Headwaters of the South Skunk River Watershed Management Plan

WMA Members

Cities

- Ames
- Jewell
- Randall
- Roland
- Story City

Counties

- Hamilton
- Story

Soil and Water Conservation Districts (SWCD)

- Hamilton
- Story

Technical Advisory Team

- Center for Rural Affairs
- City of Ames Department of Water & Pollution Control
- Hamilton County Conservation
- Hardin County Conservation
- Iowa Corn Growers Association
- Iowa State University
- ISU Extension
- Practical Farmers of Iowa
- Story City
- Story County Conservation
- Story County Environmental Health

For More on the Watershed Management Plan:

Read the full draft plan and learn more about the WMA by visiting www.jeo.com/headwaters-south-skunk-wma or scan the QR code below with your smart phone.

Comments on the plan will be accepted until Friday, November 18, 2022 and can be submitted online or to a project team member.

Funding provided by Iowa DNR/EPA Section 319 Watershed Improvement Program and the Environmental Protection Agency (EPA)

Plan developed by JEO Consulting Group

The Plan Purpose

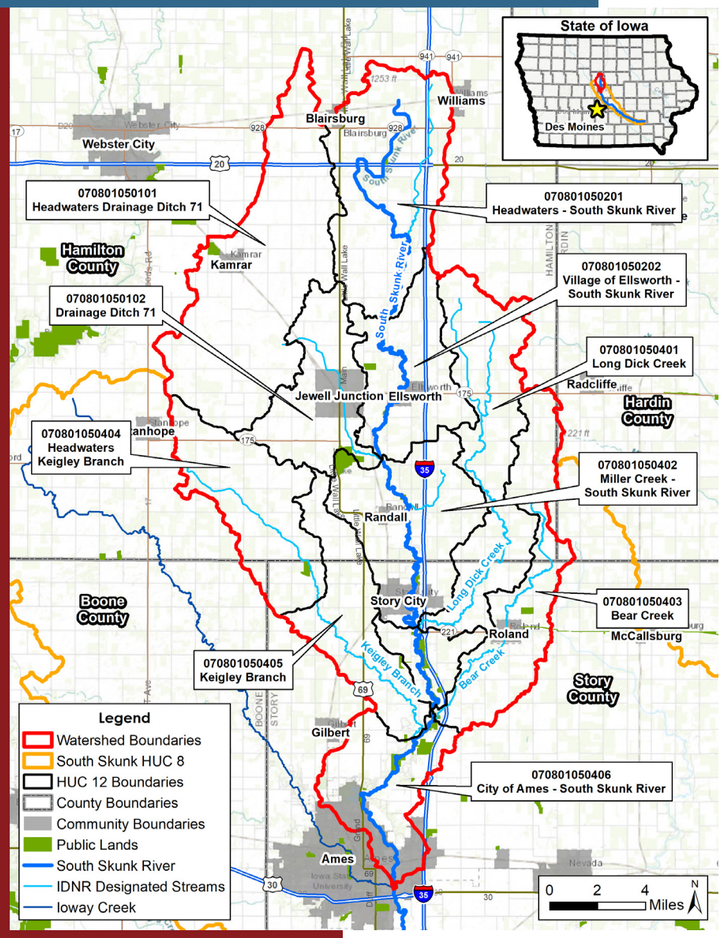
The Headwaters of the South Skunk River Watershed Management Plan is sponsored by the Headwaters of the South Skunk River Watershed Management Authority (WMA), which is a voluntary coalition of local counties, cities, and soil and water conservation districts within the watershed. The plan identifies and prioritizes projects and activities to address water quality and flooding concerns across the watershed. Implementation of the plan is based on voluntary cooperation between WMA members, landowners, and other stakeholders.

The Plan Vision

The WMA will bring together farmers, landowners, residents, soil and water conservation districts, cities, counties, and other stakeholders through an "all in it together" approach towards watershed management. Education, outreach, and voluntary efforts will be used to improve water quality, increase flood resiliency, and enhance soil health across the watershed.

Established Goals

1. Generate and maintain full political, technical, and public support across all participating political subdivisions and other stakeholders to ensure plan sustainability.
2. Improve water quality to enhance quality of life, environmental integrity, and recreational opportunities, within the watershed.
3. More widely and deeply affect water quality improvements in the watershed by increasing individual and community commitment to water quality.



