

PROGRAM INFORMATION

EQIP AND CSTWP:

EQIP – SIGNUP DEADLINE FOR 2019 FUNDS IS PROJECTED TO BE **NOVEMBER 16, 2018**. STOP IN EARLIER TO ENSURE YOU GET AN APPLICATION.

CSTWP – PRODUCERS WITH COMPLETED 2018 RECORDS CAN SCHEDULE AN APPOINTMENT WITH THEIR LOCAL NRCS TO REVIEW THEIR 2018 RECORDS. PAYMENTS WILL NOT BE MADE UNTIL COMPLETE RECORDS HAVE BEEN SUBMITTED AND CERTIFIED.

NSWCP: FUNDS ARE AVAILABLE FOR IRRIGATION, RANGELAND, AND EROSION CONTROL PRACTICES. STOP BY YOUR LOCAL NRCS.

ENERGY EFFICIENCY GRANT: SIGNUP DEADLINE FOR 2019 FUNDS WILL BE **OCTOBER 31, 2018**. FOR MORE INFORMATION CONTACT KELLEY AT RURAL DEVELOPMENT AT THE KEARNEY USDA SERVICE CENTER AT 308-237-3118, EXT. 4 OR AT 308-455-9837.

CALENDAR OF EVENTS

OCT 1: CNPPID BOARD OF DIRECTOR'S MEETING – 9 AM

OCT 9: TBNRD BOARD MEETING – 7:30 PM

Highly Erodible Land (HEL) Compliance!

If you are farming HEL fields, you are **REQUIRED** to control ephemeral gully erosion in order to remain in compliance with USDA farm program benefits. Tillage to smooth the ditches is not a control practice. Tillage hides the problem and allows the problem to continue. Cover crops, terraces, waterways, etc. are ways to help control ephemeral gully erosion.

Each spring a random selection of HEL tracts is pulled for status reviews. NRCS then makes field visits to ensure the HEL acres are meeting the HEL conservation plan requirements. One of the things that will be reviewed in the field will be the presence of ephemeral gullies as well as all the other practices in the HEL conservation plan.

As you harvest, you might want to think about these areas and where you may want to plant cover crops to help prevent the gullies, etc. Some areas may be seeded along these areas while other areas may need cover crops completely up and down the side slopes. Cover crops are a start in addressing these areas. Will other conservation practices be needed? Time will tell. But for now, cover crops are a good start in addressing the ephemeral gully erosion areas. Doing nothing will not help the cause.

Contact your local NRCS office for more information.



Non-compliance

Compliance

CURTIS'S COLUMN



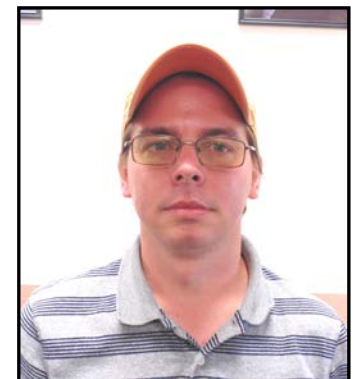
District Conservationist Selected for Holdrege NRCS!

I would like to announce the new District Conservationist for the NRCS located in Holdrege, NE. Cammie Kerner will begin her duties on September 17, 2018. She will supervise the three NRCS offices within the Tri-Basin NRD, they being Elwood, Holdrege, and Minden. For those unfamiliar with the ranks in NRCS, she is filling the position previously held by Kevin Breece. She has spent most of her career as the Resource Conservationist in the Beaver City Service Center. There she has worked with numerous programs such as CSP and EQIP, various landuses from cropland to rangeland to wildlifeland, Highly Erodible Lands, wetlands, etc. Please welcome Cammie to the Tri-Basin NRD.



Soil Conservation Technician Selected for Minden NRCS!

