OVERVIEW OF SHELL ROCK RIVER WATERSHED

SHELL ROCK RIVER WATERSHED MANAGEMENT COALITION

Watershed Issues

The Shell Rock River runs from Albert Lea, Minnesota to its confluence with the Cedar River a few miles north of Cedar Falls in Iowa.

» The full watershed is approximately 691,000 acres, with a little more than three-fourths of that area (533,000 acres) in north central Iowa.

» The Iowa portion includes partial areas of seven counties: Winnebago, Worth, Mitchell, Cerro Gordo, Floyd, Butler, and Bremer Counties.

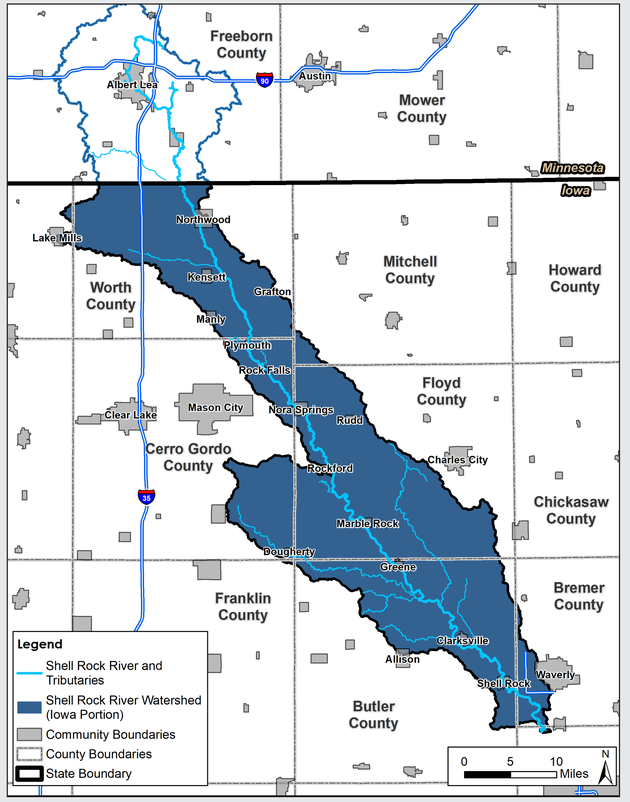
A Coalition of Local Partners

In 2021, several cities, counties, and soil and water conservation districts (SWCDs) voluntarily joined together to create the Shell Rock River Watershed Management Coalition (SRRWMC)

» The SRRWMC's goal is to participate in the management and enhancement of the Iowa portion of the watershed.

» In 2022 the SRRWMC received grant funding to begin the development of a voluntary watershed management plan.

The Watershed Planning Area



Coalition Members:

Cities

» Nora Springs
» Plymouth
» Northwood
» Shell Rock

Counties

» Bremer
» Floyd
» Butler
» Mitchell
» Cerro Gordo
» Worth

Soil and Water Conservation Districts (SWCD)

» Bremer
» Floyd
» Butler
» Mitchell
» Cerra Gordo
» Worth

OVERVIEW OF PLANNING PROCESS

SHELL ROCK RIVER WATERSHED MANAGEMENT COALITION

The watershed planning process is focused on the following issues:

» Water Quality

» Flooding

» Recreation

The watershed plan will identify and prioritize projects and activities to address watershed concerns. Implementation of the plan is based on voluntary cooperation between SRRWMC members, farmers, and other stakeholders.

Stay Connected

www.jeo.com/shell-rock-river-wmc

www.facebook.com/ShellRockWMC

@ShellRockRiver

Visit any of the links at left to learn more about the project, stay up-to-date with the planning process and upcoming events, and review the Shell Rock River Watershed Management Plan (when available).

