

**HASTINGS UTILITY BOARD  
AGENDA**

**Airport Conference Room - Hastings Municipal Airport  
3300 W. 12th Street  
May 8, 2025  
9:00 AM**

**ROLL CALL:**

**PLEDGE OF ALLEGIANCE:**

**MOTION TO ADOPT CURRENT AGENDA FOR May 8, 2025 REGULAR MEETING.**

**PUBLIC NOTICE** - Official Notice of the Regular Meeting was published in the Hastings Tribune on Tuesday, May 6, 2025. Pursuant to Nebraska Revised Statute Section 84-1412, the public is advised that a copy of today's agenda and all reproducible written material which will be discussed at today's meeting is located at the back of the Conference Room. Also, a current copy of the Nebraska Open Meetings Act is posted on the south wall of the Airport Conference Room, which is accessible to members of the public.

**MANAGER'S COMMUNICATIONS:**

**BOARD CHAIRMAN'S COMMUNICATIONS:**

**BOARD MEMBERS' COMMUNICATIONS:**

**CITIZEN COMMUNICATIONS:**

**CONSENT AGENDA:**

1. All Consent Items.
  - (a) Approval of the minutes of the Hastings Utility Board Meeting of April 10, 2025.

**REGULAR AGENDA:**

2. Unfinished Business of Preceding Meeting.
3. General Business.
  - (a) Finance
    - i. Budget Process
    - ii. Monthly Financial Comments
  - (b) Production

- i. PPGA Update - Aux Boiler Project
  - (c) Operations
    - i. Water Discussion - ASR/Nitrates
    - ii. Highway 6 Project and Impact to Utilities
  - (d) Administration
    - i. Posting Elimination Update
  - (e) Other
    - i. Utility Board Meeting Date Change for June and July.
4. Possible Closed Session (if necessary or requested).

**ADJOURN:**

The Hastings Utility Board reserves the right to enter into an executive session at any time during the meeting, in accordance with the Nebraska Open Meetings Act, even though the closed session may not be indicated on the agenda. It is the intention of the Hastings Utility Board to take up the items on the agenda in sequential order. However, the Hastings Utilities Board reserves the right to take up matters in a different order to accommodate the schedule of the Utility Board Members, persons having items on the agenda, and the public.

CITY OF HASTINGS, NEBRASKA  
MINUTES OF UTILITY BOARD REGULAR MEETING  
Thursday, April 10, 2025

Pursuant to due call and notice thereof, a Regular Meeting of the Utility Board of Hastings, Nebraska was conducted Airport Conference Room - Hastings Municipal Airport 3300 W. 12th Street, on April 10, 2025.

**ROLL CALL:**

The meeting was called to order at 9:00 a.m. in Regular Session by Bill Hitesman with the following members present: Jeanette Dewalt, Mark Hemje. Derek Zeisler, Erik Nielsen, Kirk Layton, Steve Huntley, Shane Stone, Larry Consbruck, Noel Nienhueser, Karl Block, Jaci Higgins, Kyle Patten, Jason Redding, Lee Vrooman, Lori Hartman, Brandan Lubken, Jay Beckby, Mark Funkey, Jesse Oswald, Tony Herrman. Absent: Susan Meeske, Scott Kvols

**PLEDGE OF ALLEGIANCE:**

Bill Hitesman led the group in the recital of the Pledge of Allegiance to the United States of America.

**MOTION TO ADOPT CURRENT AGENDA FOR April 10, 2025 REGULAR MEETING.**

Moved by Dewalt and seconded by Hemje to adopt the current agenda for the April 10, 2025 Regular Meeting. Roll Call: Ayes: Hitesman, Dewalt, Hemje. Nays: None. Absent: Meeske, Kvols. The motion carried.

**PUBLIC NOTICE** - Official Notice of the Regular Meeting was published in the Hastings Tribune on Tuesday, April 8, 2025. Pursuant to Nebraska Revised Statute Section 84-1412, the public is advised that a copy of today's agenda and all reproducible written material which will be discussed at today's meeting is located at the back of the Conference Room. Also, a current copy of the Nebraska Open Meetings Act is posted on the south wall of the Airport Conference Room, which is accessible to members of the public.

**MANAGER'S COMMUNICATIONS:**

We are starting the process of getting the budget documentation put together. Appreciate the members of City Council that stopped by the sub-committee so we could go over how our budget process takes place.

Asked Brandan to say a few words because we have a few retirements coming up that we believe need acknowledgment.

Brandan talks about the two men who are retiring from the gas department. They have 84 years combined knowledge. May 2nd, Bob Helton will be retiring. Has been here for 39 years. April 17th, Ed Fleharty will be retiring after 45 years. We have learned so much from them. There is always good and bad with people retiring. We appreciate all of their hard work and dedication. We wish them the best.

**BOARD CHAIRMAN'S COMMUNICATIONS:**

Bill would like them to know that we appreciate the years of service that they have given to the Hastings Utilities. We also appreciate Mark and Derek putting a committee together to review the budget and take a look at and educate most of us.

**BOARD MEMBERS' COMMUNICATIONS:**

None.

**CITIZEN COMMUNICATIONS:**

None.

**CONSENT AGENDA:**

1. All Consent Items.

- (a) Approval of the minutes of the Hastings Utility Board Meeting of March 13, 2025.

Hemje moved, Dewalt second to approve the minutes from the meeting on March 13, 2025. Roll Call: Ayes: Hitesman, Dewalt, Hemje. Nays: None. Absent: Meeske, Kvols. Approved.

**REGULAR AGENDA:**

2. Unfinished Business of Preceding Meeting.

3. General Business.

- (a) Finance

- i. Monthly Financial Comments

You should still be receiving monthly financial as they get completed by accounting. We will leave this on here in case anyone ever has any questions on the financial documents or any financial in general.

- (b) Production

- i. Coal Contract Extension

There was a redacted version of the copy handed out to Board members and can be discussed further if there are any questions.

We will be asking the recommendation of the board members to approve this to go to city council.

Shane Stone goes over the highlights of the coal contract.

How often do we look at the coal agreement? Historically, it has been about 3–5 years. We always try to get the best deal.

Recommended by Dewalt to approve this to go to City Council. Second by Hemje. Roll Call: Ayes: Hitesman, Dewalt, Hemje. Nays: None. Absent: Meeske, Kvols.

Approved.

(c) Operations

i. March 19th Outage Summary

Noel gives us details about the March 19th Blizzard Event.

- The first storm outage call came in at 2:30 am. The wind was up and it was more like a hailstorm than a blizzard.
- By 5:00 am it was a full-blown blizzard. Everyone was called in.
- Outages peaked shortly after 9:00 am at about 5000 customers on Tunet.
- At 9:30 am amid the storm the first large area was brought back returning 148 customers.
- SCADA, GIS mapping, and Tunet mapping were heavily utilized to determine scale and prioritize areas for restoration efforts.
- Juniata had broken poles on its primary feed down 12th Street and on its back up feed down DLD. DLD was impassable so repairs had begun before noon on the primary feed down 12th Street.
- By 1:30 pm, 2000 customers were without power. Half of Don Henry and the WEC Substation had sustained damage. Feeders from those substations had been rerouted to other feeders.
- Transmission lines had been restored and were holding.
- The water department was working to clear DLD and the gas department was delivering poles and vacuuming holes for replacement poles.
- All crews worked straight through the day. The water department delivered food to crew sites shortly after 5:00 pm.
- The majority of Juniata was restored about 9:00 pm. At that time, a small portion of the crews began being sent home as they would be returning at 6:00 am to take over.
- By 12:15 am on the 20th, just over 100 customers were without power. A small number of those were residential customers that were in between areas of major damage. The others were customers such as irrigation wells and street light services which were a lower priority.
- At 12:15 am a skeleton crew was kept to keep working until 6:00 am to be available for emergencies such as fire calls. Others were sent home to return at 8:00 am.
- The last known residential customer from the initial wave of the storm was restored at 8:00 pm Tuesday the 20th.
- The 20 electrical department employees logged over 400 hours during the Wednesday workday. All employees also worked a minimum of a 12-hour day on Thursday.
- Monday the 24th, a 4-man crew left with 3 bucket trucks and a skid loader to provide Mutual Aid to Fremont. They returned on the 28th.
- Line Crew have replaced over 20 poles since the 19th which were either temporarily braced or noted as heavily damaged, but not completely broken.
- Saturday the 22nd, a 115 KV insulator failed that was damaged in the storm.

- A 115KV failed arrestor jumper was found on Monday the 24th.
- 34.5 KV spacer brackets that were damaged but inaccessible due to snow and mud were replaced on the 27th.
- The system was return to "Normal" on Friday, April 4th when the Don Henry West bus was returned to service.
- Two 13.8 KV breakers failed at Don Henry. They are 1971 breakers scheduled for upgrade in 26-27 budget cycles.
- The 13.8 KV breakers just taken out of service in January during the B Street substation upgrade were utilized.
- Breaker Bus Terminal posts were also taken from the B Street switchgear during the repairs to repair Don Henry feeder 234 which was damaged a few years ago.
- SCADA reported 372 unplanned breaker cycles on the 19th. In each of the last 4 years, it has not been over 100 total.

(d) Administration

i. Elimination of postings/potential late fees.

Karl Block explains the Next Phase of ERP (Utility Billing).

New Features and Changes

- Communication Options: Email, text, automated voice.
- Updated Customer Portal: Schedule payments, see meter data, set self-service alerts.
- Change to budget billing: 12 month spread, no settlement month.

