Upper Loup Scoop

Upper Loup NRD

July 2016

Inside this issue:

Sub-District 5 Irrigators	2
ULNRD Awards	
Scholarships	2
Improvements to Office	2
NET Grant Received	3
Recycling Changes	3
Sub-District 1 Well	
Owners	3
Spring Water Levels	4

Calendar of Events

4	Office Closed:
14	Independence Day
	Board Meeting
	ULNRD Office 7PM C

August

 Board Meeting: ULNRD Office 7PM CT
State Fair Begins

September

- 5 Office Closed: Labor Day
- 7 ULNRD Field Day
- 8 Board Meeting: ULNRD Office 7PM CT
- 13 Range Judging Competition, Thedford
- 13-15 Husker Harvest Days
- 25-27 NARD Annual
 - Conference

Important Information About Irrigated Acres

ATTENTION all Irrigators in the Upper Loup Natural Resources District: Upon evaluation of the District's static water levels, stream depletion information and the Department of Natural Resources INSIGHT data, the Upper Loup NRD's Board of Directors has decided to NOT allow any new irrigated acres anywhere within the District for 2017.



ULNRD Voluntary Integrated Management Plan for Basin Approved

The Upper Loup Natural Resources District (ULNRD), Department of Natural Resources (DNR) and a group of local stakeholders began developing an integrated management plan (IMP) back in April of 2014. The objective of developing an integrated management plan is to manage the River Basin to achieve and sustain a balance between water uses and water supplies for the long term.

In 2010, the Nebraska Legislature passed a bill that makes creation of a voluntary IMP an option for NRDs. Like IMPs required in over and fully-appropriated river basins (the Loup is neither), the goals are to achieve and sustain a balance between water uses and to maintain a proactive approach to water management. Should a fully appropriated designation occur in the future, DNR and the NRD could amend the IMP. *(IMP, continued on page 3)*

Seventh Year of ACE Camp, Yet Another Success

This year marked the seventh annual Adventure Camp about the Environment (ACE). The camp was held from Sunday, June 12th through Wednesday, June 15th at the 4-H Camp in Halsey. A total of 41 campers traveled from all over the state to attend camp, with 13 of them returning for a second or even a third year! This year, 12 NRD's across the state were represented, including two for the first time: Lower Elkhorn NRD and Upper Elkhorn NRD.

The campers had the opportunity to learn through hands-on activities about Nebraska's Natural Resources Districts, energy, wetlands, water quality, forestry, soils, range, wildlife, fishing, GPS, and careers in natural resources. Activities included building and testing solar cars, searching for aquatic creatures in the Middle Loup River, painting with soils, and finding geocaches with a GPS. Some of the presenters came from NRD's close by, while others came from all over the state to help teach the campers, including employees from USDA-Natural Resouces Conservation Services, Pheasants Forever, and the University of Nebraska–Lincoln. *(continued on page 2, ACE)*

(ACE, cont'd from page 1) Many sponsors continue to help make ACE Camp successful from year to year. The main sponsors every year are Nebraska's NRDs and the Nebraska Association of Resources Districts Foundation. Other sponsors that help make camp successful are the Nebraska National Forest, Nebraska State 4-H Camp, Nebraska Game and Parks Commission and the Hooker County Turner Youth Foundation.

Sub-District 5 (Logan & McPherson Counties) Irrigators

<u>May 1, 2017</u> is the date for all high capacity wells associated with certified irrigated acres–whether actively watering or not–to be equipped with a flowmeter.

Basic flowmeter requirements are:

- new
- NOT a Seametric brand
- if chemigation practices will be used, meter must be impeller driven
- if electronic must have uninterruptible power supply
- meet or exceed industry standard of $\pm 2\%$ water flow accuracy
- installed according to manufacturer's specifications and calibrated to the pipe size
- capable of measuring all the groundwater pumped by a well or wells connected in a series serving a single purpose
- have a gallon totalizer gauge that reads in acre-inches and a flow rate gauge that reads in gallons per minute
- be protected with a cover.

Flowmeter size, serial number, and flow direction shall be clearly stamped on the body of the flowmeter and shall be recorded by the District for inventory purposes. Once you have the meter(s) installed please contact our office at 308-645-2250 and we will send out a technician to inspect. If you have any questions, or need to make any changes please feel free to contact us.

ULNRD Awards Scholarships for Summer Camps

Each year, the Upper Loup NRD offers scholarships to area students who want to attend the summer camps, Nebraska Youth Range Camp and Adventure Camp about the Environment (ACE), at the 4-H Camp in Halsey. This year, the ULNRD approved scholarships for BaiLee McMillan from

CONSERVATION JEOPARDY

 The process of water in the soil that soaks back into the groundwater supply is known as: A. precipitation
B. watershed C. recharge

2. Which is bigger, the Pacific Ocean, or all the land in the world combined?

What is the name for the zone of water saturation below ground?
A. discharge B. water table C. aquifer
True of false: the flat land that borders a river and is covered by water when the river floods is called a floodplain.

5. At what temperature does water boil? A. 80 degrees Celsius B. 132 degrees Celsius C. 100 degrees Celsius Answers on page 4 Milburn, and Ryley Johnson from Hyannis, to attend Nebraska Youth Range Camp. For ACE Camp, Taylor Svoboda from Mullen, Tyson Stengel from Valentine, and Reece Zutavern from Dunning.



Pictured from left to right are campers from ULNRD: Reece Zutavern, Brett Downing, Tyson Stengel and Taylor Svoboda.



