Gri-Basin Irrigator

Volume 21, Issue 1

PROGRAM INFORMATION

EQIP: CONTRACTS ARE BEING OBLIGATED FOR 2025 FUNDS. MORE CONTRACTS WILL BE OBLIGATED AS FUNDS BECOME AVAILABLE. SIGN-UP NOW FOR 2026 FUNDS TO ENSURE NOT MISSING THE CUTOFF DATE.

CSP: CONTRACTS ARE BEING PREPPED FOR OBLIGATION FOR 2025 FUNDS. MORE CONTRACTS WILL BE OBLIGATED AS FUNDS BECOME AVAILABLE. SIGN-UP NOW FOR 2026 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 1ST SO GET YOUR IRRIGATION APPLICATIONS IN BY AUGUST 31ST 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: IN 2025, THEY ARE UNABLE TO ACCEPT APPLICATIONS FROM APRIL 1ST THROUGH JUNE 30TH. WITH THAT, THE NEXT APPLICATION DEADLINE IS SEPTEMBER 30TH. IN ADDITION, THE COST-SHARE RATE RIGHT NOW IS UP TO 25%. THIS GRANT / PROGRAM IS 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 308-4555-9840 OR AT *JOLENE.JONES@USDA.GOV.*

CALENDAR OF EVENTS

MAY 21: TBNRD BOARD MEETING MAY 26: MEMORIAL DAY – BANKS & GOV'T OFFICES CLOSED JUNE 2: CNPPID BOARD OF DIRECTORS MEETING JUNE 9 THRU AUG 31: CNPPID 12 WEEK IRRIGATION SCHEDULE

Tri-Basin Irrigator Notes

Here are a couple of notes related to this newsletter that need mentioned.

- 1. I added a link on page 4 called Drought Monitor. Whether or not you like to see this ugly map, I now have a link to it.
- 2. Todd Whitney, UNL Extension Educator, is now employed at the WCREEC in North Platte. It's my understanding that they are in the process of filling his position here in Holdrege. Todd wrote the articles under Nebraska Extension Extras on page 2 for numerous years. With this vacancy, I plan to continue this portion of the newsletter by copying UNL articles that I feel are of value. Who knows, maybe I will copy some of Todd's past articles if they are an annual type article that works every year. Or maybe I will fill that section with something unique. Stay tuned.

CURTIS'S COLUMN

Up and running in 2025!!! The Tri-Basin Irrigator is up

and running in 2025.

Hello. My name is Curtis Scheele. I am the Water Management Specialist with the NRCS covering the three counties in the Tri-Basin NRD (TBNRD) of Gosper, Phelps, and Kearney counties. My office is located in Holdrege. See page 4 for the phone and addresses of the three NRCS offices within



the TBNRD, CNPPID, the TBNRD, and UNL Extension. I would like to welcome those 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 is to provide you with irrigation and nitrogen information across the TBNRD that is short and to the point. To 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, WATER, that we all rely on each and every day.

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 <u>curtis.scheele@usda.gov</u>. 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.

2025 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 Mesonet stations. <u>To be</u> 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 Mesonet station nearest you. You can select from any of the stations across Nebraska. 7 of the stations are within or neighbor the TBNRD.

4. The ET Texting Service will give daily Crop ET for the 3 Mesonet stations within the TBNRD (Smithfield 2E, Holdrege 5N, Axtell 5NE). This free service will start June 1st. More information will be available in the next issue, May 29, 2025.

May 15, 2025

Natural Resources Conservation Service

USDA

CNPPID NOTES



CNPPID Irrigation

The Central Nebraska Public Power & Irrigation District serves over 108,000 irrigated acres with surface water for irrigation. This surface water is sourced from either water that is stored in Lake McConaughy and released downstream for irrigation or is natural flow out of the Platte River.

Water is conveyed and delivered through four canal systems (Supply, E65, E67 & Phelps Canals), which consist of a combination of hydroelectric power facilities, lakes, open ditches, pipelines, and siphons. The four canal systems provide surface water irrigation for Centrals customers in Lincoln, Dawson, Gosper, Phelps, and Kearney counties.

Central's 84-day scheduled irrigation season begins June 9th and runs through August 31st for the 2025 irrigation season. This irrigation water is delivered to Centrals irrigation customers on a one-week or two-week scheduled delivery, depending on how the customer has set up their desired irrigation schedule.



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

TRI-BASIN NRD NEWS



Chemigation Deadline May 31st

Chemigation can be an effective and efficient means of applying fertilizers, herbicides, and insecticides to your field. 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, 2025. 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) through irrigation systems. If your system crosses an open waterway, such as an irrigation canal, an additional form must be completed before a chemigation permit can be approved.

Chemigation systems require routine inspections every three years. If your system is due for an inspection, we will contact

you 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

<u>https://www.tribasinnrd.org/groundwaterwater-</u> <u>quality/chemigation</u>.



NEBRASKA EXTENSION EXTRAS

<u>Navigating the Nitrogen Fertilizer Supply Challenges</u> to Sustain Crop Production in 2025

What's Driving the Shortage?

Josh Linville, vice president of Fertilizer at StoneX, attributes the current shortage to several overlapping factors. First, the extended fertilizer application window due to a dry fall has led to increased early spring demand. Compounding this issue, unexpected shutdowns at nitrogen production facilities and reduced import volumes have left supply chains unable to keep pace. Meanwhile, more UAN has been shipped overseas, limiting domestic availability.

As a result, UAN shipments originally scheduled for April and May have already sold out in many regions. Retailers are now attempting to secure June shipments at elevated prices, hoping to stay ahead of the shortage. This disruption is putting pressure on Nebraska farmers who rely heavily on UAN solutions for side-dress applications during key vegetative growth stages.

