Midwest climate can help control erosion by stabilizing banks.
4. **NO DUMPING**
Avoid dumping yard waste and clear heavy debris jams.
5. **MANAGE CHEMICAL USE**
Avoid over fertilizing lawns or spilling/dumping chemicals near waterways.

For more detailed information, check out the Lake County Stormwater Management Commission's booklet, "Riparian Area Management: A Citizen's Guide," at www.lakecountyil.gov/stormwater.



RAIN BARREL



RAIN GARDEN



STREAM RESTORATION

REMOVE THESE NON-NATIVE AND INVASIVE SPECIES

COMMON REED



BUCKTHORN



REED CANARY GRASS



PURPLE LOOSESTRIFE



GARLIC MUSTARD



TEASEL



Executive Summary

ACTION PLAN

The Upper South Branch Kishwaukee River Improvement Plan includes an Action Plan developed to provide stakeholders with recommendations to address plan goals. The Action Plan includes programmatic and site-specific recommendations. Programmatic recommendations are general watershed-wide remedial, preventative, and regulatory actions. Site-specific recommendations include actual locations where projects can be implemented to improve water quality, green infrastructure, and aquatic and terrestrial habitats.

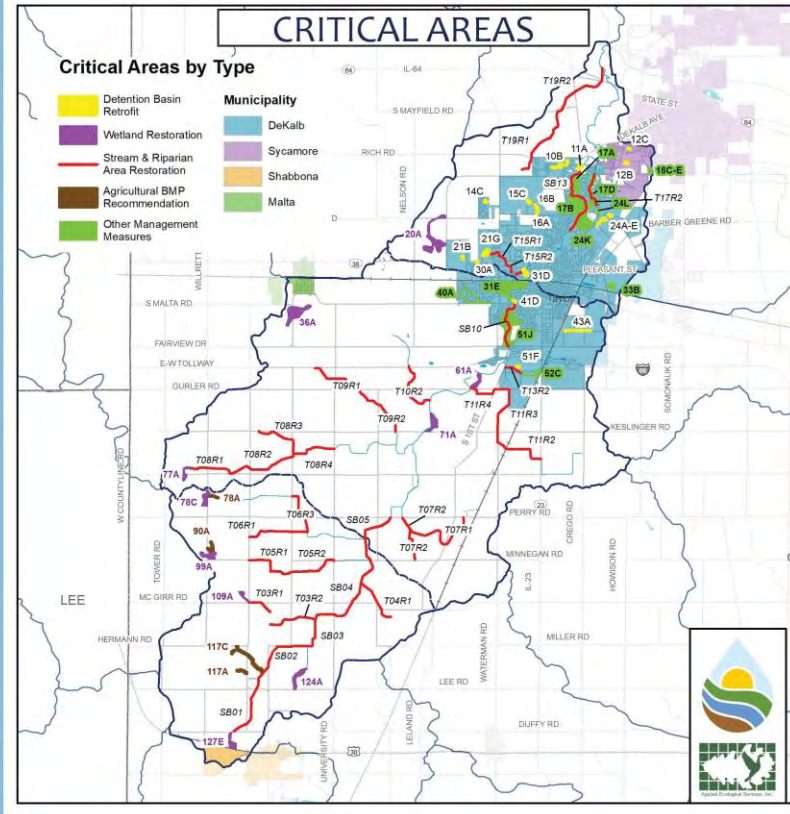
Programmatic recommendations include...

- Ordinance and Policy Recommendation
- Rainwater Harvesting & Re-use
- Native Landscaping
- Street Sweeping
- Septic System Maintenance
- Green Infrastructure Planning
- Conservation Design & Low Impact Development
- Water Quality Trading & Adaptive Management

Site-specific recommendations include...

