

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: APPLICATIONS CAN BE TAKEN ANY TIME.

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 21-25: GOSPER COUNTY FAIR

JULY 25-30: PHELPS COUNTY FAIR

AUG 3: CNPPID BOARD OF DIRECTORS MEETING

AUG 19: TBNRD BOARD MEETING

What are Your Sensor Charts Telling You?

Have you invested in Soil Moisture Sensors? Do you know what they are telling you? Is your dealer helping you understand what they are saying? Are you asking the questions? This all needs to take place in order to get your money worth, improve your irrigation scheduling, and keep from leaching nitrogen into the groundwater. If you don't know what your charts are telling you, you will easily find the excuse that soil moisture sensors do not work.

First thing to know, is how they are set up. If they are not set up properly, then they will definitely not give us proper data. It's not that they don't work, it's probably because they are not set up properly. Get your refill lines set up where you want. Make sure your full 100% moisture lines are accurate for each individual sensor? How many levels of sensors and how deep can you see moisture levels?

Second thing is what are the charts telling us. If we don't understand it, we need to be asking the questions. Understanding what they are telling us can help us make irrigation decisions. What do the numbers on the sides of the charts represent? Are they actual moisture or are they simply a reference number. Are the lines going up or down?

I have attached to this newsletter a write-up comparing our TAPS plot sensor to an actual farmer sensor, both in 2026. My goal is to provide some information on what sensor charts tell us. I am also trying to explain why the two sensors are different. Why does one have lines going up while the other has lines going down. I know it's long but hopefully, after reading it, you will have a better understanding of what the sensor charts are saying.

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

CURTIS'S COLUMN

Complete Your CSP / EQIP To-Do List by Deadlines!!!

If you are in a CSP or EQIP contract with management enhancements or practices, before you can get your payments, documentation must be submitted to your local NRCS office. Below are a few reminders to help you get started while things are currently fresh in your mind. **NOTE: This is not a complete thorough list as contracts can vary from one to the next. Contact your local NRCS for specific documents and details in your own contract.**

- **Pesticide Management:** With herbicides, insecticides, and fungicides completed for the year or getting close, now is a good time to get these records and forms filled out. Items needed include the product, the rate per acre applied, applied dates, and EPA Registration #'s for each product.
- **Nutrient Management:** Fertilizer is either done or getting close to completion for the year. Put together your soil tests, fertilizer products applied, the rate per acre applied, date each fertilizer product was applied, tissue samples, enhanced efficiency fertilizers applied, etc.
- **Irrigation Water Management:** Submit 2 charts; your soil moisture sensor summary chart and individual sensor chart showing all the sensor depths. Print screen shots while the sensor is still in the field. Continue to record rainfall, flow meter readings, and crop water use. Submit your **weather station documentation (make sure it has solar radiation included)**.
- **Cover Crops:** Some of you may have a cover crop mix sheet provided in your contract packet. Use that mix if you can. If you want to make changes or you never received a sheet with a mix, contact your local NRCS office to make sure the change/mix you want meets NRCS specifications.
- **Other Enhancements or Practices:** There may be other items in your contract that needs documentation submitted to the NRCS for payment. Review your contract packet. If questions, contact your local NRCS office.

Start by reviewing your contract packet provided to you when the contract began. You can also review anything you received from winter/spring reminder meetings or reminder letters.

- **CSP Payments:** **To receive your payment, documentation needs to be submitted to your local NRCS office prior to September 1st.** This allows time to review and gather any missing documentation before the certification deadline. - Also, a letter is being sent to all CSP contract holders reminding you of this in further detail. Within that letter is a sheet asking which calendar year you want paid, certification of benchmark and completed scheduled activities, along with direct deposit verification.
- **Other CSP Items:** If you anticipate loss of land, changes in your operation, bank information changes, payment share changes, etc., you need to notify your local NRCS office promptly. **This can jeopardize one, your payment or two, your contract meaning paybacks with penalties.**
- **EQIP Payments:** The sooner your local NRCS office gets the proper documentation, the sooner you get paid. This is pretty straight forward.

