

# THE CONSERVATION DIRT

## BENTON SOIL & WATER CONSERVATION DISTRICT

### 2023 SUMMER NEWSLETTER

## Foley Fun Days Parade



Our staff and their kids participated in creating a float for the Foley Fun Days Parade. We won Honorable Mention for Preferred Commercial entry.

## 75th Anniversary Open House



Benton SWCD celebrated their 75th Anniversary on June 29th with the District Supervisors and County Commissioners. We will continue to celebrate our anniversary throughout 2023.

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75th Anniversary

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### Contact Us:

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(320)-968-5300 ext. 3



SERVING BENTON COUNTY

Since 1948



## Outstanding Conservationist 2023

During the June Board Meeting, Jason and Michelle Petron were voted the 2023 Outstanding Conservationists for Benton County. The Petron's have been working with the SWCD over the last 20 years in both federal and state programs. Their earliest project was a ten-row shelter belt completed with CRP funding in 2002.

In 2015, they were funded through EQIP for an erosion control project (water and sediment control basins). This included 1,673 ft. of earthen diversions, 614 ft. of waterways, and 1,673 ft. of tile. This project eliminated over ten classic and ephemeral gullies on the thirty-acre field. In 2016, they re-enrolled 2,085 ft. of field windbreak, 1,255 ft. of living snow fence, and 2,169 ft. of shelterbelt in CRP.

He restored 3.8 acres of wetland with the help of Benton SWCD and U.S.F.W Services in 2020. This project also removed invasive species out of the wetland area.

His most recent project, conducted in 2021 through EQIP, was a 60' x 172' roofed stacking slab and concrete heavy use protection areas that were installed for the two chicken barns to help with manure management. He also converted 6.2 acres of field to wildlife habitat, including a 2,158 ft. windbreak and 2.6 acres of upland wildlife habitat.



Petron family are the 2023 OCC Winners.



Water and sediment control basin.



Heavy use protection area.

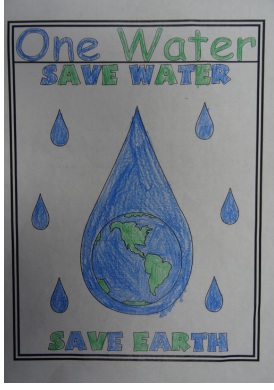
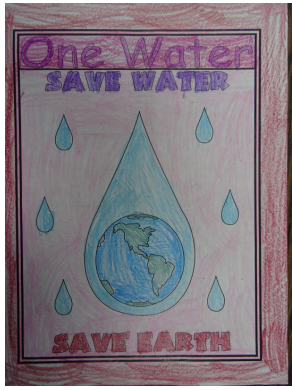


Wetland restoration and invasive species removal.



# 2023 Youth Conservation Contest Winners

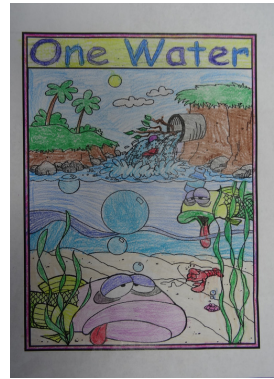
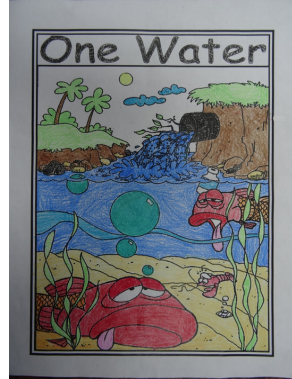
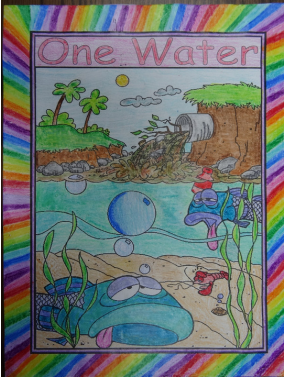
Every year Benton SWCD involves local schools in different conservation contests depending on age. The theme for 2023 was "One Water." There was a presentation given about why water is an essential part of all human, plant, and animal life and the importance of protecting it. The students were instructed to create their project based on that "One Water" theme. Kindergarten through 4th grade did a coloring contest and the 5th/6th graders did a poster, mural, and essay contest.



