

DUBUQUE COUNTY BOARD OF HEALTH

DATE: Wednesday, June 2, 2021
TIME: 6:00 p.m.
PLACE: Dubuque County Health Department Board Room

**1225 Seippel Rd.
Dubuque, IA 52002**

(Due to the current COVID-19 situation Board Members and public should attend through ZOOM – link is included at the bottom of this agenda)

Agenda

1. Roll Call
2. PUBLIC COMMENTS –

At this time, anyone may address the Board on matters of which are on the agenda. Please raise your hand on ZOOM, state your name and home address. Individual remarks are limited to three minutes.

3. Approval of Agenda
4. Approval of Minutes
 - a. May 5, 2021 Meeting
5. Board Resignations
6. COVID-19 Update
7. Water Testing – Adam Hoffmann / Collin Dolphin
8. Role of Board of Health – Becky Nowachek (IDPH)
9. Future Meeting Schedule & Format
10. Next Meeting – Jun. 16, 2021
11. Public Comment

At this time, anyone may address the Board on matters which are not agenda items. Please raise your hand on ZOOM, state your name and home address. Please be aware that the Board is limited in their ability to respond to such inquiries and Iowa Code prohibits the Board from deliberating or acting on items not appearing on the agenda. Individual remarks are limited to three minutes.

12. Adjournment

ZOOM Meeting Information.

<https://zoom.us/j/9090167418?pwd=NIhpSndvL2p3emRxZ3N0NFNYMk54QT09>

Meeting ID: 909 016 7418

Passcode: 011350

***Dubuque County Board of Health Meeting
Minutes of May 5, 2021***

Mr. Bechen called the May 5, 2021 Dubuque County Board of Health Meeting to order at 6:00p.m.

Roll Call:

Members Present:	Tom Bechen, Diane Pape-Freiberger, Katie Jones, Adam Hoffman, Hendrik Schultz, Amy Crow Sunleaf
Members Absent:	Suzanne Stroud, Dr. Bobby Koneru, Corey Young
Others Present:	Patrice Lambert, Dubuque County Health Department; Samantha Kloft, Dubuque County Health Department; Stacey Killian, VNA; Ben Fischer; TH Ed Raber, Interim Board Executive Director; Ann McDonough, Chair to Dubuque County Supervisors; Harley Potthoff, Dubuque County Supervisor; Wayne Kenniker; Michaela Freiburger; Becky Nowachek, IDPH; Sarah Goodall; Nichole Weber

Additional Notes:

1. Roll Call

2. Public Comments

Ann McDonough – Makes it aware that a work session with the BOH & BOS has not yet occurred on the Food Policy Council contract due to scheduling conflicts. This is on the Agenda for tonight as an action item. She also urges that brain health concerns following the COVID-19 pandemic be discussed by the BOH.

3. Approval of Agenda

Diane Pape-Freiberger made the motion to approve the Agenda for May 5, 2021. Hendrik Schultz seconded the motion. 6 Aye, motion carried.

4. Approval of Minutes

Hendrik Schultz made the motion to approve the Minutes for April 21, 2021. Katie Jones seconded the motion. 6 Aye, motion carried.

5. COVID-19 Update

Samantha Kloft shares her screen to display a presentation led by Patrice Lambert. Patrice gives the BOH a brief update on COVID-19 vaccinations in Dubuque County and touches on work being done to continue promoting the vaccine throughout the County.

She also adds that this week, the IMT will most likely not accept a full vaccine allocation for next week. This is due to a decrease in vaccine demand in the County.

Diane Pape-Freiburger adds that her and Katie Jones will be at the Farmer's Market this Saturday to assist with vaccine administration and answer questions from the public.

Katie Jones congratulates and thanks the IMT for their har work. Dubuque County is ahead of the curve will all vaccinations compared to other counties in the area. Diane adds a thank you for the CodeRED and additional messaging throughout the county.

6. Food Policy Council Presentation / Discussion

Michaela Freiburger leads a presentation on the Food Policy Council and their work in Dubuque County. The purpose of this was to introduce new BOH members to the Food Policy Council and the presentation was provided in advance through the Agenda Packet.

7. Food Policy Council Contracted Service

Tom Bechen starts the discussion by reminding the BOH that this was tabled at the last meeting because there was concern over how the BOH could approve this contract without having a connection or more involvement with the Food Policy Council. Since then, Patrice Lambert and Samantha Kloft have offered to attend Council meetings and there is now a direct link between the two groups.

Amy Crow Sunleaf adds that food is one of the most important in Maslow's Heritage of Needs and she is in favor of approving this with the Food Policy Council. Hendrik Schultz agrees.

Hendrik Schultz made the motion to approve the contract of service for Limestone Bluffs RCND. Amy Crow Sunleaf seconded the motion. 6 Aye, motion carried.

This contract will now be passed on to the BOS.

8. Board of Supervisor / Board of Health Liaison Comments

Supervisor Ann McDonough appreciates the BOH vote on the Food Policy Council. She also shares that American Rescue Plan is funding \$18.8 million to Dubuque County for big projects related to the aftermath of COVID-19. She urges for more discussion on this and mentions that Patrice has started participating in conversation with county finance o the use of these dollars.

9. County Health Needs Assessment – Health Improvement Plan Schedule

Becky Nowachek from IDPH explains that CHNA/HIP report submission has been extended until Fall 2023. This decision was made by IDPH due to the COVID-19 pandemic taking priority in health departments across Iowa. More information, guidance, and training will be provided moving closer to 2023.

10. Next Meeting – May 19, 2021

The mask mandate resolution will be discussed at this meeting. Tom suggests this is the only item on the Agenda.

Ann McDonough asks if contact has been made with the County Attorney to address how to remove a mask mandate resolution or move forward, depending on the BOH decision.

11. Public Comment

Sarah Goodall – Urges the BOH to educate more people on the effects of the COVID-19 vaccine and masking.

Nichole Weber – Agrees with the comments of Sarah and adds that the BOH seems unqualified to discuss things such as vaccines and the mask mandate, especially in terms of mental health. Amy Crow Sunleaf responds with her personal qualifications as a BOH member.

12. Adjournment

Diane Pape-Freiburger made the motion to adjourn at 6:52pm. Hendrik Schultz seconded the motion. 6 Aye, motion carried.



Dubuque County Water Quality Monitoring

Ronald W. Tigges

Dubuque County Board of Health Meeting

6/2/21

Adam Hoffman, PhD

A Bit About Me





Journal of Environmental Quality
July-August 2019 Vol. 48 • No. 4 • JEQAA 48(4)787–1126(2019)

Table 1. Distribution of total P annual yield by event type.

