## Tri-Basin Irrigator

Volume 24, Issue 1

May 23, 2024

### **PROGRAM INFORMATION**

**EQIP:** CONTRACTS HAVE BEEN OBLIGATED FOR 2024 FUNDS.

MORE CONTRACTS WILL BE OBLIGATED AS FUNDS BECOME

AVAILABLE. SIGN-UP NOW FOR 2025 FUNDS TO ENSURE NOT

MISSING THE CUTOFF DATE.

CSP: CONTRACTS HAVE BEEN OBLIGATED FOR 2024 FUNDS.

MORE CONTRACTS WILL BE OBLIGATED AS FUNDS BECOME

AVAILABLE. SIGN-UP NOW FOR 2025 FUNDS TO ENSURE NOT

MISSING THE CUTOFF DATE.

NSWCP: NSWCP FUNDS ARE APPROVED MONTHLY FOR FLOW METER ONLY AND SOIL MOISTURE SENSOR APPLICATIONS. ALL OTHER IRRIGATION APPLICATIONS FOR UNDERGROUND PIPE, SURGE VALVES, ETC. ARE REVIEWED FOR FUNDING 4 TIMES A YEAR, SEPTEMBER, DECEMBER, FEBRUARY, AND MAY (FOR SLIPPAGE).

NEW FUNDS COME JULY 1<sup>ST</sup> SO GET YOUR IRRIGATION APPLICATIONS IN BY AUGUST 31<sup>ST</sup> IN ORDER TO HAVE FIRST CHANCE AT THE NEW FUNDS IN SEPTEMBER. APPLICATIONS MUST BE SIGNED BY THE OWNER. INSTALLATION WORK CANNOT BE STARTED UNTIL APPROVED. - AS A SIDE NOTE, ALL NON-IRRIGATION APPLICATIONS ARE APPROVED MONTHLY.

ENERGY EFFICIENCY GRANT: SIGN UP CUTOFF'S ARE QUARTERLY. NEXT SIGN-UP DEADLINE IS JUNE 30<sup>TH</sup> FOR IMPROVEMENTS TO IRRIGATION SYSTEMS SUCH AS CONVERTING GRAVITY SYSTEMS TO PIVOTS OR SDI, AND NATURAL GAS/PROPANE/DIESEL ENGINES TO ELECTRIC MOTORS, WELL REBOWLS, ETC. FOR MORE INFORMATION CONTACT JOLENE AT RURAL DEVELOPMENT AT THE KEARNEY USDA SERVICE CENTER AT 308-455-9840 OR AT JOLENE.JONES@USDA.GOV.

## **CALENDAR OF EVENTS**

MAY 27: MEMORIAL DAY - BANKS & GOV'T OFFICES CLOSED

JUNE 3: CNPPID BOARD OF DIRECTORS MEETING

JUNE 10: CNPPID 12 WEEK IRRIGATION RUN SCHEDULE STARTS

JUNE 10: UNL WHEAT PLOT TOUR NEAR ARAPAHOE. SEE ATTACHED FLYER FOR MORE INFORMATION.

JUNE 13: TBNRD BOARD MEETING – MOVED FROM 2<sup>ND</sup> TUESDAY

JUNE 14: FLAG DAY

JUNE 19: UNL TAPS SUMMER FIELD DAY AT NORTH PLATTE.

GOTO https://taps.unl.edu/taps-2024-summer-field-day
FOR MORE INFORMATION AND TO REGISTER BY JUNE 12.

JUNE 26: UNL WEED MGT FIELD DAY AT THE NEBRASKA

**EXTENSION SOUTH CENTRAL AG LAB NEAR CLAY CENTER** 

GOTO HTTPS://GO.UNL.EDU/2024FIELD-DAYTO PRE-

REGISTER. MORE INFO ON PAGE 2 OF THIS NEWSLETTER.

#### **Nitrogen Efficiency Forum**

Locally developed nitrogen communication tool to share thoughts, trials, etc. related to nitrogen fertilizer. Goto: <a href="https://nitrogen-efficiency.com/">https://nitrogen-efficiency.com/</a> to read. Register to add your own comments or start a new topic.

#### **CURTIS'S COLUMN**



#### Pearl???

It's not Minnie and it's not the gemstone. It's the 20<sup>th</sup> season of the Tri-Basin Irrigator.

