# Tri-Basin Irrigator

**Volume 21, Issue 9** **September 4, 2025**

## Program Information

***EQIP:*** **Sign-up now for 2026 funds.**

***CSP:*** **Sign-up now for 2026 funds.**

***NSWCP:*** **Flow meters and non-irrigation applications are approved monthly. Applications must be signed by the owner. No work can be done on the project prior to approval. Tri-Basin NRD Board meets on the 3rd Wednesday's of the month.**

***ENERGY EFFICIENCY GRANT:*** **Applications for 2026 funds will start being taken on October 1, 2025. Contact Jolene at Rural Development at the Kearney USDA Service Center at 308-455-9840 or at *jolene.jones@usda.gov*.**

## Calendar of Events

**Sept 9-11: Husker Harvest Days**
**Goto *https://www.huskerharvestdays.com/en/home.html***
**Sept 17: TBNRD Board Meeting**
**Oct 6: CNPPID Board of Directors Meeting**
**Oct 13: Columbus Day – Gov't offices closed**

## *How Much Water did I Apply in 2025?*

As irrigation season comes to an end, you can read your flow meters and calculate how much water was pumped in 2025. Flow meters vary as to their unit outputs (ac-in * 0.01, gallons * 100, etc.). Simply subtract your beginning year reading from the ending year reading to get gross water pumped. See chart below to convert units to inches. Gross inches pumped is used for allocations, irrigation reports, etc. You can multiply gross inches pumped by an efficiency factor to calculate net water applied to the crop.

### *How to Calculate Gross Inches Pumped*

- Acre-Inches / Acres = Inches Pumped
- Gallons Pumped / 27,154 / Acres = Inches Pumped
- (Acre-Feet * 12) / Acres = Inches Pumped

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### *How to Calculate Net Inches Applied to the Crop*

Inches Pumped x Efficiency Factor* = Net Inches Applied

*Efficiency Factors
Subsurface Drip Irrigation = 0.95
Pivot - low pressure drops = 0.90
- med. & low pressure impacts = 0.85
- high pressure = 0.80
Surge Valve = 0.80
Gated Pipe - with reuse = 0.7
- without reuse = 0.5

If you have any questions, you can call Curtis Scheele at 308-995-6121, Ext. 3 or email him at *curtis.scheele@usda.gov*.

## Curtis's Column

### *Is Bin Run Seed Allowed for Cover Crops under EQIP and CSP Contracts?*

- The use of bin run seed is allowed provided the producer **uses their own seed** AND **the use of the seed does not violate any patent or labeling restrictions associated with certified or GMO seed.**
- Producers can purchase bin run seed **if the seller provides them with a label or seed tag that meets the requirements of the Nebraska Seed Law**.
- A seller of bin run seed **must have a valid seed permit** from the Nebraska Department of Agriculture, **AND** the **seed must have been tested and labeled** per the requirements of the Nebraska Seed Law.
- Producers using bin run seed must provide scale tickets to document the pounds per acre of seed that was planted.
- Anyone using bin run seed that doesn't meet the above rules can be found in **violation of their contract.**

### *Cover Crop Plantings Under an EQIP or CSP Contract*

If you are having to plant a cover crop this fall for an EQIP or CSP commitment, below are some pointers to help you meet the specifications required to meet contract obligations.

- For bin run seed, make sure you follow the guidance provided in the article above.
- Make sure your seed mix meets the minimum seeding requirements.
  - Broadcast rates are 1.5 times more than drilled rates. Know which rate your seeding sheet is for.
  - Different CSP enhancements have different seeding rates. Example: If your contract has a cover crop for erosion control, you may need a higher seeding rate.
- Plant your cover crop during appropriate seeding dates.
- If grazing, make sure your cover crop and contract requirements allow for grazing and that grazing requirements are met.
- Haying or harvesting the cover crop Is not allowed.
- If you make changes to your seeding sheet, need a seeding sheet, want to verify you will meet the NRCS requirements, or have other questions, contact your local NRCS office to ensure not being in contract violation.

### *End of Year Irrigation Thoughts*

Irrigate corn late and soybeans to the end. What does this mean? Keep it muddy? Do crops perform better when wet? Are we subtly talking ourselves into irrigating later because that's the conversation? I'm not saying it is or isn't beneficial for yield, but does the conversation itself simply cause us to irrigate later without looking at all the other factors.

Isn't there free soil moisture in the ground that can be utilized? What's the cost of another irrigation (wear, energy, etc.)? What about the replacement cost of nutrients lost to leaching? What do those nutrients do to our already high nitrates in the groundwater? Does that last 1/2 to 3/4 inch make enough difference in yield to offset costs of another irrigation?

The only way to know is to not irrigate that last irrigation on a half pivot or so. Check out the results and monitor your soil moisture sensor chart to see where you are at. You can then better utilize your soil moisture sensor next season and maybe save some money by not irrigating more than necessary.