Site	Rain	%	
		Mixed	Snowmelt
S2	52	30	18
S3	47	34	19
S4	68	11	21
S5	46	13	41
S8	40	32	28
Average	51	24	25

Journal of Environmental Quality

SPECIAL SECTION

AGRICULTURAL WATER QUALITY IN COLD ENVIRONMENTS

Long-term Variation in Agricultural Edge-of-Field Phosphorus Transport during Snowmelt, Rain, and Mixed Runoff Events

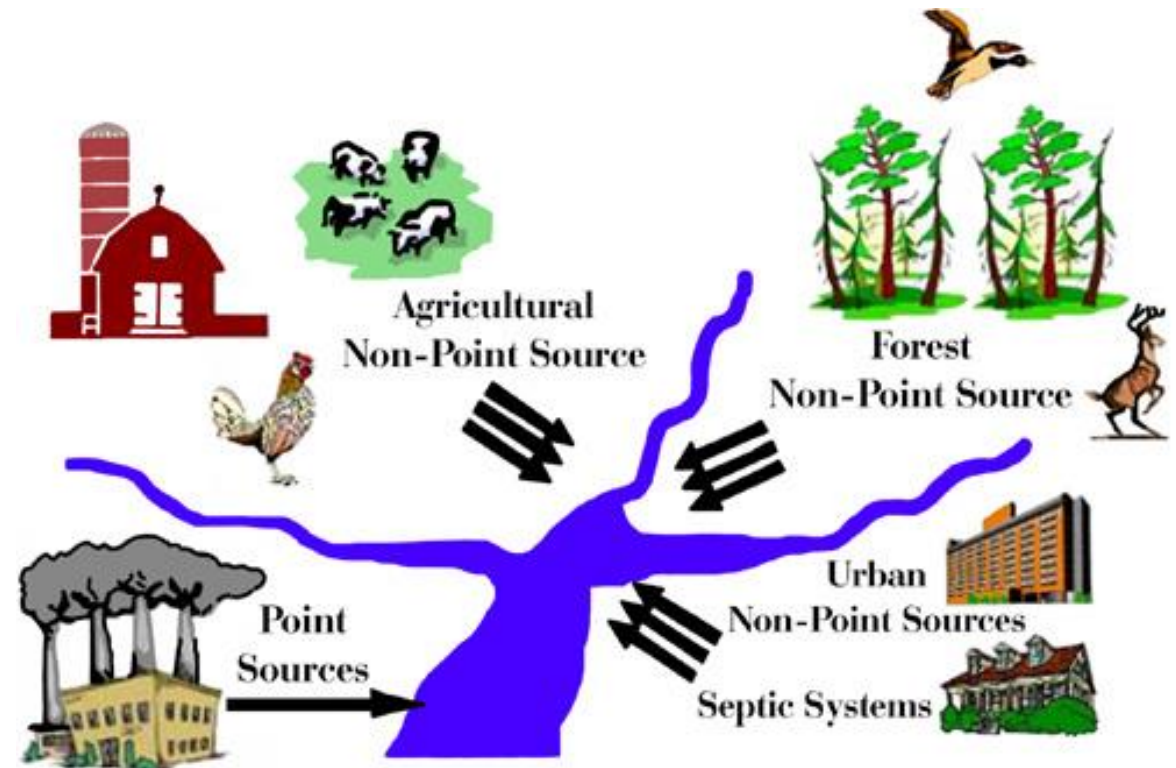
A. R. Hoffman,* A. S. Polebitski, M. R. Penn, and D. L. Busch

Water and Public Health

- Human Health
 - Physical
 - Mental
- Quality of Life
 - Recreation
 - Value
- Rules & Regulations
 - Clean Water Act (1972)
 - Safe Drinking Water Act (1974)
 - Lead and Copper Rule (1991)

Potential Pollutants

- Chemical contaminants
- Biological contaminants
- Radiological contaminants



Nutrient Pollution

- Limiting nutrient - the nutrient in shortest supply, in most fresh waters even a slight increase in phosphorus often causes a whole chain of undesirable events in a stream including accelerated plant growth, algae blooms, low dissolved oxygen.

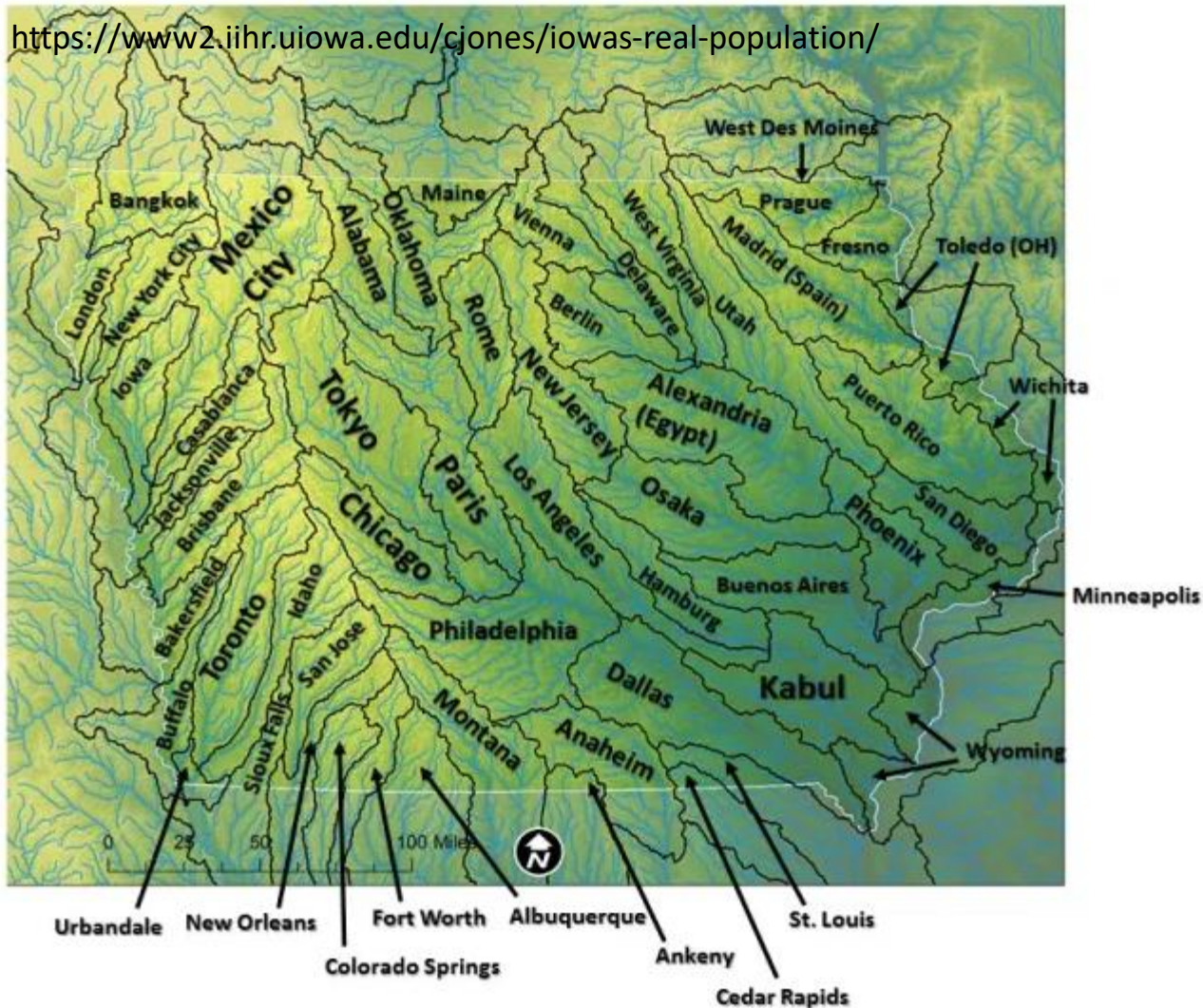


Nutrient pollution is one of America's most widespread, costly and challenging environmental problems.

