

2.1 Upper South Branch Kishwaukee River Improvement Plan Mission

he Watershed Coordinator, Steering Committee, and stakeholders of the Upper South Branch Kishwaukee River watershed developed a mission statement to guide the watershed plan. That mission is as follows: "The mission of the watershed plan is to improve water quality by reducing nonpoint source pollution and flooding, while improving habitat, along with increasing our knowledge to help improve the stewardship of the Upper South Branch Kishwaukee River watershed."



2.2 Places-of-the-Heart

uring a February 5, 2020 meeting devoted to gathering feedback from the community on the development of the plan and goals, stakeholders were given the opportunity to participate in an exercise called Places-of-theHeart. Participants were asked to place heart-shaped stickers on a map of the watershed to indicate places they felt a connection to and to explain to the group why they placed their stickers where they did. Figure 3 depicts where participants placed their hearts and Table 2 summarizes what participants shared with the group (note: not all

participants shared a description of why they placed a heart where they did). Stakeholders were also asked to put an "X" on the map to locate any Flood Problem Areas.

Table 2. Location and description of Places-of-the-Heart group exercise.

Date	Summary
1	Nehring Forest Preserve- Land was recently purchased adjacent to forest preserve. This newly purchased area is in need of restoration.
2	Multi-generational family farming
3	Possible flood detention
4	NIU Lagoon and campus- keep lagoon integrity but reduce flooding
5	Hopkin's Park- I grew up here. It is where I first went into the river; my favorite place in Dekalb
6	Nehring Park- Where I go for walks for peace, to see animals and birds; A small patch of natives to give my kids experience daily
7	NIU Lagoon- Ice skating, ducks, love
8	Park pathway blocking natural flow of water under train tracks
10	Great place to fish! Potential to expand prairie pollinator habitat
15	Where it all starts
22	This is where I drive over the Kish to get to school. Through school I have learned about conservation and water quality. I also have learned & studied the Kish & watershed here establishing the importance of saving our waterways.
29	Prime farmland, source of livelihood
30	Water being pumped from Enbridge onto our farmland. Help!
31	Small stream in Hopkin's Park. Children love to play in it
32	Quiet spot in Prairie Park; Relaxing; Need to restore original channel
33	I like there!
36	Farming tiles, ponds, possible areas for aquatic organisms
37	The place I live in Dekalb County is a residence hall on the NIU compass. Overall the campus is an important place to me
38	Around my apartment and around campus where I spend the most amount of time
39	Wilkinson marsh is a great place to view a wetland but is mostly invasive cattails. Let's restore to native prairie!
40	Hopkin's Park
41	Flooding on greens
42	Caught 1st big fish (carp) at age of 7 (60 yrs ago)