Hello. My name is Curtis Scheele. I am the Water Management Specialist with the NRCS covering Gosper, Phelps, and Kearney counties. My office is located in Holdrege. See page 4 for my contact information.



I would like to welcome those who will be receiving the Irrigator for the first time as well as those returning subscribers. This newsletter is sent bi-weekly during the crop season – FREE of charge.

My goal this year is to provide you with irrigation and nitrogen information across the Tri-Basin NRD that is short and to the point. For our neighbors and others across this great state of Nebraska, I hope this information can benefit you all as well. Together, we need to protect and preserve our most valuable natural resource that we all rely on each and every day. That being our precious water.

If you would like to receive this newsletter via email, simply provide me with your email address. You can call your local NRCS office (see page 4) or you can email me at curtis.scheele@usda.gov. Benefits of receiving via email are direct links to websites, receiving weekly Crop ET information, and other information as appropriate.

Archived copies from 2018 to present are available on the Tri-Basin NRD's website at

<u>https://www.tribasinnrd.org/information-outreachnews/tri-basin-irrigator-newsletter</u>. You will need to contact myself for older issues.

#### 2024 Crop ET Sources!!!

- 1. I will email weekly Crop ET information from TBAWMN sites each week. See map on page 3 for locations. These sites are additional Crop ET locations to the High Plains Regional Climate Center (HPRCC) locations. To be added to this email list, contact Curtis Scheele at curtis.scheele@usda.gov or call 308-995-6121, Ext. 3. The info will still be on page 3 of this newsletter, but you can receive it more timely by receiving the weekly email.
- 2. The weekly Crop ET information from the TBAWMN sites will be posted each week on the Tri-Basin NRD's website. See page 3 of this newsletter for the link.
- 3. The CropWatch website shown on page 3 of this newsletter will have the Crop ET for the past 7 days, past 3 days and the future 3 days. Accum. GDD is included. You can save the URL for the site locations nearest you. You can select from any of the HPRCC sites across Nebraska. 7 of the sites are within or neighbor the TBNRD.
- 4. The ET Texting Service will give daily Crop ET for the 3 HPRCC sites within the TBNRD. More information on this service is on page 2 under the Nebrasaka Extension Extras. Phone numbers to subscribe are on page 3 of this newsletter under the Crop ET Information section.

#### **CNPPID NOTES**



#### Legislative Bill Passes

An important piece of legislation was signed into law by Governor Jim Pillen on April 15 that affects Central's board of director's ability to serve their constituents to the fullest ability.

LB1260, introduced by Senator Mike Jacobson of North Platte, is specific to public power & irrigation districts and allows Board of Directors who are irrigation customers to discuss and vote upon annual irrigation delivery rates. It also allows directors who have homes/cabins at District owned lakes to discuss and vote on the general terms and rates for those leases. The bill does not give authority for individual accounts, just standard rates and terms for all customers.

Approximately five years ago, in response to a question raised by a constituent to the Nebraska Accountability and Disclosure Commission, Central sought an advisory opinion from the Commission regarding any possible limits on the authorities of directors that were also customers of the District. Unexpectedly, the commission concluded that board members with either cabin leases or irrigation contracts with Central could not engage in discussions regarding or vote on matters related to those contracts. That opinion limited several of our directors in their important roles governing the district.

The bill was introduced during the 2024 legislative session and passed 40-0 with an emergency clause as part of a package of bills (LB1370) from the Natural Resources Committee meaning the law takes effect immediately.

With the passage of LB1260, our directors with a unique perspective that comes from being customers themselves, may now fully participate in the governance of the District. This was a critical bill that moving forward allows our directors to discuss, consider and vote on the issues that are the greatest importance to their constituents.

Visit www.cnppid.com or follow @CNPPID on Facebook, Instagram and Twitter for updates throughout the year.

## Tri-Basin NRD News



#### Chemigation Deadline - May 31st

Chemigation is an efficient means of applying fertilizers, herbicides, and insecticides. State law requires anyone applying fertilizer or ag chemicals through their irrigation system to have an annual chemigation permit for each injection site.