I would like to announce the new Soil Conservation Technician for the NRCS located in Minden, NE. Logan Keller began his duties on August 20, 2018. He is originally from Norman, OK and attended college at West Virginia University. He is filling the position previously held by Dave Beins, who most of you know is currently located in the Holdrege office. If you haven't already, please welcome Logan to the NRCS here in Tri-Basin NRD and the great state of Nebraska.



CSP, EQIP, and other Reminders!!! **2018 Certification and Records need completed.**

- **CSP:** If contract holders are wanting paid in tax year 2018, COMPLETE and Certified enhancements need to be in the NRCS office by Thanksgiving. Contact your local NRCS offices for more information.
- **EQIP Irrigation Water Management (IWM) Records:** Irrigation records need completed and submitted to your local NRCS office for your IWM payment.
- **Water Use Reports:** The NRD requires your tillage info on these reports (acres of no-till, conventional till, etc). **Deadline for submitting these reports to the Tri-Basin NRD is November 16, 2018.**
- **Nitrogen Management Reports:** See tillage info requirements under Water Use Reports above. **Deadline for submitting these reports to the Tri-Basin NRD is December 31, 2018.**

Near Term Plans for Lake McConaughy Water:

All Central irrigation canal headgates are closed and drain-down is occurring. Due to timely rains in both the irrigated area and upstream of Lake McConaughy we have ended the season in great shape and customers will have a full supply of water in 2019. Statistics for September 12th at McConaughy follow; Elevation: 3252.6', Volume: 1,390,555 AF, Volume to fill: 352,500 AF, Inflows: 1,570 cfs and Outflows: 1,029 cfs.

Central water users are not the only group relying on Lake McConaughy storage water. NPPD and the USFWS Environmental Account (EA) store water and USBR (US Bureau of Reclamation) moves water in the fall to Lake McConaughy for five Glendo Reservoir accounts, for use the following summer. There are also Federal Energy Regulatory Commission (FERC) mandatory releases made to the river; volume released depends on the time of year and climatic conditions.

At this time, NPPD is taking Lake McConaughy water at its Keystone Diversion and the Keith-Lincoln Irrigation District is receiving Glendo water via the North Platte River. In the near-future, Central will be releasing water to meet FERC minimum flows and will have maintenance outages on and off through mid-October. The EA will release water to the North Platte/Platte Rivers in October-November to help meet target flows for the fall migration.

TRI-BASIN NRD NEWS



Flow Meter Readings for Water Use Reports:

As the irrigation season winds down and you are picking up irrigation pipe or bedding down irrigation engines, remember to record the ending meter readings for your Irrigation Water Management (Water Use) Forms. We have the Water Use forms printed and ready to be filled out! You can stop in our office to pick them up or call us at 1-877-995-6688 to have them mailed to you.

Tri-Basin Staff to Inspect Meters:

With irrigation season winding down, Tri-Basin NRD staff members are beginning annual irrigation meter inspections. Each year, we take readings from meters in about one-third of the townships in the district.

This year we will be doing inspections in the following townships: Kearney County: 5N-15W, 6N-15W, 7N-15W, and 8N-15W; Phelps County: 5N-19W, 6N-19W, 7N-19W, 8N-19W; and Gosper County: 5N-22W and 5N-24W.

If you have irrigation wells in these townships and you put your meters in storage for the winter, you can call the Tri-Basin NRD office at 1-877-995-6688 to schedule an inspection. If there is no meter at the site when we come to inspect, you will receive a letter requesting access to the meter for inspection.



Controlling Harvest Compaction:

If combines, grain carts & silage harvesters are leaving field ruts, then methods to reduce compaction should be followed. University research in tilled soils records an average first-year yield loss to severe compaction of approximately 15 percent. Yield loss in the first year after compaction is mostly due to residual effects of surface compaction. In the absence of *recompaction*, yearly yield losses decrease to approximately 3 percent per year up to ten years after the compaction event. The final yield loss usually is a result of subsoil compaction and considered a permanent yield reduction.