What Can We Do?

- Stay Informed
 - <https://www2.iuhr.uiowa.edu/cjones/scientific-insights-into-improving-water-quality-in-iowa/>
 - <https://tracking.idph.iowa.gov/Environment/Private-Well-Water>
 - <https://tracking.idph.iowa.gov/Environment/Public-Drinking-Water>
- Continue to Gather Data
- Get Involved

Iowa's Unique Challenges



Iowa's Population

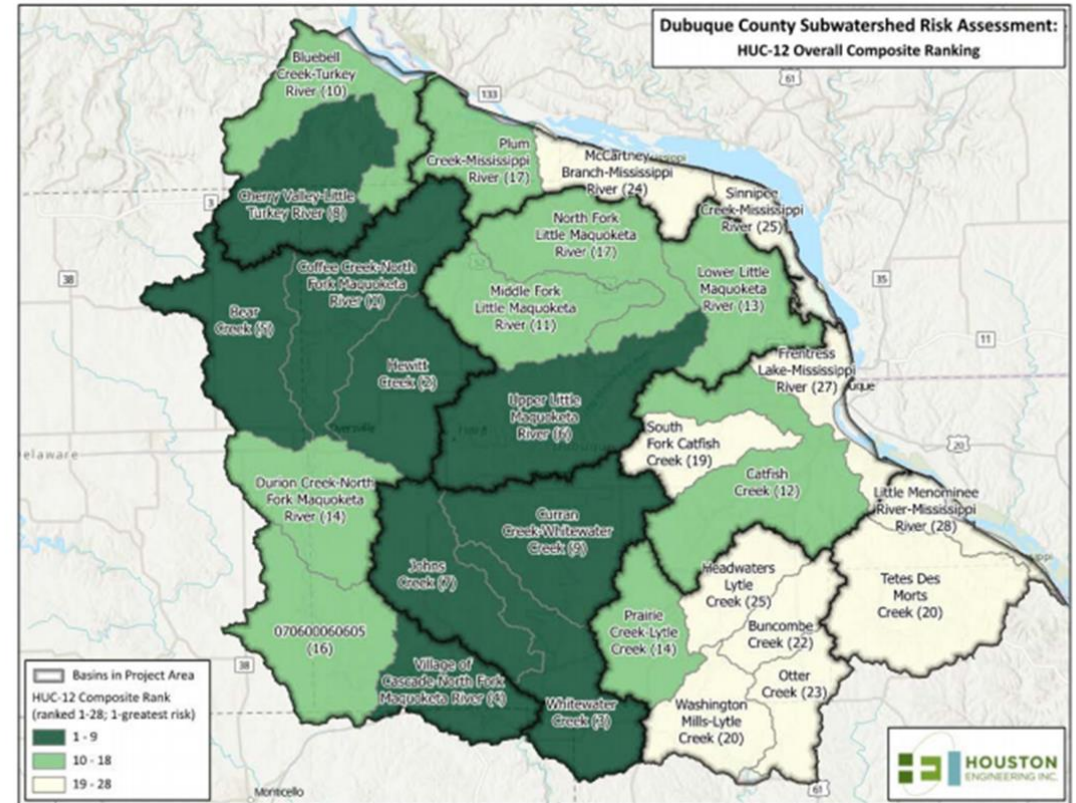
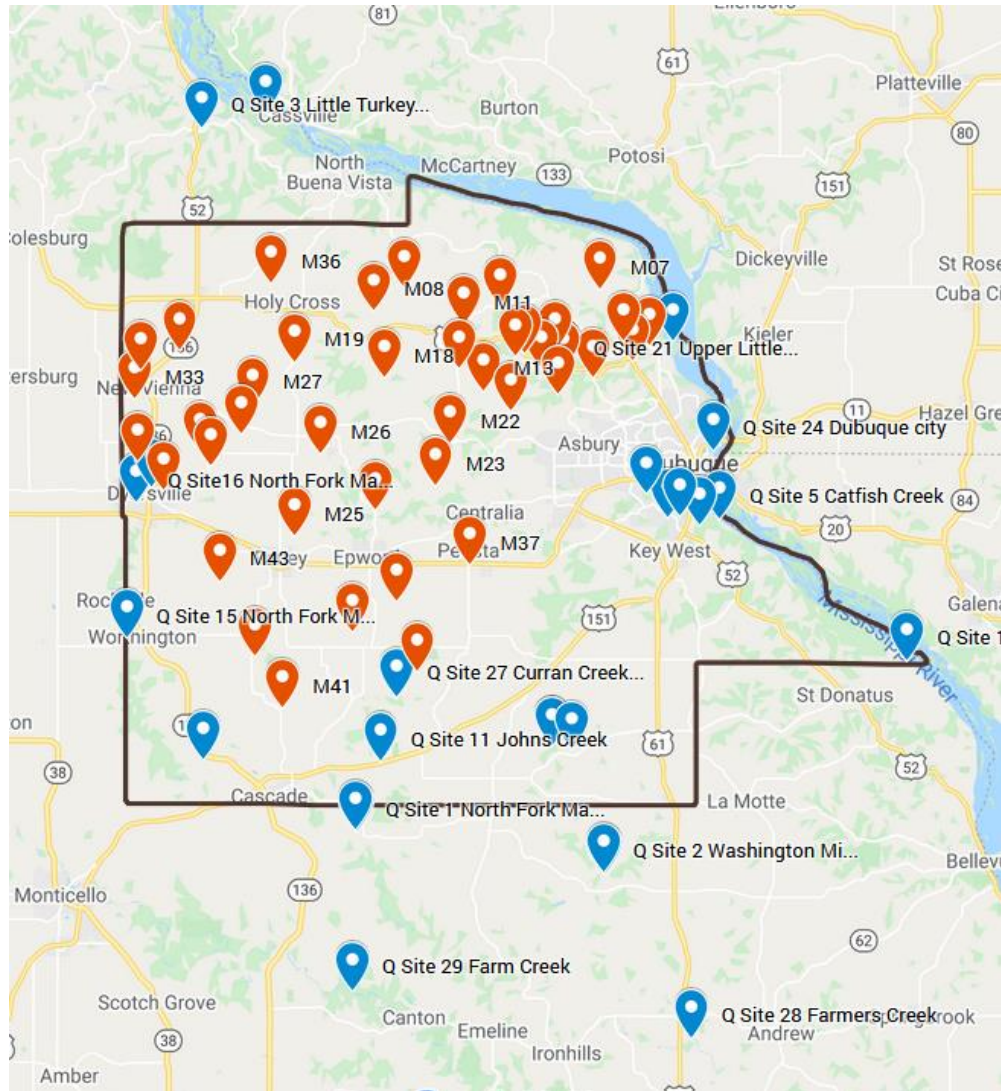
- 3 million people
- 20-24 million hogs
- 250,000 dairy cattle
- 1.8 million beef cattle
- 80 million laying chickens
- 4.7 million turkeys

Current and Future Monitoring Work

- Continued HUC-12 outflow quarterly sampling
- Special Event and snapshot monitoring.
- Targeted BMP and intensive watershed sampling
- Projects
 - County Wide Sampling
 - Microplastics
 - Bee Branch Creek Restoration Sampling
 - Dubuque County Well Water Study – U of Iowa --
Center for Health Effects of Environmental Contamination

