Tri-Basin Irrigator

Volume 22, Issue 4 *June 25, 2026*

Program Information

EQIP: **Sign-up now for 2027 funds to ensure not missing the cutoff date.**

CSP: **Contracts are being prepped for ranking for 2026 funds. Sign-up now for 2027 funds to ensure not missing the cutoff date.**

NSWCP: **New NSWCP funds come July 1st. Irrigation applications for underground pipe, surge valves, etc. are reviewed for funding 4 times a year, September, December, February, and May (for slippage). Applications must be signed by the owner. Installation work cannot be started until approved.**

ENERGY EFFICIENCY GRANT: **As of now, USDA Rural Development is not accepting new applications due to Executive Order 14315. For more `information contact Jolene Jones at Rural Development at the Kearney USDA Service Center at 308-455-9840 or at *jolene.jones@usda.gov*.**

Calendar of Events

July 3: Independence Day Observed – Gov't offices closed
July 4: Independence Day
July 6: CNPPID Board of Directors Meeting
July 15: TBNRD Board Meeting
July 17-20: Kearney County Fair
July 21-25: Gosper County Fair
July 25-30: Phelps County Fair

REMINDER!!!

Leaf Tissue Samples

For CSP contract holders who need to complete corn leaf tissue samples as a part of your CSP requirements for your 2020 payment, now would be a good time to start planning for this. The following are guidelines:

- 1 leaf sample per 40 acres or less per management system.
- Samples taken prior to tassel.
- 15-20 plant leaves per sample.
- Sample leaves are ear shoot leaves. If samples prior to ear shoot leaf, samples will be the youngest mature leaf (top leaf with a collar).
- Dirty/dusty samples should be lightly rinsed. Over-rinsing can leach out soluble nutrients.
- Samples should be air dried or placed in a paper bag for shipping.
- Contact your lab for additional information on sampling and analysis.

Curtis's Column

Same Ole Song and Dance

Attached to this newsletter is a summary of nitrogen/yield comparisons from the 2025 UNL On-Farm Research Results publication. The comparisons on my summary attachment are pivot, gravity and dryland. There are other nitrogen/yield comparisons in the UNL publication using biologicals and sensor/image based technologies. As I summarize these projects, farmers are spending more money than they need to be. Based off nitrogen/yield dollars, the most profitable is lower nitrogen rates than what the producer applies. Year in and year out, the results are the same ole song and dance.

I have heard in the past that we need to see more research. There is plenty of research out there. There are UNL On-Farm Research publications going back to 2013 that have all kinds of replicated research projects. To view these, you can go to: *https://on-farm-research.unl.edu/research-results/*.

A note on the attached versus the actual publication, I changed the price of corn from $4.22 per bushel to $4.50 per bushel. The price of N on the attached is $0.70 per lb.

I would like to key in a bit on a more specific same ole song and dance. The attached has a research project located in Madison County listed at the top of page 2 of 2. This one stood out to me because Pat Nott (Tri-Basin NRD) and myself assisted on this same type of project east of Minden in 2024. The nitrogen inputs are basically the same with the same trend results yield and profit wise. The most profitable is 40 lbs less than the producers normal rate. See comparisons below.

UNL On-Farm Research - Pivots				Yield / N net profit	
N Applied		Yield		$4.50 Corn	
# / Ac		Bu / Ac		$0.70 N	
Kearney	Madison	Kearney	Madison	Kearney	Madison
80	84	230	195	$ (100.50)	$ (97.40)
120	123	260	224	$ 6.50	$ 5.80
160	163	269	231	$ 19.00	$ 9.30
200	202	271	235	Base	Base

I remember a surge fertigation project in 1998 and 1999 done in the same location here in Phelps County. I went back to look at those results. Same ole song and dance. See below.

Surge Fertigation - Phelps County				Yield / N net profit	
N Applied		Yield		$4.50 Corn	
# / Ac		Bu / Ac		$0.70 N	
1998	1999	1998	1999	1998	1999
105	146	208	194	$ 63.50	$ 28.80
155	191	208	198	$ 28.50	$ 15.30
215	221	211	196	Base	Base

The research is out there and the results, well, it's the same ole song and dance year in and year out. Every field can be a research field and it doesn't need to be difficult. As one producer said, "It's worth it to try something, learn from it, which can ultimately save more money in the long run."

