Tri-Basin Irrigator

Volume 22, Issue 2 *May 28, 2026*

Program Information

EQIP: **Contracts are being obligated for 2026 funds. More contracts will be obligated as funds become available. Sign-up now for 2027 funds to ensure not missing the cutoff date.**

CSP: **Contracts are being prepped for ranking for 2026 funds. Currently, the ranking deadline is June 1st. Pre-approvals and obligations will take place sometime after June 1st. Sign-up now for 2027 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). 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: **As of now, USDA Rural Development is not accepting new applications due to Executive Order 14315. No new grant awards will be made until USDA finalizes and issues new REAP regulations. Applicants with applications on file can reapply once the new regulations are effective. There is no timeline set for when the new regulations will become effective. 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

June 1: CNPPID Board of Directors Meeting
June 8 thru Aug 30: CNPPID 12 week irrigation schedule
June 14: Flag Day
June 21: Father's Day
June 19: Juneteenth Holiday – Gov't offices closed
June 25: TBNRD Board Meeting – Rescheduled from the normal 3rd Wednesday of the month.

NOW - Install Soil Moisture Sensors!!!

If you have soil moisture sensors to install, now is the time to be getting them installed for best accuracy. You want to install these at emergence or shortly thereafter in order to not destroy larger crops, or their roots, and to let the crop roots grow naturally around the sensors. This will also give the soil time to gel around the sensors by irrigation season.

Accurate soil moisture readings can help you better schedule your irrigations, potentially saving you money.

If you are getting paid for sensors from EQIP or CSP contracts, you need to get these installed. If you don't have them yet, you need to be getting them so that they can be installed in a timely manner for 2026. Contact your local NRCS office for more information.

Curtis's Column

Soil Moisture Conditions – Do You Know???

After a very dry off-season and running pivots early, do we know our current moisture levels in the soil profile?

A lot of conversations these days involve dry and needing more rain. It seems easy to get caught up in what we hear all the time. Does hearing repeatedly how dry it is and that we need more rain make us turn on the pivot quicker than needed? Does it make pivots and dryland equally dry? If so, then we need to regather our thoughts, eliminate the emotions, and figure out what our soil profile looks like so we can make good sound irrigation decisions. Let's not get too quick in spending money, wasting water, wearing out equipment, and leaching nitrates into the groundwater.

A week ago, I installed sensors in a dryland field and a couple of pivot fields, all next to each other northwest of Holdrege. These fields are treated the same, except that the two pivots are managed for irrigation separately. See moisture levels in the table below.

The dryland has some work to do to get a full soil moisture profile but we can't control that. One pivot was a little bit drier than the other one. It could have been run less this spring or was dried down more last fall. After irrigating this spring and the recent rains, we are at or near a full profile on the pivots.

As of 2 PM on Wednesday, May 27, 2026
May 11 - May 27 Rain = 2.38 inches
Pivot irrigation to date = ???
Pivot - No-till Corn planted into Soybean
Holdrege Silt Loam soil (2.25 inches per foot)

Soil Depth	Dryland	Avg 2 Pivots
1 foot	100%	100%
2 foot	98%	100%
3 foot	96%	100%
4 foot	60%	100%
4 ft. avg.	89%	100%

I have 2 other pivots with sensors. One south of Holdrege has the top 2 feet at 100% moisture and the 3rd and 4th feet at 85% (1.73 inches of rain since May 11th). The other pivot northeast of Wilcox has the top 2 feet at 100% moisture and the 3rd and 4th feet at 95% (1.78 inches of rain since May 11th). This can vary by rainfall amounts and our irrigation management.

Pivots and unlimited water is a very big blessing. This combination makes it too easy to overwater if one doesn't know how much moisture is in the soil. Just too easy to turn on, especially with all the talk about how dry it is. The mind tends to wonder that direction on all fields. Overwatering can lead to shallow roots which in turn leads to more watering in July/August because the roots aren't getting water from the deeper depths. Basically, you have a small cup to drink from so you have to fill it more often.

To know where we are moisture wise, soil moisture sensors are an excellent tool in knowing what the moisture levels are to 3-4 feet. They also show you the depths of where the moisture is being taken from during the crop season. Soil moisture sensors will help take the emotion out of the dry talk.