Postings/Late Fees

- No other peer utilities currently use postings
- Improved communication methods to avoid lost/unseen posting
- No need to roll truck to post to address
- Start June 1, 2025
- Will work with Tony to get the word out and ask customers to ensure we have current contact information

(e) Other

4. Possible Closed Session (if necessary or requested).

**ADJOURN:**

Moved by Dewalt seconded by Hemje there being no further business to adjourn at 10:04 am.  
 Roll Call: Ayes: Bill Hitesman, Jeanette Dewalt, Mark Hemje. Nays: None. Absent: Susan Meeske, Scott Kvals. Meeting Adjourned.

APPROVED:

\_\_\_\_\_  
 Board Secretary



- The Public Power Generation Association (PPGA) is an interlocal agency established in 2005 with the sole purpose of constructing and operating Whelan Energy Center Unit 2 (WEC2).
  - Hastings was selected as the site for WEC2 and as the Project Operating Agent.
  - WEC2 is a 220MW coal fired power located approximately 3 miles east of Hastings and connected to WEC1.
  - Operational in 2011, WEC2 created 25 new jobs for Hastings Utilities.
- PPGA participants and entitlement shares:

<u>PARTICIPANT</u>	<u>ENTITLEMENT SHARE</u>	<u>CAPACITY SHARE (MW)</u>
Municipal Energy Agency of Nebraska (MEAN)	36.36%	80
Heartland Energy	36.36%	80
Hastings	15.91%	35
Grand Island	6.82%	15
Nebraska City	4.55%	10



# PPGA

public power generation agency

- PPGA is governed by a Board of Directors made up with members from each participant.
  - Chair: Robert Poehling, CEO MEAN
  - Vice Chair: Russel Olson, CEO Heartland
  - Secretary-Treasurer: Jeff Kohrs, Utilities Manager Nebraska City
  - Board Member: Ryan Schmitz, Utilities Director Grand Island
  - Board Member: Derek Zeisler, Utilities Manager Hastings
  
- PPGA also coordinates project management through the Engineering & Operations (E&O) and Finance Committees.
  - Lee Vrooman represents Hastings in the E&O Committee.
  - Roger Nash serves on the Finance Committee.
  - Shane Stone is the acting Operating Agent for the project.

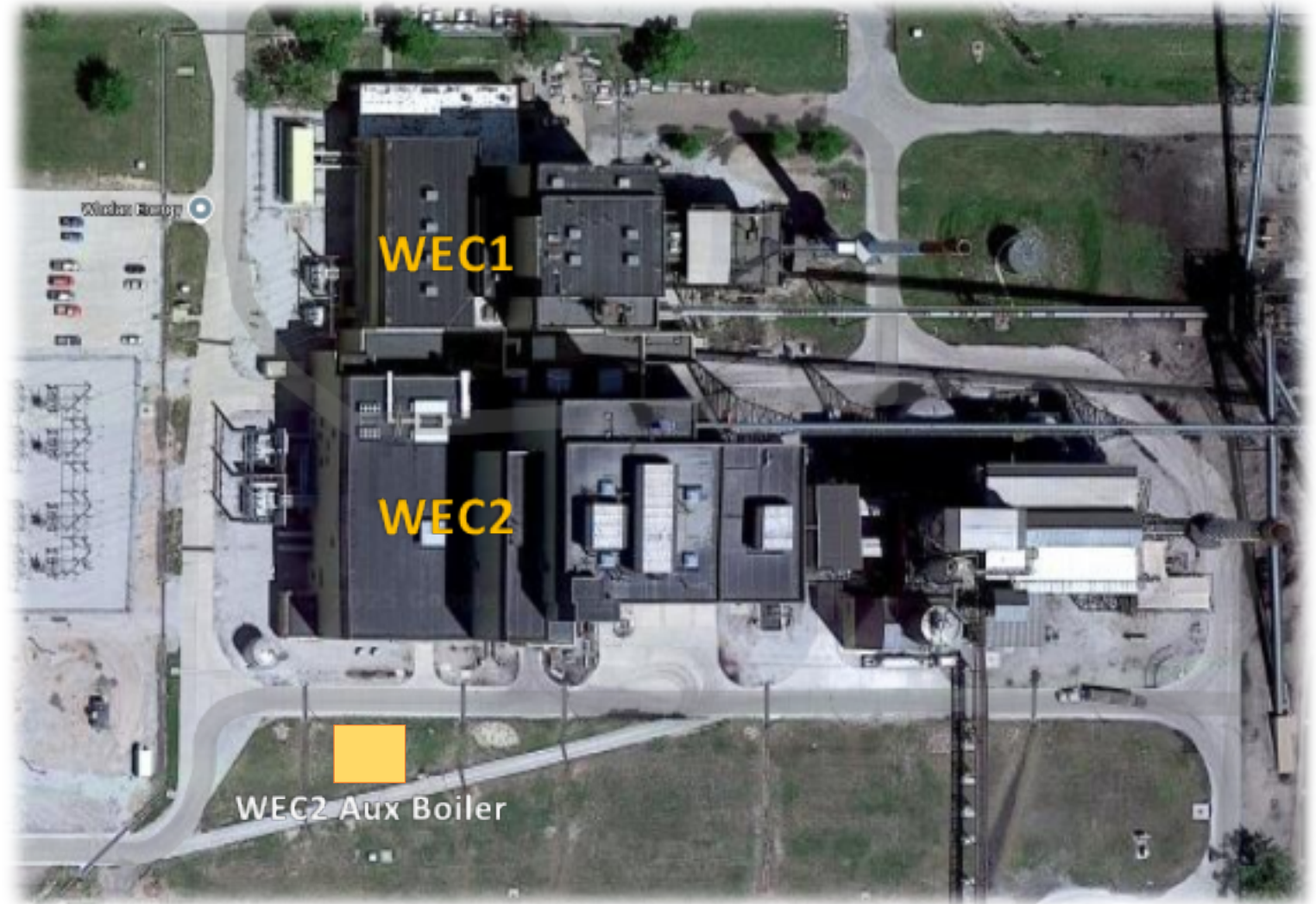




- In the operating agreements with PPGA, Hastings WEC1 provides auxiliary steam for the primary purpose of assisting WEC2 during unit startups.
- Several years ago, PPGA began having conversations around the need for WEC2 to be able to produce startup aux steam independent from WEC1.
- In 2022, the PPGA Board approved funds to engineer and construct an Auxiliary Boiler. Engineering began in 2023.
- 2023-25 bids were awarded for the boiler supply, civil, mechanical, and electrical construction.

# PPGA WEC2 Auxiliary Boiler

- The aux boiler supply contract was awarded to Clever Brooks.
- The Clever Brooks boiler will be operated on fuel oil and will provide WEC2 with up to 48,000 lb/hr of steam at 360° F and 150psig.
- Located south of WEC2, the Aux Boiler will be located inside a 60'x50' building.



# PPGA WEC2 Auxiliary Boiler

- Underground tie-in work to existing systems began in 2023.
- The location of the boiler required moving the truck scale in 2024.
- The boiler was received at the beginning of '25.
- Much of the underground work and the pad were completed this year.
- The boiler was mounted in April.





# PPGA WEC2 Auxiliary Boiler

- The exterior building construction began this week.
- The remaining electrical, controls, fire protection, and mechanical work will continue through this summer and into the 2025 WEC2 Fall outage.
- Commissioning is anticipated to take place after the Fall Outage.



# **Nitrate Legacy: Sustainability, Public Health, and Future Liability**

**“Passing it onto the next  
generation”**

**What will you do today?**

Marty Stange; Environmental Director  
Hastings Utility Advisory Board Meeting May 8, 2025

# Lessons learned and your future

- **Defining the Nitrate problem**
- **Short term management – Aquifer Storage and Restoration**
- **Long term management issues – Best Management Practice**
- **Public Health Impacts**
- **Who pays for cleaning up the Nitrate Legacy – Debt and future costs left to the next generation to address**
- **What will you do to manage the nitrate legacy**

# Regional Groundwater Recharge

- **Platte River** supplies approximately **50%** of the total groundwater recharge impacting our municipal wells (50-year travel time)



# Regional Groundwater Recharge

- Recharge from **Rainfall** is approximately **25%**
- Recharge from **Irrigation** return is approximately **25%**
- **50%** of the recharge passes through the **Root Zone**

With the increased use of center pivots the amount of irrigation return is decreasing – critical to nitrate management



# Municipal Well Nitrate Isotope Sampling

## Nitrate Isotope Testing 08/01/2008

Well #	NO <sub>3</sub> -N mg/l	N <sup>15</sup> N-NO <sub>3</sub> %	Comments
33	8.5	8.42	Indicates Commercial Fertilizer
28	3.1	5.69	Indicates Commercial Fertilizer
26	5.2	4.7	Indicates Commercial Fertilizer
16	7.0	5.88	Indicates Commercial Fertilizer

15N-NO<sub>3</sub> Results of -5 to +5 indicate commercial fertilizer (NH<sub>4</sub>)

15N-NO<sub>3</sub> Results of +10 to +30 indicate animal wastes

**Was told the problem was due to the feed lots and we should leave the farmers alone as it is not their problem**

# Groundwater Contamination

- Some areas within the Hastings Wellhead Protection Area have Nitrates **7.5** times the MCL of 10 mg/l (10 ppM)
- Some areas have Uranium **10** times the MCL of 30 ug/l (30 ppB)
- Collected over 1,000 water samples

