



Bazile Groundwater Management Area (GWMA) Project

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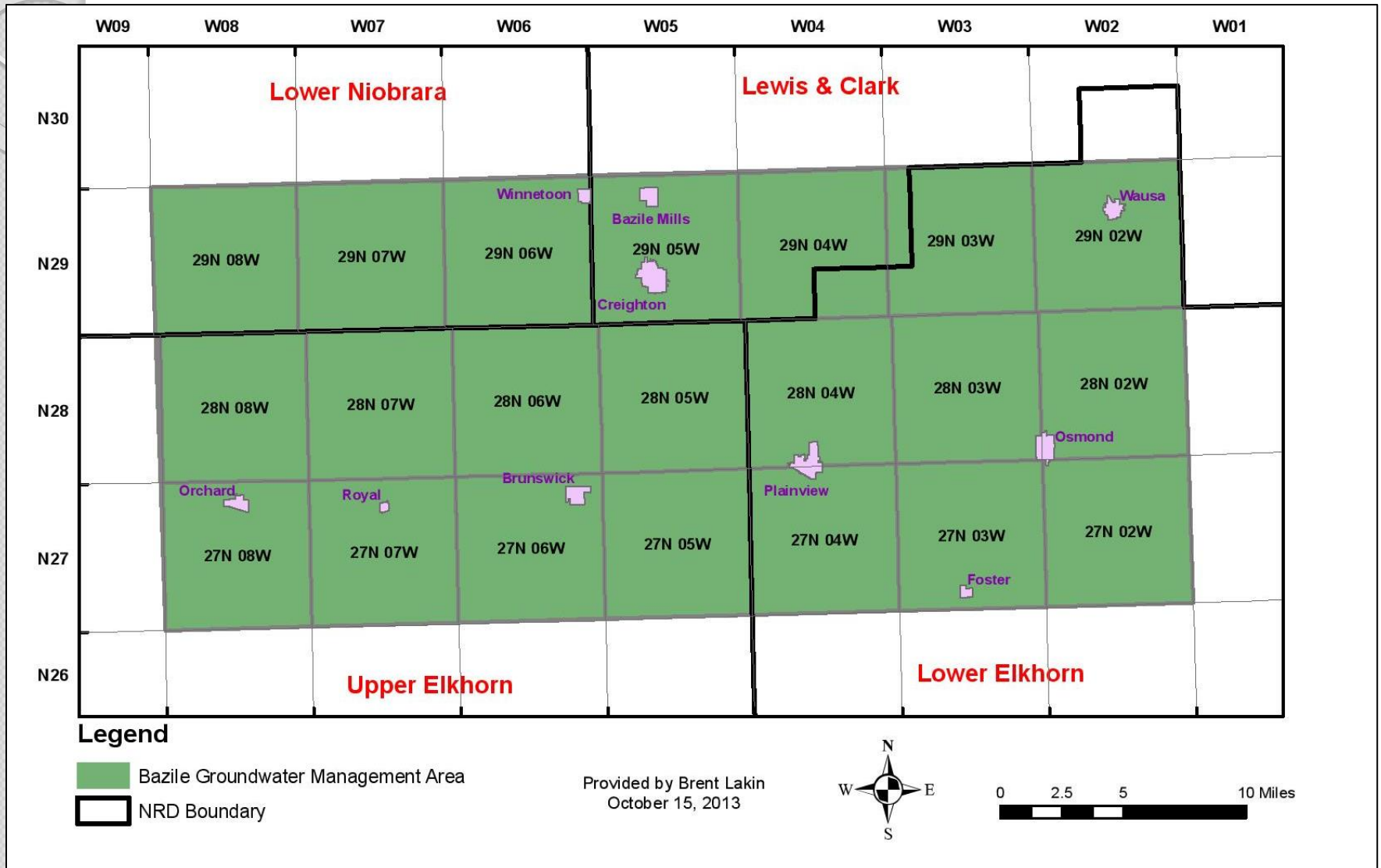
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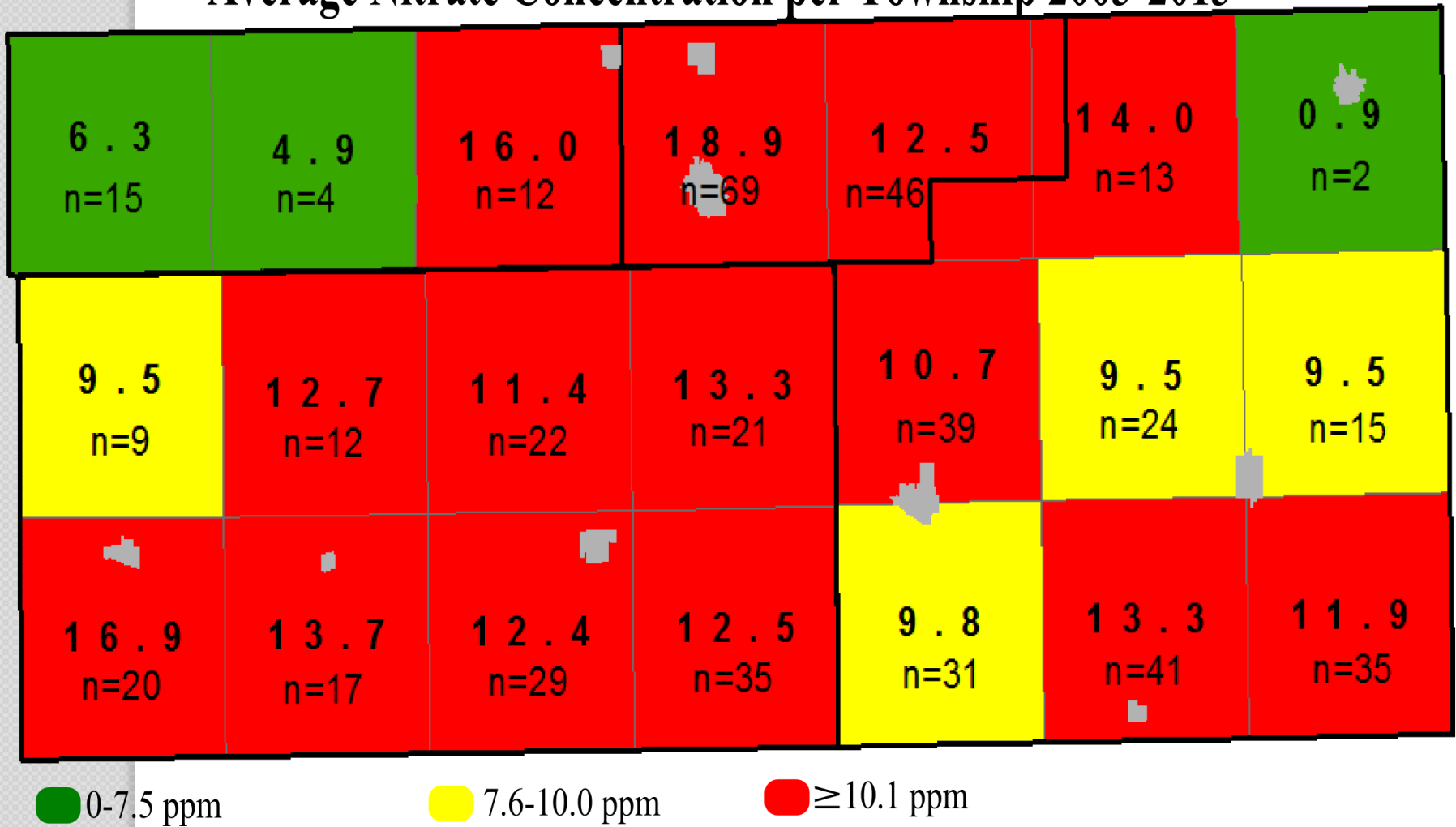
Project History