Help to Keep Your Screen Clean - Eliminating Algae/Weed Growth in Surface Water

CNPPID works hard to keep screens clean against moss that can grow in the canal from an abundance of excess nutrients. Key nutrients that feed algae to bloom are found in the same fertilizers that are applied to the fields through fertigation. These can include phosphorus, nitrogen, potassium, magnesium, iron, zinc, etc. With a permit, CNPPID allows pivots to cross the canal for its customers but regulating fertigation is the responsibility of the Tri-Basin NRD. As such, Tri-Basin works very hard to limit fertigation over the canal as part of their chemigation program.

Producers who apply nutrients to their fields such as manure can help to reduce or eliminate moss by not allowing the nutrients to enter the canal. Excess nutrients from fertilizers, stormwater runoff from fields, and wastewater along with abundant sunlight, and warmer temperatures are key factors in providing the essential needs to fuel and feed algae blooms in surface water. These same factors also are key to the growth of rooted aquatic vegetation such as sego pondweed. So please help to keep your screen clean, and your neighbors, by keeping the surface water in the canal free of nutrients.



Find us at www.cnppid.com or @CNPPID on Facebook, Instagram, X and LinkedIn.

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

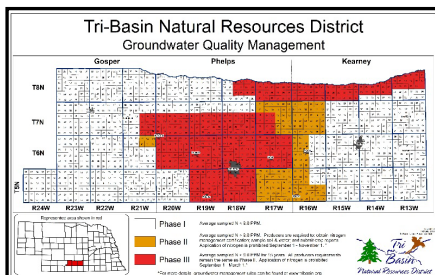
TRI-BASIN NRD NEWS



It's Water Sample Time

If your irrigation well is in a **Phase II or Phase III Groundwater Quality Management Area**, you must get an **annual nitrogen water test**. Collect the water sample during the **irrigation season**, after the well has been running for at least **15 minutes** to ensure accurate results.

Your **2026 irrigation season nitrogen test results** should be used for your **2027 crop's nitrogen planning** and reported on your **2027 Nitrogen Management Crop Report**. You can pick up sample bottles at the Tri-Basin NRD and NRCS offices.



Random Thoughts for the Middle of the Year

Let me start off by saying I apologize. I should be a responsible adult and have a few of these written and ready to be sent to Curtis at the USDA NRCS, but like most of us I suffer from having a bit of a procrastination problem. So as I sit (or lay) here with one of the worst headaches I have had in a long time, I struggle to put together two coherent thoughts. But hey, we all push forward. That is where I came up with the idea for this Tri-Basin Irrigator's column. That idea is, harvest is closer than we would like to assume.

So, while it's still a ways off, it is time to start thinking of all those harvest time chores that need to be done so that we can bring in the harvest and prepare for next year.

- First is, what is your estimation of the total water your crops will need to make it till those harvesters hit the field. Right now, corn and soybeans are near their mid-point and peak for daily use for the season. This means you need to know what is available in your soil profile and how much more will need to be applied as irrigation, or if we get lucky, as rain.
- After trying to get a gauge on what you have left in front of you for irrigation, we need to be sure we are monitoring for disease and other nutritional issues that may be occurring in the field.
- Then, there is needing to be sure that your harvest equipment is ready for the season. Now would be one of the better times to have the harvester gone through. If you can get your equipment in and serviced and any replacement parts ordered, harvest can run as smooth as possible.

The other thing that makes the end of summer seem all the closer is the Phelps County Fair. The fair begins this weekend. The Gosper County Fair is currently taking place. If you are nearby, try and stop in to support your local 4H kids or even your own.

In addition to the above items, you need to be taking time for yourself. This is just as important as anything else you do for your business. With all the hectic running here and there, we all still need some R and R.