- Detention Basin Retrofits
- Wetland Restoration
- Stream & Riparian Area Restoration
- Agricultural Management Practices
- Other Management Measures:
 - Natural Area Restoration
 - Golf Course Naturalization
 - Parking Lot BMPs

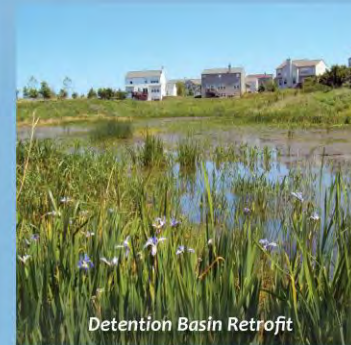
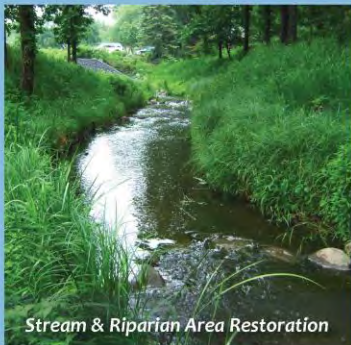
The recommended programmatic and site-specific management measures provide a solid foundation for protecting and improving watershed conditions over time but should be updated as projects are completed or other opportunities arise. Key implementation stakeholders are encouraged to organize partnerships and develop various funding arrangements to help delegate and implement the recommended actions. More details on the action plan and implementation can be found in the full watershed plan document.



WATER QUALITY MONITORING & INFORMATION & EDUCATION PLAN

A water quality monitoring plan is an essential part of any watershed plan to evaluate plan implementation outcomes. Physical, chemical, and biological data will be collected over time to track progress towards achieving water quality improvements and will include total phosphorus, total nitrogen, total suspended solids, *E. coli*, and biological monitoring. Monitoring partners include Illinois EPA, Northern Illinois University, Kishwaukee Water Reclamation District, Illinois Tollway, and the Steering Committee.

The Information & Education (I&E) Plan recommends campaigns that are designed to enhance understanding of the issues, problems, and opportunities within the Upper South Branch Kishwaukee River watershed. The intention is to promote general acceptance and stakeholder participation in selecting, designing, and implementing recommended Management Measures to improve watershed conditions. The first step in understanding the issues, problems, and opportunities within Upper South Branch Kishwaukee River watershed is to gain a better perspective on how the watershed evolved over time into what exists today. The goal of the I&E Plan is to equip municipal staff, elected officials, and other key stakeholders with the tools necessary to establish watershed-based practices and create changes in behaviors that will improve the overall health of the watershed.



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WHERE DO WE GO FROM HERE?

The degradation of water resources seen today in the Upper South Branch Kishwaukee River Watershed occurred over almost 200 years of landscape changes. Fortunately, there are actions outlined in the plan that can be taken to mitigate existing issues and improve water quality over time. The future health of the watershed is largely dependent on how stormwater and natural resources are managed. That includes implementing proven and environmentally-sensitive practices and approaches to restoration, such as those identified in this executive summary and the watershed plan, to improve water quality and stream health in the watershed. You can help the Upper South Branch Kishwaukee River watershed by starting in your own backyard and supporting local water quality improvement efforts.

There is no single fix for the water quality and flooding problems in the Upper South Branch Kishwaukee River Watershed. These problems are the cumulative result of decisions made since people moved to the watershed in the 1800s. It will take all stakeholders and actions at every scale in order to positively impact watershed resources. This watershed-based plan is the first step in helping watershed residents and stakeholders understand what can be done to restore the valuable resources of the Upper South Branch Kishwaukee River Watershed.

Funding for the development of the Upper South Branch Kishwaukee River Watershed-Based Plan was provided in part through the USEPA Section 319(h) of the Clean Water Act distributed through the Illinois Environmental Protection Agency. The findings and recommendations herein are not necessarily those of the funding agencies. Funding and

Full Plan available on the
DeKalb County Government website and at:
<http://www.dekalbcountywatersheds-il.org>

All photos by AES unless otherwise noted.

For more information on how you can help,
contact the DeKalb County Watershed Coordinator:

Dean Johnson
DeKalb County Soil & Water Conservation District
1350 West Prairie Drive
Sycamore, IL 60178
815-756-3234 ext. 3
Dean.Johnson@il.nacdnet.net

or visit the DeKalb County Watershed website at:
www.dekalbcountywatersheds-il.org



Monitoring Plan

USEPA Element I: Monitoring component to evaluate the effectiveness of the implementation efforts over time



Monitoring Plan

Existing monitoring should continue and *E. coli* and macroinvertebrate sampling should be added to the 5-year monitoring regimes.