FINAL

## HASTINGS WELLHEAD PROTECTION GROUNDWATER MANAGEMENT AREA ACTION PLAN

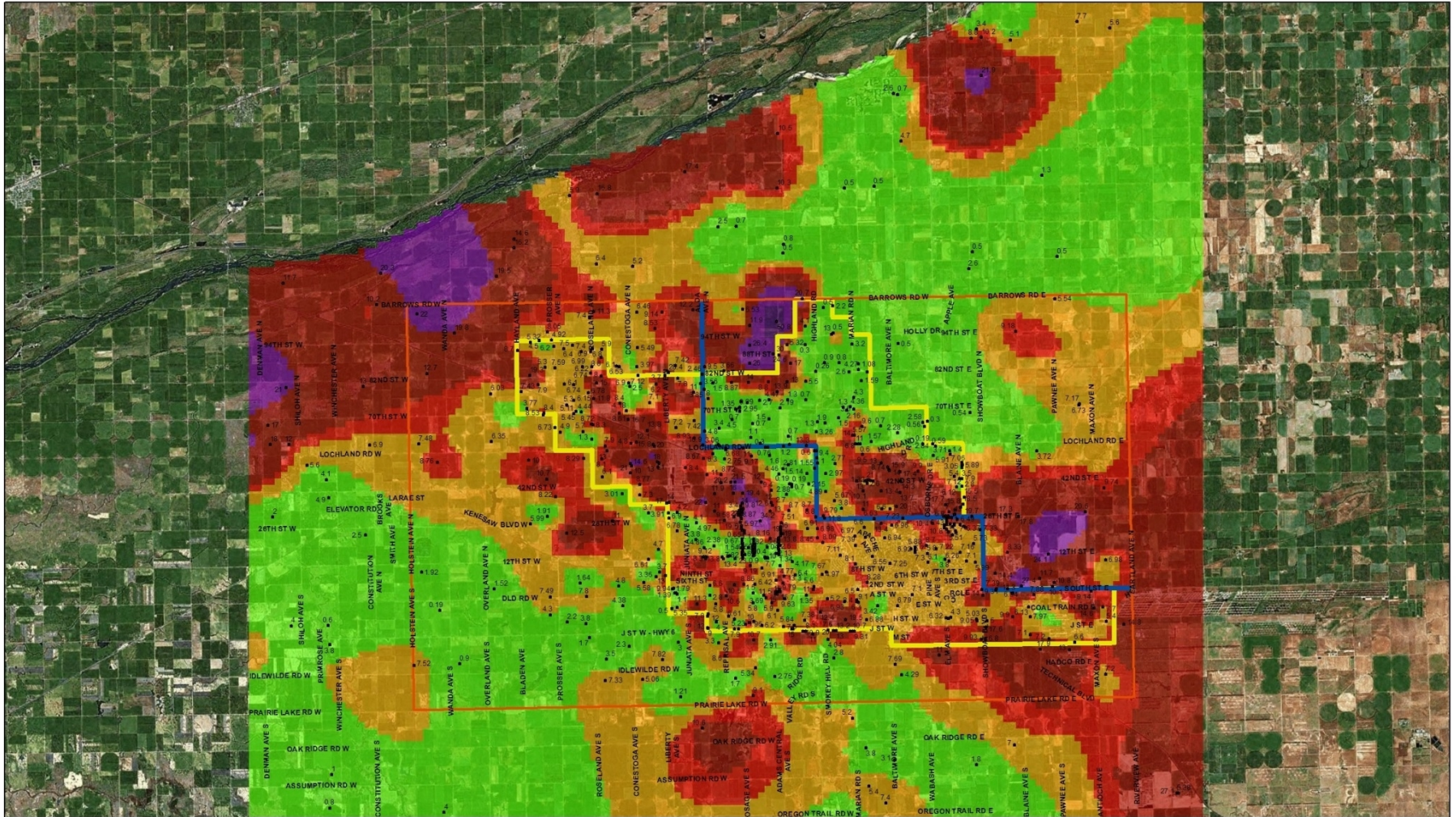
Little Blue Natural Resources District  
Upper Big Blue Natural Resources District  
City of Hastings

Effective Date - July 1, 2012

Adopted: February 28, 2012, Terminates: December 31, 2025



# 2011 Nitrate Map



2011 Nitrate Sampling Plume



↙ Direction of groundwater flow

2011 Hastings Wellhead Protection Area - Nitrate Sampling Map

Path: Z:\Projects\Hastings Wellhead Protection\MXD\2011\_Sampling\_Area\_v2.mxd

Date: 8/22/2011

All results in mg/l (ppm)

# Nitrate Contamination – Water Supply Loss

- When wells exceeds the 10 mg/l MCL for nitrates the wells are shut down
- To date 8 wells have been taken out of service at a current cost of \$600,000 per well - \$4,800,000 of lost capital



**Well 33 Shut Down due to Nitrates**

# Nitrate Contamination – Water Supply Loss

- More losses due to industrial contamination - between 1986 and 2008 spent a present worth exceeding \$25,000,000 addressing Superfund Issues

**The legacy issues addressed by the Water Department makes it difficult to compare Water Rates with other communities as they may not be burden by these historical costs**

# 2010 Vadose Zone Study

## UNL 2010 Vadose Zone Study

- 2010 Vadose Zone sampling indicates **500 to 2000** lbs of Nitrogen per acre is located below the Root Zone and above the Aquifer – Future Contamination Source
- Isotope sampling indicates the source of Nitrates is Commercial Fertilizer – Anhydrous Ammonia



# 2016 Vadose Zone Study

## Average nitrate-N under cropland

- Included 23 of the 32 sites

Averages:

- 2011:  $400 \pm 140$  lbs-N/Acre
- 2016:  $520 \pm 280$  lbs-N/Acre
- Estimated nitrate-N increased by ~30%



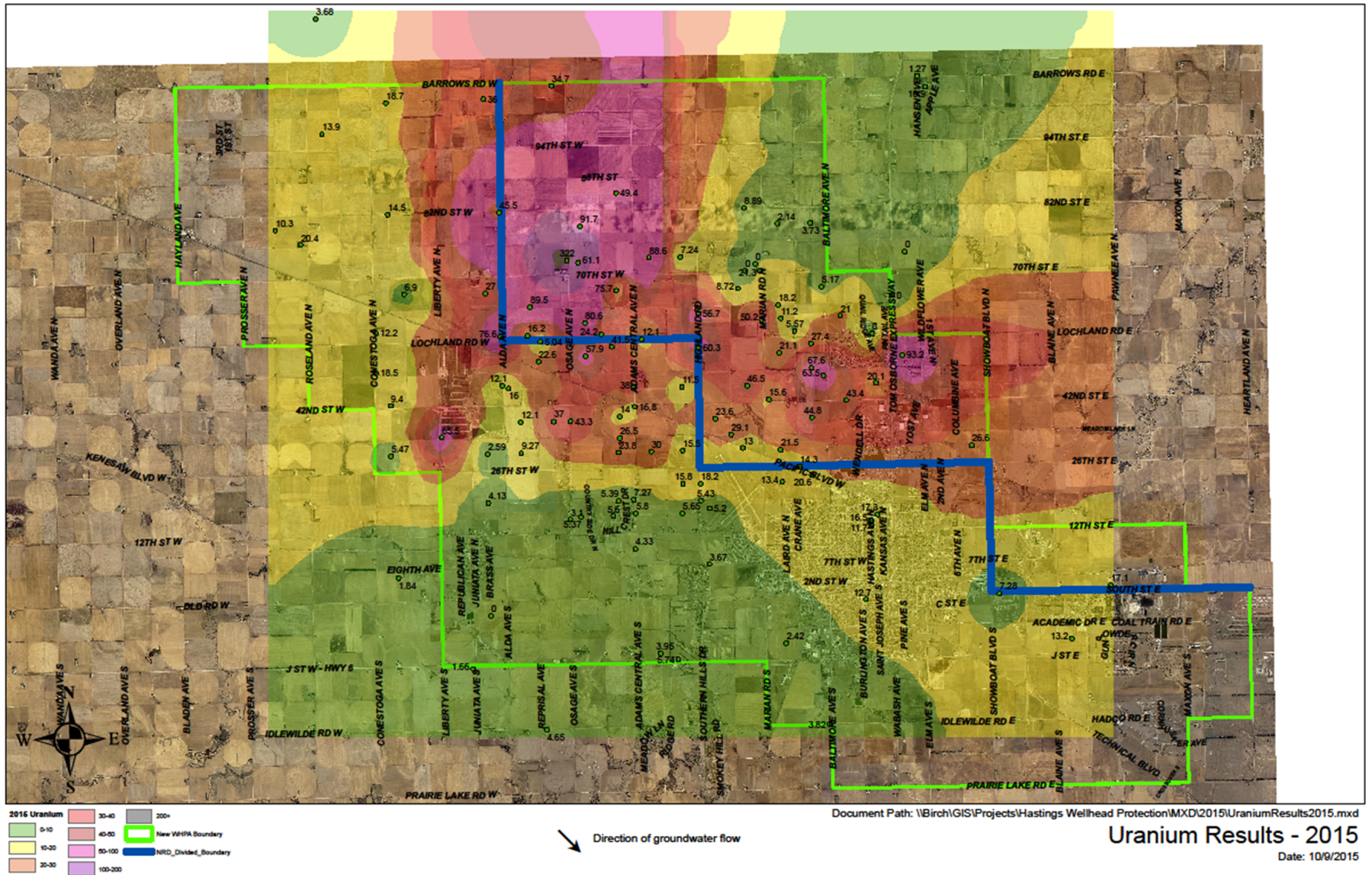
# 2016 Vadose Zone Study

## Average nitrate-N under urban land use

- Included 5 of the 32 sites
- Irrigated via manual/underground sprinklers and hoses
- Averages:
  - 2011:  $480 \pm 440$  lbs-N/Acre
  - 2016:  $270 \pm 200$  lbs-N/Acre
- Estimated nitrate-N decreased by  $\sim 44\%$