Project Timeline

January 2023
» Quarterly Meeting

March 2023
» Board Meeting
» Project kickoff
» Scoping & issues ID
» **Public Scoping Meeting - TODAY!**

April 2023
» Quarterly Meeting
» Draft goals
» Draft Chapters 1-4

July 2023
» Quarterly Meeting
» Draft action plan
» Draft Chapter 5

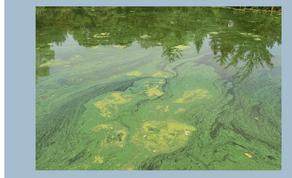
October 2023
» Quarterly Meeting
» Open house planning
» Draft Chapters 6-8

November 2023
» **Public Open House**
» Review full draft plan

December 2023
» Board Meeting
» Adopt final plan

WATER QUALITY CONCERNS IN THE WATERSHED

SHELL ROCK RIVER WATERSHED MANAGEMENT COALITION

Concern	Effects	Potential Sources
 **Nutrient Pollution** *(Nitrogen and Phosphorus)*	- Excess nutrients can lead to algae blooms in waterways. - When the algae begins decomposing it reduces oxygen in the water which harms aquatic life. - Sometimes these blooms are dominated by blue-green algae, which produces toxins that can be harmful to humans, livestock, and pets. - High levels of nitrates in drinking water can cause blue-baby syndrome in infants, and are regulated by EPA drinking water standards.	- Fertilizer - Soil erosion - Manure application - Small open feedlots - Tile line drainage - Grazing livestock - Stream erosion - Wastewater treatment systems
 **Erosion & Sediment Pollution**	- Sediment transports other pollutants with it - Increases water turbidity (reduces clarity) - Buries stream and lake bottom aquatic habitat - Loss of farmland or threats to infrastructure - Loss of usable lake areas – recreation impacts	- Streambank and bed erosion - Farm field erosion - Construction sites - Livestock use areas
 ***E.Coli* Bacteria Pollution**	- Ingesting water with disease-causing bacteria, viruses, or parasites (collectively called pathogens) can make you sick. - Effects could include: diarrhea, vomiting, cramps, nausea, headaches, fever, fatigue, and even sometimes death. - *E. coli* bacteria testing is used as an indicator for harmful pathogens in the water.	*E. coli* bacteria originates from fecal matter: - Wildlife - Livestock - Wastewater treatment systems

What are your concerns or interest regarding Shell Rock River water quality?

» Is information on Shell Rock River's water quality easy to obtain? Are you aware of current water quality conditions?

» Is good water quality important to you, others in the watershed, or to the area's economic viability?

» What activities do you think harm water quality the most?

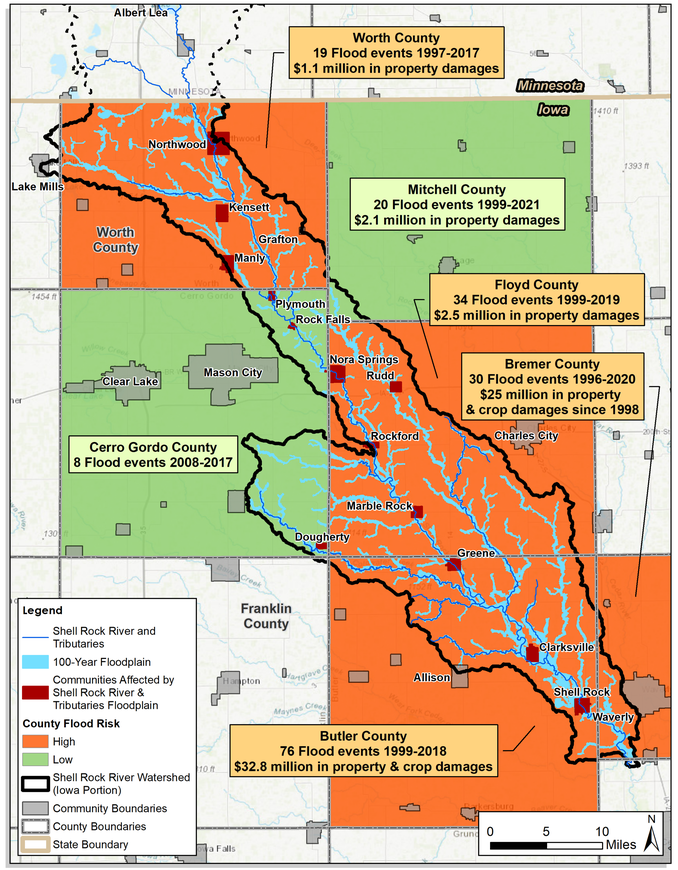
» What resources do cities, counties, farmers, or others need to help improve water quality across the watershed?