## Coloring Contest Winners -Kindergarten

Row 1: 1st Place: Evan Winkelman,  
2nd Place: Emilia Olson, 3rd Place:  
Ryder Latterell.

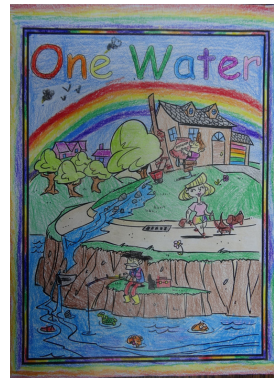
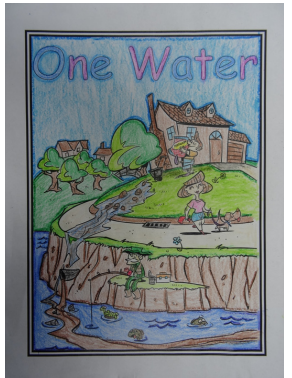
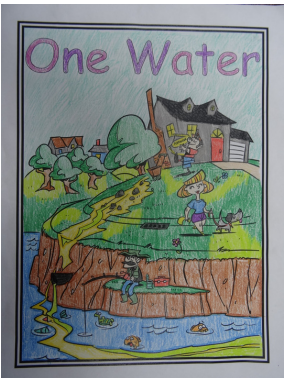
**Teacher Award:** Mrs. Thorsten - St. John's  
Area School.



## Coloring Contest Winners - 1st & 2nd Grade

Row 2: 1st Place: Christian Wolf, 2nd Place:  
Scarlett Swanson, 3rd Place: Madelyn  
Friedrichs.

**Teacher Award:** Mrs. Kollodge - St.  
Katherine Drexel.



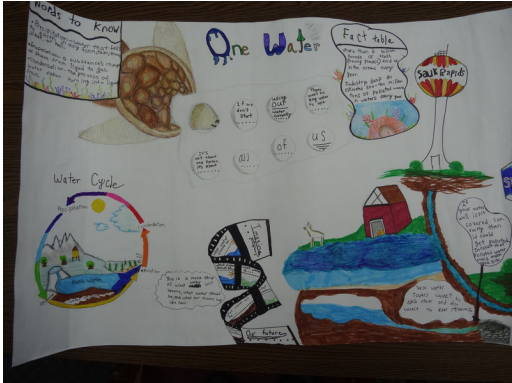
## Coloring Contest Winners - 3rd & 4th Grade

Row 3: 1st Place: Calli Diehl, 2nd place:  
Elle Murphy, 3rd Place: Brielle Kent.

**Teacher Award:** Mrs. Diehl - St. Cloud  
Christian



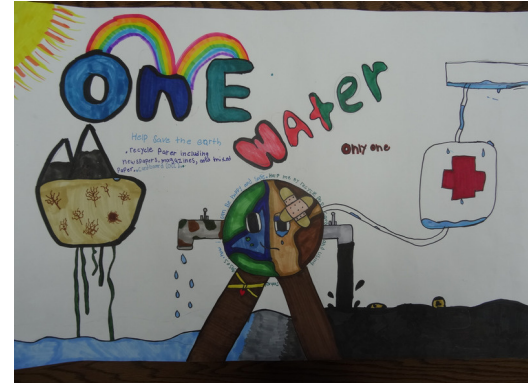
# Mural Contest Winners



1st Place: Addison Vadnie & Amelia Thoennes



2nd Place: Alissa McLaughlin

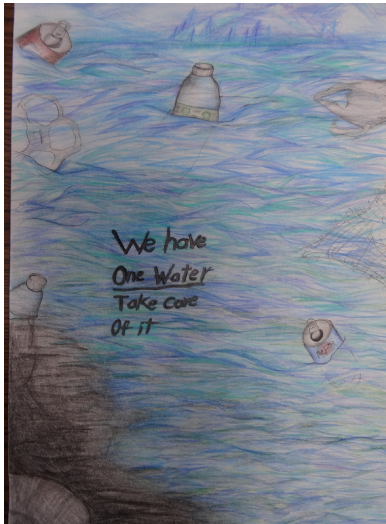


3rd Place: Isabelle Meyer & Leah Seehafer

# Poster Contest Winners



1st Place: Raelyn Helmin



2nd Place: Lillian Bradwisch



3rd Place: Averi Koepp

# Essay Contest Winners



1st Place: Olivia Johnson  
(Pictured to the right)