Urea Prices Climb, Ammonia Gains Interest

With UAN in short supply, many growers are turning to granular urea as an alternative. However, the surge in demand has pushed urea prices up by nearly \$100 per ton in just over a week. While urea is more flexible in application, it can be more prone to volatilization if not incorporated properly — particularly under warm, dry conditions common during Nebraska's side-dress window.

Anhydrous ammonia is also drawing attention as a backup strategy. However, ammonia application requires specialized equipment and careful management to avoid root injury and timing conflicts. Farmers considering ammonia for in-season applications should weigh the agronomic fit carefully and ensure proper safety protocols are in place.

Strategic Considerations for Nebraska Producers

Given these evolving market conditions, growers are encouraged to take a proactive approach:

- Communicate early with suppliers to confirm product availability and delivery timelines.
- Evaluate fertilizer options based on current field conditions, equipment and agronomic goals.
- Consider using enhanced efficiency fertilizers (EEFs) like urease or nitrification inhibitors to reduce potential N loss.
- Incorporate soil nitrate testing and canopy sensing tools to fine-tune in-season N rates.

A Look Ahead

As side-dress season progresses, UAN prices typically decline, but current market trends suggest ongoing supply constraints. This reinforces the need for diversified nitrogen strategies and adaptive planning. Nebraska corn producers should consider alternatives like urea and anhydrous ammonia when UAN is limited, accounting for each product's application and efficiency needs. Enhanced efficiency fertilizers (EEFs) can help retain nitrogen longer in the root zone. Using soil nitrate tests and canopy sensing can guide inseason N decisions. Close coordination with suppliers and real-time field data will be essential for balancing yield goals, fertilizer efficiency and economic risk amid supply uncertainty.

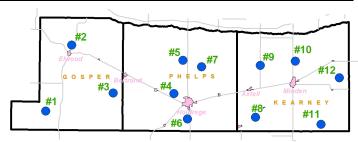
ByJaved Iqbal - Extension Nutrient Management and Water Quality Specialist, Aaron Nygren - Extension Educator, Nicolás Cafaro La Menza – Cropping Systems Specialist, Department of Agronomy and Horticulture, Jessica Groskopf - Extension Educator for Agricultural Economics, Bijesh Maharjan - Extension Soil and Nutrient Management Specialist, Guillermo Balboa - Nutrient Management and Digital Agriculture, Richard Ferguson - Extension Soil Fertility Specialist

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) = Reference ET x Kc

	April 28 – May 4		May 5 – May 11	
Site	Reference ET Rain		Reference ET	Rain
1	NA	NA	NA	NA
2	NA	NA	NA	NA
3	NA	NA	NA	NA
4	NA	NA	NA	NA
5	NA	NA	NA	NA
6	NA	NA	NA	NA
7	NA	NA	NA	NA
8	NA	NA	NA	NA
9	NA	NA	NA	NA
10	NA	NA	NA	NA
11	NA	NA	NA	NA
12	NA	NA	NA	NA



2025 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 (1/2 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 5 - May 11 was 0.00"-0.00".

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

Avg. daily water use from May 5 – May 11 was 0.00"-0.00".

May 5-May 11 (12 of 12 TBAWMN sites reporting): Average weekly rainfall was NA (range NA to NA). Average weekly ET for corn was 0.00 and for soybeans was 0.00.

CROP ET INFORMATION

TBAWMN Sites: https://www.tribasinnrd.org/tbawmn

CropWatch: https://cropwatch.unl.edu/gdd-etdata

Texting: Sasha Hahn at TBNRD: 308-995-6688

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	leaf meets the stalk. This line circles the stalk. TIP: Mark the 6th leaf or a higher leaf by cutting a notch 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 later leaf (vegetative) stages.	
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 <u>http://cnppid.com/wp-</u> <u>content/uploads/2016/06/lakeRiverData.html</u>.

	May 15, 2025, 8:00 AM	1 Year Ago
El. & Cap. – Lake McConaughy	3238.7 ft - 60.7%	3242.2 ft - NA%
Inflows to Lake McConaughy	328 cfs	881 cfs
Flows on the North Platte at North Platte	261 cfs	260 cfs
Flows on the South Platte at North Platte	147 cfs	754 cfs
Flows on the Platte at Kearney	57 cfs	475 cfs



Websites of Interest

NRCS Nebraska Farm Service Agency TBNRD Home Page Central Irrigation District UNL Cropwatch UNL Extension	www.ne.nrcs.usda.gov www.fsa.usda.gov www.tribasinnrd.org/ www.cnppid.com/ cropwatch.unl.edu extensionpubs.unl.edu/		
Drought Monitor			
https://droughtmo	onitor.unl.edu/nadm/Home.aspx		
No-till On The Plains	www.notill.org		
Soil Health:			
www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/			
NE State Irrig Assoc			
www.nebraskastateirrigationassociation.org/			
-			

RAINFALL

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

Location:	<u> May 1 – May 14</u>	<u> May 1 – May 14</u>	
Elwood 1.81 mi. NW:	0.49	0.49	
Loomis 0.2 mi. SW:	0.42	0.42	
Holdrege 1.7 mi. W:	0.13	0.13	
Axtell 7.2 mi. NW:	0.05	0.05	
Norman 2.8 mi. NW:	0.05	0.05	

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 curtis.scheele@usda.gov. ***

USDA



and institutions participating in or administraw and 0.0. Department of Agnobiated (00DA) of whigh the regulations and policies, the ODDA, its Agences, and employees, and enditing gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistence program, political beliefs, or reprisal or retaliation for civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program infor