JULY 25-30, 2026 — HOLDREGE

PHELPS COUNTY FAIR

SUNDAY, JULY 26	TUESDAY, JULY 28
11 AM Antique Tractor Pull (register at 10 AM)	7 AM Common Ground Coffee
11 AM UNL Dairy Store Ice Cream	8 AM 4-H Jr. Swine Show
12-3 PM Balloon Twisting (FREE)	8 AM Antique Tractor Show (commercial Bldg)
1-3 PM Ranch Rodeo (Horse Arena)	11 AM UNL Dairy Store Ice Cream
(1 PM Sign Up, 2 PM Start)	1-4 PM Face Painting (donuts included, FREE)
2 PM 4-H Dog Show	3-6 PM Rockit Events (FREE)
2-5 PM Hometown Heroes Family Safety Expo	3 PM Pedal Pullers Contest (register at 2:30 PM)
4-8 PM Rockit Events (FREE)	4-7 PM Live Balloon Twisting (donuts included, FREE)
5-7 PM 4-H Council Hamburger Feed	5 PM 4-H Olympics
6-8 PM Bingo (West Fairgrounds Tent)	6-8 PM Bingo (West Fairgrounds Tent)
6-8 PM Nebraska Pioneer Farm Awards	6-11 PM DC Lynch Carnival
Boy Scout Ice Cream Social (FREE)	
7 PM 40 For Now Christian Music (Last Fairgrounds, FREE Concert)	6 PM Mutton Bustin' (5 PM Sign Up)
	7:30 PM Bull Ride — Arrow T Productions (\$10 adults/\$5 kids) Kenndall Eugene Live Music Following
MONDAY, JULY 27	WEDNESDAY, JULY 29
7 AM Common Ground Coffee	7 AM Common Ground Coffee
7:30 AM 4-H Small Animal Shows	8 AM 4-H Jr. Sheep Show & Goat Show
8 AM Antique Tractor Show	8 AM Antique Tractor Show (commercial Bldg)
11 AM UNL Dairy Store Ice Cream	11 AM UNL Dairy Store Ice Cream
1:30 PM 4-H Food Show & Culinary Event	1-4 PM Face Painting (donuts included, FREE)
3-6 PM Rockit Events (FREE)	3-6 PM Rockit Events (FREE)
4-7 PM Balloon Twisting (donuts included, FREE)	3:30 PM 4-H Elite Showmanship Contest
4-7 PM Face Painting (donuts included, FREE)	6-8 PM Bingo (West Fairgrounds Tent)
4-8 PM Hometown Heroes Family Safety Expo	6-11 PM DC Lynch Carnival
3 PM 4-H Jr. Buckle Call Show	6-8 PM Yachta Yachta Live Music (FREE)
4 PM 4-H Jr. Beef Show	7:30 PM Demo Derby With 'Night Life' Monster Truck Car Crush!
5 PM FREE Beef BBQ & Live Music	
6-8 PM FREE FFA Watermelon Feed	
6-8 PM Bingo (West Fairgrounds Tent)	
6-11 PM DC Lynch Carnival	
6 PM Sips & Songs, Formerly Three (Last Fairgrounds, FREE Concert)	
THURSDAY, JULY 30	
8 AM Pre-Auction Breakfast	
9 AM 4-H & FFA Auction	

★ **PHELPS COUNTY FAIRGROUNDS** ★

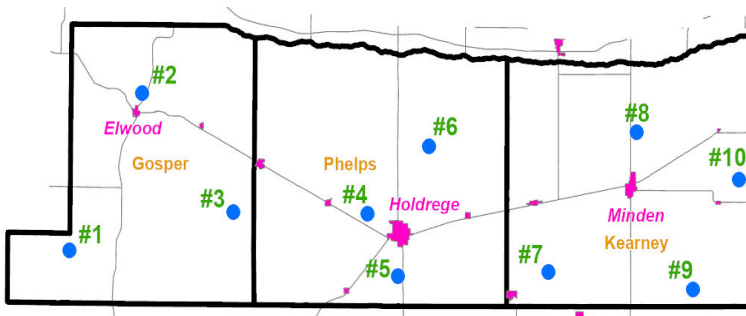
1308 2nd St., Holdrege, NE | 305-209-1102 | phelpscountyfairgrounds.com
 Publicity approved in part by a grant from the Phelps County Visitors Council

NAWMN CROP ET INFORMATION

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

$$\text{Inches of Crop Water Use (ET)} = \text{Reference ET} \times K_c$$

	July 6 – July 12		July 13 – July 20	
Site	Reference ET	Rain	Reference ET	Rain
1	2.20	0.75	2.40	0.00
2	1.90	0.57	2.00	0.00
3	1.90	0.50	2.30	0.00
4	1.90	0.50	2.10	0.00
5	1.90	0.80	2.20	0.00
6	1.70	0.80	1.90	0.00
7	1.80	0.78	2.00	0.00
8	1.70	0.39	2.20	0.00
9	1.90	1.39	2.10	0.00
10	1.90	1.56	2.20	0.00



2026 Map of TBAWMN Sites across the Tri-Basin NRD

Crop Coefficients (Kc)

Corn		Soybeans	
Stage	Kc	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 (V16-16 Leaf to R2-Blister stage): Silking is the peak water use. Stress at Blister thru Dough can still affect yield. Does this mean irrigate, irrigate, irrigate. No. Simply slow down where you are still watering the crop but not so much that we are not pulling moisture from the deeper depths. See attachment.