Tri-Basin Chemigation renewal forms were sent to producers in January and must be signed and returned with payment to the Tri-Basin NRD office by May 31, 2024. Renewal permits are \$15 each and new permits are \$50 each. Landowners and operators should contact Tri-Basin NRD 308-995-6688 about new chemigation permits. All newly permitted chemigation systems must be inspected before use.

A person must have a chemigation applicator license to apply ag products (fertilizer or chemicals) in irrigation water. If a chemigation system crosses an open waterway, such as an irrigation canal, an additional form must be completed before the permit can be approved.

Chemigation systems require routine inspections every three years. If your system is due for an inspection, you will be contacted this summer. NRD staff conduct these inspections from June to August. Routine inspections must be completed for permits to be eligible for renewal the following year. A more detailed explanation of the chemigation permitting process is available on our website at https://www.tribasinnrd.org, under Water Quality.

# NEBRASKA EXTENSION EXTRAS RETENSION



#### Free Irrigation ET Texting Service

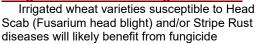
The "free daily texting" corn & soybean crop irrigation ET (evaporation/transpiration) water usage service is available again in 2024. The automated daily weather station updates (through the High Plains Regional Climate Center) can be texted directly to your cell phone.

This free-of-charge service is a joint effort among CNPPID (Central Nebraska Public Power Irrigation District); Tri-Basin NRD (Natural Resource District); and Nebraska Extension. This daily text provides crop growth and water use calculations for both corn and soybean. Corn growth staging water usage is based on a May 10th emergence date whereas, soybean growth staging water usage is based on a May 20th emergence date. The ET texting starting date will be June 1st.

Referenced automated weather data network stations are named to reflect mileage and direction from the nearest town. Texting weather stations include: "Holdrege 5N;" "Axtell 5NE;" and "Smithfield 2E."

For returning participants, you do not need to re-register. To be added, removed OR to change your cell phone number; contact Sasha Hahn @ Tri-Basin NRD (308-995-6688).

#### Fungicide Advised for Irrigated Wheat





applications this year. FHB spores can overwinter on corn and wheat residue. Then, excessive rainfall prior to head flowering (Feekes stage 10.5.1) can damage kernel development. Thus, target fungicide applications when yellow anthers first become visible. Labelled products include: Caramba®; Sphaerex®; Prosaro®; Prosaro Pro®; Miravis Ace®; and Proline®.

#### UNL Wheat Plot Tour - June 10 - Arapahoe

Troy & Drew tenBensel (UNL On-Farm Cooperators) will be hosting a Nebraska Extension Wheat Varieties Performance Plot tour on Monday, June 10th at 10:00 AM. Their field site is located from Arapahoe, NE: 1.5 miles west & then one mile north on Road 422 (plot on west side of road). See attached flyer for more information. GPS 40.325595, -99.932086

#### Free Bean Cam App

The free University of Wisconsin "Bean Cam App" (via your smart phone camera) is an efficient method to assess soybean emergence stand counts. Dr. Shawn Conley developed this App for 'repair-plant/fill-in/overseed' soybean decisions for sections of fields. https://ipcm.wisc.edu/apps/beancam/

App users hold their phone camera above a 5' wide x 4' long area of field containing two 30" row; four 15" rows or eight 7.5" rows. Then, align the plant rows with the camera yellow lines, before snapping a photo. Then, manually count (just this one time) the number of plants captured in the Bean App and use UNL soybean recommendations: https://on-farmresearch.unl.edu/result-publications

#### <u>UNL Weed Mgt. Field Day – June 26 – Clay Center</u>

Nebraska Extension South Central Ag Lab - Clay Center located 12.4 miles east of Hastings on Hwy 6 (GPS Coordinates: 40.57539, -98.13776 is hosting a free "Weed Management Field Day on Wednesday, June 26th from 9:00 AM to 1:00 PM. Tour includes new tech demonstrations of corn, sorghum & soybean weed control along with a free lunch and UNL Dairy Ice Cream.

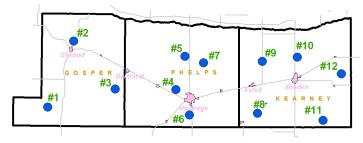
Although admission is free, pre-registration is required at: https://go.unl.edu/2024field-day. CCA Credits are available.

