

UPPER ELKHORN The Oracle

“Making Wise Decisions Concerning Our Natural Resources”

<http://www.uenrd.org>

Natural
Resources
District

Winter 2017

Niobrara River Instream Flows Approved for NRDs and NG&Ps

LINCOLN, Neb. – Jeff Fassett, director of the Nebraska Department of Natural Resources, on Oct. 19 signed an order granting application A-19406 to appropriate water for the purpose of instream flows on the Niobrara River to maintain habitat for the fish community.

The instream flow permit was granted to the Nebraska Game and Parks Commission, the Upper Niobrara White Natural Resources District (NRD), the Middle Niobrara NRD, the Lower Niobrara NRD, the Upper Loup NRD and the Upper

Elkhorn NRD for flows on the Niobrara River between Spencer Dam and the confluence with the Missouri River.

Appropriation A-19406 was approved for seasonally adjusted flow amounts to coincide with the different life cycle stage needs of the fishery, including overwintering, spawning, rearing and growth. The flows also will meet habitat needs for whooping crane migration in spring and fall, and piping plover and least tern nesting in spring and summer.

Instream flow permits are granted only for un-

appropriated water and are subject to the same “first in time, first in right” requirements that are binding on all surface water appropriations. Only the NRDs and Game and Parks can hold instream flow permits, and this water right will have a Dec. 4, 2015 priority date.

The instream flows are part of the efforts by the Niobrara River Basin Alliance NRDs and Game and Parks, along with the Nebraska Public Power District, to ensure the long-term sustainability of water in the Niobrara River basin for generations to come.



Niobrara River looking east from the Spencer Hydro Dam. The Niobrara River Basin Alliance in conjunction with NPPD and Nebraska Game & Parks are working on a proposal to manage the basins water for future ground and surface water uses.

Static Groundwater Level Rules and Regulations Update Public Informational Meetings Scheduled

The Upper Elkhorn NRD will be hosting Public Informational Meetings and a Public Hearing regarding updates to the Groundwater Management Plan Rules and Regulations in December 2017.

The drought which occurred in 2012 caused everyone to reevaluate their needs and use of groundwater. Although some

individuals were not hindered, others were negatively affected when the UENRD experienced a three foot decline in static groundwater levels district wide. Have you ever wondered what would have happened to the aquifer system had the drought continued for another 3 – 5 years? What would be the economic impact to producers whose wells no

longer pumped enough to water their crops? To domestic wells which no longer provided water to homes? The goal of the Groundwater Management Plan and UENRD Rules and Regulations are to protect all current and future groundwater users: domestic/municipal, livestock, irrigation, commercial/industrial, and impacts to surface

water. You are invited to Public Informational Meetings and the Public Hearing regarding updates to the Groundwater Management Plan and UENRD Rules and Regulations and how the UENRD anticipates managing groundwater levels in order to protect life, protect property, and protect for the future.

UENRD Offers Scholarships to High School Seniors

Each year, the Upper Elkhorn Natural Resources District offers three \$500 scholarships to graduating High School Seniors from the District. These scholarships are available for students who are planning to further their education in a field related to natural resources or agriculture. Seniors who are interested should contact the Upper Elkhorn NRD or visit the website at www.uenrd.org/education.html for further information, eligibility requirements and applications. The deadline for all scholarship applications is April 6, 2018.

Public Informational Meetings			
Town	Location	Date	Time
Bassett	Range Cafe Back Room	Tuesday, December 5, 2017	2:30 PM
O'Neill	O'Neill Community Center	Monday, December 11, 2017	2:30 PM
Neligh	Neligh American Legion	Thursday, December 14, 2017	2:30 PM
Public Hearing			
O'Neill	O'Neill Community Center	Monday, December 18, 2017	1:30 – 2:30 pm

Got a Gully? Fix it, Don't Disc It!

LINCOLN, Oct. 4, 2017 – Harvest isn't just about cutting stalks, it's about taking stock.

According to Britt Weiser, state resource conservationist with the USDA Natural Resources Conservation Service in Lincoln, during harvest farmers should study the areas in their fields where erosion is occurring.