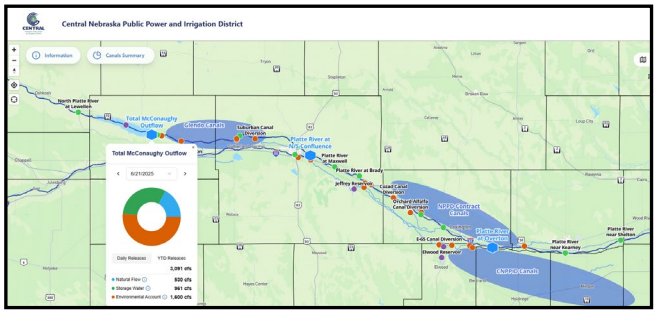
CNPPID Notes

Colors of Water Tool

Water management in the Platte River Basin is essential for irrigation, energy production, wildlife habitat preservation, groundwater recharge, and recreation. The Central Nebraska Public Power and Irrigation District plays a key role in managing Nebraska's water resources as the owner and operator of Lake McConaughy, which supports these critical functions.

The **Colors of Water Tool** was developed to provide a clear, visually intuitive representation of water flow within Central's system and other key downstream locations. Designed as a graphical feature on Central's website, it enhances transparency and helps the public and water management stakeholders understand how water moves through the system.

Building on Central's commitment to accessible water management data, the tool integrates real-time information from stream and lake monitoring stations, using data from the Nebraska Department of Water, Energy, and Environment (NeDWEE) and the United States Geological Survey (USGS). Water flows through rivers, streams, and diversions are categorized based on their intended use. These use-based flow portions, referred to as **"Colors of Water"**, are visually represented in pie charts within the interactive map.



Visit Colors of Water Tool *https://cnppid-cow.vercel.app.*

Tri-Basin NRD News

Groundwater Management Reminders

Groundwater Quantity Management (Water Use)

Please check your flow meters to make sure they are working properly. If your meter is not working or you have replaced it, contact Tammy Fahrenbruch at 308-995-6688. Cost-share assistance may be available for a new meter; contact your local NRCS office for more information.

Groundwater Quality Management (Nitrogen Management/GMA)

Phase II & III: Take water samples this July or August for your 2027 Nitrogen Management Crop Reports. If you have questions about these requirements or reports, call Pat Nott at 308-995-6688.

Water Quality Sampling: NRD Staff will be out collecting water samples around the district.

Chemigation

We are currently scheduling both new and routine chemigation inspections. In the Tri-Basin NRD, inspections are required every three years for your system to remain renewable.

If you experience problems with your system or make any changes, please contact the NRD to schedule an inspection. For questions about these requirements, call Jane or Sasha at 308-995-6688.

Nebraska Extension Extras

Disease Season Has Begun

Disease season has started. With the wind and hail, some of the recent storms have given us the environment needed with damaged plant tissues for bacterial diseases like Goss's wilt, bacterial stalk rot, and bacterial leaf streak to enter into the tissues of corn plants. The key to bacterial diseases is to remember that they cannot be controlled with fungicides. Fungal disease have also started to occur in corn crops. Tar spot has already been confirmed in Phelps County this week. In the coming weeks I will also start to keep watch on the southern rust maps to watch for it coming into the state as well as scouting for it. As of June 24th, it has not been scouted in any fields in Nebraska, but time has come to start keeping watch as we move into the latter weeks of July. I have QR codes for the southern rust map and crop watch so that you can keep informed on diseases that could be coming in the next few weeks.

Crop Watch

Southern Rust Map

Personal Protection

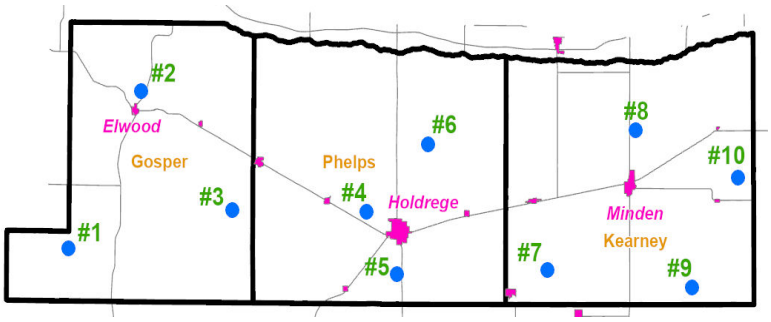
Though I know you have heard it almost to the point of irritation, personal protection equipment is essential when mixing, loading, and applying pesticides. There are several studies that show that consistent use of PPE leads to reduced risk of chronic illnesses such as cancer or Parkinson's disease. PPE use will also keep you safe from acute toxicity as well. While PPE is required by law, more importantly, it's to keep you safe and out of the hospital. With PPE use, you should also be aware of the temperature for the day of application. While PPE will keep you safe from the chemicals it can become a detriment in extreme heat with the added nonbreathable layers. This does not however mean you should not use them. Try to make any dealings with chemicals be done in the cooler parts of the day and if that is not possible do it in short periods with plenty of water available to drink. All that to say with spray season ramping up in the coming weeks, be safe, nothing is worth risking your health over.