Monitoring Entity/Program	Monitoring Location (See Figure 64)	Monitoring Frequency	Parameters Sampled	Cost to Implement
Existing Recommended Monitoring Programs				
Illinois EPA Intensive Basin and Special Study	IL-02, IL-13, and IL-99	Every 5 years	Physical; Chemical	Not Applicable
NIU	8 sites along USBKR and tributaries	Yearly	Physical; Chemical	Not Applicable
New Recommended Monitoring Programs				
Steering Committee or other partners	IL-02, IL-13, and IL-99	Every five years	<i>E. coli</i>	\$1,000 each 5-year cycle
Illinois Tollway or NIU or Illinois RiverWatch	IL-02, IL-13, and IL-99	Every five years	Biological (Macroinverts)	\$5,000 each 5-year cycle
Project lead or landowner	Varies: Specific to each management measure	Pre and post implementation	Physical, Chemical	\$5,000 for each project

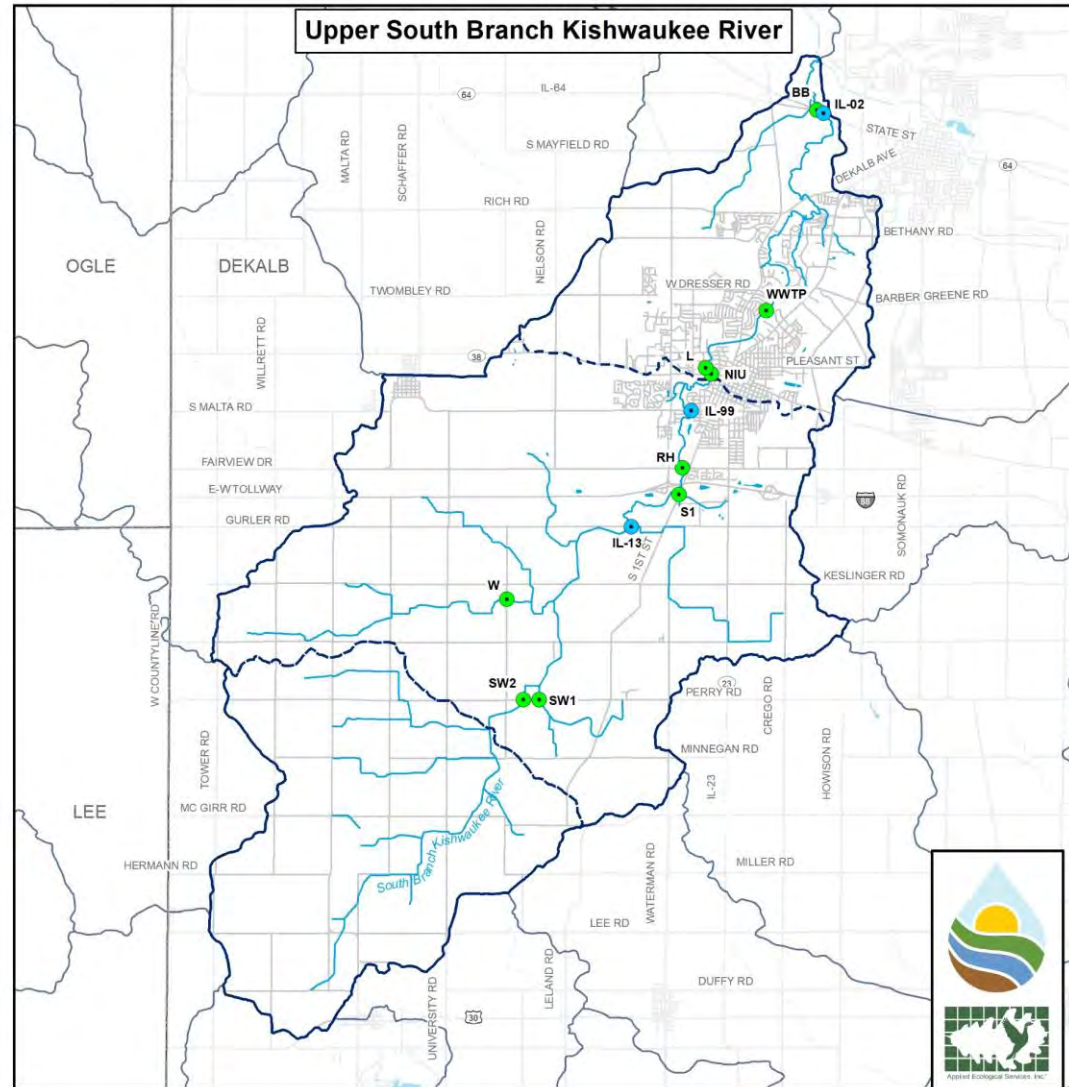


Monitoring Plan

Physical and chemical monitoring should continue

-  IEPA Monitoring Locations
-  NIU Monitoring Locations

Additional monitoring should include *E. coli* and macroinvertebrates at IEPA monitoring locations



Monitoring Plan

Additionally, water quality monitoring should be conducted at individual management measure sites as implementation occurs.

Analysis of satellite imagery can be used to track changes in conservation practices over time at the watershed scale.

