

Connection Between Land & Water

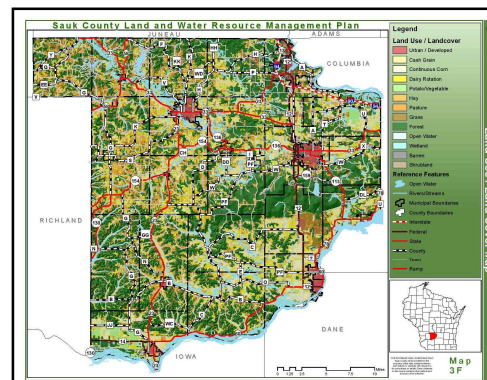
Justine Bula
Education Coordinator
Sauk County Land Resources and Environment Department

SAUK COUNTY OVERVIEW

- Land Use
- Groundwater
- Sauk County Drinkwater Program
- Surface water
- Erosion
- Producer Led Groups
- Questions

Land and Water

- Farmland management can affect:
 - Groundwater
 - Surface water
 - Soil health
 - Farmland productivity

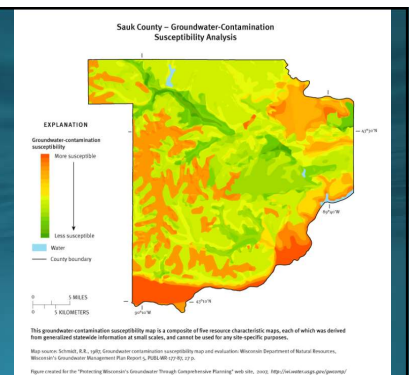


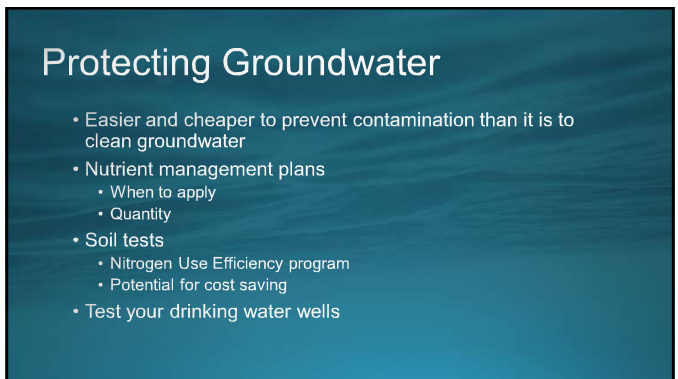
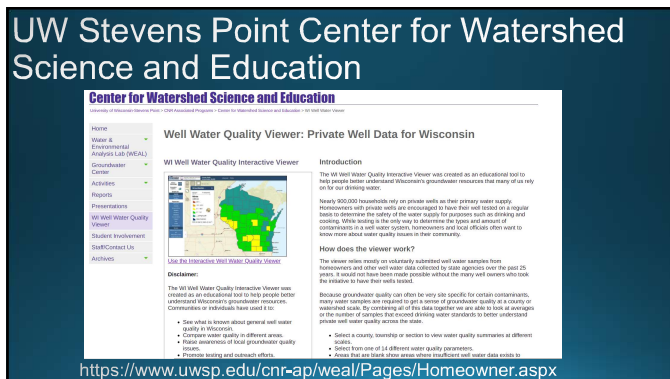
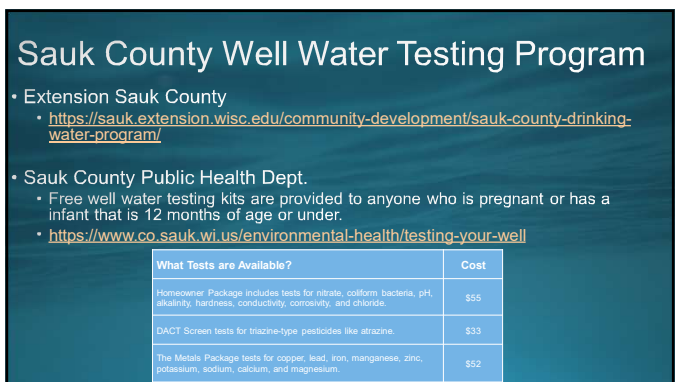
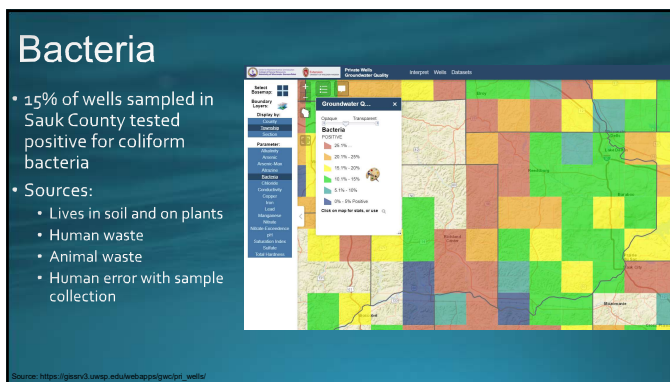
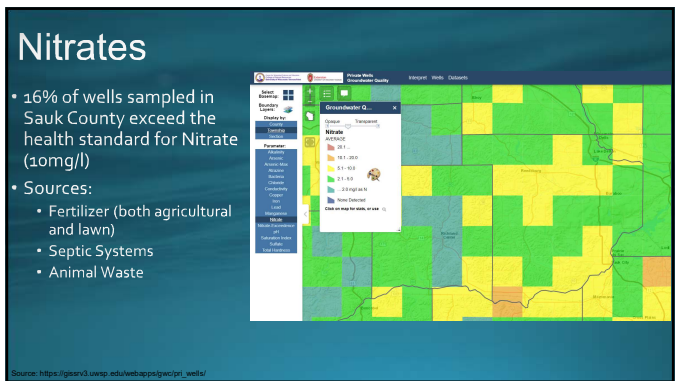
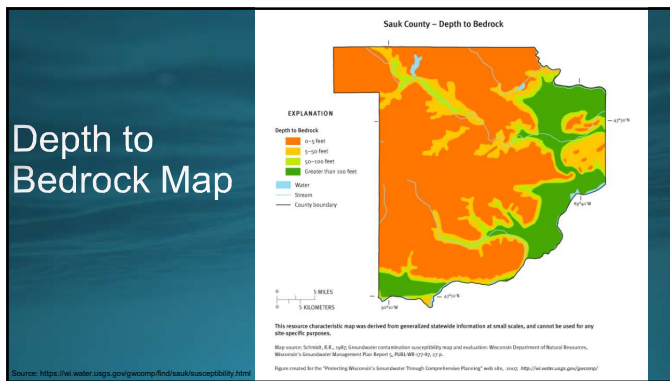