## **NAWMN CROP ET INFORMATION**

Additional Information and other ET resources can be found at websites listed under "Crop ET Information" below.

## Inches of Crop Water Use (ET) = Evaporation x Kc

	May 6 – May 12		May 13 – May 19	
Site	<b>Evaporation</b>	Rain	<b>Evaporation</b>	Rain
1	NA	NA	1.7	0.52
2	NA	NA	1.3	0.70
3	NA	NA	1.5	0.48
4	NA	NA	1.6	0.82
5	NA	NA	1.6	0.62
6	NA	NA	1.5	0.68
7	NA	NA	NA	NA
8	NA	NA	1.5	0.64
9	NA	NA	1.5	0.97
10	NA	NA	1.5	0.89
11	NA	NA	1.6	0.73
12	NA	NA	1.3	0.80



2024 Map of TBAWMN Sites across the Tri-Basin NRD.

Crop Coefficients (Kc)			
Corn		Soybeans	
Stage	Kc	Stage	Kc
2 leaf	0.10	Cotyledon (VC)	0.10
4 leaf	0.18	1st Node (V1)	0.20
6 leaf	0.35	2nd Node (V2)	0.40
8 leaf	0.51	3rd Node (V3)	0.60
10 leaf	0.69	Beg. Bloom (R1)	0.90
12 leaf	0.88	Full Bloom (R2)	1.00
14 leaf	1.01	Beg. Pod (R3)	1.10
16 leaf	1.10	Full Pod (R4)	1.10
Silk - Beg. Dent	1.10	Beg. Seed (R5)	1.10
1/4 Milk Line	1.04	Full Seed (R6)	1.10
Full Dent (½ Milk)	0.98	Yellow Leaf (R6.5	1.00
3/4 Milk Line	0.79	Beg. Mat. (R7)	0.90
Black Layer	0.60	Full Mat. (R8)	0.20
Full Maturity	0.10	Mature	0.10

#### **CROP STAGE INFORMATION**

Corn (Not Planted to V4-4 Leaf stage): Hail, wind, or frost that damages the exposed leaves at the 3-leaf stage have little or no effect on yield due to the below ground growing point. At V3, all leaves and ear shoots that the plant will eventually have are being formed now.

Avg. daily water use from May 13 - May 19 was 0.00"-0.17".

Soybeans (Not Planted to Emerging stage): Nothing at this time

Avg. daily water use from May 13 – May 19 was 0.00"-0.00".

May 13-May 19 (11 of 12 TBAWMN sites reporting): Average weekly rainfall was 0.71 (range 0.48 to 0.97). Average weekly ET for corn was 0.08 and for soybeans was 0.00.

#### CROP ET INFORMATION

TBAWMN Sites: <a href="https://www.tribasinnrd.org/tbawmn">https://www.tribasinnrd.org/tbawmn</a>
CropWatch: <a href="https://cropwatch.unl.edu/gdd-etdata">https://cropwatch.unl.edu/gdd-etdata</a>

Texting: TBNRD: 308-995-6688 or UNL: 308-995-4222

CORN STAGE		DESCRIPTION
V2	2 Leaves	Leaf stage is defined by number of leaves with visible collars. The collar is a discolored line where the
V4	4 Leaves	<ul> <li>leaf meets the stalk. This line circles the stalk. TIP: Mark the 6th leaf or a higher leaf by cutting a not in it or some other way so as to know that leaf number. Reason is the lower leaves will be lost as the plant develops. Flag or somehow mark the plant in the field as a reference plant when determining lat leaf (vegetative) stages.</li> </ul>
V6	6 Leaves	

SOYBEAN STAGE		DESCRIPTION	
VC	Cotyledon	Shortly after emergence. Cotyledons and unifoliate leaves are unfolded. (1 node)	
V1	First Node	One trifoliate leaf has 3 leaflets. V1 is the first trifoliate leaf with unrolled or unfolded leaflets. Leaflet edges are no longer touching. (2 nodes = 1 unifoliate + 1 trifoliate)	
V2	Second Node	V2 has 2 nodes on main stem, each with a trifoliate leaf with unfolded leaflets. Plant as 3 nodes total: 1 unifoliate + 2 trifoliates	

## LAKE AND RIVER LEVELS

CNPPID Reservoir Elevation and Capacity as well as Platte River Flow data listed below and other locations can be found on CNPPID's website at <a href="http://cnppid.com/wp-content/uploads/2016/06/lakeRiverData.html">http://cnppid.com/wp-content/uploads/2016/06/lakeRiverData.html</a>.