"If you notice rough spots in your cropland where the soil has washed away, take stock. Chances are that area is not only losing soil and productivity, but it could potentially cost you your USDA farm program benefits," Weiser said.

Since the passage of the 1985 Farm Bill, farmers have been required to control erosion on fields that are classified as highly erodible. A non-compliance ruling can impact the benefits farmers receive from USDA agencies, such as access to federal crop insurance premium subsidies and conservation program dollars.

Each spring, NRCS conducts compliance reviews on a random selection of highly erodible fields to determine if erosion has been adequately controlled. The two factors measured for

conservation compliance are sheet-and-rill erosion, and ephemeral gully erosion.

Sheet and rill erosion is generally controlled through no-till farming. Ephemeral gullies are small ditches in fields that are often smoothed out with a disc. According to Weiser, discing or smoothing gullies does not fix the problem, and it puts farmers at risk of losing USDA farm program benefits.

"Using a disc to smooth out ditches in cropland can make the issue worse, causing soil to be more unstable and susceptible to washing away. If it is necessary to smooth out a ditch, farmers should plant a cover crop or grass, or install another practice to prevent erosion from occurring." Weiser said, "We're telling farmers, 'Fix it. Don't Disc it.'"

NRCS is available to help "fix it" by providing both technical and financial assistance to install conservation practices like no-till farming, cover crops, grassed waterways, and terraces to control erosion. This article was provided by the NRCS.

Notice:

Anyone Applying for an Application for a Permit to Construct a Water Well within the Upper Elkhorn NRD for a new or replacement irrigation well MUST have their groundwater irrigated acres certified prior to receiving approval!

Upper Elkhorn NRD Board of Directors Decreases Property Tax Asking for FY 17-18

The Upper Elkhorn NRD Board of Directors in September approved the 2017-2018 fiscal year budget with a decrease in the mill-levy and property tax asking. The FY 17-18 budget request is only 1.53 cents per \$100 of valuation for a total of \$762,106 in property tax asking. A decrease of \$33,036 from fiscal

year 16-17. The Upper Elkhorn NRD continues to maintain a responsible budget to lessen the property tax burdens of its friends and neighbors. This has been accomplished by obtaining additional funding through the Nebraska Environmental Trust and the Department of Environmental Quality 319 Grants.

**Nebraska's Natural Resources Districts
Protecting Lives
Protecting Property &
Protecting the Future Since 1972**

Get Your Groundwater Irrigated Acres Certified

The Upper Elkhorn NRD continues its Groundwater Irrigated Acre Certification. Landowners will be contacted by mail with letters and information regarding the irrigated acres they have listed with the county assessor in 2010.

Lower Niobrara River Basin: Landowners who own groundwater irrigated acres within the Lower Niobrara River Basin and can show proof that they irrigated them at least once between the years 2003 and October 16, 2007 will be able to certify their acres at 100%. Acres irrigated prior to 2003 will be considered Historically irrigated and with the proper documentation will be certified at 95%.

Lower Platte River Basin: Landowners who own groundwater irrigated acres within the Lower Platte River Basin and can show proof that they irrigated them at least once between the years 2004 and December 16,

2008 will be able to certify their acres at 100%. Acres irrigated prior to 2004 will be considered Historically irrigated and with the proper documentation will be certified at 95%.

Area Outside the 10/50 Line (Northern Antelope County): Landowners who own groundwater irrigated acres within the area outside the 10/50 line and can show proof that they irrigated them at least once between the years 2008 and October 1, 2012 will be able to certify their acres at 100%. Acres irrigated prior to 2008 will be considered Historically irrigated and with the proper documentation will be certified at 95%.

Historically irrigated acres: Historically irrigated acres shall consist of groundwater irrigated acres which were irrigated prior to 2003 for the Lower Niobrara River Basin, 2004 for the Lower Platte River Basin and 2008 for the area outside the 10/50 line or are current-

ly enrolled in the Conservation Reserve Program, Conservation Reserve Enhancement Program, Environmental Quality Incentive Program or other federal, state or local conservation program must also be certified if there is any possibility of future irrigation.