2nd Place: Averi Koepp

3rd Place: Sophie Jarousek

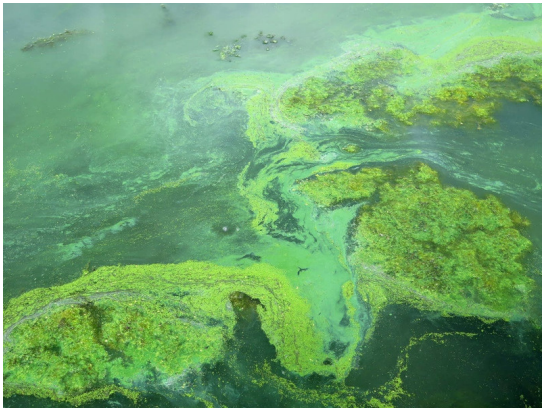




# Blue-Green Algae

Blue-green algae, which is also known as cyanobacteria, are microscopic, photosynthetic organisms that are found naturally in aquatic systems. Cyanobacteria blooms usually occur under very specific conditions that include warm temperatures, a stable water column, abundant nutrients, and plenty of light. These algal blooms pose a threat to human health, harm wildlife and domestic animals, aquatic ecosystems, and drinking water due to the production of potent toxins called cyanotoxins. To learn more about identifying cyanobacteria blooms visit:

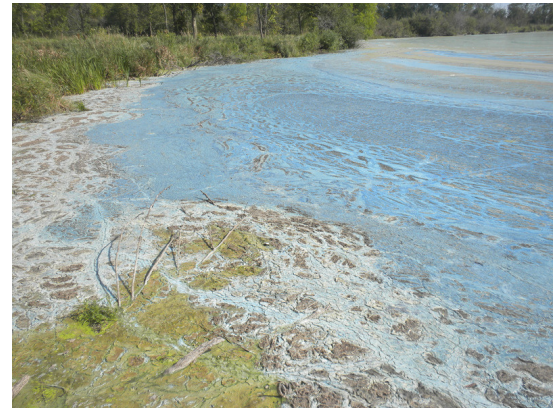
<https://www.pca.state.mn.us/air-water-land-climate/blue-green-algae-and-harmful-algal-blooms>.



Cyanobacteria on Lake Peltier in Lino Lakes, MN. Source: MPCA.



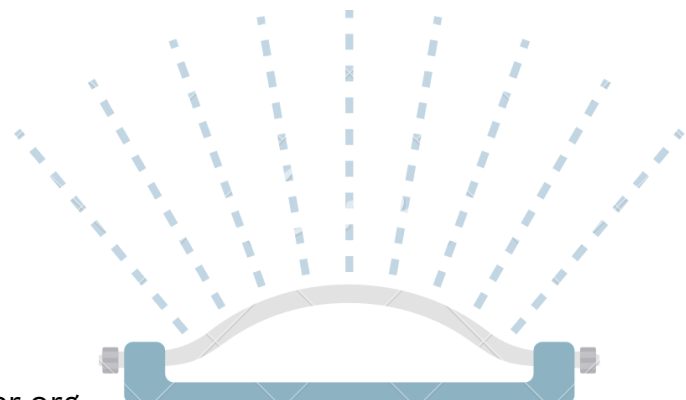
Cyanobacteria on a Pelican. Source: MPCA.



Dense Blue-green Algae from 2015 on Little Rock Lake in Rice, MN.