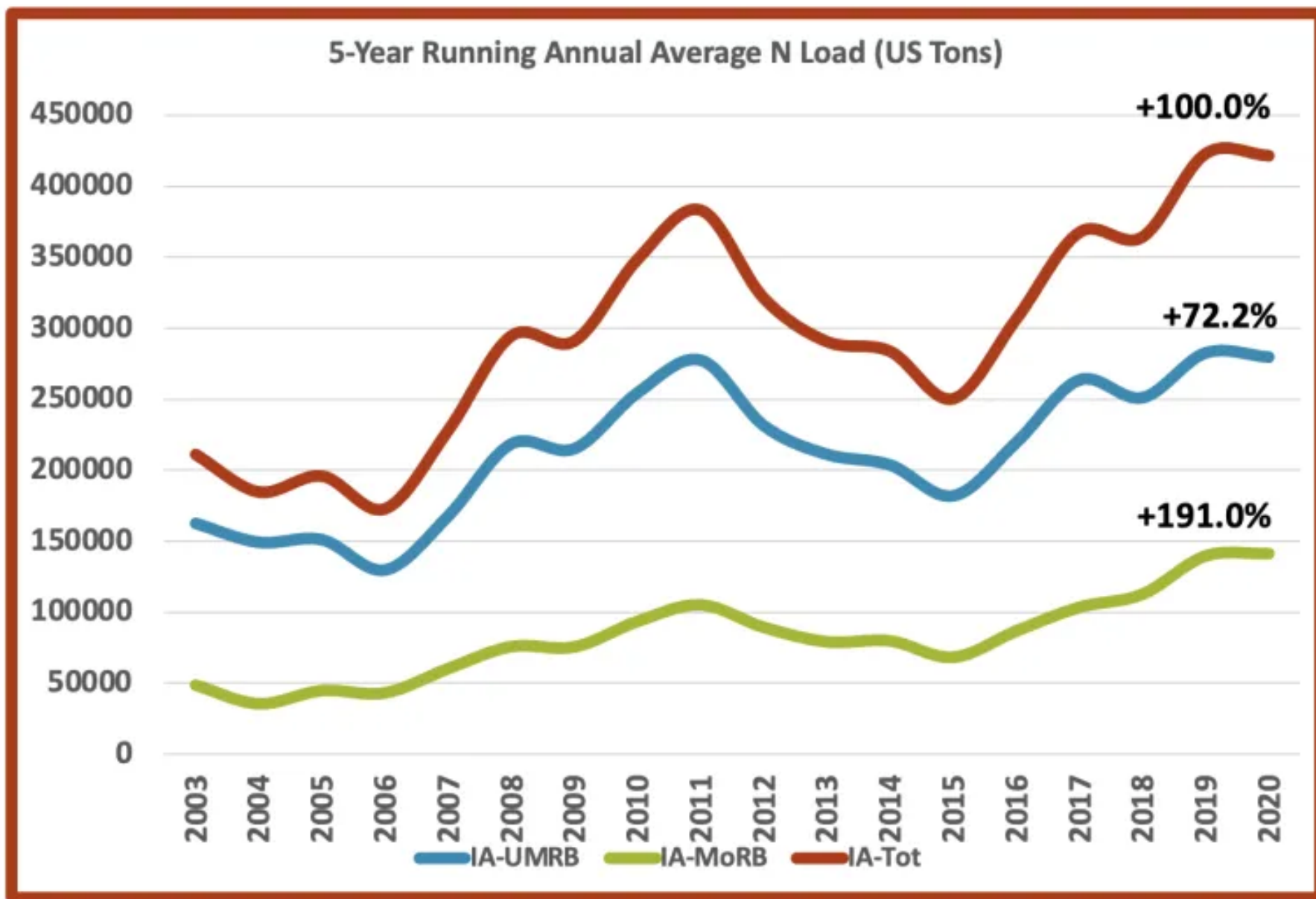


Sampling Sites, Frequency, & Parameters



Nitrogen – Ammonium, Nitrite, and Nitrate

- There are three forms of nitrogen that can impact aquatic life – ammonium (NH_4^+), nitrite (NO_2^-), and nitrate (NO_3^-).
- When ammonium, nitrite, or nitrate is present in water at high enough levels, it is difficult for aquatic organisms to sufficiently excrete the toxicant, leading to toxic buildup in internal tissues and blood, and potentially death. Excess nitrates can cause hypoxia (low levels of dissolved oxygen) and can become toxic to warm-blooded animals at higher concentrations (10 mg/L or higher) under certain conditions. The natural level of nitrate in surface water is typically low (less than 1 mg/L), and to avoid nutrient pollution, the EPA's suggestion is to it stay below this threshold. Drinking water maximum contaminant level (MCL) for nitrate is 10 mg/L.



<https://www2.ihr.uiowa.edu/cjones/manure-matters-ia-2020-nitrate-summary/>

A Bit About The Sampling & Data – Students!

UD students testing water quality throughout Dubuque County

BY ALLIE HINGA allie.hinga@thmedia.com Jul 27, 2019



University of Dubuque students Levi Buchholtz (far left) and Isaiah Williams and professor Adam Hoffman (second from right) talk with Iowa Rep. Chuck Isenhart, D-Dubuque, after conducting water testing at Catfish Creek at Mines of Spain State Recreation Area in Dubuque on Friday.

Buy Now



University of Dubuque student Isaiah Williams and professor Adam Hoffman talk Friday morning while conducting water testing in Dubuque County.