Avg. daily water use from July 13 – July 19 was 0.30"-0.38".

Soybeans (R1-Beginning Bloom to R3-Beginning Pod stage): R3-Beginning Pod thru R6-Full Seed will reduce yield more than any other time. R4-Full Pod is the most crucial period.

Avg. daily water use from July 13 – July 19 was 0.24"-0.38".

July 13-July 19 (10 of 10 TBAWMN sites reporting): Avg. weekly rainfall was 0.00 (range 0.00 to 0.00). Avg. weekly ET for corn was 2.32 and for soybeans was 2.14.

CROP ET INFORMATION

TBAWMN Sites: <https://www.tribasinrrd.org/tbawmn>

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

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

CORN STAGE		DESCRIPTION
R1	Silking	Begins when any silks are visible outside the husks.
R2	Blister	The kernels are white on the outside and resemble a blister. The cob should be at or near full size by R2. The silks are beginning to dry out and darken in color.
R3	Milk	The kernels display a yellow color on the outside. Inner fluid is milky white. Silks are brown and dry or becoming dry.

SOYBEAN STAGE		DESCRIPTION
R1	Beg Bloom	At least one open flower is present at any main stem node.
R2	Full Bloom	At least one open flower is present at any one of the two uppermost main stem nodes that have fully developed leaves.
R3	Beg Pod	At least one pod of 3/16" length is present at one of the four upper most main stem nodes with a fully developed leaf. It's not uncommon to see pods of greater length at lower nodes.

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>.

	July 23, 2026, 8:00 AM	1 Year Ago
El. & Cap. – Lake McConaughy	3211.2 ft - 30.8%	3228.0 ft - NA%
Inflows to Lake McConaughy	123 cfs	325 cfs
Flows on the North Platte at North Platte	892 cfs	298 cfs
Flows on the South Platte at North Platte	62 cfs	207 cfs
Flows on the Platte at Kearney	25 cfs	355 cfs

**Thank you
for the rain
provided!**



WEBSITES OF INTEREST

NRCS Nebraska www.ne.nrcs.usda.gov
 Farm Service Agency www.fsa.usda.gov
 TBNRD Home Page www.tribasinrrd.org/
 Central Irrigation District www.cnppid.com/cropwatch.unl.edu
 UNL Cropwatch
 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:	July 9 – July 22	May 1 – July 22
Elwood 1.81 mi. NW:	0.44	10.13
Loomis 0.2 mi. SW:	0.31	8.51
Holdrege 0.49 mi. WNW:	0.62	8.14
Minden 7.2 mi. W:	0.89	6.19
Minden 8.8 mi. ESE:	1.18	8.41

Average Rain for May-July in Holdrege = 11.32 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

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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Tri-Basin Water Watchers TAPS Team Soil Moisture Sensor Chart – As of 7-22-26