Documentation for Acre Certification: Proper documentation for the certification of irrigated acres will include either county assessor records noting the year and irrigated acres or an FSA 578 form. Any irrigated acres that are not certified during the specified dates would not be allowed to have groundwater applied to them for any purpose. Final acre certification will be based off of County Assessor and/or FSA records.

If Groundwater Irrigated Acres are not certified with the Upper Elkhorn NRD, there is a chance that they will not be allowed to be irrigated in the future.



Conservation Tree Seedling Orders are now being taken for Spring Planting

Due to a number of issues over the past few years, a number of trees have been removed to develop areas for crop production. The Upper Elkhorn NRD would like to encourage all those landowners who removed trees to consider replacing them this upcoming spring.

There are several incentive programs to help offset the cost of installing a new windbreak on the federal, state and local level. Federal programs include the Environmental Quality Incentives Program (EQIP); Wildlife Habitat Improvement Program (WHIP); Wetlands Reserve Program (WRP-limited to appropriate wetland sites); and, Continuous Conservation Reserve Program (CCRP).

State programs include Nebraska Soil and Water Conservation Program (NSWCP); individual NRD programs; Nebraska Buffer Strip Incentives Program; and, WILD Nebraska.

Private organizations also offering assistance to promote tree planting are Corners for Wildlife, Pheasants Forever and Quail Forever chapters.

The Upper Elkhorn NRD will be taking orders from now until March 1st. Trees are available on a first come first serve basis and are available in a variety of species consisting of conifers, broadleaves and shrubs. Hand plant trees should be ordered in bundles of 25 while machine plant orders will be based on the windbreak design. The NRD can also provide technical assistance to cooperators who would like help designing a new windbreak or renovating an old one. The technician will suggest the type of trees best suited for your soil type and design a layout beneficial to your needs.

The NRD also offers two practices to help increase the survival rate

of new seedlings, drip irrigation and conservation weed mulch. Drip irrigation is available for cooperator installation and is used when there is a water source at the site. Conservation weed mulch is installed over the seedlings to help control weeds and retain moisture. Both practices can be very beneficial to young windbreaks and should be considered when placing your order.

Remember, the Upper Elkhorn NRD is also your one-stop shop to order trees and weed mulch. The NRD can plant and install the trees and fabric as we have for the past 40+ years. Trees and mulch purchased from the Upper Elkhorn NRD could be eligible for local or state funds. For further information or to place an order contact your local NRCS office or the Upper Elkhorn NRD at 301 N. Harrison Street, O'Neill or (402) 336-3867.

Bazile Groundwater Management Project Offers Incentives for BMPs up to 90%

The Bazile Groundwater Management Area Project (the Project) on behalf of the Lewis and Clark, Lower Elkhorn, Lower Niobrara, and Upper Elkhorn Natural Resource Districts (NRD); in partnership with the Nebraska Department of Environmental Quality (NDEQ), has received an Environmental Protection Agency (EPA) Section 319 grant to provide financial incentives up to 90% for the adoption of Best Management Practices (BMPs) in the Tier 1 and Tier 2 areas of the Project. Tier 1 and Tier 2 Areas are defined as the geographic areas which contribute to groundwater recharge of Public Water Supply wells. As you may be aware, some of these Public Water Systems are impacted by groundwater nitrate contamination. Improving groundwater quality in these areas is a high priority of the Project.

The Project has partnered with United States Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) to offer additional cost share incentives for conservation practices available through the Environmental Quality Incentives Program (EQIP) and the National Water Quality Initiative (NWQI) program (see gray shaded area on the map). This partnership enables producers to implement BMPs with little out-of-pocket expense.

Please contact Phil Steinkamp (philsteinkamp@gmail.com), Bazile Project Coordinator, or your local USDA/NRCS office for more details. We look forward to working with area landowners, farm operators and product/service

providers to utilize these conservation dollars in pursuit of increased nitrogen use efficiency and the preservation of our local natural resources.