- Agriculture accounts for 61% of the land use across Sauk County

Groundwater

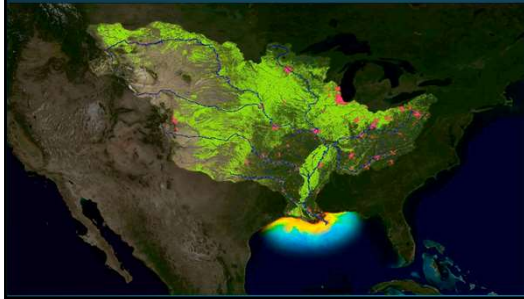
- Groundwater is an extremely valuable resource
- More than 95% of Wisconsin's drinking water comes from groundwater
- 100% of Sauk County Residents depend on groundwater as their source of drinking water
- Susceptibility of Groundwater to Pollutants:
 - Depth to bedrock
 - Type of bedrock
 - Soil characteristics (permeability)
 - Depth to water table
 - Characteristics of surficial deposits

Groundwater Contamination Susceptibility





The Dead Zone



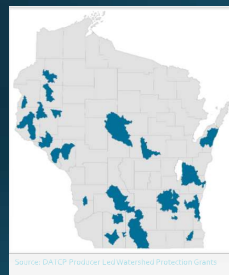
- Eutrophication
- Low levels of dissolved oxygen
- One pound of phosphorus can grow 700 pounds of algae