## Blue-Green Algae Nutrient Reduction Strategies

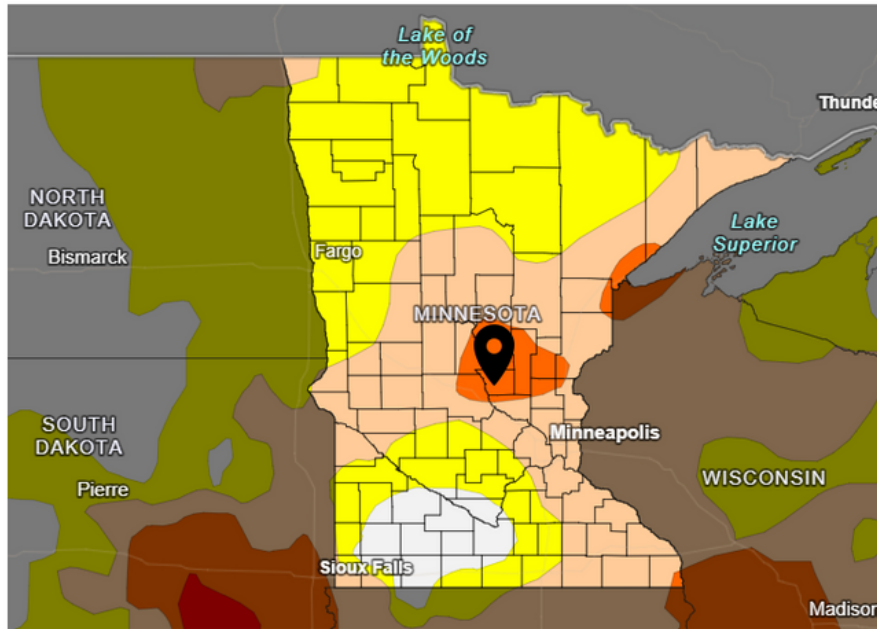
- Reducing the use of fertilizers where possible
- Preventing land erosion, to stop soil washing into waterways
- Avoid excess irrigation
- Pick up pet waste
- Clean leaves and other organic material out of storm drains
- Avoid using lawn care products once yard is dormant





# Midwest Drought

U.S. Drought Monitor



**Drought & Dryness Categories**



Source(s): NDMC, NOAA, USDA  
Data Valid: 06/27/23

% of Benton County

- 0%
- 0%
- 0%
- 0%
- 0%
- 0%

**Drought.gov**

The Spring of 2023 started off with an above average snow melt (2.241 inches above normal) and has received very little rain fall throughout the beginning of the summer. According to NOAA (National Oceanic and Atmospheric Administration), Benton County had the fifth driest May on record, over the past 129 years. We were 2.4755 inches below normal for the month's precipitation.

Over the last 100 years, there has been a trend moving towards wetter conditions and fewer droughts in the Midwest. In addition to the drought challenges, the transition from flooding to drought within a very short timespan creates a decrease in agricultural production as well as in other economic sectors.

When areas within the state of Minnesota reach "extreme" to "exceptional" drought and dryness category different financial aid may start to kick in for those applicable.

## Estimated Amounts of Drought in Benton County



56,554 acres of corn in drought



54,340 acres of soybeans in drought



17,195 acres of hay in drought



25,398 hogs in drought



14,417 cattle in drought

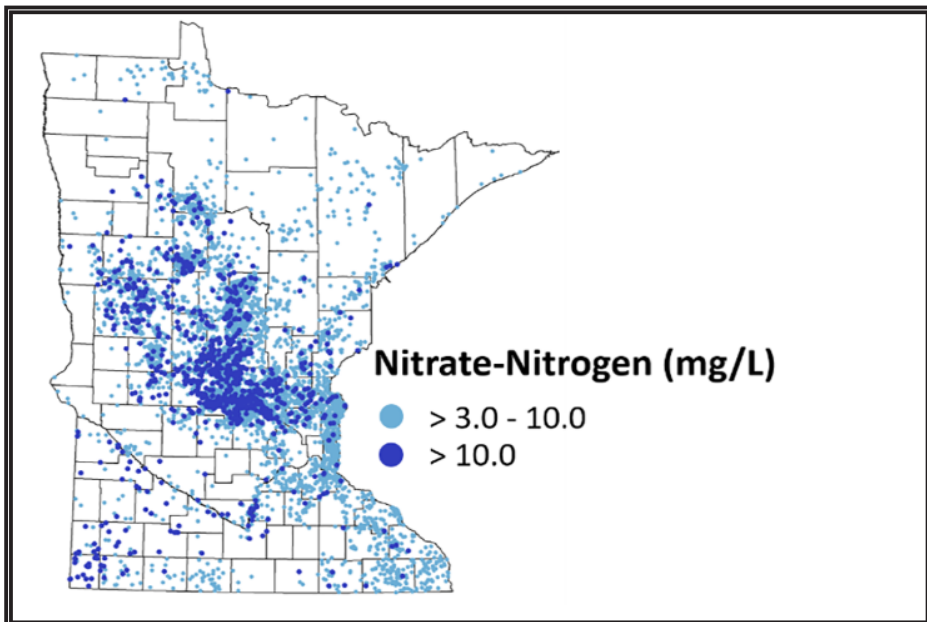
\*All estimates are as of 06/27/2023 from <https://www.drought.gov/state/s/Minnesota/county/Benton>



# Importance of Nitrate Testing

## Health Risks

Nitrates can affect how blood carries oxygen, nitrates can turn hemoglobin (the protein in our blood that carries oxygen) into methemoglobin. Methemoglobin does not bind to oxygen and cannot deliver oxygen to the tissues as a result. Blue baby syndrome is caused by nitrates in drinking water given to bottle-fed babies under six months old. There has also been nitrate/nitrite exposure associations to increased heart rate, nausea, headaches, abdominal cramps, and an increased risk of certain cancers.



Most concentrations above 3 mg/L are in central and southeastern Minnesota. Concentrations above 10 mg/l are mainly in central and southwestern Minnesota.

-Minnesota Department of Health (2022).

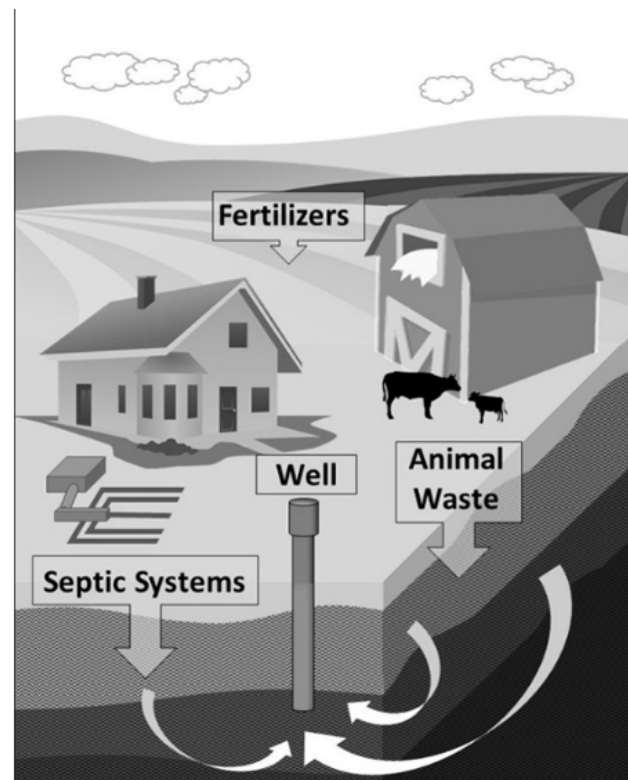
## Nitrate Testing Locations

- Benton Soil & Water Conservation District. Cost: FREE
- Water Laboratories, Inc. (Elk River) Cost
- Traut Water Analysis Lab (St. Joseph)
- A.W. Research Laboratories, Inc. (Brainerd)

\*For certified lab costs, check the website.

## Safe Drinking Water Levels

Drinking water with concentrations of nitrates below 10 milligrams of nitrate per liter of water are considered safe for everyone to drink. The U.S. Environmental Protection Agency (EPA) standard for nitrates in drinking water is 10 mg/L for public waters. There are several different systems that can remove nitrates from private wells such as reverse osmosis, water filters, ion exchange, and distillation.



Nitrates are commonly found in many fertilizers that are used on yards, golf courses and crops. Other nitrate sources include animal waste, septic systems and urban drainage.



# Upcoming Events

- Soil Health Field Day.....August
- Tour of Practices.....September
- Women in Agriculture.....October

\*More details on specific dates to come, check our website event page.

## New round of Soil Health Equipment Grants opening August 1st through the Minnesota Department of Agriculture

\$2.375 million is available as grants for soil health equipment through the Soil Health Financial Assistance Program. The application window is Aug. 1 - Sept. 15, 2023. Awards for these competitive grants range from \$500-\$50,000 (up to 50% cost-share). Individuals, producer groups, and local government units can apply.

The application link and request for proposals will be available **August 1st**. Please contact Jessica Jurcek with questions (651-802-3059 or [jessica.jurcek@state.mn.us](mailto:jessica.jurcek@state.mn.us)).



### CONSERVATION TIP:



Putting a layer of mulch around trees and plants slows down evaporation. Saving 750 to 1,500 gallons of water a month.



*Ranunculus sepentrionalis*