## CNPPID Notes

### Gov. Pillen Signs Nebraska Hydropower Day Proclamation

The Central Nebraska Public Power & Irrigation District along with Loup Public Power District and Nebraska Public Power District welcomed Nebraska Governor Jim Pillen to Kingsley Dam/Lake McConaughy for a proclamation signing ceremony to declare August 24th as Nebraska Hydropower Day.

At the signing ceremony overlooking Lake McConaughy, Governor Pillen spoke on the importance of hydropower production to the state of Nebraska.

Within his proclamation, the Governor remarked that hydropower infrastructure provides benefits far beyond electricity generation. Our dams and waterways, which form the backbone of the state's water management systems, deliver the promise of sustainable irrigation, support power plant cooling, facilitate aquifer recharge and enhance recreational opportunities-strengthening rural communities and contributing to Nebraska's ecological resilience.

Nebraska Hydropower Day was held in conjunction with National Hydropower Day that was celebrated on August 24.

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

## Tri-Basin NRD News

### Chemigation Inspections

2025 follow-up inspections must be completed so they can be renewed next year. Schedule them soon.

### Flow Meter Readings:

Irrigation Water Management (Water Use) Forms will be ready to pick up in our office by September 15th or you can call us at 308-995-6688 to mail them to you. When picking up irrigation pipe or bedding down irrigation engines, remember to record the ending meter readings.

### Tri-Basin Staff to Inspect Meters:

Tri-Basin NRD staff will begin annual irrigation meter inspections soon. Each year, we take readings from meters in about a third of the district. This year we will be doing inspections in townships with Ranges of 14W, 18W, and 22W, and 5-22 of Gosper County (Union Township).

If you have irrigation wells in these townships and you put your meters in storage for the winter, please call the Tri-Basin NRD office at 308-995-6688 to schedule an inspection.

### Nitrogen Management Papers

Phase II and III Groundwater Management areas, be sure to call or stop in after harvest to get your Nitrogen forms.

## Nebraska Extension Extras

### Hands-On Learning and Farm Solutions with Nebraska Extension at 2025 Husker Harvest Days

Stop by the "Big Red Building" to explore how the University of Nebraska-Lincoln, the Institute of Agriculture and Natural Resources, along with Nebraska Extension are providing **Solutions for On-Farm Risk** at the 2025 Husker Harvest Days farm show, located at Lot 827.

From Tuesday, Sept. 9 to Thursday, Sept. 11, Nebraska Extension educators, specialists and other faculty across the state will be ready for your questions and sharing their field-proven experiences with new data-driven research. Discover more about:

- **Landscapes and Weather Resilience:** Techniques for managing landscapes to withstand extreme weather, including plant selection, irrigation, pruning, and pest management. https://hles.unl.edu/
- **Soil Health:** Methods for enhancing soil productivity through cover crops, interseeding, and sustainable practices. https://cropwatch.unl.edu/
- **Digital Agriculture and Technology:** Insights from Nebraska On-Farm Research Network into new digital tools and technologies that improve production and profitability. https://on-farm-research.unl.edu/
- **Pest Management — Plant Health:** Learn about advanced strategies for pest control that reduce risk. https://pat.unl.edu/
- **Health and Wellness:** Strategies for maintaining physical and mental well-being amid the demands of farm life. https://ruralwellness.unl.edu/
- **Manure Management:** Best practices for integrating manure into farming for better soil health and reduced use of synthetic fertilizers. https://manure.unl.edu/
- **Water Management:** Innovative techniques for conserving water resources, including irrigation management and drinking water protection. https://water.unl.edu/
- **Livestock Health:** Approaches to improving cattle herd productivity through disease prevention, early detection, and proper nutrition. http://beef.unl.edu/
- **Rural Prosperity:** Support for community leaders and entrepreneurs to promote economic development and vibrant local food systems. https://ruralprosperityne.unl.edu/
- **Agricultural Profitability:** Resources from the Center for Agricultural Profitability to aid in financial decision-making for securing the future of farming operations. http://cap.unl.edu/
- **Leadership Development:** Information on the Nebraska LEAD Program, which prepares agricultural leaders for industry challenges. http://lead.unl.edu/
- **Youth Education and Career Preparation:** Join Nebraska 4-H, Nebraska College of Technical Agriculture (NCTA) and UNL's College of Agriculture and Natural Resources (CASNR) to help youth explore career paths and develop employability skills. http://4h.unl.edu, https://ncta.unl.edu/, https://casnr.unl.edu/
- **AgrAbility:** Learn how they can help individuals with disabilities overcome barriers to continue in their chosen agricultural profession. Located in the Health and Wellness Tent. https://agrability.unl.edu/

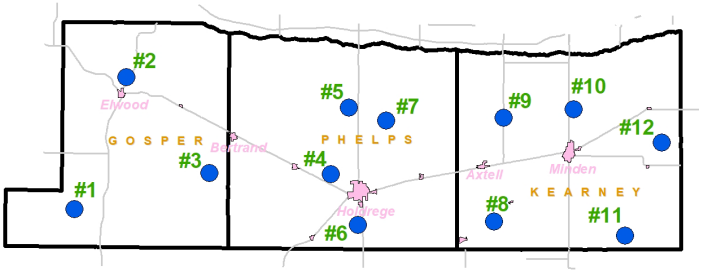
By Crystal Powers – Water and Cropping Systems Extension Educator, Nebraska Water Center