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

	June 8 – June 14		June 15 – June 22	
Site	Reference ET	Rain	Reference ET	Rain
1	1.90	0.25	1.70	0.24
2	2.00	0.11	1.70	0.30
3	2.00	0.50	2.00	0.38
4	1.90	0.30	2.20	0.54
5	1.90	0.35	1.60	0.40
6	1.80	0.86	1.60	0.18
7	1.90	0.71	2.10	0.40
8	1.80	1.36	2.10	0.17
9	2.00	0.30	1.70	0.38
10	1.80	1.27	1.70	0.11



2026 Map of TBAWMN Sites across the Tri-Basin NRD

Crop Coefficients (Kc)

Corn Stage	Kc	Soybeans Stage	Kc
2 leaf	0.10	Cotyledon	0.10
4 leaf	0.18	1st Node	0.20
6 leaf	0.35	2nd Node	0.40
8 leaf	0.51	3rd Node	0.60
10 leaf	0.69	Beg. Bloom	0.90
12 leaf	0.88	Full Bloom	1.00
14 leaf	1.01	Beg. Pod	1.10
16 leaf	1.10	Full Pod	1.10
Silk – Beg. Dent	1.10	Beg. Seed	1.10
¼ Milk Line	1.04	Full Seed	1.10
Full Dent (½ Milk)	0.98	Yellow Leaf	1.00
¾ Milk Line	0.79	Beg. Mat.	0.90
Black Layer	0.60	Full Mat.	0.20
Full Maturity	0.10	Mature	0.10

Crop Stage Information

Corn (V4-4 Leaf to V14-14-Leaf stage): At V9, the tassel begins to develop. Nutrients and water are in greater demand starting at V10. V15 is the beginning of the most crucial period of plant development in terms of seed yield.

Avg. daily water use from June 15 – June 22 was 0.04"-0.32".

Soybeans (V2-2nd Node to V6-6th Node stage): By V5, the lateral roots will completely reach across 30 inch rows. Vertical root growth increases sharply at R1-Beg. Bloom. Secondary roots and root hairs proliferate after R1 in the top 9 inches.

Avg. daily water use from June 15 – June 22 was 0.09"-0.24".

June 15-June 22 (10 of 10 TBAWMN sites reporting): Avg. weekly rainfall was 0.31 (range 0.11 to 0.54). Avg. weekly ET for corn was 1.14 and for soybeans was 1.02.

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
V4	4 Leaves	Leaf stage is defined by number of leaves with visible collars. The collar is a discolored line where the 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.
V10	10 Leaves	
V16	16 Leaves	

SOYBEAN STAGE		DESCRIPTION
V2	Second Node	V2 has 2 nodes on main stem, each with a trifoliate leaf with unfolded leaflets. Plant has 3 nodes total: 1 unifoliate + 2 trifoliates
V5	Fifth Node	V5 has 5 nodes on main stem, each with a trifoliate leaf with unfolded leaflets. Plant has 6 nodes total: 1 unifoliate + 5 trifoliates
R1	Beginning Bloom	At least one open flower is present at any main stem node.

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 *http://cnppid.com/wp-content/uploads/2016/06/lakeRiverData.html*.

	June 25, 2026, 8:00 AM	*1 Year Ago*
El. & Cap. – Lake McConaughy	**3218.2 ft - 37.5%**	**3231.6 ft - NA%**
Inflows to Lake McConaughy	**162 cfs**	**507 cfs**
Flows on the North Platte at North Platte	**860 cfs**	**902 cfs**
Flows on the South Platte at North Platte	**243 cfs**	**437 cfs**
Flows on the Platte at Kearney	**1460 cfs**	**1690 cfs**

Happy 250th America!