Allie Hinga

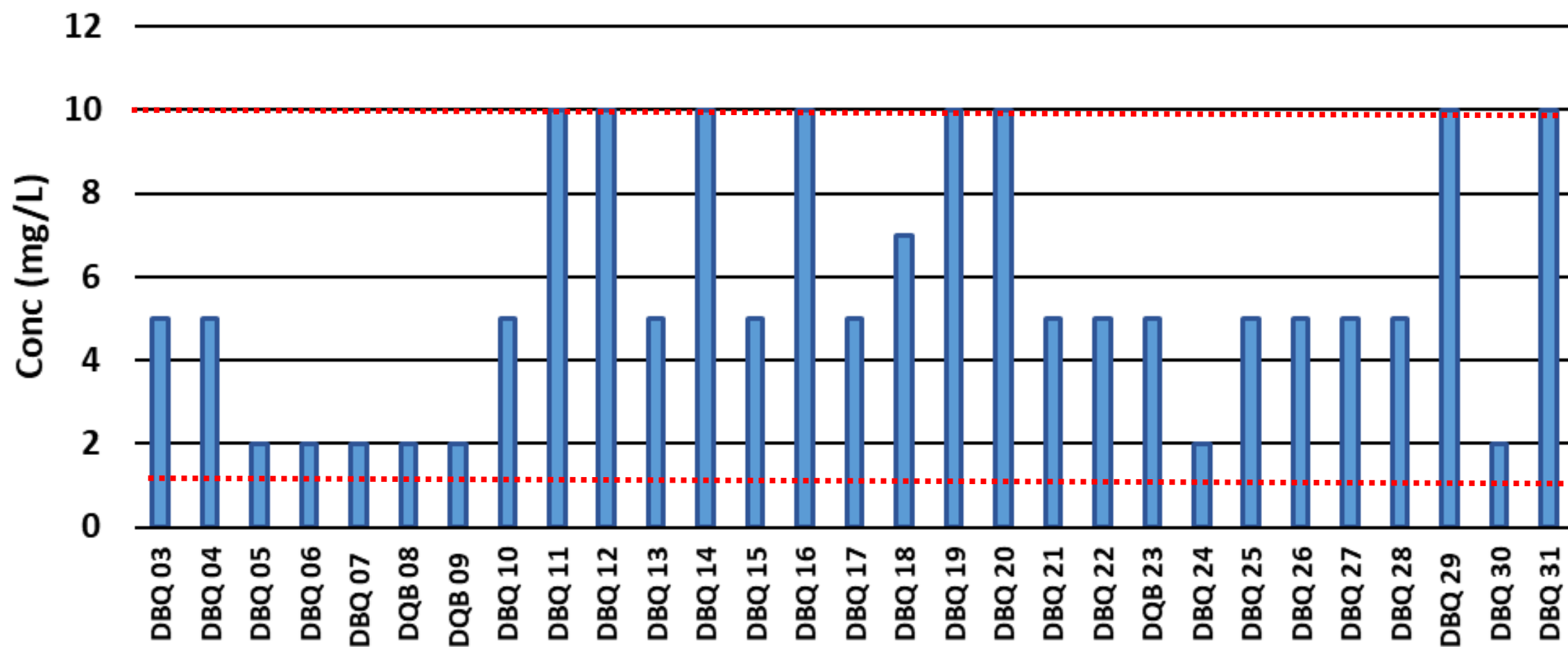


Dubuque students study river creatures, plastic pollution

BY ALLIE HINGA December 23, 2018



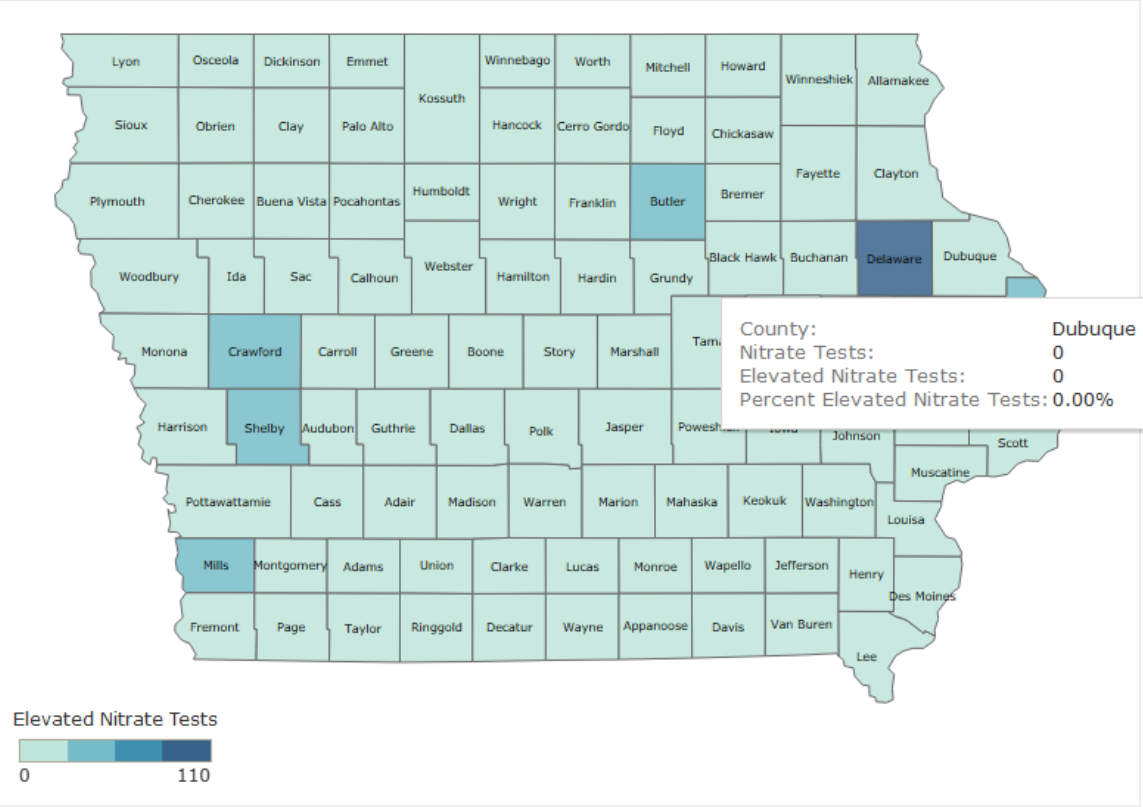
Maximum HUC-12 Outlet Nitrate Concentrations - Baseflow



Private Well Water Data

Nitrate Testing in Private Water Wells - 2018

Hover over a County to see the County Name and values for that County.
Clicking on a County will show the values for that County in the lower right.



State of Iowa Measures - 2018

Nitrate Tests	6,478
Elevated Nitrate Tests	761
Percent Elevated Nitrate Tests	11.75%

All County - 2018

Nitrate Tests	6,478
Elevated Nitrate Tests	761
Percent Elevated Nitrate Tests	11.75%



Iowa Public Health Tracking Portal

[Home](#) [Health](#) [People & Community](#) [Environment](#) [Reports](#) [Help](#) [Contact Us](#)

Environment > Private Well Water

> Private Well Water And Health

About Private Well Data

Private Well Services

Arsenic Testing Data

Total Coliform Bacteria Testing Data

Fecal Coliform Bacteria Testing Data

Nitrate Testing Data

Private Well Water

Private water wells supply drinking water to households across Iowa that are not served by [Public Water Systems](#). Unlike Public Water Systems that must follow federal regulations; regulatory oversight of private water wells is provided by the [Iowa Department of Natural Resources Private Well program](#).

The Tracking Network has data and information about the levels of multiple contaminants that can be an indicator that a private water well is not safe to use. These contaminants were selected for the Tracking Network because they are supported through the [Grants to Counties program](#).

More on Private Well Water

- Read about the health impacts of private well water contaminants
- Learn how these data are collected and how they are being used