- Calculate minimum Normalized Difference Tillage Index (NDTI)
- Resources available online



Stream Monitoring Parameters

Physical & chemical stream monitoring parameters, collection, and handling procedures.

Parameter	Statistical, Numerical, or General Use Guideline	Container	Volume	Preservative	Max. Hold Time
Physical Parameters Measured in Field					
pH	>6.5 or <9.0	These parameters are measured in the field			
Conductivity	<1,667 μ mhos/cm				
Dissolved Oxygen	>5.0 mg/l				
Temperature	<90 F				
Turbidity	<14 NTU				
Chemical & Physical Parameters Analyzed in Lab					
Total Suspended Solids	<19 mg/l	Plastic	32 oz	Cool 4 °C	7 days
Biochemical Oxygen Demand	<5.0 mg/l	Plastic	32 oz	Cool 4 °C	48 hours
Ammonia Nitrogen, Nitrate-Nitrite, & Total Kjeldahl Nitrogen	Total Nitrogen (mg/L) <i>calculated</i> <2.461 mg/l	Plastic	32 oz	Cool 4 °C 20% Sulfuric Acid	28 days
Total Phosphorus	<0.0725 mg/l (streams)	Plastic	4 oz	Cool 4 °C	28 days
Chloride	<500 mg/l	Plastic	32 oz	Cool 4 °C	28 days
<i>E. coli</i>	<235 MPN/100mL	Plastic	4 oz	Cool 4 °C	<6 hours



Goal Milestones

USEPA Element G:

Description of interim measurable milestones

Goal “Report Cards”

- One for each goal
- Grade Evaluation:
80%-100% met = A;
60%-79% met = B;
40%-59% met = C;
and < 40% = failed.