JEO CONSULTING GROUP

FLOODING RISKS IN THE WATERSHED

SHELL ROCK RIVER WATERSHED MANAGEMENT COALITION

Flooding Risks are High Across the Watershed

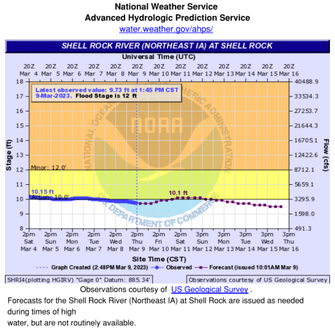


Information based on historical records and risk assessment data provided in county hazard mitigation plans.

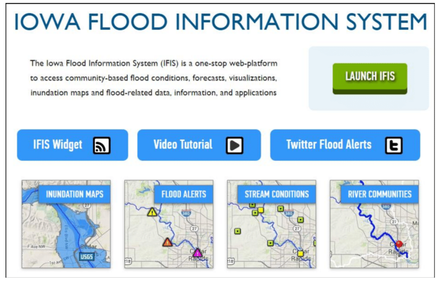
Cities at Risk to Flooding from Shell Rock River

- » Northwood
- » Manly
- » Kensett
- » Plymouth
- » Rock Falls
- » Dougherty
- » Clarksville
- » Greene
- » Shell Rock
- » Marble Rock
- » Nora Springs
- » Rudd

Current Tools to Reduce Flood Risk



Iowa Flood Information System (IFIS)
https://ifis.iowafloodcenter.org/ifis/



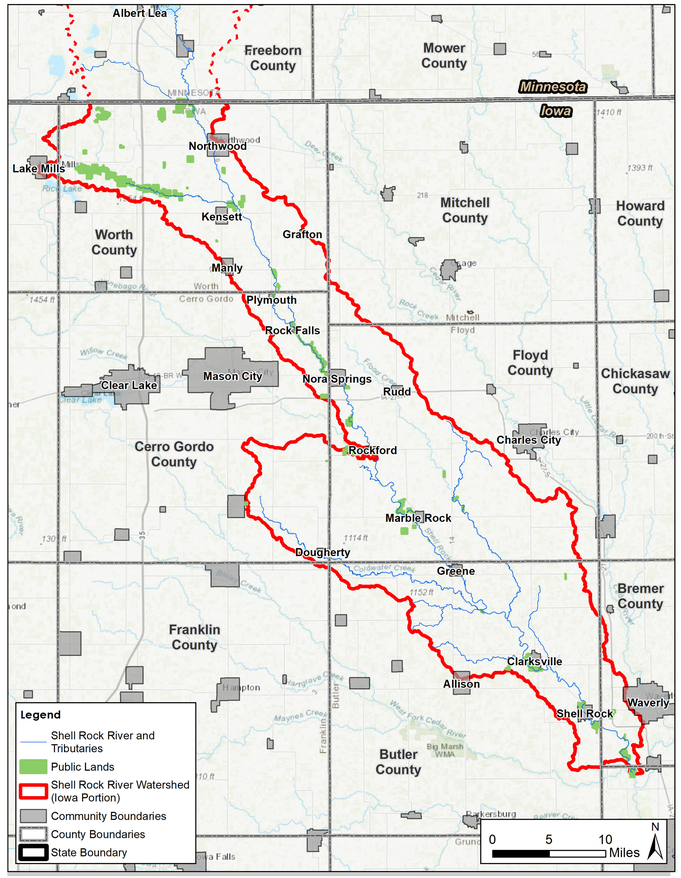
What are your concerns or interest regarding Shell Rock River flooding?

- » Have you experienced flooding in the watershed? Where? What were the impacts?
- » What resources does your community need to mitigate flood risks?
- » Is your community willing to work with other communities to solve flooding at the watershed scale?

RECREATION OPPORTUNITIES IN THE WATERSHED

SHELL ROCK RIVER WATERSHED MANAGEMENT COALITION

Existing Recreation Areas



Existing Facilities

- Wildlife areas (wetlands, prairies, forests)
- Camping
- Picnicking
- Hiking
- Horse riding
- Skiing
- Hunting
- Fishing
- Boating
- Canoeing/ Kayaking

Recreation areas can also provide benefits of reduced flooding, improved water quality, and enhanced wildlife habitat.

What are your concerns or interest regarding Shell Rock River recreation?

- Is recreation important in the watershed?
- Are there any under served areas of the watershed?
- What new or additional types of recreation are needed?