Data

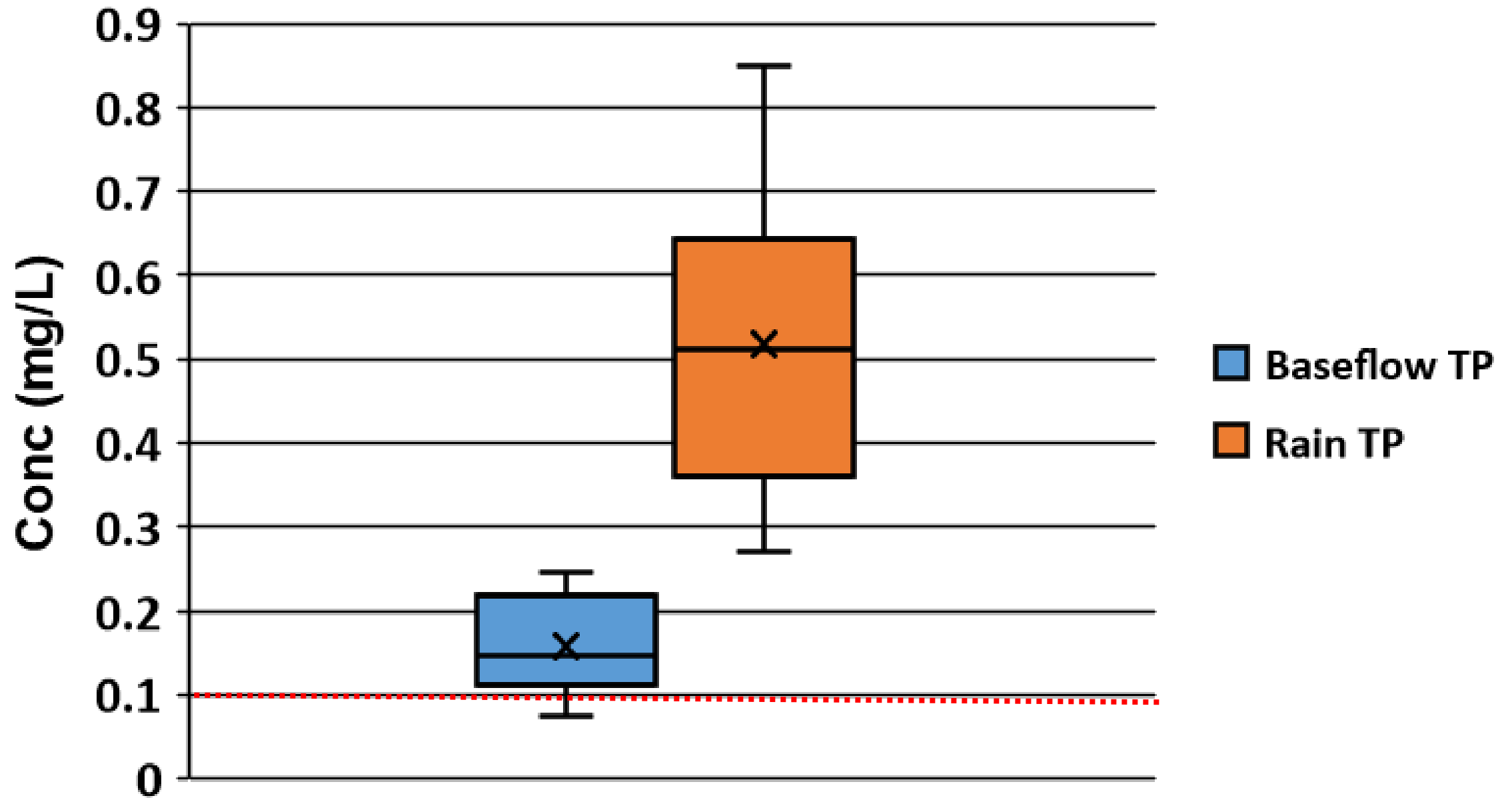
- Well Services
- Arsenic Testing Results in Private Well Water
- Total Coliform Bacteria Testing Results in Private Well Water
- Fecal Coliform Bacteria Testing Results in Private Well Water
- Nitrate Testing Results in Private Well Water

Other Resources

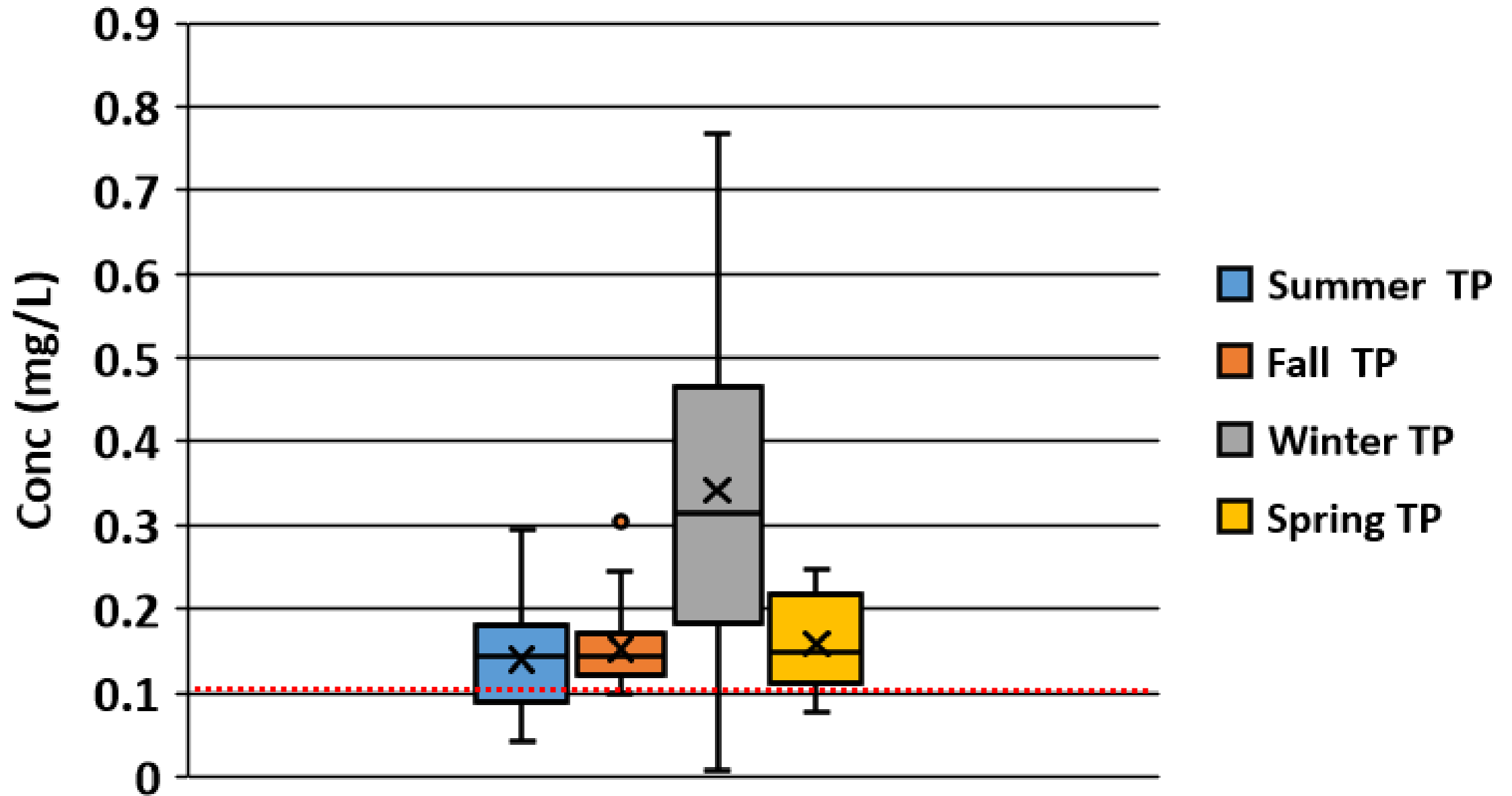
- Iowa DNR Private Well Program
- IDPH Grants to Counties Program
- Public Drinking Water
- State Hygienic Laboratory Private Well Program
- Iowa Well Forecasting System

Each year in Iowa, only 5 to 7% of the 75,000 active wells are tested for harmful contaminants.