- Groundwater nitrate issues since the 1980's
 - Known health affects
 - EPA health standard
- NRD Management Plans in place
- Nitrate levels have continued to rise

Bazile GWMA Boundaries

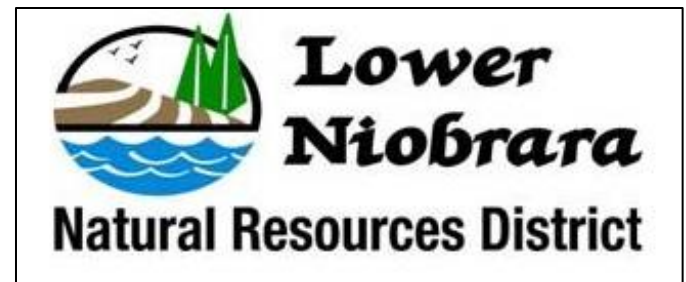
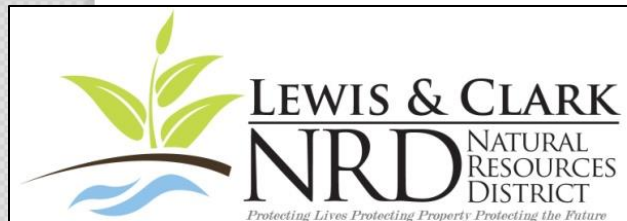
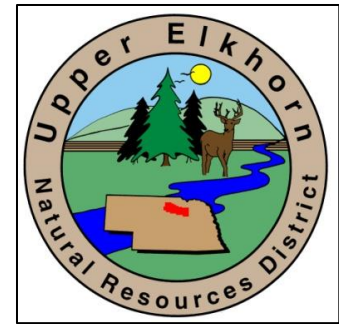