	May 23, 2024, 8:00 AM	1 Year Ago
El. & Cap. – Lake McConaughy	3242.5 ft - 65.6%	3234.0 ft - NA%
Inflows to Lake McConaughy	1140 cfs	1020 cfs
Flows on the North Platte at North Platte	326 cfs	302 cfs
Flows on the South Platte at North Platte	406 cfs	316 cfs
Flows on the Platte at Kearney	451 cfs	306 cfs



### **WEBSITES OF INTEREST**

NRCS Nebraska
Farm Service Agency
TBNRD Home Page
Central Irrigation District
UNL Cropwatch
UNL Extension
K-State SDI Website
No-till On The Plains

www.ne.nrcs.usda.gov www.fsa.usda.gov www.tribasinnrd.org/ www.cnppid.com/ cropwatch.unl.edu extensionpubs.unl.edu/ www.ksre.ksu.edu/sdi www.notill.org

<u>www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/</u> NE State Irrig Assoc

www.nebraskastateirrigationassociation.org/

## RAINFALL

Soil Health:

Rainfall amounts listed below and other locations come from NeRAIN which can be found at website <a href="https://nednr.nebraska.gov/NeRain/Maps/maps">https://nednr.nebraska.gov/NeRain/Maps/maps</a>.

Location:	May 9 - May 22	May 1 – May 22
Elwood 1.81 mi. NW:	2.05	3.96
Loomis 0.2 mi. SW:	1.85	3.85
Holdrege 1.7 mi. W:	2.20	3.96
Minden 7.2 mi. W:	1.33	2.87
Minden 5.8 mi. E:	1.33	2.82

Average Rain for May in Holdrege = 4.06 Inches

\*\*\* If you wish to receive this newsletter via e-mail, or have any questions, comments or ideas, feel free to contact Curtis Scheele at the NRCS office in Holdrege or you can email him at <a href="mailto:curtis.scheele@usda.gov">curtis.scheele@usda.gov</a>. \*\*\*

#### USDA - Natural Resources Conservation Service

1609 Burlington Street PO Box 798 Holdrege, NE 68949-0798 308-995-6121, Ext. 3 309 Smith Street PO Box 41 Elwood, NE 68937-0041 308-785-3307, Ext. 3

1005 South Brown Street Minden, NE 68959-2601

308-832-1895, Ext. 3

## Central Nebraska Public Power & Irrigation District

415 Lincoln Street PO Box 740 Holdrege, NE 68949 308-995-8601



Natural Resources Conservation Service

#### Tri-Basin Natural Resources District

1723 Burlington Street Holdrege, NE 68949 308-955-6688



#### Nebraska Extension

1308 2<sup>nd</sup> Street Holdrege, NE 68949 EXTENSION
PO Box 146

Elwood, NE 68937

424 North Colorado PO Box 31 Minden, NE 68959 308-832-0645

308-995-4222 308-785-2390

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# SCHEDULE

# Monday, June 10, 2024 **Tour Begins: 10:00 AM Location:** Ø 40.325595, -99.932086



From Arapahoe, NE: Head West 1.5 Miles, then turn North on Road 422 for 1 Mile. Plot will be on the South side of Road 725 on the West Side.

## 34 Public & Private Wheat Varieties **Plot Tour Leaders:**

Todd Whitney - UNL Extension Educator Cody Creech - UNL Wheat Specialist Amanda Easterly - UNL Wheat Specialist

# **Post Tour Presentation**

**Location:** Arapahoe United Methodist

Time: 10:45 AM Church - Basement: 701 Fifth St

Long Term Eco Fallow Rotations ~ Bob Klein, UNL

West Central Extension Crops Specialist

## **Cooperators:**

Troy tenBensel ~ Arapahoe, NE Drew tenBensel



#### **For More Information Contact:**

**Phelps County Extension** Office: (308) 995-4222 or email

**Todd Whitney:** twhitney3@unl.edu



## **Refreshment Sponsor:**

Hometown Agency -Arapahoe



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