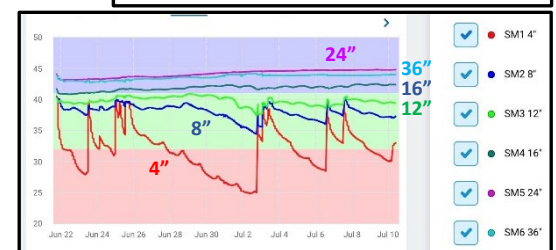
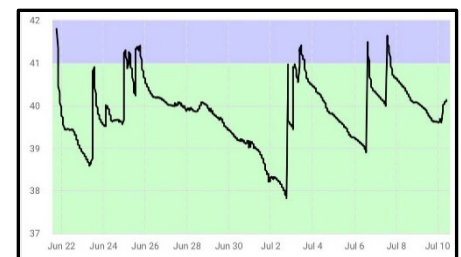
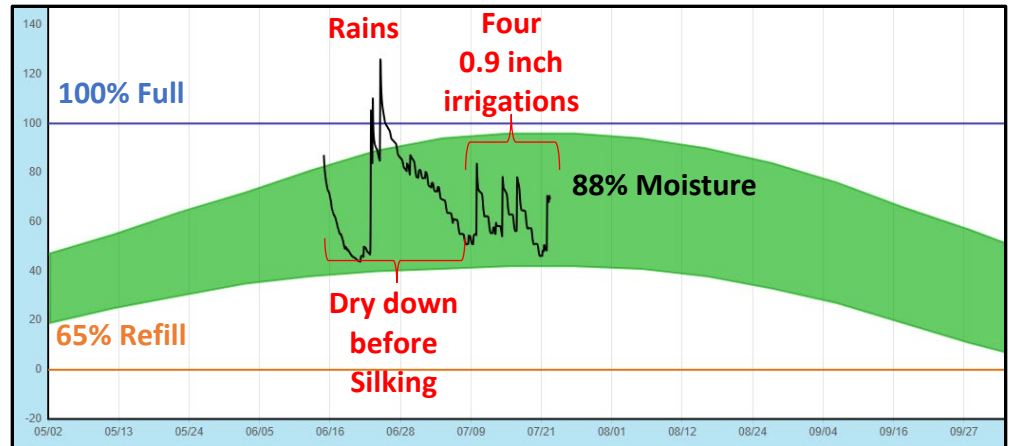
Location is at the UNL research Farm in North Platte on a loam/silt loam soil. The sensor in our plot has 12 sensors, 1 every 4 inches down to 48 inches (4 feet). The plot is corn in 2026 following 2025 soybeans. We planted P13777 PCUE at 33,000. Terminated the rye cover crop two weeks prior to planting. Due to soil tests and OM at 2.1%, we will apply a total of 180 lbs of N. For irrigation, four fertigations will apply 100 lbs of the 180 lbs total N. 0.10 inches of water will be applied per 10 lbs of nitrogen, totalling 1.0 inch of irrigation applied by fertigation. However, 30 lbs of N is the most applied per fertigation so no more than 0.30 inches of water per fertigation. Fertigation water applications will be 0.30 inches at 9-leaf, 12-leaf, and tassel, followed by 0.10 inch at blister stage.

This first chart to the right shows the summary of our moisture levels based off root depth. Because our roots are now pulling from 48 inches at tassel time, this summary line is the average moisture to 4 feet based on all 12 sensors, 1 every 4 inches to 48 inches. As of the date at the top of this page, we are averaging through 4 feet about 88% moisture.

The blue horizontal line is 100% full moisture. The orange horizontal line near the bottom, we have set at 65%, called the refill line. Most if not all sensor companies, this line can be changed to whatever the producer wants it to be set at. We have ours set as a target at years end, not as a time to irrigate line. Most dealers I have seen have these set around 80% moisture, ranging from 70% to 85%. All depends on how conservative they want to be. If they are set too high and you never visit with your dealer, you could be over-irrigating. If not over-irrigating, then you could be thinking the sensors don't work. One really needs to know where this is set in order to schedule irrigations properly. So again, know what this line is set at. And know what the rest of the chart information is set at and telling you or you will again think the sensors don't work. You will be assuming what the sensors are telling you. You need to dig in and quiz the dealers. I think sensors are a great tool if you know what's going on, how to use them, and how you can make them work for you.

The numbers on the left-hand side are reference numbers only. They simply reference to themselves basically. But you do need to know what they reference. Holds true for most if not all companies. This sensor has 100 on the 100% Full Line. But 0 on the 65% Refill Line. So, based on this, each 20 interval equals 7% moisture. $20 = 72\%$, $40 = 79\%$, $60 = 86\%$, and $80 = 93\%$ for this chart. You can calculate this by taking the difference between the Full Line of 100 and the Refill Line of 65. The difference is 35. So divide that by the number of gaps, in this case 5 gaps. $35 \text{ divided by } 5 = 7$. So every number on the left is a 7% moisture difference. So in knowing this, the bottom of the green optimal area during peak use, silking, is approximately at 80% moisture. Good moisture. So you should be able to dance in the lower green optimal area and could even touch below it a bit without really hurting anything. But because nobody knows some of this information, the green is optimal irrigation, that's all we know. So bigger is better, right? We will simply irrigate in the top half of the optimal area and kick some butt. However, in doing that, you are over-irrigating.