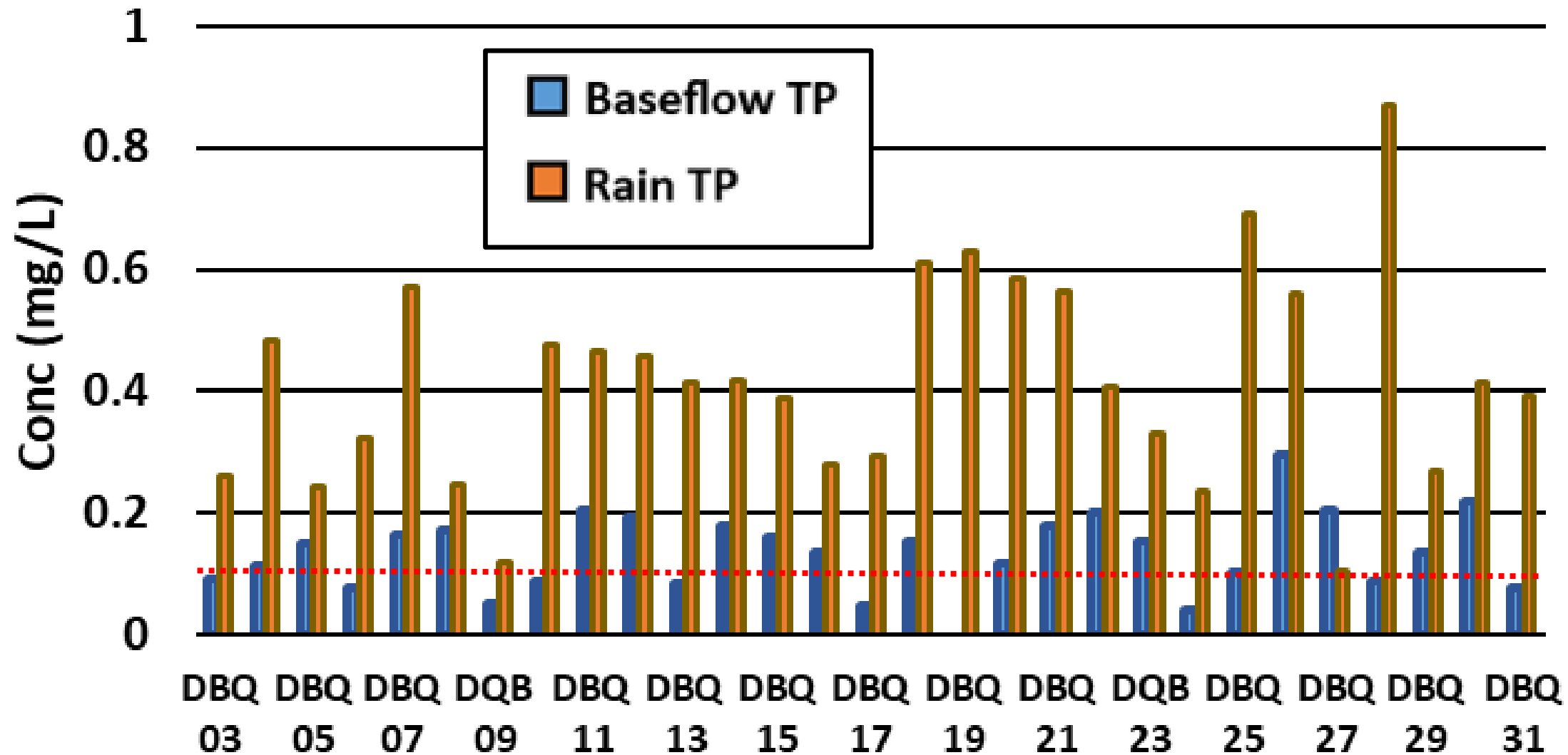
HUC-12 Outlet TP Spring Rain Variation



HUC-12 Outlet TP Concentrations - Baseflow



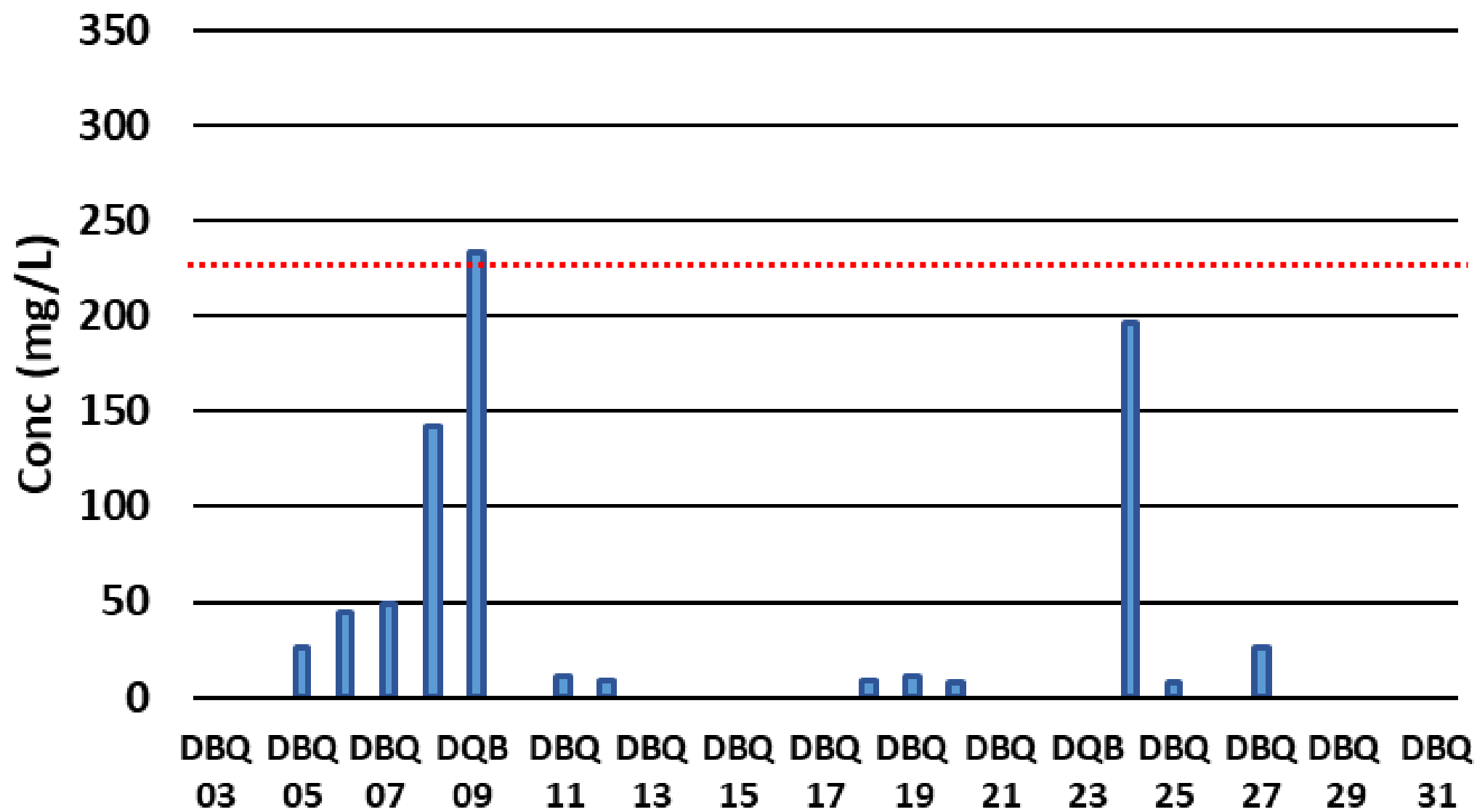
Average HUC-12 Outlet TP Concentrations - Summer Rain & Baseflow



Chlorides

- Progressively becoming a major problem in many aquatic systems and excess chlorides can impact water taste and aquatic life. High amounts of chlorides impact the ability of freshwater organisms to osmotically regulate their cells and can be fatally impacted by high amounts of chlorides.
- The major anthropogenic sources of chloride in surface waters are deicing salt, urban and agricultural runoff, and discharges from municipal wastewater plants, industrial plants, and the drilling of oil and gas wells.
- The EPA's national recommended water quality criteria for chloride concentrations is 860 mg/L for acute effects and 230 mg/L for chronic effects. No samples rose above the mark for acute impacts; however a few samples rose above the chronic effect mark.