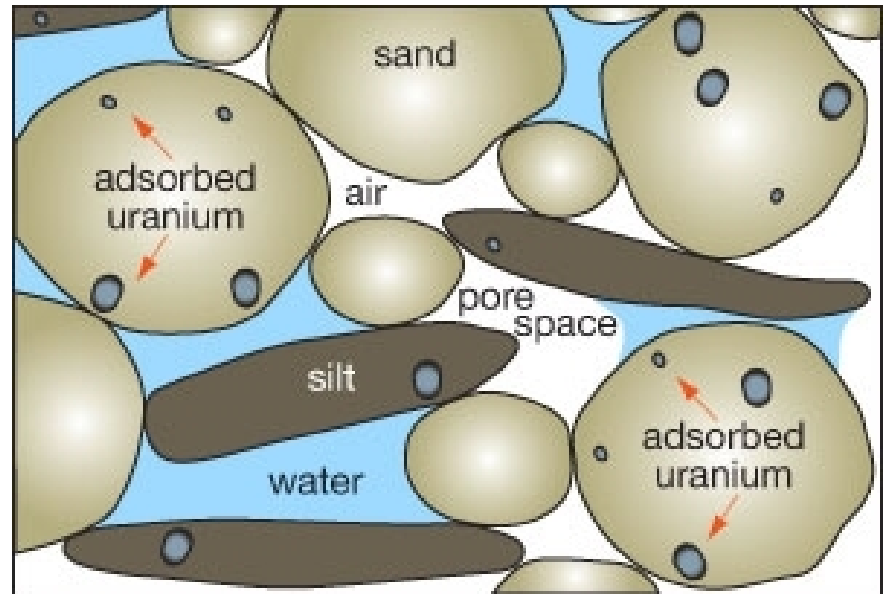


# 2015 Uranium Map



# Uranium Source

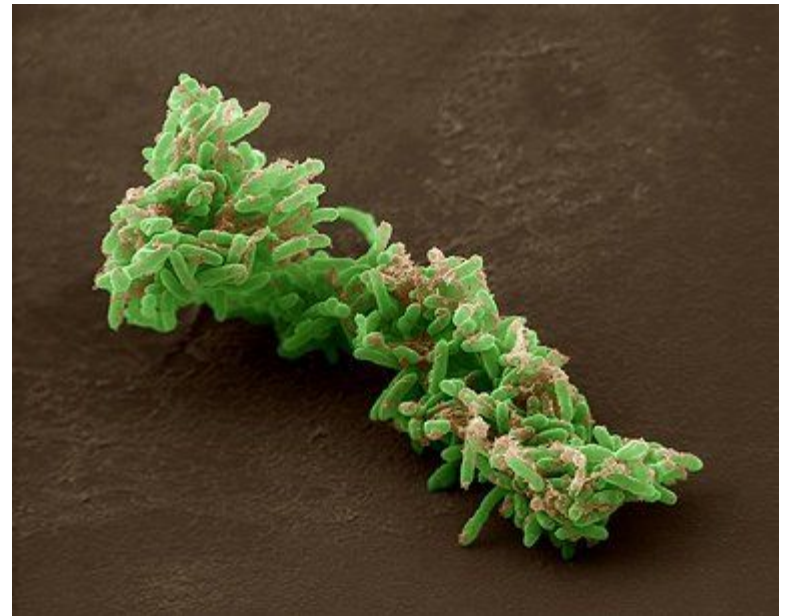
- Uranium is naturally occurring in the geologic formation
- Uranium is not normally mobile in the Hastings Area
- Generally understood by researchers that Uranium was a Platte River issue due to deposits of geological sediments



**Aquifer Material and Pore Space**

# Uranium Investigation

- UNL conducted studies in Hastings and Alda that indicated that Uranium is being released due to nitrates
- Nitrates found in the aquifer and vadose zone promote microbial growth
- Uranium is being released due to microbial respiration



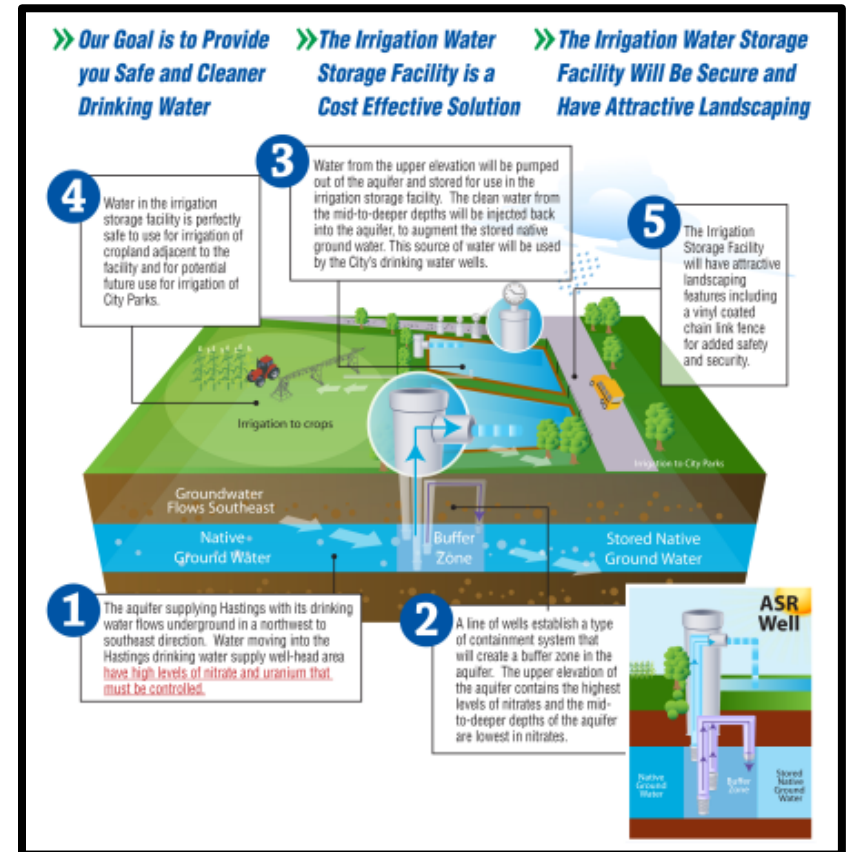
**Uranium Eating Bacteria**

# Uranium Contamination – Water Supply Impacts

- High levels of uranium found in rural areas – rural residents unaware of uranium in their drinking water
- Uranium is being pumped from the aquifer and used for irrigation and livestock watering
- Hastings water currently below Uranium MCL of 30 ug/l
- Concern that Uranium is moving into the northern portion of the Hastings municipal well field – Future Costs

# Wellhead Protection Plan – Short Term Action Plan

- **Hastings Wellhead Protection Plan** identified that nitrate and uranium contamination was so **extensive** that watershed controls would not protect the Hastings drinking water supply in a timely manner without a **short-term plan** to implement water treatment



# Aquifer Storage and Restoration Project



## 5 Prong Solution

- Dual Pumping
- Focused Water Treatment
- Aquifer Storage and Restoration
- Irrigation Management
- Blending and Storage

**COMBINATION OF ALL APPROACHES**  
**Potential to Substantially Reduce**  
**Capital Investments in Infrastructure**  
**and Operating Costs**

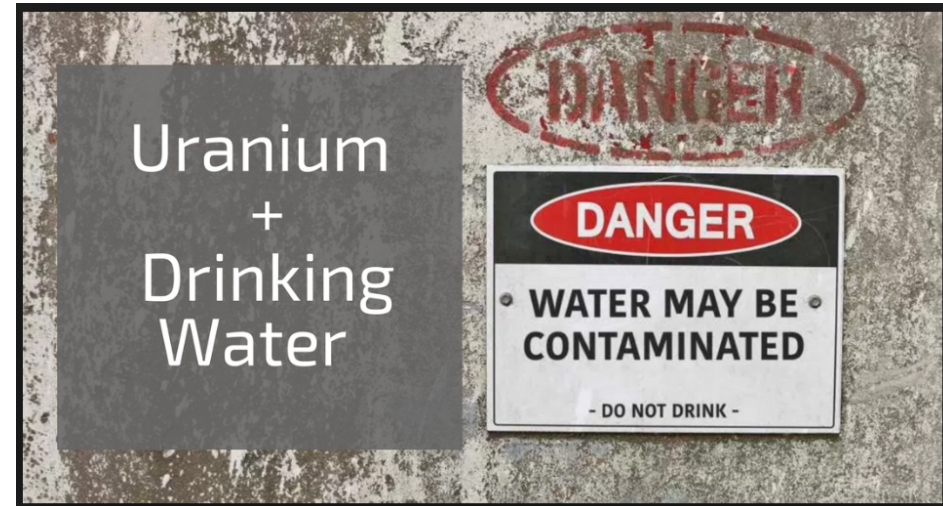
**ASR Project estimated to cost \$46,000,000 including Uranium treatment and disposal – Currently Spent \$15,000,000**

# Water Quality Effects on Health and Crop Production



## ***Nitrates in Drinking Water:***

- ✓ Blue Baby Syndrome
- ✓ Birth Defects
- ✓ Cancer in Adults



# Nitrate Contamination of Drinking Water

**Blue Baby Syndrome** - An illness that begins when large amounts of nitrates in water are ingested by an infant and converted to nitrite by the digestive.