Map of the Project Area

NOVEMBER 2022

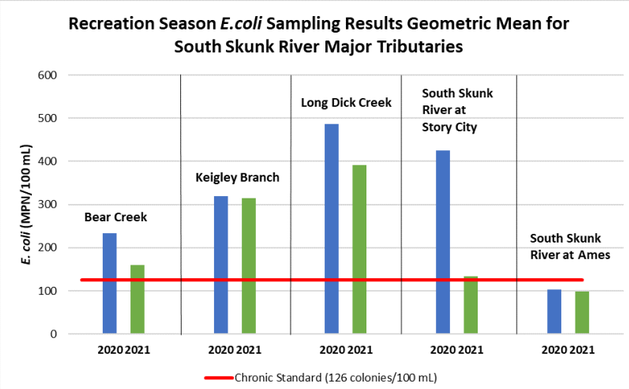
Primary Concerns to Address in the Watershed Area

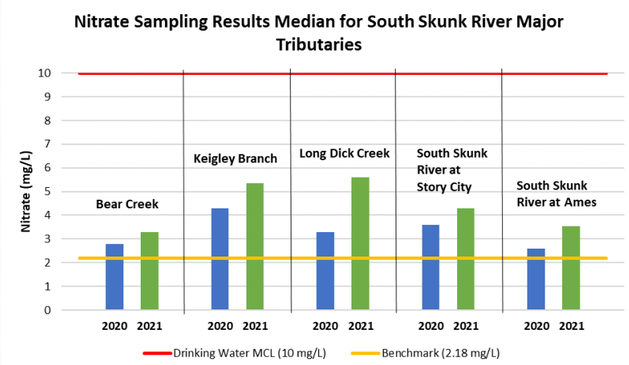
A key discovery made during the planning process was a need to expand water quality monitoring effort across the watershed. In particular, tributary monitoring in Hamilton County is needed to help better identify and prioritize locations for best management practices (BMPs) and implementation efforts.

Additionally, development of watershed-wide water quality model could leverage all stream monitoring data, help to understand pollutant sources, and better predict outcomes from implementation of BMPs.

See Chapters 2 and 3 of the watershed plan for a description of watershed characteristics and an assessment of existing conditions.

High Nitrogen and *E. coli* Bacteria Levels





Best Management Practices

Best Management Practices (BMPs) are defined as a broad set of conservation practices that help to conserve soil and water resources.

Both watershed-wide and targeted implementation efforts to improve water quality and flood resiliency will primarily be accomplished through both existing partner programs/projects and newly identified best management practices.

There are a variety of BMPs which are proven to improve water quality and reduce flooding — including in-field, edge-of-field, livestock & manure, and urban stormwater BMPs.

See Chapter 5 of the watershed plan for more information on BMPs.

BMP Examples

In-Field BMP: Cover Crop

Livestock & Manure BMP: Manure Injection

Edge-of-Field BMP: Bioreactor

Urban Stormwater BMP: Bioretention Cell

Short-Term Action Plan

The action plan identifies priority activities that each city, county, and SWCD, along with the WMA should take over the next 5 years. This action plan has been developed around a framework of four categories of activities which include Education, Projects and Studies, Partnerships and Policy, and Monitoring and Plan Evaluation. Each of these categories contain specific actions that help to address the plan's goals and objectives.

See Chapter 7 of the watershed plan for the full Action Plan.

Action Plan Framework

Monitoring & Plan Evaluation

Efforts to collect, manage, and utilize data over time to track progress of meeting watershed plan goals. Baseline and goal benchmarks are established through plan goals and objectives, or through other individually identified outcomes of other activities. This action is measured by diversity of resources monitored, amount of data collected, and the development of a long period of record.

Partnerships & Policy

Collaboration between WMA members or other partners and the resulting actions, guidelines, or protocols set forth to achieve a specific outcome. Generally these are undertaken to support other activities or projects. These could be at the WMA level or at the individual partner level. Whenever possible, policy should promote incentives rather than be punitive. This is measured by tracking the development of policies, WMA membership status, and the number of partnerships on other activities.

Education

Outreach, education, or technical assistance aimed at various target audiences that helps to increase awareness of the WMA, the watershed plan, or assists in the increased adoption of BMPs. This is measurable in terms of changes in knowledge, attitude, and behavior.

Projects & Studies

A standalone or specific effort meant to produce a product, tool, report, or achieve a tangible result. Projects are temporary work efforts with a clear beginning and end. This is measured by documenting the efforts, outcomes, or other deliverables produced through each project.

Long-Term Action Plan

The watershed plan lays out a long-term implementation time frame of 20 years, and education will be the cornerstone to achieving success.

It will take the education and buy-in of landowners, farmers, and communities; plus grants and other partner funds to help make this plan a reality.

Priority subwatersheds were identified for initial areas to focus BMP adoption efforts towards. These areas (shown on the map) were selected based on high levels of nitrogen and *E. coli* in water quality samples and opportunities for multiple partners to work together.

See Chapter 5 of the watershed plan for the full Long-Term Implementation Strategy.

Priority Subwatersheds