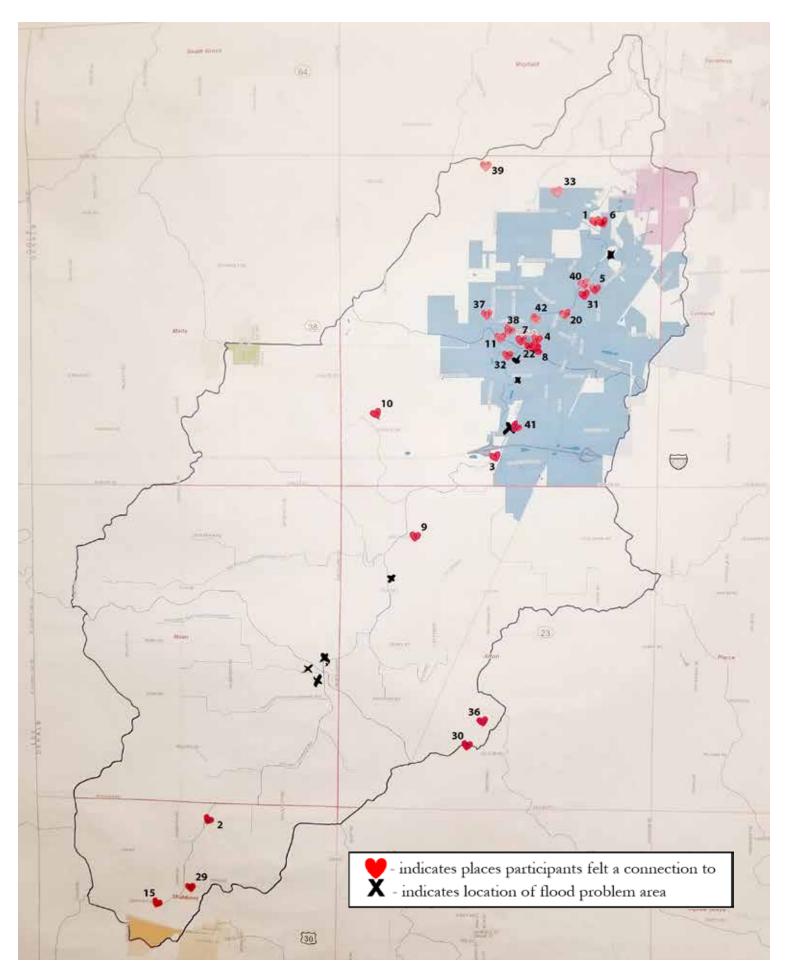


Figure 3. Watershed locator maps.

2.3 Goals and Objectives

atershed stakeholders were first presented with information about the character, existing conditions, and quality of watershed resources over the course of several meetings prior to developing goals. Six general goal topics were chosen by the USBKR Steering Committee to address issues that were brought up during those meeting as important in the Upper South Branch Kishwaukee River

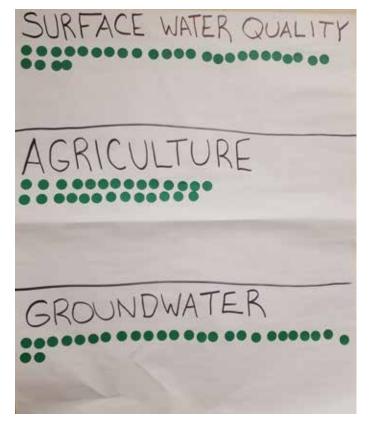
watershed. Stakeholders were then given the opportunity to vote on goals they felt were most important as a way of prioritizing those goals.

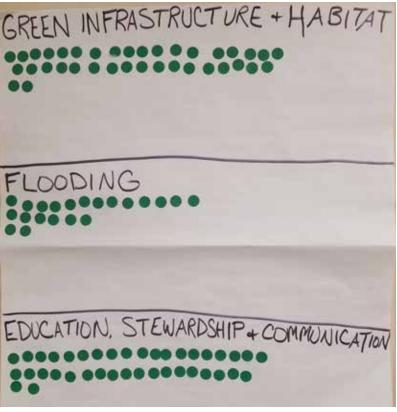
The voting process occurred during the Goals meeting held on February 5, 2020 and included approximately fifty stakeholders from the community. Each stakeholder was given five votes. Each person was allowed to use up to two votes on a single goal if he or she felt strongly about it. The voting process helped focus on goals that need

to be adequately addressed in the planning process and within this watershed plan report. Tallied votes by goal topic were as follows:

- Education, Stewardship, & Communication – 39 votes
- 2. Green Infrastructure Network & Habitat– *37 votes*
- 3. Surface Water Quality 28 votes
- 4. Agriculture 27 votes
- 5. Groundwater 27 votes
- 6. Flooding 21 votes

Final Goal Prioritization results held during February 5, 2020 Goals Workshop





Finally, stakeholders that attended the Goals meeting participated in a World café exercise dedicated to a facilitated brainstorming session around the watershed plan mission statement and goals. Facilitators led successive groups of stakeholders through questions and prompting around each goal and the mission statement, taking notes on stakeholder ideas and feedback. This information was then used to refine the mission, the goals, and the objectives of the plan, as well as incorporated into the plan

document where appropriate.

Objectives for each goal were further refined to be specific where appropriate and designed to be measurable so that future progress toward meeting goals can be assessed. Goals and objectives ultimately lead to the development of action items and project recommendations. The Management Measures Action Plan section of this report is geared toward addressing watershed goals by recommending programmatic

and site-specific Management Measure actions to address each goal. The goals and objectives are examined in more detail in the discussion of the measurement of plan progress and success via milestones and "Report Cards" outlined in Section 9.2.

Stakeholders participating in February 5, 2020 Goals Workshop



Goal 1: Build stakeholder awareness of watershed issues through education and stewardship while increasing communication and coordination among stakeholders.

Objectives:

- 1. Implement the Upper South Branch Kishwaukee Watershed Improvement Plan Information & Education Campaign.
- 2. Increase environmental stewardship opportunities and encourage stakeholders to participate in watershed plan implementation and restoration campaigns to increase activism in the watershed.
- 3. Inform public officials of the benefits of conservation design and low impact development and the importance of ordinance language changes that promote these developments.
- 4. Create targeted educational information for agricultural landowners.
- 5. Create targeted educational information for riparian landowners.
- 6. Install watershed interpretation signage at public access points, major roads, and installed best management measures.
- 7. Develop recommendations and alternatives for the use of fertilizer and road salt and the disposal of pet waste.