[www.onlinehomemedies.com](http://www.onlinehomemedies.com)

- The baby turns blue due to a lack of oxygen and could die if not treated
- Concern for adults that have respiratory issues as oxygen is displaced by nitrites in the blood - Methemoglobinemia

# Nitrates – Cancer and Birth Defects

- **New health risk studies are showing evidence that Nitrates may be contributing to an increase in Cancer and Birth Defects**

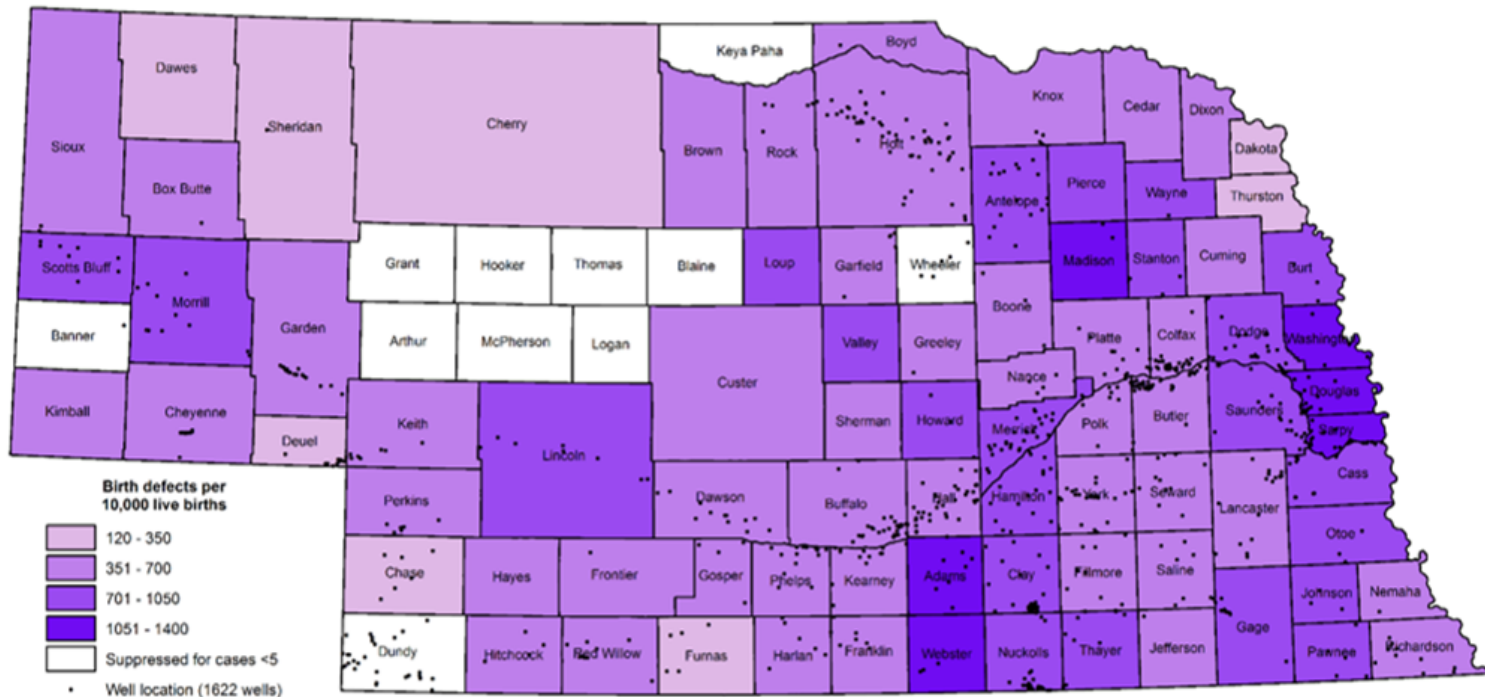


**"The researchers examined data from across the United States and found a correlation between certain types of cancer and nitrates. This is the first time the correlation has been quantified."**

Kara Nell, Ph.D.  
University of Minnesota Morris

# Health Concerns

## Nebraska birth defect rates by county and wells positive for nitrate + nitrosatable agrichemical



Birth defect rates 2005-2014. Source: Nebraska Department of Health and Human Services

Source for well data: Quality-Assessed Agrichemical Contaminant Database for Nebraska Groundwater (queried Fall 2015)



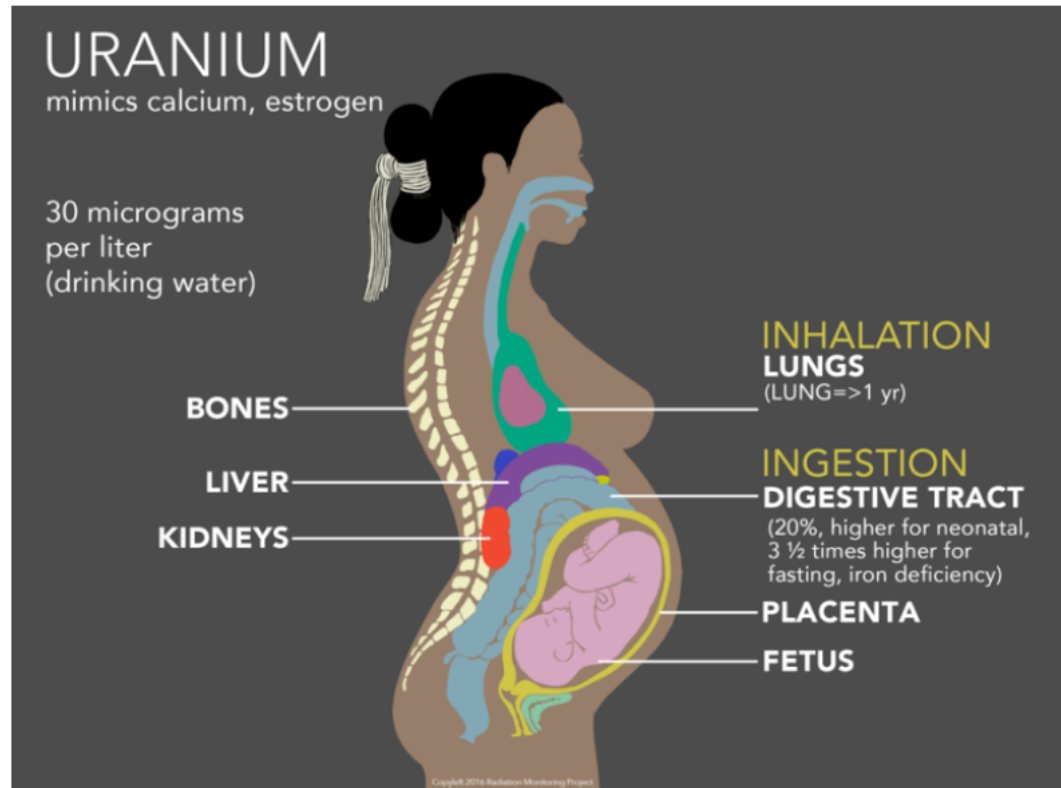
# Does Uranium and Nitrates increase Cancer Risk

- Determining cause of increased health risk is difficult. Health risk due to multiple exposure path was is not additive but like  $1 + 1 = 3$
- Influence of increased uranium due to nitrates has yet been fully studied – Finding the money is a problem