See the two sensor charts from this year to the right showing this very thing. A different sensor so a different look. He dried down some prior to silking. But since then, notice how the summary line in the top chart is hanging around the 100% full line (blue and green meet) and he is hanging in the top part of the optimal area (green). His irrigations have added moisture to the profile which is fine since needing that moisture during silking/peak use. Notice in the chart below showing the individual sensors. The 4 and 8 inch depths are rising/trending up. 12 inch is staying put. The 16, 24, and 36 inch depths are also gaining in moisture. There might be root activity at the 16 inch depth as shown by the stair-stepping/bumpiness but is still increasing in moisture. Definitely no root depth at the 24 or 36 inch depths. Just smooth lines increasing in moisture. Note these deeper depths remain above the 100% full line while increasing in moisture. Why are we doing that? That is over-irrigating. He should be slowly tapping into those deeper depths for water. I don't mind the rising prior to silking to add to the profile if needed as we don't want to short ourself during that stage. But, I think we could have applied less and/or waited a bit longer to irrigate. One to force roots deeper so you can rely on some of that deeper moisture to help you out. Irrigating all year in only two feet of roots allows one to over irrigate and potentially lose valuable nitrogen. And two, to dance in the lower portion of the optimal irrigation area, saving room for rain.



Back to the our first summary chart (TAPS) on page 1. Increases (up ticks) are added moisture due to rain or irrigation. A small increase can be due to roots drawing from the next deeper sensor, thus changing this summary average. Example: if summary line is averaging 5 sensors and the roots have reached the 6th sensor, now the summary will average 6 sensors. Therefore, a small boost in total moisture.

We dried moisture down enough before silking to force the roots to go deeper. As we approached and are now at silking, we applied four 0.9 inch irrigations during this hot spell. We can only irrigate on Mondays and Thursdays. Irrigated on the 9th, 13th, 16th and the 20th. Got a boost right before the last irrigation due to roots reaching the 48 inch depth and from 0.30 inches of irrigation due to the 30 lbs N fertigation application at tassel. We are irrigating in the lower levels of the green optimal area. This makes room in the top foot for rain. We are tapping into some of that deeper moisture (down to at least 48 inches/4 feet) without completely draining it. We are maintaining good moisture through the peak water use period. And we are not leaching nitrogen.

As you look where the summary line decreases, you will see stair-stepping. Day water use goes down and night water use drops very little. Where we irrigated those four 0.9 inches, you will see larger daily decreases of moisture due to hot days and crop stage needing more moisture. Earlier in the year when crops were smaller and days weren't as hot, the daily drops were smaller. Watching these daily decreases, and knowing the weather, you can predict how many days you have until you want to irrigate. Knowing how many days it will take your pivot to get to the sensor location also needs to be taken into account.

At the right are our TAPS Sensor Individual Charts. I have them broken down by the feet of depth. You can refer back to the summary chart as needed on page 1 of this attachment.

The sensors in the top foot are the most active since near the surface. Heavily affected by root activity, rains and irrigation. All three sensors in the first foot were reached by the rains early and the irrigations recently. The rains also reached the 3 sensors in the 2nd foot as well. The four 0.9 inch irrigations recently did affect the 2nd and 3rd feet. The roots were heavily taking moisture at the 16 and 20 inch depths prior to the irrigations. But the irrigations leveled those off by allowing the roots to take moisture from the top foot and very little from that 2nd foot during the irrigations. And not enough irrigation water was applied to increase the moisture levels at these depths in the 2nd foot. Although the 16 inch depth did creep up a little bit. In the 3rd foot, the irrigations slowed the water usage from at least the 28 and 32 inch depth. Looks like the 36 inch depth used moisture steadily. In the 4th foot, roots started drinking water there, including the 48 inch depth in the last 3 days or so. See the red circle in the zoomed in photo. Notice when the stair-stepping started. It appears the irrigations added enough moisture to affect how much was removed by the crop in the 2nd and 3rd feet but didn't affect it as much in the 4th foot. You can see this by how much more decrease and stair-stepping took place in the 4th foot.

A level line means moisture is not being added or removed from the profile. This can mean it's too dry to allow any more removal of moisture. It can also be an equilibrium point of where the amount of moisture being added to the profile is also being removed by the crop. It can also be a full profile which the roots have not reached that depth yet to remove moisture.

