2019 SUMMER SAMPLING



Natural Resources District



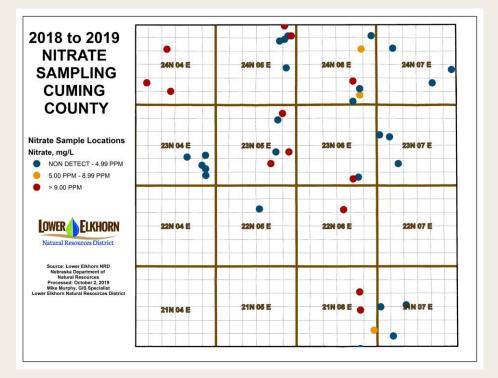
- CUMING, COLFAX, AND DODGE COUNTIES WERE INCLUDED IN THE STUDY AREA
- THIS AREA WAS CHOSEN DUE TO THE LACK OF DATA COLLECTED IN THE PAST
- 102 WELLS WERE SAMPLED IN 2019 BY MIKE MURPHY, AND THE SUMMER INTERNS. 50 WELLS WERE SAMPLED IN 2018 BY STAFF
- ADDITIONAL SITES WERE VISITED, BUT UNABLE TO OBTAIN SAMPLES DUE TO LACK OF FAUCETS OR SUFFICIENT LEAKS

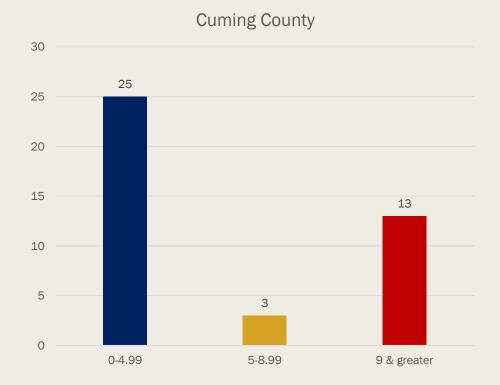


Natural Resources District

CUMING COUNTY

2018/2019 SAMPLES

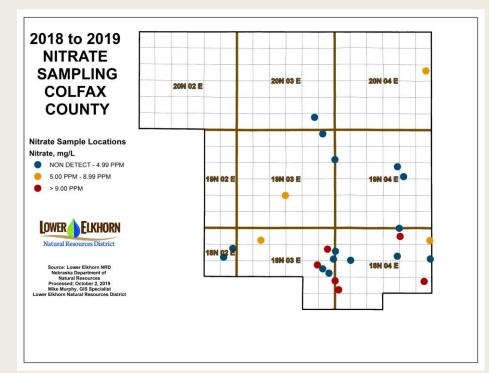


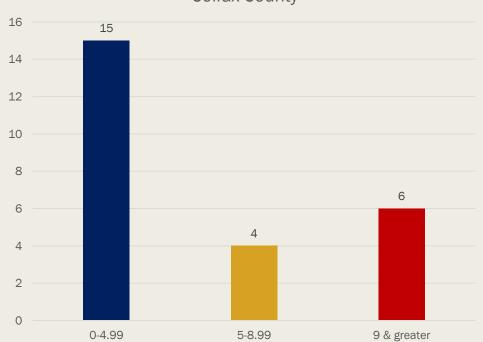




COLFAX COUNTY

2018/2019 SAMPLES





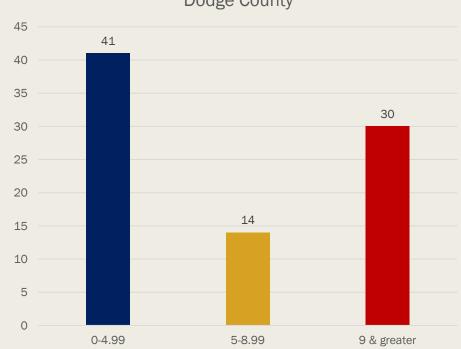
Colfax County



2018 to 2019 NITRATE SAMPLING DODGE COUNTY 20N 07 E 20N 08 E DON OF 19N 05 E 19N 07 E 19N 08 E . 18N 07 E . • 18N 06 E 18N 05 F 18N 08 E . Nitrate Sample Locations Source: Lower Elkhorn NRD Nitrate, mg/L LOWER Nebraska Department of Nebraska Department of Natural Resources Processed: October 2, 2019 Mike Murphy, GIS Specialist Elkhorn Natural Resources District NON DETECT - 4.99 PPM Natural Resources District 5.00 PPM - 8.99 PPM > 9.00 PPM

DODGE COUNTY

2018/2019 SAMPLES



Dodge County

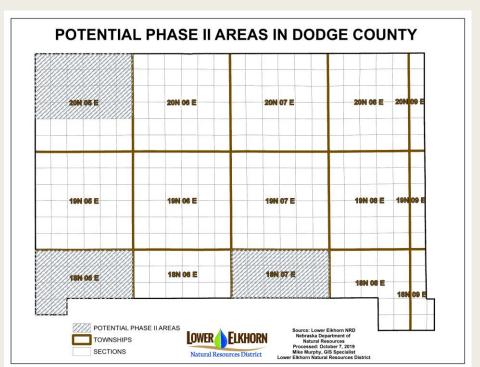


PHASE AREA DEFINITIONS

- Phase 1: All areas that are not Phase 2, 3, or 4. The entire district is Phase 1
- Phase 2: 20% of wells are 5ppm or greater
- Phase 3: 50% of wells are 9ppm or greater. Also must have been in Plase 2 for a minimum of 5 years
- Phase 4: Areas have been Phase 3 for 5 years and Nitrate levels haven't declined
- PHASE AREAS MUST BE A MINIMUM OF 9 SQUARE MILES



POTENTIAL PHASE 2 AREAS



- 20N 5E Sections 1-24: Dodge/Snyder area & south
 - 10 samples: 4.1 32.8 ppm
 - 9 wells > 5 ppm
 - 38 active wells = 23.6%
- Township 18 7E: Southwest of Hooper
 - 14 samples: 0 17.9 ppm
 - 11 wells > 5 ppm
 - 33 active wells = 33.3%
- Township 18 5E: North of N Bend, west of HWY 79
 - 18 samples: 0 15.1 ppm
 - 14 wells > 5 ppm
 - 64 active wells = 21.9%



- Samples ranged from non-detect to over 32ppm
- More sampling needs to take place in concentrated areas to gather more data for gaps in areas sampled

Questions or comments??