Goal 3 Report Card	
Improve surface water quality to meet water quality standards.	
Current Conditions: <ul style="list-style-type: none"> • According to IEPA's most recent 2018 Integrated Water Quality Report and Section 303(d) List, Upper South Branch Kishwaukee River is “Fully Supporting” for Aquatic Life, “Not Supporting” for Fish Consumption, and the upper half of the Kishwaukee is also “Not Supporting” for Aesthetic Quality; neither reach was assessed for Primary Contact Recreation. Analyzing all of the data suggests that there is moderate impairment to the Upper South Branch Kishwaukee River due to elevated phosphorus, nitrogen, total suspended solids, and <i>E. coli</i> levels. • The majority of non-point source pollutants are originating from agricultural and urban sources and streambank erosion. 	
Criteria/Targets to Meet Goal Objectives: <ul style="list-style-type: none"> • All 20 “High Priority-Critical Area” detention basins retrofitted. • All 10 “High Priority-Critical Area” wetlands restored. • All 32 (215,995 lf) “High Priority-Critical Area” stream and riparian area reaches restored. • All 4 “High Priority-Critical Area” agricultural areas in need of additional grass waterways or vegetated swales installed. • All 39% (19,658 acres) of existing cropland landowners already participating in reduced or low residue tillage (30-59% residue) to increase residue to 60% or more on their lands. • All 13 Other Management Measures identified as “High Priority-Critical Area” implemented. 	
Goal/Objective Milestones: <i>1-10 Yrs (Short)</i> <ol style="list-style-type: none"> 1) At least half (10 of 20) of “High Priority-Critical Area” detention basins retrofitted. 2) At least 5 of 10 “High Priority-Critical Area” wetlands are restored. 3) At least 16 of 32 “High Priority-Critical Area” stream and riparian area reaches are restored. 4) At least 2 or 4 “High Priority-Critical Area” agricultural areas in need of additional grass waterways or vegetated swales installed. 5) At least 20% (or 9,829 acres) of existing cropland landowners already participating in reduced or low residue tillage (30-59% residue) to increase residue to 60% or more on their lands. 6) At least 7 of 13 “High Priority-Critical Area” Other Management Measures are implemented. 	Grade
<i>10-20 Yrs (Long)</i> <ol style="list-style-type: none"> 1) All 20 “High Priority-Critical Area” detention basins retrofitted. 2) All 10 “High Priority-Critical Area” wetlands restored. 3) All 32 (215,995 lf) “High Priority-Critical Area” stream and riparian area reaches restored. 4) All 4 “High Priority-Critical Area” agricultural areas in need of additional grass waterways or vegetated swales installed. 5) All 39% (19,658 acres) of existing cropland landowners already participating in reduced or low residue tillage (30-59% residue) to increase residue to 60% or more on their lands. 6) All 13 Other Management Measures identified as “High Priority-Critical Area” implemented. 	
Monitoring Needs/Efforts: <ul style="list-style-type: none"> • Track implementation of restoration projects (stream, detention basin, wetland, other management measures). • Track implementation of grass waterways/swales and tillage practices and amount of residue on existing cropland by acre. 	
Remedial Actions: <ul style="list-style-type: none"> • Locate Illinois EPA 319 grants that are being submitted for recommended stream, wetland, detention basin, and other management measure projects and determine success rate. • NRCS/SWCD contact farmers to determine barriers to implementing higher residue tillage practices or grass waterways/swales. 	
Notes:	

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.



Implementation & Schedule

- Identifies key watershed stakeholders and partners
- Implementation schedule outlined within various sections and individually for each project
- List of potential funding sources in Appendix G
- Includes IEPA, IDNR, USFWS, USACOE, USDA/NRCS, NFWF, River Network, Conservation Fund, National Park Service, and many others



Information & Education Plan

A successful I&E Plan first raises awareness among stakeholders of watershed issues, problems, and opportunities. The second step is to provide stakeholders with information on alternatives to address the issues, problems, and opportunities.

- Define I&E goals and objectives. Identify and analyze the target audiences.
- Create the messages for each audience.
- Package the message to various audiences.
- Distribute the message.
- Evaluate the I&E program.



Information & Education Plan

Education Action of Campaign	Target Audience	Communication Vehicles	Schedule	Lead (Supporting) Organization	Outcomes, Change in Action	Estimated Cost
Regenerative Agriculture Workshop	Farmers and Ag Industry	Social Media, Websites, local publications	Fall/ Winter 2020/2021	SWCD, NRCS	Understanding of the Nutrient Loss Reduction Strategy, improved water quality and soil health.	\$500.00
Water Quality Educator Resources	DeKalb County Educators	Emails, Communication with School Districts	Ongoing	U of I Extension, DeKalb County Farm Bureau Ag Literacy Coordinator	Provide useful tools to educate the Educators and Students on understanding watersheds and how to improve water quality in DeKalb County	\$1,265.00
Name that Stream	Students in the Watershed	Emails, Letters to the School District	Fall/ Winter 2020/2021	Watershed Steering Committee	Encourage student involvement and provide opportunities to discuss water quality and watersheds	\$250.00
Nitrate strip testing program	Agricultural Landowners and Farmers	Mailings and Social Media	Spring of 2021	DeKalb SWCD	Establish baseline for nitrate loss, encourage timing of nitrogen application to achieve minimal loss	\$500.00
Water Quality Monitoring	Stakeholders	Social Media, Websites	Ongoing	DeKalb County Community Foundation, SWCD and NIU	Provide data that establishes baseline information and identifies issues and accomplishments	\$14,000.00