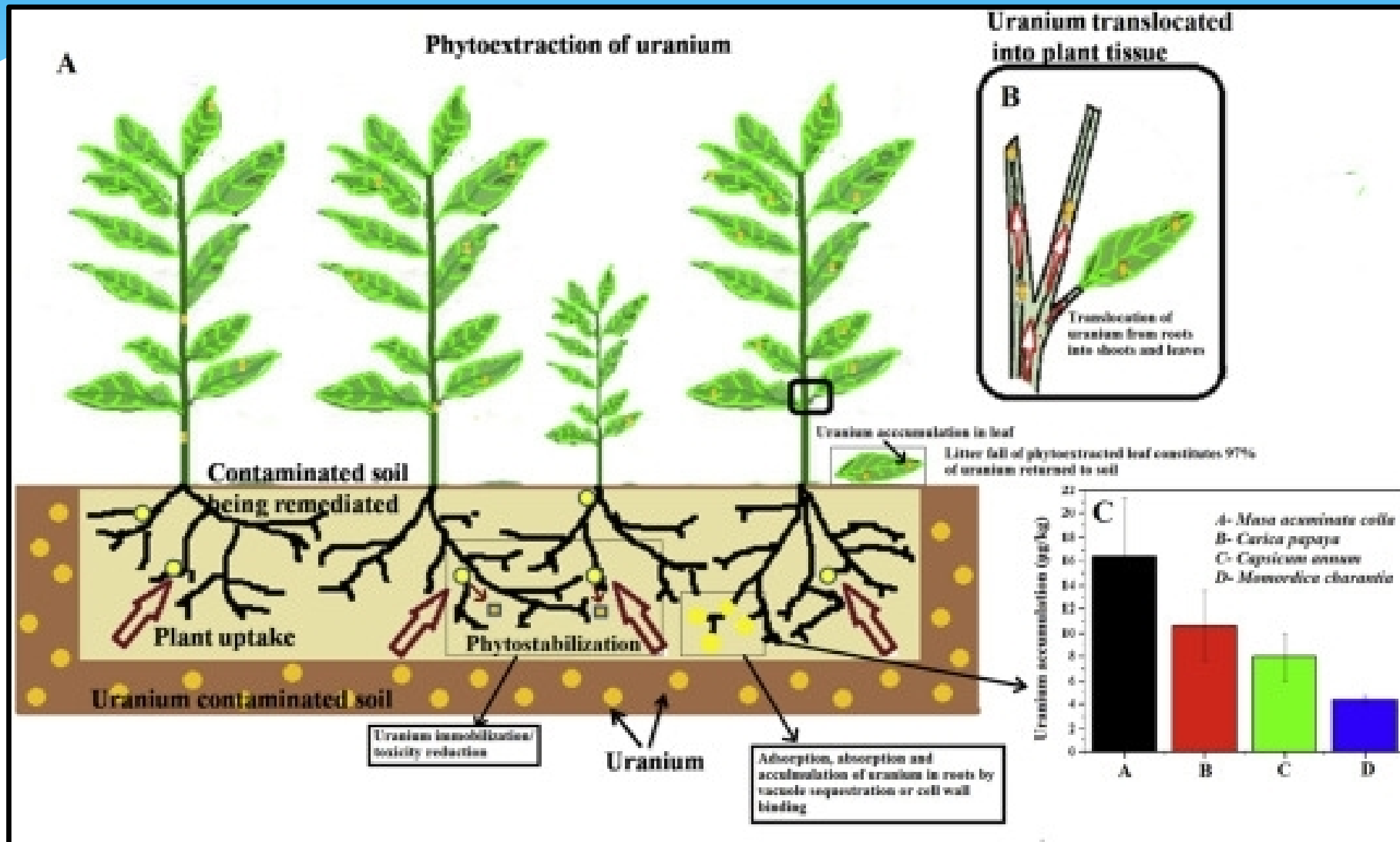
**What is the financial and human cost of ignoring health risk?**

# Uranium Contamination of Drinking Water

- Uranium mimics Calcium and is stored in the body
- Uranium is radioactive and can cause Cancer as well as Liver, Kidney, and Bone Disease



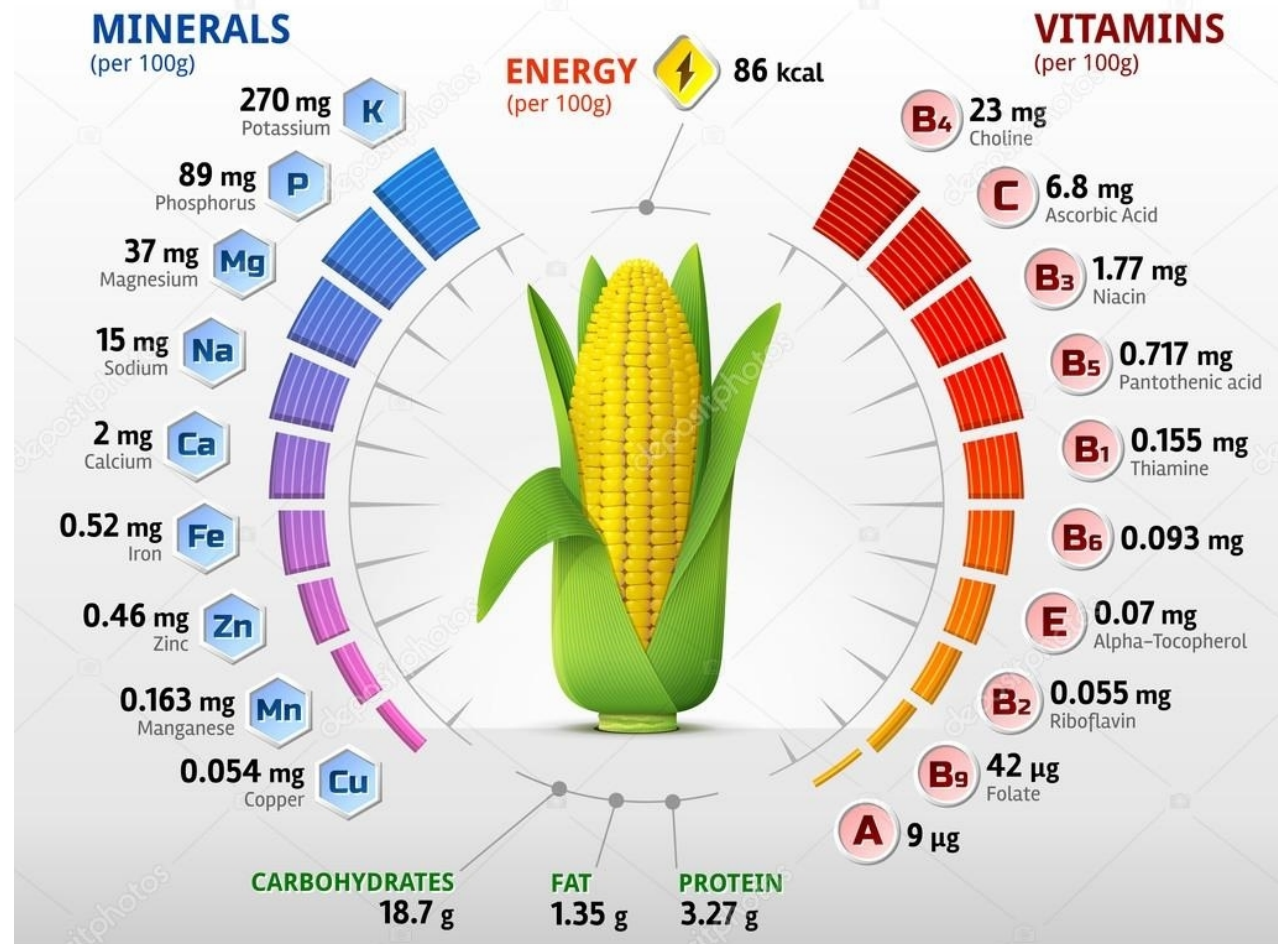
# Uranium and Crop Production



# Uranium Contamination of Irrigation Water



- Uranium mimics Calcium and interferes with the uptake of Calcium by the plant
- Uranium in the soil will reduce Crop Yields



# What is Best Management Practice?

- Is reducing fertilizer use sufficient BMP to address nitrates?
- Excess irrigation is causing the nitrogen to be carried into the aquifer – 25% of recharge. Is water conservation a Nitrate BMP? Producers do not want their water metered.
- Can improved soil health and soil testing reduce nitrogen loss from the root zone?

**No one process is going to adequately manage the nitrate legacy**

# Which Ear is a more profitable?



**Assume no concerns related to pollination**

# Questions to Consider

- Is the filling out the ear wasting Nitrogen dollars for the added bushels (diminishing returns) – Is the full ear evidence of a potential loss of profit
- Does the full ear only provide bragging rights but not real profit and potentially a loss of profit?

