

Nebraska Department of Environmental Quality (NDEQ) is proud to announce the approval of the Bazile Groundwater Management Area (BGMA) Plan by EPA on October 13th, 2016. The BGMA Plan is the first groundwater focused plan in the nation to address nonpoint source pollution. The plan is the result of a collaborative effort to address groundwater nitrate contamination between NDEQ and four of Nebraska's Natural Resources Districts (NRDs): Lewis and Clark, Lower Elkhorn, Lower Niobrara, and the Upper Elkhorn.

The BGMA covers 756 square miles in northeast Nebraska and is home to 10 communities and over 7,000 residents. Groundwater in the BGMA is the only drinking water source for communities and rural residents. Extensive row crop and sandy soils make it easy for land applied manure and commercial fertilizer to leach into the groundwater. The NRDs have collected data on groundwater nitrate concentrations since 1980. During that time, average nitrate concentrations have increased with some areas exceeding 30 mg/L, three times the levels safe for drinking water.

The plan is focused on reducing nitrate levels to below 10 mg/L in the groundwater by progressively adopting more protective BMPs throughout the BGMA with the community's wellhead protection areas as the highest priority. The NRDs will utilize a combination of agricultural BMPs required by their elevated Groundwater Management plan phases and voluntary BMPs outlined in the BGMA plan that go above and beyond those requirements. Through the development of the BGMA Plan, the NRDs have created a cohesive strategy to monitor nitrate reductions in groundwater as fertilizer practices and irrigation methods are improved in the area. This monitoring data will also further refine future versions of the BGMA plan to ensure its goals are achieved.

EPA's approval of this groundwater plan opens up funding from section 319 of the Clean Water Act available each year via NDEQ. Previously, only surface watershed management plans have been eligible for this funding. NDEQ hopes other NRDs and municipalities will use the Bazile plan as a template to develop additional groundwater management plans in the state and nation.

You can view the plan at <http://deq.ne.gov/publications/pages/16-013> or visit any of the four natural resources districts websites (Upper Elkhorn NRD at <http://www.uenrd.org/> ; Lower Elkhorn NRD at <http://www.lenrd.org/> ; Lower Niobrara NRD at <http://www.lnnrd.org/> ; and Lewis and Clark NRD at <http://www.lcnrd.org/>)

A special thanks to the BGMA stakeholders and the many individuals from various local, state, and federal organizations for their contributions to the development of this plan. For more information contact Laura Johnson, NDEQ, at laura.r.johnson@nebraska.gov .

Location of the Bazile Groundwater Management Area