Goal 2: Protect and manage natural and cultural components of the Green Infrastructure Network and improve fish and wildlife habitat.

Objectives:

- 1. Include the identified Green Infrastructure Network in all county and municipal comprehensive plans and development review maps.
- 2. Encourage private landowners with parcels within the Green Infrastructure Network to manage their land for ecological and water quality benefits.
- 3. Increase the width of and restore riparian buffers along 32 stream reaches identified as critical stream reaches and reconnect the stream to the floodplain where possible.
- 4. Improve habitat in degraded stream reaches using natural and ecological design approaches.
- 5. Develop and implement restoration and management plans for all Natural Area Restoration sites
- Implement conservation design or low impact development standards where new or redevelopment occurs.
- 7. Incorporate naturalized landscaping into golf courses and restore understories of remnant oak woodlands where possible.
- 8. Ensure adequate funding is in place for future operations and maintenance of natural areas and restorations.

Goal 3: Improve surface water quality to meet water quality standards.

Objectives:

- 1. Continue existing water quality monitoring programs and implement the Water Quality Monitoring Plan outlined within the plan.
- 2. Implement additional policy recommendations that focus on improving watershed conditions by preserving green infrastructure, protecting groundwater, minimizing road salts, minimizing lawn fertilizer, sustainable management of stormwater, and allowances for native landscaping.
- 3. Restore 298,920 linear feet of riparian areas buffers and spot stream stabilization along all High Priority and Medium Priority stream reaches.
- 4. Implement 708 acres of other management measures recommended in this plan.
- 5. Implement 175 acres of site-specific and 19,658 acres of programmatic recommendations on agricultural land identified in the plan.
- 6. Track changes in water quality over time and make adaptive management changes to the plan as necessary to ensure water quality improvements toward meeting identified pollutant load reductions.

Goal 4: Encourage agricultural techniques and soil conservation practices that will protect and conserve topsoil, improve soil health, and protect our water resources.

Objectives:

- 1. Educate and inform landowners about federal and state cost-share programs, which provide incentives for landowners to enroll in conservation programs and implement conservation practices.
- 2. Encourage landowners to utilize existing programs and agencies such as the Natural Resource Conservation Service, the DeKalb County Soil and Water Conservation District and the Farm Service Agency to install conservation practices that protect soil loss and water quality.
- 3. Increase support for and develop additional financial assistance programs targeted at increasing the installation of conservation practices.
- 4. Encourage landowners and farmers to follow the principles of soil health and/or regenerative agriculture on their land.
- 5. Encourage landowners and farmers to leave in place or install adequate buffers between agricultural land and waterways.
- 6. Implement 175 acres of site-specific and 19,658 acres of programmatic recommendations on agricultural land identified in the plan.
- 7. Encourage landowners and farmers to support the Illinois Nutrient Loss Reduction Strategy by implementing practices that reduce annual loading of nitrate-nitrogen and total Phosphorus to the Upper South Branch Kishwaukee River by at least 15 percent and 25 percent respectfully by 2025.

Goal 5: Protect groundwater quantity and quality.

Objectives:

- 1. Encourage the DeKalb County Health Department to monitor the extent and current condition of septic tanks in the watershed and to educate septic tank owners on how to properly maintain their systems.
- 2. Educate stakeholders about potential groundwater contamination issues and encourage private well testing.
- 3. Encourage landowners to install downspout disconnection practices such as rain gardens and rain barrels and utilize pavement alternatives to improve groundwater recharge.
- 4. Encourage use of Stormwater Treatment Train, Conservation Design, or Low Impact Development within new and redevelopment.
- 5. Encourage agricultural landowners and farmers to improve soil health, thereby increasing infiltration.

Goal 6: Manage and mitigate for existing and future structural flood problems.

Objectives:

- 1. Implement impervious reduction measures into development that is predicted to occur within Subwatershed Management Units 17, 20, 23, 24, 25, 28, 30, 31, and 34, which are "Highly Vulnerable" to future development changes and associated impervious cover.
- 2. Limit development in the identified FEMA 100-year floodplain.
- 3. Mitigate for identified flood problem areas on a case by case basis where feasible.
- 4. Restore 1,346 acres of potential wetland restoration sites and maintain or improve existing wetland connectivity to streams.