Information & Education Plan

Education Action of Campaign	Target Audience	Communication Vehicles	Schedule	Lead (Supporting) Organization	Outcomes, Change in Action	Estimated Cost
Educate Elected Officials about the completed plan to 1) encourage them to adopt the Upper South Branch Kishwaukee Watershed Improvement Plan 2) encourage amendments of municipal comprehensive plans, codes and ordinances to include watershed plan goals/objectives	Elected Officials, Community Leaders	Meetings with boards, special presentations with community leaders	Immediately following completion of the plan	SWCD, DeKalb County Community Foundation	All communities within the watershed adopt the plan and encourage implementation of identified watershed issues within their jurisdiction	N/A
Critical Planning Areas Bus Tour	Stakeholders and Elected Officials	Newspaper, Social Media	2021	DeKalb County Community Foundation	Bring attention to areas identified as critical planning areas in the watershed plan to encourage buy-in to implementation of BMPs	\$500.00
Citizens Mobilization Programs: (storm drain stenciling, River Clean Ups)	Residents, Volunteers, and Landowners	Newspaper, Social Media and websites	Seasonally	Municipalities, Park Districts	Create awareness, activism and ownership of the watershed within the community	TBD
Urban Educational Seminars: Examples Rain Gardens, Rain Barrel, Lawn to River Webinar	Stakeholders	Newspaper, Social Media, Websites	Ongoing	U of I Extension, SWCD, Park Districts, and KWRD	Encourage Homeowners to install BMPs to control runoff and implement water quality improvements	TBD
Watershed Sign Sponsor Program	Businesses and Residents	Newspaper, Social Media, Websites	Fall 2020	DeKalb County Community Foundation, SWCD	Encourage community to participate by paying to sponsor a watershed sign in their watershed	N/A



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Education Action of Campaign	Target Audience	Communication Vehicles	Schedule	Lead (Supporting) Organization	Outcomes, Change in Action	Estimated Cost
Inform Farmland owners and renters about the plan and recommended actions, Inform and support farmland owners and renters to evaluate and implement recommended actions within the watershed plan	Agricultural landowners and farmers	Meetings of farmland owners and operators	Ongoing	SWCD, NRCS, KWRD	Encourage implementation of identified watershed projects and discuss funding mechanisms to install BMPs	\$100.00
Mini- Grant Programs	Units of Government	Mailings and Social Media	Ongoing	DeKalb County Community Foundation	Encourage local units of government to install special projects that demonstrate ways to improve water quality	\$5,000.00
Provide the School Districts within the Upper South Branch of the Kishwaukee River Watershed with information about the watershed <u>as a means to support outdoor curriculum within the watershed's green infrastructure.</u>	Schools, Students and Educators	Emails, letters and Social Media	Annually	U of I Extension, DeKalb County Farm Bureau Ag Literacy Coordinator and SWCD	Students within the watershed will <u>have the understanding of</u> how our environmental community works together through curriculum created and delivered by Natural Resource Educators	\$5,000.00
Outreach Programs that inform the community of ways to improve water quality within the watershed.	Stakeholders	Articles, Social Media, face to face meetings	Ongoing	U of I Extension, SWCD, KWRD	Create Awareness	TBD



Schedule

Draft plan sent to IEPA by June 30th

While in review, plan is put into InDesign.

Will have final version completed within 1 month of receiving edits back from IEPA (tentatively by October 31st)



Questions?

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