Soil Health Principles



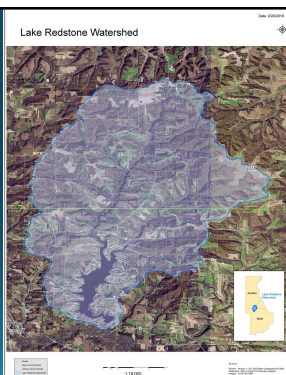
Producer Led Groups



- Groups of farmers that work together to address nonpoint source pollution
- Groups are made up of farmers, conservation staff, and community partners all working towards the same goals of clean water
- Grant funding available through DATCP to help groups offer education programs, on farm demonstration and research projects and offer cost share programs.
 - 2021 – 30 groups received funding from DATCP
- 2 Groups in Sauk County

Producers of Lake Redstone

- Vision statement: *The Producers of the Lake Redstone Watershed are working towards the goal of improving the water quality and soil health within the watershed.*
- Mission statement: *Our Producer-Led group is using on farm research and innovative practices to improve conservation in and out of the watershed.*

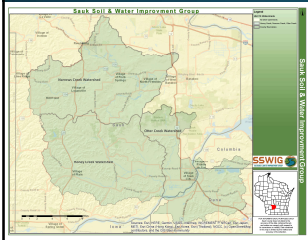


Producers of Lake Redstone

- Researching different ways of planting cover crops
- Community manure application program
- Edge of field monitoring with Discovery Farms
- Offer cost share programs for cover crop
- Host community education programs
- Facebook: <https://www.facebook.com/Producers-of-the-Lake-Redstone-Watershed-101909747969855>



Sauk Soil & Water Improvement Group



- **Mission:** "Sauk Soil and Water Improvement Group is a community of farmers and partners that share a common goal of improving our soil and water quality through soil health and other conservation practices."
- **Vision:** "SSWIG seeks to increase the number of farms practicing regenerative ag to improve soil health and water quality, while preserving family farms, enhancing the local farming culture and educating the general public."

Sauk Soil & Water Improvement Group

- Rotational grazing research and on farm demonstrations
- Cover crop and no till research and on farm demonstrations
- Cost share programs
- Education programs
- Sharing information
- Facebook: <https://www.facebook.com/SaukSoilWaterImprovementGroup>



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Resources:

- Protecting Wisconsin's Groundwater Through Comprehensive Planning: <https://wi.water.usgs.gov/gwcomp/find/sauk/susceptibility.html>
- Sauk County LWRM Plan 2018-2028: https://www.co.sauk.wi.us/sites/default/files/fileattachments/land_conservation/page/40043/2018_sauk_county_lwrm_plan.pdf
- UW Stevens Point Groundwater Quality Viewer: https://gisrv3.uwsp.edu/webapps/gwc/pri_wells/ap/watershed/Pages/default.aspx
- UW Stevens Point Center for Watershed Science and Education: <https://www.uwsp.edu/cnr/ap/watershed/Pages/default.aspx>
- Wisconsin's Water Quality Report to Congress: <https://dnr.wisconsin.gov/topic/SurfaceWater/Congress.html>
- Wisconsin Manure Management Advisory System: <http://www.manureadvisorysystem.wi.gov/>
 - Runoff Risk Advisory Forecast: <http://www.manureadvisorysystem.wi.gov/runoffrisk/index>
- Department of Agriculture, Trade and Consumer Protection (DATCP)
 - Producer-Led Watershed Protection Groups and Grants: https://datcp.wi.gov/Pages/Programs_Services/ProducerLedProjects.aspx
 - Sauk Soil and Water Improvement Group (SSWIG): <https://www.facebook.com/SaukSoilWaterImprovementGroup>
 - Producers of a Lake Redstone: <https://www.facebook.com/ProducersoftheLakeRedstone/Waterhed-sswipg3n29p8g>