Average Nitrate Concentration per Township 2003-2013



Project History

- Planning for Bazile GWMA project began in 2011
 - Combined effort of four NRDs
- Received funding in 2014



Project Funding

- Nebraska Department of Environmental Quality (DEQ)
 - Project Coordinator, supplies, demonstration sites
- Nebraska Environmental Trust (NET)
 - Demonstration sites, BMP cost-share
- Natural Resources Districts
 - Project Coordinator, cost-share, non-grant funded costs



Project Goals

- Short and long term goals
- Participation is key



Promote
BMPs,
provide I&E
events for
residents

Reduce
nitrate levels,
re-assess
project and
adjust

Maintain
nitrate levels
under EPA
standard

Cost-share Assistance

- 50% on flowmeters
- 100% on tissue analysis



Past and Upcoming Events

2014

- Public meetings
- Farmer's Field Day
- BMP cost-share
- Deep vadose sampling



Upcoming

- Agricultural and urban demonstration sites and field days
- Communicate with producers
 - Incorporate BMPs into their management plans



Special Project

- Deep Vadose Sampling (down to 24 ft)
- Analyze for nitrogen
- Looking for locations
- 100% grant covered cost
- Results are kept anonymous



Activities and Accomplishments



Bazile Groundwater Management Area Project assists local producers

The Bazile Groundwater Management Area (GWMA) Environmental Trust has provided financial assistance this growing season for area producers to incorporate best management practices (BMPs) into their management plans. The project received funding through the Nebraska Environmental Trust to provide cost-share on plant tissue analysis, vadose soil sampling and flowmeter installation. To date, 42 fields across the Bazile GWMA have been analyzed through early and late season stalk testing. Producers also utilized funding to install flowmeters on 11 fields in the area and deep vadose sections with more being completed this fall. Results from the analysis and soil sampling are used to plan nitrogen applications based on the amount of available in the soil. Producers receive information and more control over use which increases production of both water and



Wahoo Creek Watershed Implement Best Management Practices

Producers located in the Wahoo Creek Watershed are implementing best management practices for the National Water Quality Initiative. The project received funding through the Nebraska Environmental Trust to provide cost-share on plant tissue analysis, vadose soil sampling and flowmeter installation. To date, 42 fields across the Bazile GWMA have been analyzed through early and late season stalk testing. Producers also utilized funding to install flowmeters on 11 fields in the area and deep vadose sections with more being completed this fall. Results from the analysis and soil sampling are used to plan nitrogen applications based on the amount of available in the soil. Producers receive information and more control over use which increases production of both water and



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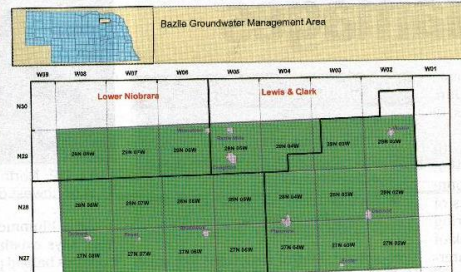
Producers learn about managing nitrogen

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Producers in the Bazile Creek watershed near Creighton, Mo. were the focus of a "Bazile Triangle" nitrogen management workshop. The workshop focused on nitrogen management and nitrogen in the field. Producers were encouraged to share their experiences and learn from each other. The workshop was held in a room with a large screen displaying a map of the Bazile GWMA.

At a glance

- New initiatives aim at improving water quality.
- Cost-share available for best management practices.
- Goals are to improve use of N, lower groundwater nitrates.



Producers were identified earlier this year for additional assistance through the National Water Quality Initiative. This federal program is administered in part by USDA's Natural

because it is a joint effort of several agencies," Butler says. "The NRDs have adopted an area management plan that will be utilized across the entire region." With additional support from the NWQI for the Bazile Creek and Wahoo Creek regions, more than \$600,000 of federal funding was awarded to producers in the Bazile Creek GWMA alone to install conservation practices.

"In 2015, we will have demonstration sites established with local producers featuring irrigation and nitrogen

More Project Information

- www.uenrd.org
 - Bazile GWMA project plan
 - Maps
- Facebook page
 - Project updates, events