# 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**

| | Aug 18 – Aug 24 | | Aug 25 – Aug 31 | |
|---|---|---|---|---|
| Site | Reference ET | Rain | Reference ET | Rain |
| 1 | 1.60 | 0.89 | 0.60 | 3.30 |
| 2 | 1.50 | 0.25 | 0.50 | 1.45 |
| 3 | 1.50 | 0.15 | 0.50 | 1.80 |
| 4 | 1.50 | 0.76 | 0.60 | 2.34 |
| 5 | 1.50 | 0.71 | 0.60 | 1.92 |
| 6 | 1.60 | 0.37 | 0.70 | 3.04 |
| 7 | 1.60 | 0.57 | 0.50 | 2.28 |
| 8 | 1.40 | 0.29 | 0.40 | 3.18 |
| 9 | 1.40 | 0.33 | 0.60 | 3.40 |
| 10 | 1.40 | 0.24 | 0.70 | 2.09 |
| 11 | 1.10 | 0.20 | 0.80 | 2.00 |
| 12 | 1.50 | 0.28 | 0.50 | 2.21 |




*2025 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 (R4.7–Beg Dent to R5.5–Full Dent 1/2 Milk Line stage):** Stress at R5-1/4 Milk Line will reduce yield by kernel weight, not kernel number. At the beginning of R5, kernels have about 55% moisture.

Avg. daily water use from Aug 25 – Aug 31 was 0.06"-0.13".

**Soybeans (R6-Full Seed to R6.5-Full Seed/Yellow Leaf):** Rapid leaf yellowing over the plant begins shortly after R6. Root growth is complete after R6.5. Stress from R6 to R6.5 may cause large yield reductions. 0.0 inches needed for yield at R7-Beginning Maturity.

Avg. daily water use from Aug 25 – Aug 31 was 0.06"-0.13".

*Aug 25-Aug 31 (12 of 12 TBAWMN sites reporting): Avg. weekly rainfall was 2.42 (range 1.45 to 3.40). Avg. weekly ET for corn was 0.60 and for soybeans was 0.57.*

## 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

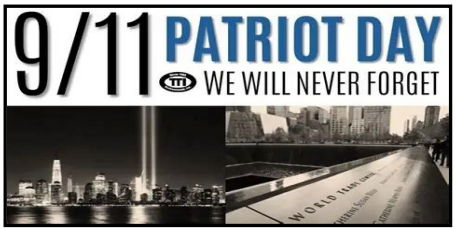
| CORN STAGE | | DESCRIPTION |
|---|---|---|
| R-5 | 1/4 Milk Line | All or nearly all kernels are dented. Milk line or starch line appears shortly after denting as a line across the kernel when it is viewed from opposite the embryo side and will advance toward the base of the kernel (toward the cob). |
| R-5.5 | Full Dent - 1/2 Milk Line | Starch line is 1/2 way down the kernel. Top 1/2 is hard and bottom 1/2 is softer near the cob. |
| R-5.8 | 3/4 Milk Line | The starch line is 3/4 the way down the kernel. |

| SOYBEAN STAGE | | DESCRIPTION |
|---|---|---|
| R6 | Full Seed | At least one pod whose cavities are completely filled with green seeds is present at one of the four uppermost main stem nodes that have fully developed leaves. |
| R6.5 | Full seed / yellow leaf | Leaves begin to yellow, beginning in the lower canopy and progressing upwards. |
| R7 | Beginning Maturity | At least one (normal) pod that has attained its final mature color (tan or brown, depending on variety) is present on any main stem node. 0.0 inches needed for yield. |

## 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*.

| | Sept. 4, 2025, 8:00 AM | 1 Year Ago |
|---|---|---|
| El. & Cap. – Lake McConaughy | 3221.9 ft - 41.3% | 3229.6 ft - NA% |
| Inflows to Lake McConaughy | 1150 cfs | 969 cfs |
| Flows on the North Platte at North Platte | 652 cfs | 369 cfs |
| Flows on the South Platte at North Platte | 137 cfs | 103 cfs |
| Flows on the Platte at Kearney | 1290 cfs | 62 cfs |




## 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: | Aug 21 – Sept 3 | May 1 – Sept 3 |
|---|---|---|
| Elwood 1.81 mi. NW: | 1.59 | 14.96 |
| Loomis 0.2 mi. SW: | 2.26 | 18.57 |
| Holdrege 1.7 mi. W: | 2.87 | 12.76 |
| Minden 7.2 mi. W: | 4.86 | 16.12 |
| Minden 5.8 mi. E: | 2.51 | 18.88 |

**Average Rain for May-August in Holdrege = 14.21 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**
**308-832-1895, 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**

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