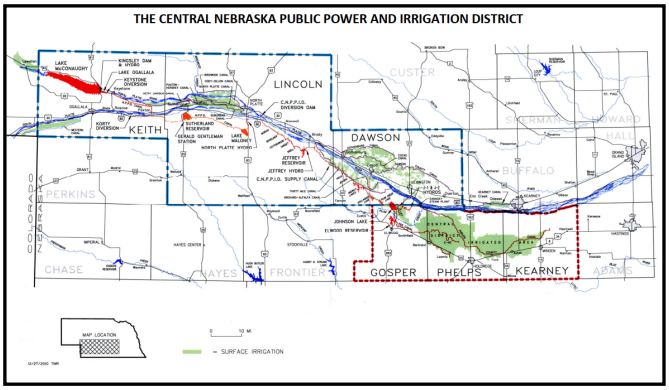
CNPPID Notes

CNPPID Irrigation

The Central Nebraska Public Power & Irrigation District serves nearly 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 8th and runs through August 30th for the 2026 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 www.cnppid.com or follow @CNPPID on Facebook, Instagram and Twitter for updates throughout the year.

Tri-Basin NRD News

CHEMIGATION DEADLINE JUNE 1ST

Check Flowmeters Before Starting Irrigation

Please check the flowmeters on your wells before starting irrigation this season. Double check that your beginning meter reading matches the reading from the end of last season. Check the meter periodically throughout the season to confirm it is working properly. This benefits both you and Tri-Basin NRD. Keeping accurate irrigation records helps you be more efficient, which in turn will help your bottom line. It is the responsibility of the producer to make sure the flowmeter is functioning properly during the irrigation season.

Please be aware that **Senninger brand flowmeters** will not work properly if the battery size is not correct. **These meters require lithium 3.6-volt batteries, NOT standard 1.5-volt AA batteries.**

Nebraska Extension Extras

Let's Talk ET!

I was trying to decide what to write about this week when Sasha at the Tri-Basin NRD called and asked me to handle the daily ET text messages. Here we are.

ET (Evapotranspiration) for the uninitiated is the loss of ground water through evaporation from the soil or bodies of water on the soil surface and transpiration from the plants which draw soil water into themselves to perform the biological processes and then moves out of the leaves as water vapor. There are several factors that affect the ET of a given field. These factors include what crop is planted, the current growth stage the crop is currently in, wind, weather conditions, tillage, relative humidity, and a few others. I know this is probably something that most of you already know, but it is always good to have a refresher.

Soybeans use approximately 20-26 inches of water to reach maturity with about 65% of that water usage occurring between the growth stages of R1 and R6+ with daily averages of 0.32 inches a day used by the plant at R1-R3. This rate can increase during hot dry summer days. Corn for a 113-day hybrid in the south-central region of Nebraska will use approximately 26 inches to grow to maturity with daily usage peaking at approximately 0.32 inches a day between the growth stages of R1 to R3. For more information on crop water use there are several good articles at the UNL Cropwatch website. Most of the information on crop ETs I got from the soybean NebGuide G1367 and corn G1850. The corn water use table also came from that NebGuide.

There are several ways to know what your approximate ET is. First is the daily text from the Tri-Basin NRD which you can sign up for using the insert that will be coming with this issue of the Tri-Basin Irrigator. Another source of information is using the Nebraska Mesonet website where you can find the closest weather station and see what its predicted ET values are. The most accurate for your specific field would be to use a pivot mounted ET meter and soil moisture probes to know exactly what your crops are doing and how much plant available water is in the soil.

If done correctly you can use ET values to make your irrigation incredibly efficient saving you money and time.

Enjoy the Growing Season!

Table I. Average crop water use (ET_c) by growth stage for 113-day maturity corn grown in South Central Nebraska.

Growth stage	*Average water use rate (in/day)*	*Duration[1] (days)*	*Water needed to reach stage (inches)*	*Water needed cumulative (inches)*
Emergence (VE)	0.08	0-10	0.8	0.8
4-leaf (V4)	0.10	11-29	1.8	2.6
8-leaf (V8)	0.18	30-46	2.9	5.5
12-leaf (V12)	0.26	47-55	1.8	7.3
Early tassel (R1)	0.32	56-68	3.8	11.1
Silking (R2)	0.32	69-81	3.8	14.9
Blister Kernel (R3)	0.32	82-88	1.9	16.8
Beginning Dent (R4.7)	0.24	89-104	3.8	20.7
Full Dent (R5.5)	0.20	105-125	3.8	24.5
Maturity (R6)	0.10	126-140	1.4	25.9