Websites of Interest

NRCS Nebraska	*www.ne.nrcs.usda.gov*
Farm Service Agency	*www.fsa.usda.gov*
TBNRD Home Page	*www.tribasinnrd.org/*
Central Irrigation District	*www.cnppid.com/*
UNL Cropwatch	*cropwatch.unl.edu*
UNL Extension	*extensionpubs.unl.edu/*
Drought Monitor	*https://droughtmonitor.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:	June 11 – June 24	May 1 – June 24
Elwood 1.81 mi. NW:	1.19	6.00
Loomis 0.2 mi. SW:	1.25	5.73
Holdrege 0.49 mi. WNW:	0.87	6.43
Minden 7.2 mi. W:	1.25	4.84
Minden 8.8 mi. ESE:	1.03	6.74

Average Rain for May-June in Holdrege = 8.04 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 - 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
308-832-2280, Ext. 3

Central Nebraska Public Power & Irrigation District

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

Tri-Basin Natural Resources District

1723 Burlington Street
Holdrege, NE 68949
308-995-6688

Nebraska Extension

1308 2nd Street
Holdrege, NE 68949

308-995-4222

PO Box 146
Elwood, NE 68937

308-785-2390

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

2025 UNL On-Farm Research Results

Nitrogen Rates in Corn

Study Number	Total Nitrogen Applied (lbs/ac)	Yield (bu/ac)	lbs of N per bu	Profit per Acre $0.70 per Lb N $4.50 corn	Irrig	Previous Crop	County	Notes	2025 UNL On-Farm Research Results - EC3081 - (Page #'s)
64099202502	100	230	0.43	$ 965.00	Pivot	Soybean	Kearney		114-115
	140	232	0.60	$ 946.00					
	180	233	0.77	$ 922.50					
1051121202501	146	226	0.65	$ 914.80	Pivot	Corn	Merrick	Total Nitrogen Credits used to calculate Nitrogen Recommendation using the UNL N Calculator. UNL recommendation was 206 lbs of N for a 260 bu. yield goal.	165
	176	235	0.75	$ 934.30					
	206	237	0.87	$ 922.30					
	236	232	1.02	$ 878.80					
	266	237	1.12	$ 880.30					
1562121202501	129	207	0.62	$ 841.20	Pivot	Corn	Merrick	Total Nitrogen Credits used to calculate Nitrogen Recommendation using the UNL N Calculator. UNL recommendation was 189 lbs of N for a 270 bu. yield goal.	166
	159	217	0.73	$ 865.20					
	189	216	0.88	$ 839.70					
	219	219	1.00	$ 832.20					
	249	223	1.12	$ 829.20					

2025 UNL On-Farm Research Results

Nitrogen Rates in Corn

Study Number	Total Nitrogen Applied (lbs/ac)	Yield (bu/ac)	lbs of N per bu	Profit per Acre $0.70 per Lb N $4.50 corn	Irrig	Previous Crop	County	Notes	2025 UNL On-Farm Research Results - EC3081 - (Page #'s)
1562061202501	84	195	0.43	$ 818.70	Pivot	Soybean	Madison	Previous year in 2024, the same kind of project was in Kearney County. Result trend in yield and profits are the same on both projects.	168
	123	224	0.55	$ 921.90					
	163	231	0.71	$ 925.40					
	202	235	0.86	$ 916.10					
85187202505	146	214	0.68	$ 860.80	Gravity	Corn	Platte		170
	166	216	0.77	$ 855.80					
	186	221	0.84	$ 864.30					
	206	210	0.98	$ 800.80					
1567015202501	19	133	0.14	$ 585.20	Dryland	Soybean	Boyd	UNL N Calculator recommended 99 lbs of N.	112-113
	59	139	0.42	$ 584.20					
	99	141	0.70	$ 565.20					
1566015202501	18	80	0.23	$ 347.40	Dryland	Soybean	Boyd	UNL N Calculator recommended 98 lbs of N.	116-117
	58	87	0.67	$ 350.90					
	98	90	1.09	$ 336.40					

For more information, see article on Page 1 of the Tri-Basin Irrigator dated 6-25-26.

For more on these results or to view other results goto: *https://on-farm-research.unl.edu/research-results/*
You can search for projects or view publications from prior years as well.