Improvements to the ULNRD Office

In June, the Upper Loup NRD replaced the old wooden sign with a new metal sign in front of the office. The High School Ag class at Mullen Public Schools cut the new sign. Taylor Shane, and Resources Technicians. made some adjustments and installed the new sign. We are quite pleased with the new addition to the front of the office!

(IMP, cont'd from page 1) An IMP creates a foundation of data and tools to effectively manage water use and supply. It creates a framework for the sharing of data. It looks at the opportunities that exist to create a plan adaptable to changing conditions and it provides an avenue to receive local input regarding future water uses and needs. It also offers funding opportunities for water projects in the district. IMPs change and eveolve as the needs of the basin change. They do not regulate water quality. General Manager Anna Baum states that the plans are a long-term process, requiring months, if not years to complete and that the average water user will not notice major changes in water regulation as most rules in the plan are based on current regulations by the NRD and DNR.

The plan received final approval from the Nebraska Department of Natural Resources following passage by the Upper Loup NRD Board of Directors in April. An order adopting the Voluntary Integrated Management Plan was signed by DNR Director, Gordon "Jeff" Fassett, on May 31, 2016.

Upper Loup NRD Receives Grant from Nebraska Environmental Trust

The ULNRD announces that it will receive \$95,000 from the Nebraska Environmental Trust for "Investigating the spatial and temporal characteristics of groundwater discharge in the Loup River Basin." This will be year two of a three-year partnership with the Upper Loup NRD, Lower Loup NRD, USGS and the Environmental Trust. Funds will help to facilitate the collection of airborne thermal infared data, purchase of additional instrumentation to measure and record groundwater-levels and temperature, and to oversee a study to enhance the understanding of spatial and temporal characteristics of grounwater/surface-water interaction in the Loup River Basin. Additional information is needed for the management and development of water resources to sustain supplies needed for agriculture, fish and wildlife, recreation and domestic uses.

Streams in the Loup River basin are sensitive to consumptive groundwater use because of the close hydrologic connection between groundwater and surface water. Over four stream reaches, totaling approximately 320 river miles, airborne thermal imagery will be collected and used to map stream surface temperatures to identify thermal anomalies, which may be indicative of focused groundwater discharge. Airborne thermal will be verified with continuous water-temperature logging at data existing stream-gauging stations and with self-logging thermistors. Mapped thermal anomalies will be investigated with a variety of techniques including temperature, potentiomanometer, and water seepage meter measurements.

Four coupled groundwater/surface-water gages consist of a streamgage coupled with an observation well that has been completed below the elevation of the streambed and instrumented with a water- level recorder. The information provided will allow scientists and managers to analyze streamflow and groundwater discharge patterns, both temporally and spatially. Future groundwater management actions must be tied to studies such as this in order to conserve, maintain and protect our water supplies, natural environments, and economic vitality for future generations.

Projects in Progress

Changes Regarding the Recycling of Plastics

Our end-market for recycling is making changes to what kind of plastics they will accept. Plastics labelled with number 1 and number 2 will be the ONLY plastics they accept. We do not have the man-power or monetary resources to separate the plastics, so we ask that you please look at the triangle on the bottom of the plastic recyclable before putting it in the bin. 1 and 2 plastics include drink bottles, milk jugs, margarine tubs and more. Watch our website and the newspaper for more information soon.

Sub-District 1 Domestic Well Owners

An Upper Loup NRD technician will be in Grant County and the southwest third of Cherry County over the next several months performing NO COST water quality tests on registered domestic known wells, unregistered wells and any requested wells. Domestic wells are at risk of being contaminated from several sources. Potential sources of ground water contamination which may be present near your home include septic tanks, animal waste, pesticides, fertilizers, fuel storage tanks, household chemicals, used motor oil, etc. The only way you know if nitrates and or bacterial are present in your drinking water is by testing because both are colorless, odorless, and tasteless. A water test for nitrate is highly recommended for households with infants, pregnant women, nursing mothers, or elderly people, as these groups are most susceptible to nitrates.

ULNRD Staff

Anna Baum General Manager Taylor Spencer Resources Technician Shane Young Resources Technician Leslie Harvey Administrative Secretary Jack Brummet Recycling Coordinator Lacey Sabatka Information & Education Pam Petersen Field Office Secretary

ULNRD Board of Directors

Sub-District 1 Eric Storer Chris Vinton Sub-District 2 Judy Ridenour **Tim Andersen** Sub-District 3 **Chris Higgins** Gary Reiser Sub-District 4 Gordon Simonson **Todd Schipporeit** Sub-District 5 Tom Johnson **Richard Burnside** At Large Bobbie Jo Christensen Cherry Cherry Cherry Brown 3 1 2 4 Grant Hooker Thomas Blaine McPherson 5 Logan

For Latest News check out www.upperloupnrd.org

PRSRT STD ECRWSS US Postage Paid Thedford, NE 69166 Permit. No. 11

TO: POSTAL CUSTOMER



□2005 □2006 □2007 □2008 □2009 □2010 ■2011 ■2012 ≈2013 ■2014 ■2015 ■2016

CONSERVATION JEOPARDY ANSWERS

1. C. recharge 2. Pacific Ocean 3. B. water table 4. True 5. C. 100 degrees Celsius

Upper Loup NRD 39252 Highway 2, Thedford, NE 69166 Phone: 308-645-2250 Fax: 308-645-2308