**What is the correct understanding?**

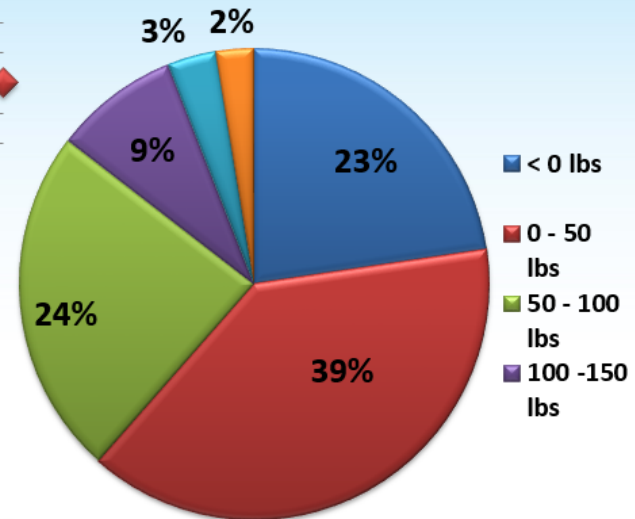
# Data from UENRD

## Distribution of Over Application

### N Over Application

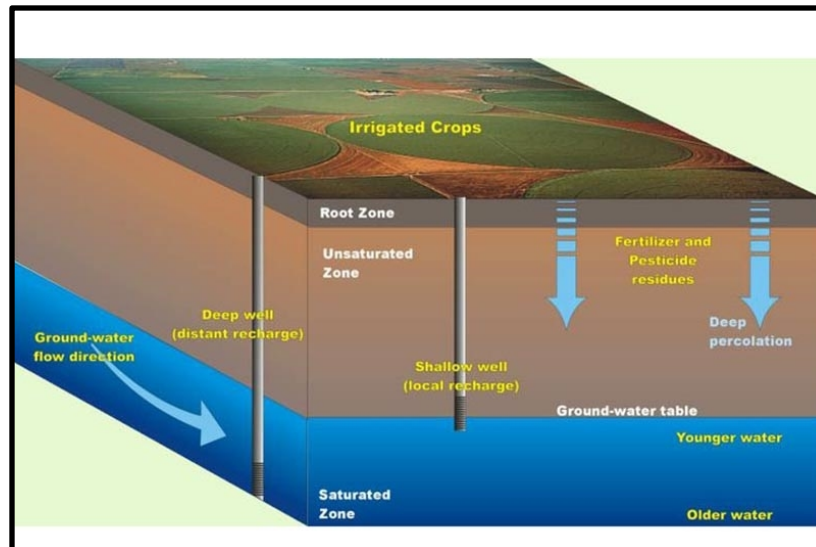


**77% of fields are receiving too much Nitrogen**

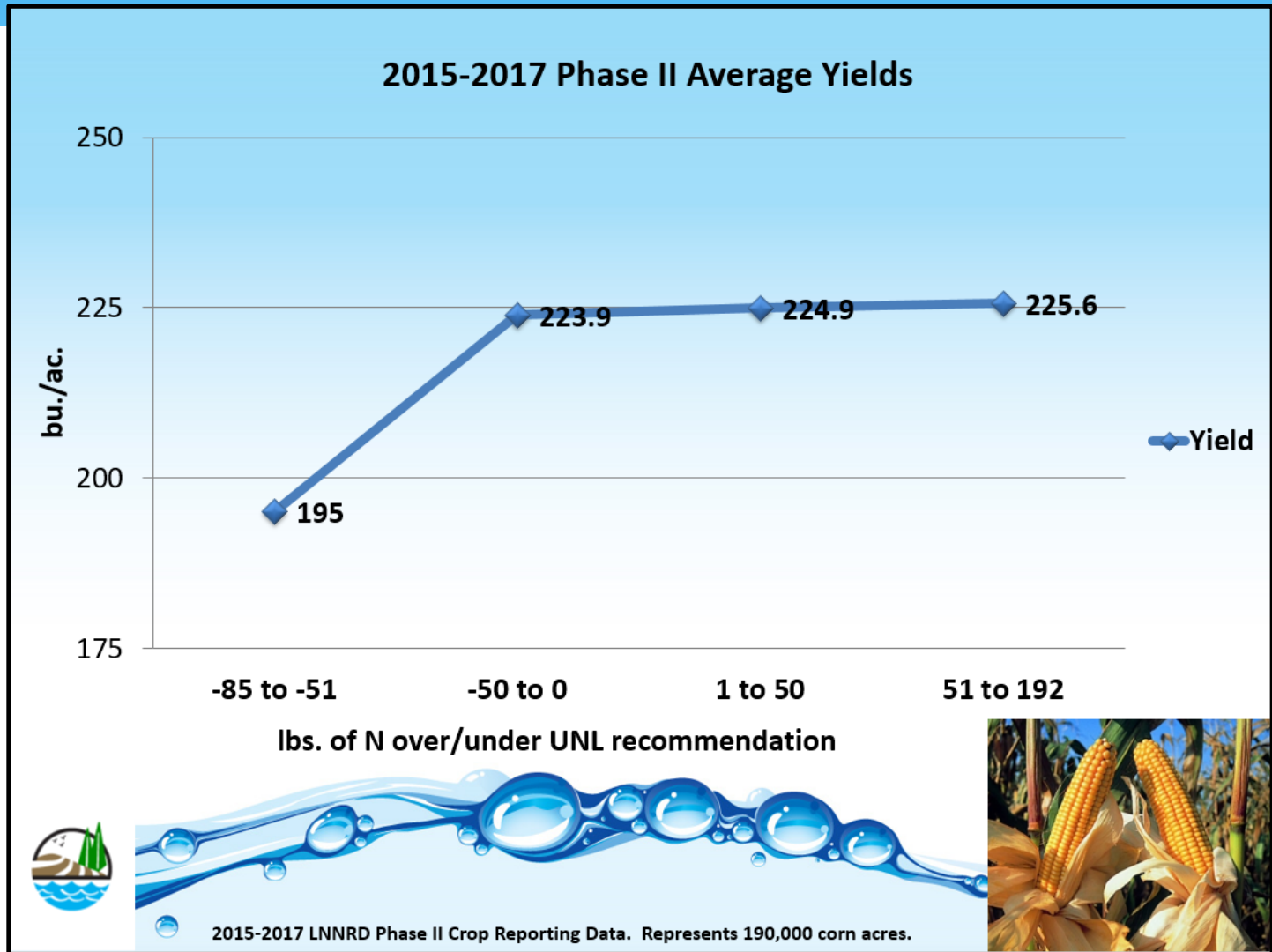


# Questions to Consider

- Are producers willing to share nitrate application data?



# Data from LNNRD



# Loss of Profit - LNNRD

- Base upon \$800 / Ton Ammonia and \$4.50 / Bu. Corn
- At an Average 25 Lb / Ac. Excess Ammonia application for a 1 Bu. Increase in yield this represents a **\$5.50 / Ac Loss of profit**
- At an Average 121.5 Lb / Ac. Excess Ammonia application for a 1.7 Bu. Increase in yield this represents a **\$40.95 / Ac Loss of profit**

**What is the incentive to apply excess Ammonia?**

# Questions to Consider

- If this information is correct does this mean the farmers with the largest yields have the greatest potential to be over applying Nitrogen?
- Is this potentially Less Profit and more Environmental damage
  - Lower Rate of Return on Investment

**How do we get factual information from the producer - good production records?**

# Corn production without Nitrogen – USDA 30 Year Study



**Corn every  
Year**

**Corn – Soybean  
Rotation**

**Corn every  
Fourth Year**

# Cover Crop without drilling

- Being told that planting cover crop is expensive, and cost of a drill is too much to justify!
- Is anyone considering planting instead of drilling?

**How to encourage innovative methods?**

# Planter verses Drill



**Planter with laser  
cut plates?**

# Good Seed Distribution



**Mixed seed on  
15-inch rows**

# Crop Rotation and Soil Health



- How much can crop rotation be used to reduce Nitrogen use and to maintain a positive Return on Investment?

**How to encourage using natural systems to improve yield with less commercial fertilizer**

# Implementing Action Items – Who Pays and Implements Control

- **Developing the Hastings Wellhead Protection Plan and implementing Short Term - Action Items is expensive and has taken Hastings more than 15 years to complete**
- **The next hurdle is to determine who pays for implementation and takes responsibility for existing and future nitrate and uranium contamination of our aquifer (Nitrate Legacy) – You generation or is this your children’s burden?**

**This is not just a Hastings Problem but is  
common for other Wellhead Protection Areas**

# Who Pays for Safe Drinking Water

- **Should the Polluter Pay – Use of Nitrogen by Agriculture is the means for Farmers to make a Profit (Currently still polluting as some producers putting more than 10% excess nitrogen on the field to get maximum yields – nitrate insurance)**
- **Should the NRD Pay – They have jurisdiction and obligation to protect the groundwater (NRD Boards slow to enact rules and had not effectively monitored groundwater – Private Sampling Failed)**
- **Should the City Pay – They are responsible for providing Potable Drinking Water (Currently financing most of the Short -Term Action Items)**

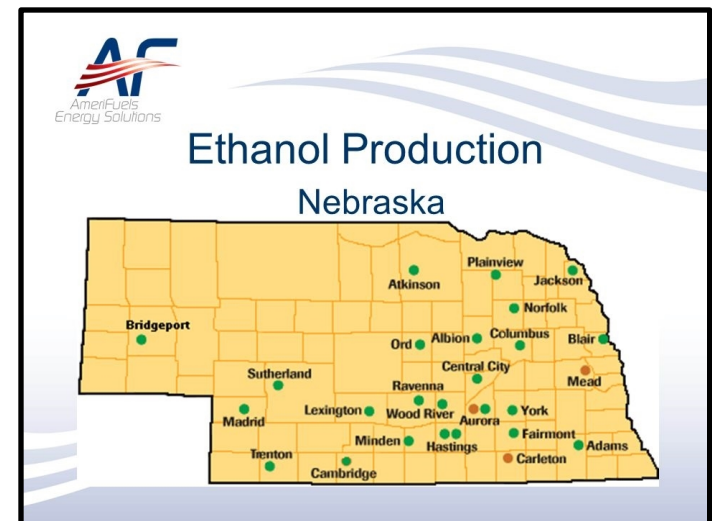
# Who Pays for Safe Drinking Water

- **Should the Federal Government Pay – As they have Implemented Cheap Food policies to try and feed the World which has caused demand for increased yields – It is your tax dollars they will use to pay**
- **Should Countries that benefit from our Food Production pay for the Environmental Damage caused by the Production of Crops that “Feed the World” - Are we selling food below the actual production cost? Should national security must be considered?**

# Who Pays for Safe Drinking Water

- **Should the Consumer Buying Alcohol Fuel pay as they are using Food Crops to make Energy (Alcohol Production is encouraged because we have excess Crop Production, and it is a means to Increase Demand and Prices) Tax incentives increase profits for the manufacturers**

**Alcohol Production also causes concentration of Livestock Feeding System and increased concentration of manure (source of Nitrates)**



# Who Pays for Safe Drinking Water

- **Increased Production may benefit the Farmer on the short term to increase income but ends up with even larger surpluses. This starts a cycle of overproduction and reduction in crop prices. Should Government pay farmers to not produce – Agricultural Welfare? It is your tax dollars.**



# Who Pays for Safe Drinking Water

- **Should the Fertilizer Companies pay as they gain profit with more fertilizer used – Problem of Fox watching the Hen House as they may make recommendation for fertilizer applications**
- **Should the Food Consumer Pay as they benefit from Cheap Food Prices – Would the public be willing to pay more for food?**
- **Should foreign countries we sell corn and soybean to pay to clean up our environment – Reduces demand**
- **Should it be a combination of responsible parties**

# Getting the Public and Responsible Parties to Find a Solution

- **How do we get the Public Involved to Address a Complex and Difficult Issues when there are many other Important Issues that need our Help – No One Person can Fix the Problem**
- **How do we get the message out without seeming like we are “Crying Wolf”**
- **How do you get factual information to the decision makers especially when costs drive decision – Drinking Water users verses Agricultural Production (Cost of Water verse Income)**

# Getting the Public and Responsible Parties to Find a Solution

- How do you Convince the Public that Governmental Regulations are Necessary when a Public Sector is impacting the Health and Financial Stability of another Public Sector that does not want Governmental Regulations (Urban verses Rural)
- How do we implement Social Behavior Change to Protect Groundwater without Regulations or Taxes
- How do you combat the “Tyranny of small decisions”

**As you can see there is no good answer to these problems it will take all of us working together to protect our groundwater**

# Burden on your generation or future generations?

- The nitrate legacy is not going away it will continue to be a problem for several generations or longer if no action is taken
- Failure to find solutions is allowing the contamination to become worse. Future costs increasing.
- What will be the human cost if we do not address this issue?