Besides reducing yields, soil compaction also reduces soil health and infiltration rates; increases surface runoff; causes nutrient deficiencies; and reduces environmental quality. During harvest, most wet soil compaction will occur in wheel tracks; often appearing as ruts. Typically, ruts are as deep as the tillage, because the soil has very little structure, and tires cut down through to the compacted tillage pan.

To reduce field compaction, the best option is to wait until soils dry enough to support harvest equipment. If this is not a viable option, then the goal is to limit compaction as much as possible. This might mean running the grain cart down the same row middles as the combine. An auger extension may be needed on the combine to keep the wheel tracks on the grain cart lining up with the harvester trackers. Overall, the wheel spacing on the combine, tractor, and grain cart should be run between the rows following the same wheel tracks. Likewise, grain trucks should not be driven in fields, since the axle loads and tire pressures are not suitable for soils.

Controlled traffic lanes with GPS auto-steer tramlines across fields greatly reduce overall compaction; since 80-85% of soil compaction damage is done with the first pass of the tires. If additional passes are made on the same traffic lanes, little additional compaction occurs; because once a traffic lane has been driven on and the soil has been firmed up, subsequent passes have little effect on the amount of compaction. Further, by using the same traffic lanes year after year, the soil structure and water infiltration in the un-trafficked areas are greatly reduced.

Other ways to reduce potential compaction during wet soil harvests to reduce grain cart fill and unload more often. Again, establish a grain cart path and stay on it. Avoid turning around in the middle of the field. Consider unloading at the ends of the field, not on the go. Finally, use wide tires with lower inflation pressures. More information is available on the Nebraska Extension website: <https://cropwatch.unl.edu>.

Evaluating Stalk Strength Prior to Harvest:

Tamara Jackson-Ziems, Nebraska Extension Plant Disease specialist, suggests that producers scout each field using the PUSH test (pushing the plant tops away from you approximately 30 degrees from vertical) to establish field harvest order. If plants do not snap back to vertical, the stalks may have been compromised by stalk rot disease(s). An alternative method is to PINCH the internodes of the lower stalk. If more than 10% of the stalks crush easily, then these fields should be first priority for harvesting.

The three main fungi stalk rot diseases include: 1) Charcoal rot – usually more common during drought conditions with a gray or black stalk appearance; 2) Fusarium stalk rot – common during damp conditions & appears as white fungus growth on the outside of stalk nodes & pink on inside of stalks; and 3) Anthracnose stalk rot – top rots in corn down to black lesions.

NAWMN CROP ET INFORMATION

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

Inches of Crop Water Use (ET) =

Evaporation x Kc

Site	Aug 27 – Sept 2		Sept 3 – Sept 9	
	Evaporation	Rain	Evaporation	Rain
1	1.40	0.20	0.60	2.00
2	1.20	0.55	0.70	0.90
3	0.80	0.65	0.40	2.10
4	1.20	1.25	0.50	1.60
5	0.90	0.21	0.60	3.24
6	1.00	0.33	0.50	2.80
7	1.10	1.30	0.60	2.25
8	1.00	1.59	0.60	2.13
9	0.90	0.76	0.70	2.57
10	1.00	0.95	0.60	3.70
11	0.80	0.87	0.50	0.60
12	1.00	1.16	0.60	3.35
13	0.95	1.24	0.50	1.47
14	0.65	1.84	0.80	1.66
15	1.00	3.80	0.50	1.60
16	1.10	0.57	0.70	1.20

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
¼ Milk Line	1.04	Full Seed (R6)	1.10
Full Dent (½ Milk)	0.98	Yellow Leaf (R6.5)	1.00
¾ 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