Best Management Practices eligible for cost share using 319 funds include:

- Nutrient Management: (includes: Soil sampling, Crop tissue analysis, Variable rate fertilizer application, and Nitrification inhibitors) \$1.50 - \$26.91 per acre
- Irrigation Water Management Plan: (includes: Soil moisture sensors, and Irrigation scheduling) \$773.52 - \$2,636.59* each
- Irrigation Water Well Sampling: \$26.62 - \$245.03 each
- Water Well Flow Meters: \$96.14 - \$473.81 per inch of pipe diameter
- Cover Crops: \$33.02 - \$78.53 per acre
- “Continuous” No Till Farming: \$9.80 - \$17.64 per acre

Cost share amounts listed are estimates only. Actual rates depend on the type, extent implemented and total cost of the practice. Cost share can cover up to 90% of the cost of the practice. Sign up deadline for EQIP in the NWQI area is February 16, 2018.

NRD cost share is also available within the entire Bazile Groundwater Management Area for other various agricultural practices and well decommissioning. This is the first time EPA 319 grant funds have been approved for use to address a groundwater quality issue; funds are typically reserved for surface water quality issues. Please visit the project web page at www.uenrd.org/programs-projects/projects.

Available Tree Species

Conifers		
Eastern Red Cedar	Rocky Mountain Juniper	Colorado Blue Spruce
Austrian Pine	Norway Spruce	Jack Pine
Ponderosa Pine		
Broadleaves		
Native Cottonwood	Swamp White Oak	Bur Oak
Black Walnut	American Elm	Silver Maple
Hackberry	Honeylocust	Black Cherry
Catalpa	Crabapple	Amur Maple
Shrubs		
Caragana	Sumac	Chokecherry
Chokeberry	Sandcherry	Elderberry
Dogwood	Hazelnut	Cotoneaster
Lilac	American Plum	Buffaloberry
Serviceberry	Nanking Cherry	Golden Currant

Cost of Trees & Materials

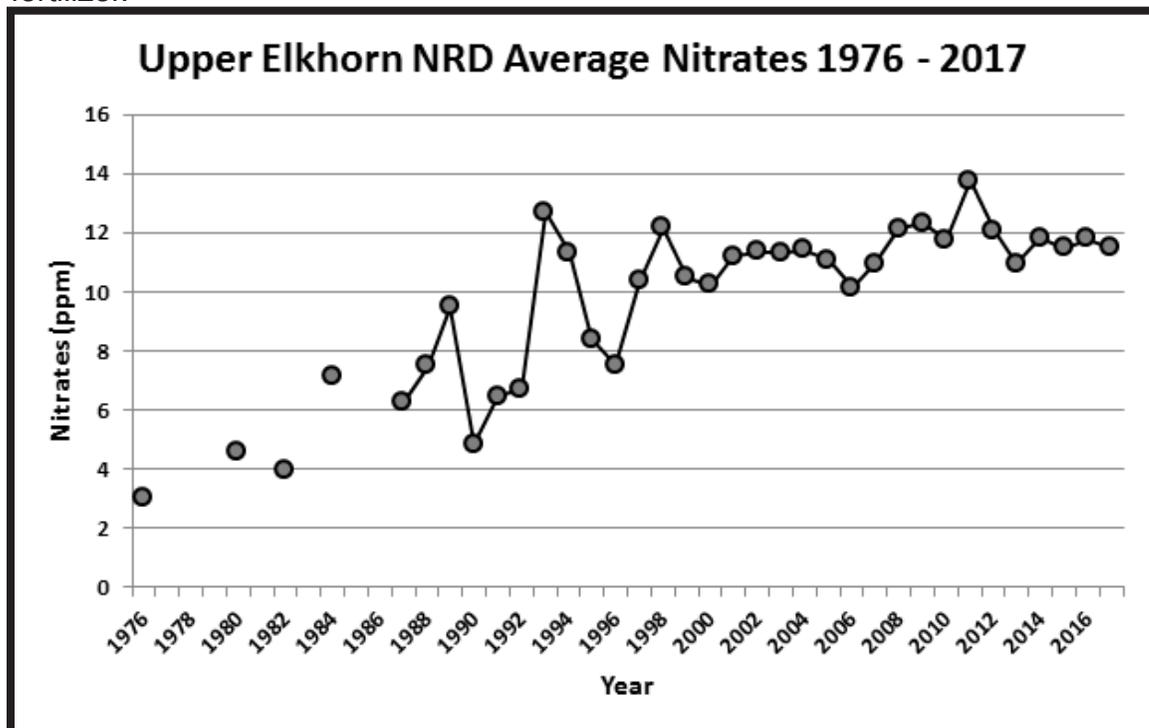
Handplant Trees	\$ 1.00/Tree plus tax
Machine Plant Trees	\$ 165.00/100 plus tax
Weed Mulch (Installed)	\$.70/foot plus tax
Weed Mulch 500 Foot Roll	\$ 200.00/Roll
Weed Mulch Squares	\$ 2.75 Each plus tax
Prices Subject to Change	

Monitoring Groundwater Nitrate Concentrations

The Upper Elkhorn NRD has monitored groundwater nitrate concentrations since 1976. Our monitoring program has since expanded to over 700 irrigation wells from participating landowners across the District. From June to September, water resource technicians follow detailed quality assurance procedures to collect irrigation water samples and send them to Ward Laboratories in Kearney, NE for nitrate analysis.

In 2017, the average nitrate concentration for UENRD was 11.5 parts per million (ppm) nitrate-nitrogen. The lowest sample concentration was 0.1 ppm and the maximum was 50.7 ppm. The District average is greater than the maximum contaminant level of 10 ppm deemed safe by the Environmental Protection Agency (EPA). Although the rate of increase has slowed since the early 2000's, there are many townships of high concern in our Phase II Management Area, where nitrate concentrations are still greatly increasing, with some townships averaging 18 - 20 ppm in 2017. Please visit our website and view your township average on the Average Groundwater Nitrates Map.

Nitrates in groundwater can come from various sources, but research funded by UENRD to determine the cause found inorganic nitrogen from commercial fertilizers to be the source. Drinking water high in nitrates can cause a potentially deadly condition in infants called blue-baby syndrome. We encourage all landowners to test their private wells for nitrate, and remind producers to test their irrigation wells every four years to remain in compliance with the District's Nitrogen Certification Program. Nitrogen in irrigation water applied to crops during the nitrogen uptake period is just as effective as the equivalent amount of nitrogen fertilizer.



Nominate Your Neighbor

Do you know someone who has done outstanding conservation work to help protect and preserve our natural resources? The Upper Elkhorn NRD would like to reward those individuals or groups for their contribution to conservation! Award categories include: Outstanding Grassland; Outstanding Tree Planter; Outstanding Community Conservation; Agri-Business; Wildlife Habitat; and, Honor Farm/Ranch. For more information contact the Upper Elkhorn NRD.

Reminder - Phase II Forms are Due by December 31, 2017!

The Oracle is the official publication of the Upper Elkhorn Natural Resources District. It is produced for the purpose of educating the public regarding natural resources issues. Any comments or questions should be sent to Beth Walsh, Upper Elkhorn NRD, 301 N. Harrison Street, O'Neill, NE 68763 or e-mailed to bwalsh@uenrd.org.

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UENRD Board Meetings are held the 4th Monday of every month.

April through October at 7:00 P.M. and November through March at 2:30 P.M.

UENRD Staff

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Joy Knapp	NRCS Clerk, Neligh
Vacant	NRCS Clerk, Ainsworth
Mary Zakrzewski	NRCS Clerk, O'Neill

Attention Landowners- Soil Sampling Requirement!

Upper Elkhorn Natural Resources Groundwater Management Plan: Phase II Requirement

Reminder to everyone in the UENRD Phase II areas – Deep soil sampling analysis (mandatory two foot sample) for nitrate-nitrogen content on each field going into corn, larger than 40 acres, with more than 50 pounds per acre of actual nitrogen fertilizer applies. This soil sampling information is required on your Phase II report at the end of the 2017 growing season to be submitted to us. Please visit our web-site at www.uenrd.org to verify if you are in the Phase II area, or contact the office at 402-336-3867.