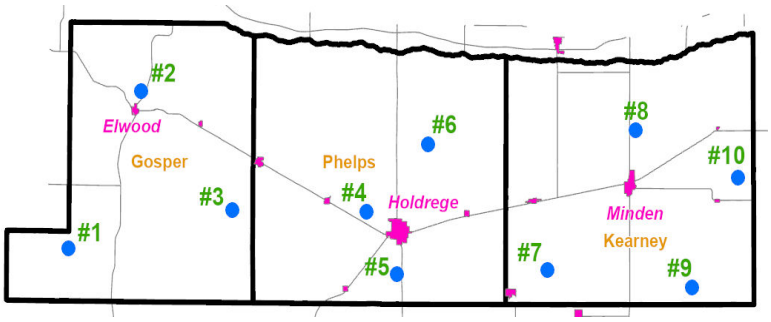
[1]Long-term average number of days since planting required to progress from the previous growth stage to the next. For example, to go from the blister kernel stage to the beginning dent stage requires approximately 15 days (day 89 to day104). Days to each growth stage were determined using the Hybrid-Maize Corn Growth Model for the period 1982-2005 at Clay Center, Neb.

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

	May 11 – May 17		May 18 – May 24	
Site	Reference ET	Rain	Reference ET	Rain
1	2.50	0.65	1.60	1.14
2	2.30	0.91	1.60	1.63
3	2.60	0.95	1.60	1.38
4	2.50	0.88	1.60	1.51
5	2.40	0.83	1.60	0.90
6	2.20	1.51	1.70	1.41
7	2.40	0.85	1.70	0.93
8	2.40	0.91	1.60	0.81
9	2.30	1.45	1.80	0.83
10	2.00	1.73	1.80	1.38



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 (VE-Emerging to V8-8-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 18 – May 24 was 0.00"-0.13".

Soybeans (Planted to V4-4th Node stage): Loss of one cotyledon has little effect on yield while loss of both can reduce yields by 8-9%. Nutrients and food reserves in the cotyledons supply the plants needs up to V1.

Avg. daily water use from May 18 – May 24 was 0.00"-0.16".

May 18-May 24 (10 of 10 TBAWMN sites reporting): Average weekly rainfall was 1.19 (range 0.81 to 1.63). Average weekly ET for corn was 0.27 and for soybeans was 0.31.

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 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.
V4	4 Leaves	
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)
V3	Third Node	V3 has 3 nodes on main stem, each with a trifoliate leaf with unfolded leaflets. Plant as 4 nodes total: 1 unifoliate + 3 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 *http://cnppid.com/wp-content/uploads/2016/06/lakeRiverData.html*.

	May 28, 2026, 8:00 AM	*1 Year Ago*
El. & Cap. – Lake McConaughy	**3226.3 ft - 49.3%**	**3236.4 ft - NA%**
Inflows to Lake McConaughy	**118 cfs**	**1220 cfs**
Flows on the North Platte at North Platte	**1190 cfs**	**1530 cfs**
Flows on the South Platte at North Platte	**168 cfs**	**331 cfs**
Flows on the Platte at Kearney	**1510 cfs**	**957 cfs**

Help us out Gene!!!

Youtube Video - Click the link below

Singin' in the Rain by Gene Kelly

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:	May 14 – May 27	May 1 – May 27
Elwood 1.81 mi. NW:	2.72	2.97
Loomis 0.2 mi. SW:	2.48	2.57
Holdrege 0.49 mi. WNW:	1.86	1.92
Minden 7.2 mi. W:	2.05	2.12
Minden 8.8 mi. ESE:	2.76	2.76

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 - Natural Resources Conservation Service

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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

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

Free

ET Data

Texting Service

A texting service for ET Data replaced the Water Use Hotline.

ET Data (Evapotranspiration Data) can be useful in making decisions about your irrigation, fertilizer and chemical application schedule. Texts are sent Monday through Friday from June 1st to August 31st. The texts contain:

Daily (D) and Future 3 Days (F3d) estimated water use for both Corn and Soybeans (Beans) at three locations across the district: Holdrege 5N (Hld), Axtell 5NE (Axt) and Smithfield 2E (Smfld).

Additional Weekly Text for all three locations includes: Weekly Precipitation (Wk Precip), Corn Growing Degree Days (Corn GDD), and Beans Growing Degree Days (Beans GDD)

To Subscribe:

- **Scan the QR Code** and enter your information,
- Text **START** to (308) 216-8188, or
- Call Tri-Basin NRD at 308-995-6688 and request to receive ET Data texting.

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Tri Basin Natural Resources District

EXTENSION

CENTRAL Nebraska Public Power and Irrigation District