Average HUC-12 Outlet Chloride Concentrations



Public Drinking Water Data



Iowa Public Health Tracking Portal

Home Health People & Community **Environment** Reports Help Contact Us

Environment > Public Drinking Water

> Public Water And Health

About Public Drinking Water Data

Public Water Use Data

Arsenic Testing Data

DEHP Testing Data

HAA5 Testing Data

Nitrate Testing Data

Radium Testing Data

PCE Testing Data

TCE Testing Data

TTHM Testing Data

Uranium Testing Data

Public Drinking Water

The majority of Americans are provided high-quality drinking water. About 90% of people in the United States get their water from a [Public Water System](#). The U.S. Environmental Protection Agency (EPA) sets regulations for treating and monitoring drinking water delivered by public water systems. Drinking water protection programs at the state and national levels play a critical role in ensuring high-quality drinking water and in protecting the public's health.

The Tracking Network has data and information about the levels of several contaminants that can be found in drinking water. These contaminants were selected for the Tracking Network because they occur more frequently in drinking water at levels that may be of public health significance.



More on Public Drinking Water

- Read about the health impacts of public drinking water contaminants
- Learn how these data are collected and how they are being used

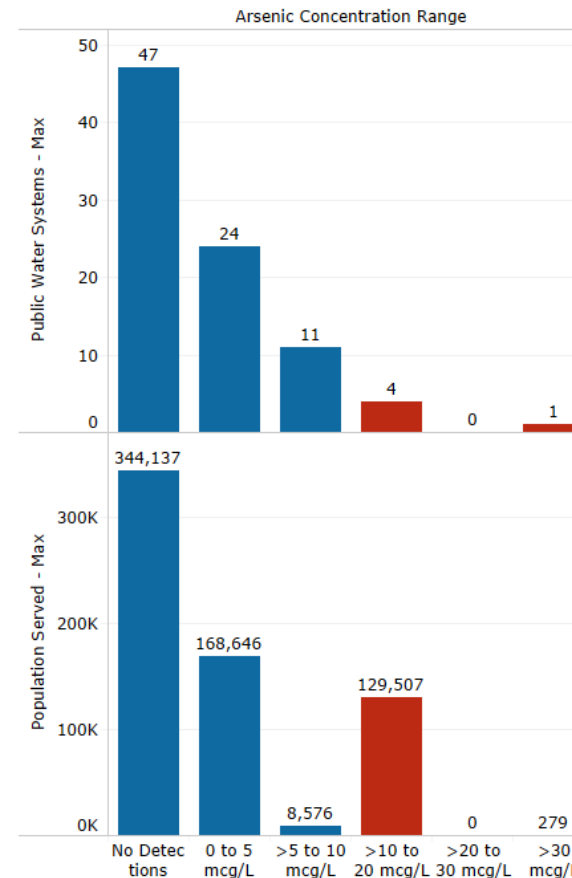
Data

- Arsenic Testing Results in Public Water
- DEHP Testing Results in Public Water
- Haloacetic Acid Testing Results in Public Water
- Nitrate Testing Results in Public Water
- Radium Testing Results in Public Water
- PCE Testing Results in Public Water
- TCE Testing Results in Public Water
- Trihalomethane Testing Results in Public Water
- Uranium Testing Results in Public Water

Other Resources

- Iowa Dept of Natural Resources - Drinking Water Compliance
- Community Water on the National Tracking Portal
- Private Well Water
- Healthy Drinking Water

Statewide Maximum Arsenic Concentration 2020



Statewide Maximum Arsenic Concentration 2020

Arsenic Concentration Range	Public Water Systems - Max	Population Served - Max
No Detections	47	344,137
0 to 5 mcg/L	24	168,646
>5 to 10 mcg/L	11	8,576
>10 to 20 mcg/L	4	129,507
>20 to 30 mcg/L	0	0
>30 mcg/L	1	279

Maximum Concentration Level (MCL)

Below the MCL
Above the MCL

The 'No Detections' category shows the Public Water Systems that had no detectable level of Arsenic for all samples taken during the year shown.

The Maximum Contaminant Level (MCL) for Arsenic is 10 micrograms per liter (mcg/L) and the three highest concentration ranges show Public Water Systems that exceeded the MCL in the year shown.

<https://tracking.idph.iowa.gov/Environment/Public-Drinking-Water/Arsenic-Testing-Data>

Items to Think About



- Wastewater epidemiology
- County Water Quality Initiatives
- Equitable Access to Water Recreation Areas
- Wells and Septic Systems

Wells and Septic Systems



IOWA

Search this site

Search

CHEEC

Center for Health Effects of
Environmental Contamination

HOME

ABOUT

DATA

RESEARCH

OPPORTUNITIES

OUTREACH

CONTACT

Dedicated to supporting and conducting research to identify, measure
and prevent adverse health outcomes related to exposure to
environmental toxins.



CHEEC is a multidisciplinary environmental health research center comprised of faculty and researchers located in the University of Iowa Colleges of Public Health, Engineering, and Liberal Arts and Sciences, and State Hygienic Laboratory.

ABOUT US

Thank You For Your Past and Continued Support!

- **Eric Schmechel**, DS&WCD – all aspects of this work.
- **Paul Berland**, Northeast Iowa RC&D and coordinator of the Upper Iowa River watershed monitoring project – They've been monitoring for past 19 years at 30 sites.
- **Ross Evelsizer**, Turkey River Watershed – monitoring 49 sites since 2011, including some of the same parameters as us.
- **Robb Davis**, Houston Engineering – Mapping and site selection.
- **Mike Steuck**, Iowa DNR Fisheries – Northeast Iowa Fisheries Supervisor.
- **Lynette Siegely**, Iowa DNR – conducts monitoring of fish and aquatic insects at stream sites across Iowa from July through October and gather chemical data collected as well.
- **Angela Auel**, Upper Wapsipinicon River Watershed Coordinator – Water quality monitoring occurring in this the UWRW.
- **Representative Chuck Isenhardt**, legislative support.
- **City of Dubuque**, collaborators with engineering and WR&RC.
- **Watershed Board**, passion for watersheds.
- **Dubuque County Board of Supervisors and Dubuque County Citizens** – Monetary and moral support.
- **Dubuque County Board of Health** - your time and attention.