**Hope that it gets better is not a solution**

# Will you take action now or place burden on future generations?

- Past and current generations have caused the problem, but today we are faced with finding equitable solutions or you may decide to pass it entirely onto the next generation
- Tyranny of small decisions caused the problem, but it will also be small decisions that manage the problem
- Will you be willing to continue supporting academic research with labor and funding?

**What will you do?**

# Addressing Nitrates has been a Unified team of agencies



**Many more organizations not listed**



# **Hastings SE Project**

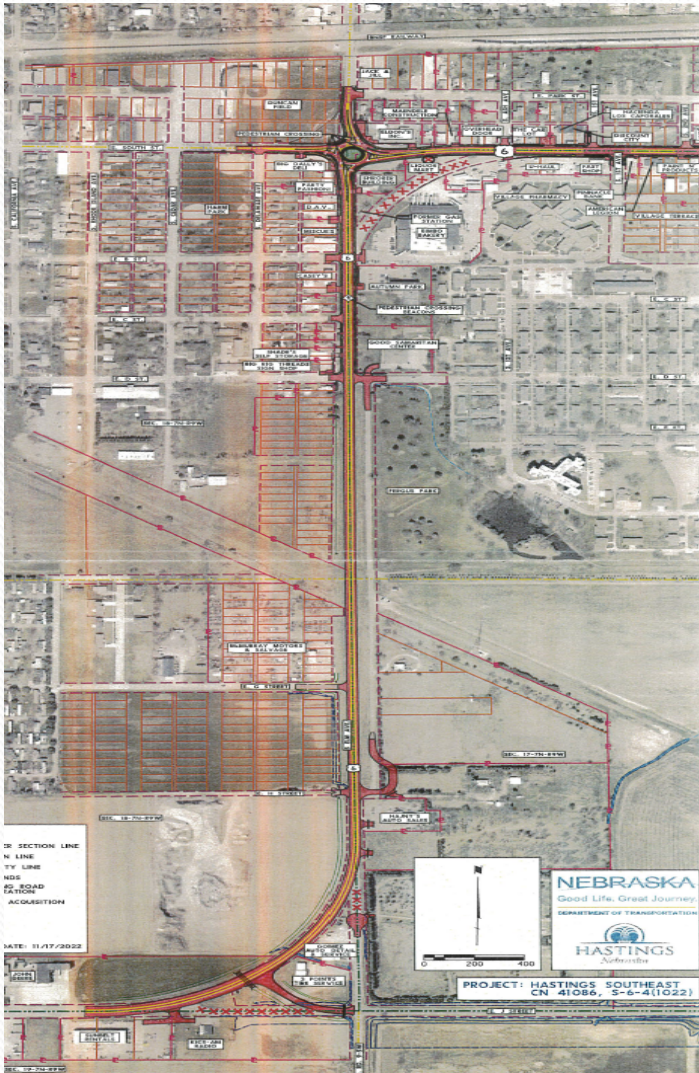
**May 8, 2025**

# Hastings SE Project

## Council Approvals

- Agreement for 5-Lane project
  - Approved July 11, 2016
  - 80% paid by NDOT, 20% paid by City
  
- Resolution of Support for 3-Lane Project with Roundabout
  - Approved April 10, 2023
  
- Supplemental Agreement No. 1
  - Approved February 10, 2025
  - Updated project scope to 3-Lane project
  
- Project to be bid fall 2025 with construction 2026 – 2027

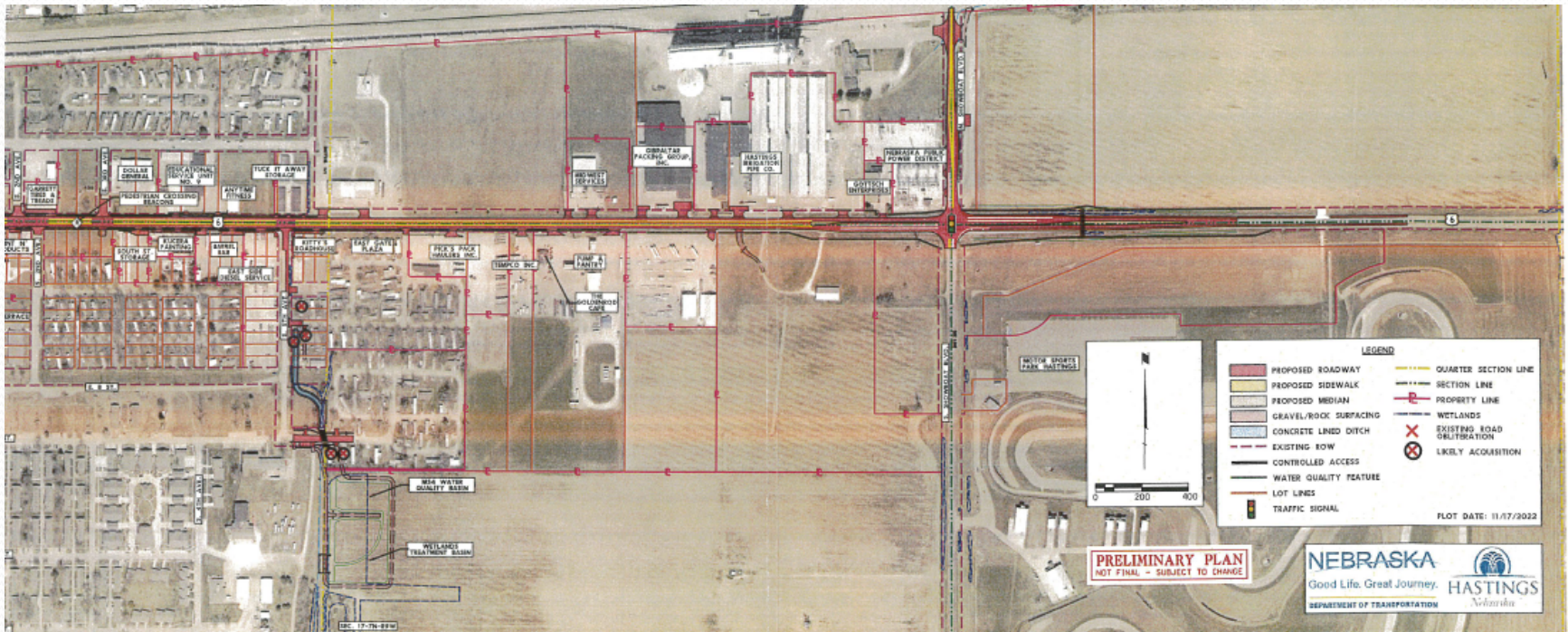
# Hastings SE Project



- Phase 1 - 2026
  - J Street
  - Elm Ave
  - Roundabout at Elm Ave and South St
  - 5<sup>th</sup> Ave

# Hastings SE Project

- Phase 2 - 2027
  - South Street
  - Showboat Blvd intersection



# Hastings SE Project

## Utility Relocation Work

- Phase 1 area completed by January 1, 2026
  
- Phase 2 completed by January 1, 2027
  
- Utility relocation due to conflicts with:
  - Storm sewer
  - Drainage
  - Roadway realignment
  - Age of manholes

# Hastings SE Project

## Utility Relocation Work

### Electric

- Work has begun on Park Street/Duncan Field area
- Overhead line on South St. will be underground
- Contractor for all duct installation

### Gas

- Work has begun in South St and Elm area, along with 5<sup>th</sup> Avenue Area
- Relocation of 8" beltline on J Street and 5<sup>th</sup> Avenue

# Hastings SE Project

## Utility Relocation Work

### Water

- Two phases of water construction all by Contractor
- Bidding Phase 1 out now

### Sewer

- Bosselman's area by a contractor
- Most of sewer work is part of NDOT contract

# Hastings SE Project

## Utility Relocation Work

### Cost Estimate Breakdown

Electric	\$5,055,923
Gas	\$718,342
Water	\$3,389,602
- Betterment	\$-326,088
Sewer	<u>\$735,344</u>
Total	\$9,573,123

□ NDOT 80% reimbursement equals \$7,658,498



# Questions

?

# ERP (Utility Billing) Update

# Additional Questions?

End of Postings

Budget Billing

Timelines (What to Expect)