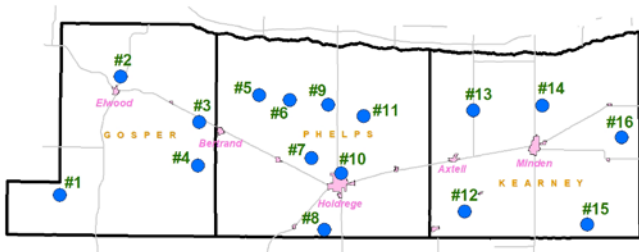
Corn (R5-1/4 Milk Line to R5.5-1/2 Milk Line (Full Dent) stage): At R5, ¼ Milk Line, you need 3.75 inches to maturity. Average moisture to 4 feet is 84% (all Silt Loam) at 6 sensor sites across the NRD. If your field matches this, you are done irrigating based on depleting to 40% moisture.

Avg. daily water use from Sept 3 – Sept 9 was 0.04"-0.11".

Soybeans (R6-Full Seed to R6.5-Full Seed/Yellow Leaf stage): At R6, Full Seed, you need 3.5 inches to maturity. Average moisture to 4 feet is 82% (all Silt Loam) at 4 sensor sites across the NRD. If your field matches this, you are done irrigating based on depleting to 40% moisture.

Avg. daily water use from Sept 3 – Sept 9 was 0.06"-0.13".

Sept 3-Sept 9 (16 of 16 NAWMN sites reporting): Average weekly rainfall was 2.07 (range 0.60 to 3.70). Average weekly ET for corn was 0.45 and for soybeans was 0.54.



2018 Map of NAWMN Sites across the Tri-Basin NRD.

ET INFORMATION SITES

NAWMN Sites:

- <https://www.cnppid.com/weatheret-data/nebraska-agricultural-water-management-network/>
- <https://nawmn.unl.edu/ETdata/DataMap>

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

CNPPID: <https://www.cnppid.com/weatheret-data/>

Water Use Hotline: 1-800-993-2507

Corn Stage		DESCRIPTION
R5.5	Full Dent - 1/2 Milk Line	The starch line is 1/2 the way down the kernel. Top 1/2 is hard and bottom 1/2 is softer near the cob.
R5.8	3/4 Milk Line	The starch line is 3/4 the way down the kernel (from outside moving towards the cob).
R-6	Black Layer	The starch line has advanced to the cob. Physiological Maturity. Black layer formed, kernel moisture is between 25%-35% moisture. 0.0 inches needed for yield.
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 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. 13, 2018, 8:00 AM	1 Year Ago
Capacity of Lake McConaughy	79.8%	NA
Inflows to Lake McConaughy	1490 cfs	2020 cfs
Flows on the North Platte at North Platte	392 cfs	383 cfs
Flows on the South Platte at North Platte	171 cfs	122 cfs
Flows on the Platte at Overton	422 cfs	1680 cfs



WEBSITES OF INTEREST

Soil Health:

www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/

Climate aqclimatenebraska.weebly.com
 NRCS Nebraska www.ne.nrcs.usda.gov
 Central Irrigation District www.cnppid.com/
 TBNRD Home Page www.tribasinrrd.org/
 Farm Service Agency www.fsa.usda.gov
 UNL Cropwatch cropwatch.unl.edu
 UNL Extension extensionpubs.unl.edu/
 K-State SDI Website www.ksre.ksu.edu/sdi
 No-till On The Plains www.notill.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 30 – Sept 12	May 1 – Sept 12
Arapahoe 9.8 NNE:	1.14	15.20
Bertrand 6.1 mi. SE:	3.57	20.42
Funk 4.1 mi. NNE:	2.51	16.09
Minden 0.855 mi. W:	3.24	17.14
Minden 8.8 mi. ESE:	2.92	17.82

Average Rain for May–Sept. in Holdrege = 16.38 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@ne.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
 308-955-6688

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

"The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, S.W., Stop 9410, Washington, D.C. 20250-9410 or call toll free at (866) 632-9992 (English) or (800) 877-8339 (TDD) or (866) 377-8642 (English Federal-relay) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer."