

PROGRAM INFORMATION

EQUIP, CSP, AND ACEP:

EQUIP – IRRIGATION FUNDS AVAILABLE FOR 2016 CONTRACTS HAVE BEEN APPROVED OR OBLIGATED IN THE TRI-BASIN NRD. – **A TARGETED SIGN-UP CUTOFF DATE FOR 2017 FUNDS IS OCTOBER 21, 2016** TO SIGN-UP FOR PIVOTS AND SDI. THIS IS NOT OFFICIAL. BECAUSE IT'S DURING HARVEST, I RECOMMEND SIGNING UP ANYTIME WITH YOUR LOCAL NRCS OFFICE PRIOR TO HARVEST.

SOIL HEALTH DEMONSTRATION FARMS INITIATIVE – **SIGN-UP DEADLINE IS JUNE 17, 2016**. THE GOAL OF THIS PROGRAM IS TO ESTABLISH FARMS WILLING TO DEMONSTRATE COVER CROP STRIP TRIALS OF VARIOUS COVER CROPS, HOST FIELD DAYS, ETC. GOTO [HTTP://WWW.NRCS.USDA.GOV/WPS/PORTAL/NRCS/DETAIL/NC/NEWSROOM/RELEASES/?CID=NRCSEPRD1031007](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/nc/newsroom/releases/?cid=NRCSEPRD1031007) FOR MORE INFORMATION.

CSP – THE NEW 2016 APPLICATIONS HAVE BEEN RANKED.

NSWCP: NEW MONEY COMES JULY 1ST. APPLICATIONS FOR COST-SHARE CAN BE TAKEN ANYTIME AT YOUR LOCAL NRCS OFFICE AND MUST BE SIGNED BY THE OWNER. APPLICATIONS MUST BE APPROVED PRIOR TO STARTING ANY INSTALLATION WORK. IN THE TRI-BASIN NRD, IRRIGATION APPLICATIONS ARE REVIEWED FOR APPROVAL FOUR TIMES A YEAR, SEPTEMBER, DECEMBER, FEBRUARY, AND MAY. THE EXCEPTION IS APPLICATIONS FOR FLOW METERS AND SOIL MOISTURE SENSORS. THESE TWO IRRIGATION PRACTICE APPLICATIONS AND NON-IRRIGATION APPLICATIONS ARE REVIEWED FOR APPROVAL MONTHLY.

ENERGY EFFICIENCY GRANT: **SIGN-UP DEADLINE FOR 2017 FUNDS IS OCTOBER 31, 2016**. APPLICATIONS CAN BE TAKEN YEAR ROUND SO STOP IN AT YOUR CONVENIENCE PRIOR TO HARVEST. THIS IS FOR IMPROVEMENTS TO IRRIGATION SYSTEMS SUCH AS CONVERTING GRAVITY SYSTEMS TO PIVOTS OR SDI. FOR MORE INFORMATION CONTACT KELLEY MESSENGER AT THE KEARNEY USDA SERVICE CENTER AT 308-237-3118, EXT. 120.

CALENDAR OF EVENTS

MAY 30: MEMORIAL DAY – GOV'T OFFICES CLOSED

JUNE 6: CNPPID BOARD OF DIRECTORS MEETING – 9 AM

JUNE 6: CNPPID 12 WEEK IRRIGATION RUN SCHEDULE STARTS

JUNE 14: TBNRD BOARD MEETING – 7:30 PM

JUNE 15: WHEAT PLOT TOUR NORTHEAST OF BEAVER CITY.

GOTO [HTTP://GO.UNL.EDU/IETH](http://go.unl.edu/ieth) FOR MORE INFO.

NO-TILL EXPOS: GOTO [HTTP://WWW.NOTILL.ORG/](http://www.notill.org/) FOR MORE INFO.

JUNE 21: WINSIDE, NE

JUNE 23: ALLIANCE, NE

AUGUST 2016: **AUSTRALIAN FARM TOUR.** EXPRESSIONS OF INTEREST MUST BE RECEIVED BY JUNE 15TH. FLYER LOCATED AT [HTTP://WWW.NOTILL.ORG/SITES/DEFAULT/FILES/EVENTS/AUS_STUDY_TOUR_FLYER.PDF](http://www.notill.org/sites/default/files/events/aus_study_tour_flyer.pdf)

[Direct Link to SAM Website on Page 4 of This and Every Newsletter Under "Websites of Interest"](#)

CURTIS'S COLUMN



Now is the Time to Install Soil Moisture Sensors:

If you have soil moisture sensors to install, now is the time to be getting them installed or at least preparing them to be installed. You want to install these at emergence or shortly thereafter for the following reasons in order to get the most accurate soil moisture readings:

- This gives the sensors and surrounding soil time to gel by irrigation season so as to provide the most natural soil conditions in the field.
- This prevents the cutting of crop roots from taller crops, thus allowing all the roots to grow naturally around the sensors.
- This prevents the breaking of larger crops that get in the way causing potential crop voids in the field that can affect soil moisture uptake.

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

If you are getting paid for sensors from EQIP contracts, you need to get these installed. If you don't have them yet, you need to be getting those so that they can be installed in a timely manner. See the box below for additional information on contract requirements.

Renewing SAM Registration!!!

*** Tips and Information ***

- Website address: www.sam.gov. Type in address and hit the ENTER key. This will take you directly to the website. Clicking on the link on page 4 of this newsletter (if you get it via email) will also take you directly to the website. Do not search as you will get various options to choose from. Some of these are legit websites that will charge \$400 or \$500 to renew your SAM.

- SAM does not cost anything. The appropriate website looks like this on the right.

- Click on "Register/Update Entity" in center box. Type in Username and Password to "Log In". You will probably need to update your password as it expires every six months. SAM

renewal is annual. Once in, simply go through the screens and edit items if needed. Otherwise keep clicking the "Next" / "Continue" button until finished. It should take no more than 30 minutes. It shows up in SAM a couple hours later.

- Your expiration date never stays the same. It is reset to 1 year from the date you renew. So an automatic annual reminder on a calendar will not work unless you renew on the same date every year. I recommend renewing earlier than the expiration date just in case there are computer issues.

- Keep a file of all your SAM information such as usernames, passwords, etc.

- FSA does not require SAM. NRCS requires entities only. Rural Development requires individuals and entities.

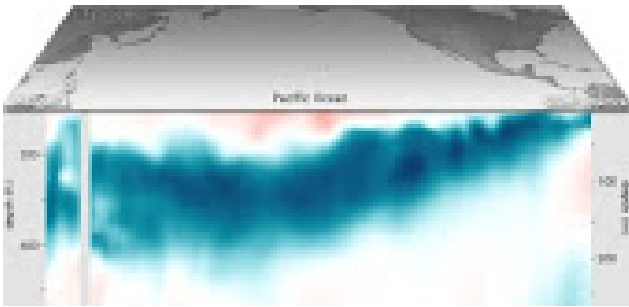
- Because I don't see producers going through this process, some of this is what I am gathering from producers. Let me know if any of this is incorrect. Thanks! Curtis Scheele



Platte Basin Conditions:

Minor to moderate flooding is occurring from the North Platte River headwaters in CO to the city of North Platte and near flood conditions are present to Grand Island. Expanded areas of flooding can be expected until river flow from the melting snowpack subsides. Some reservoir storage space is available yet to re-time flow and minimize flood impacts during the weeks ahead. Central has been releasing water for power production through the Kingsley Hydroplant at Lake McConaughy since October due to the Platte Basin historic record of large snow, rain and river flow volumes associated with El Nino events.

Strong El Nino conditions in the eastern Pacific along the equator did contribute to our wet, heavy snow and big rain events. The current El Nino event is degrading and a La Nina watch is in effect (cooler than average sea surface temperature at the Pacific equator). The May NOAA graphic below shows a shrinking pool of the El Nino warm water and a deep pool of the cool water (in blue) moving east; it has just reached the sea surface near South America. This fluctuation from El Nino to Neutral to La Nina is not unusual but does bring change to equatorial and then global weather including changes in the prevailing positions of the Pacific and Polar jet streams and our temperature and precipitation outlooks.



TRI-BASIN NRD NEWS

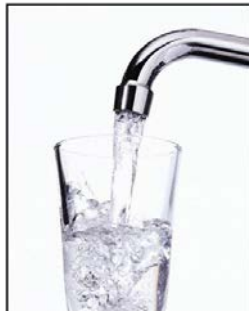


Tri-Basin NRD Helps Homeowners Protect Water Quality After Floods:

Flooding caused by heavy spring rains can contaminate privately-owned household wells. Tri-Basin NRD is encouraging private well owners to test their drinking water for pollutants.

State and federal laws require municipal water systems and other public water suppliers to test their water regularly to insure that their water is free from contaminants. Tri-Basin NRD wants rural residents in Gosper, Phelps, and Kearney Counties to have confidence that their household drinking water is as safe as public water supplies. Tri-Basin NRD offers rural residents free household drinking water tests for nitrates and coliform bacteria.

Any district resident who uses a household water well can request this testing service by calling the Tri-Basin office at 1-877-995-6688. Test results are sent to the Tri-Basin NRD office, where they are recorded in a water quality database. The results are forwarded to homeowners, along with information about protecting water quality.



Growing Sweet Corn:

Farm fresh sweet corn is always a summer treat; and many irrigators have already seeded sweet corn while checking their field corn planter settings. Sweet corn emergence, though, has likely been slower; since the newer Xtra sweet corn hybrids require warmer soil temperatures (60°F) than traditional field corn 50°F soil temperature needs.

To maintain quality and improve emergence, always use fresh sweet corn seed stored less than 2 years. For steady sweet corn harvest throughout the season, seed successive plantings about every two weeks (planting the next rows series when the previous emerging rows have developed three leaves). Planting early, mid-season and late cultivars in your initial planting can also stage production; however, this method could cause unwanted cross-pollination.

Pollination is best accomplished by planting four or more sweet corn rows side-by-side rather than one or two long rows. Since sweet corn originally came from field corn mutations; popcorn, field corn and ornamental corn may cross-pollinate with sweet corn. This then could create kernels with more starch and less sugar. Also, since sweet corn shriveled kernels gene characteristic are dominant; popcorn pollinated by sweet corn will be sweeter & shriveled. Yellow colors are also dominant; so corn ears from yellow corn pollinated by white corn and white corn pollinated by yellow corn will both be yellow.

Sweet corn breeders first used (su) and (su su) genes to improve kernel starch conversion to sugars. Later, "sugar-enhanced" (se, se+ or EH) su modified hybrids were released (Kandy Korn; Golden Sweet EH; Earliglow EH; and Tendertreat EH) along with "super-sweet / sugary supersweets or "Xtra-sweet" (su sh2). The Honeycomb Sugar Time and Sugar Loaf are "sh" (shrunken kernel) hybrids. Although "sh" increases sweetness and slows kernel starch conversion; dry kernels are smaller & more shriveled than standard sweet corn. Fully modified (su se) hybrids are: Double Delicious; Divinity; Miracle; and Double Treat. Recent breeding have also provided the "triplesweet" hybrids (both sugar enhanced 9se) and supersweet (sh2) kernels on the same ear such as Honey Select; Serendipity; and Bon Appetit.

Yellow Corn Syndrome:

Cool, cloudy, wet spring weather has caused area corn fields to show signs of chlorotic "yellow corn syndrome" OR "ugly duckling stage corn." The good news is that most leaf yellowing leaves should be temporary; and as the temperatures warm, the corn will likely return to normal photosynthesis color. However, for some yellowing corn fields, plants may be damaged or stunted for the remainder of the growing season.

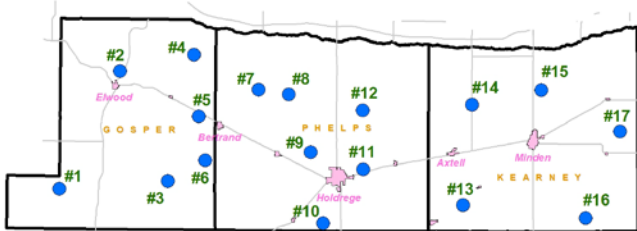
Overly wet soil conditions (water logged) can cause plant roots to be oxygen depleted. First visual signs are leaves turning yellow with lower plant leaves exhibiting leaf chlorosis (dieback) due to essential substances and nutrients being tied-up. Wet soils can also result in beneficial bacteria completing directly with plant roots for nutrient absorption as pore spaces are filled with water. Usually, this competition occurs when wet soil conditions continue in fields more than 24 to 48 hours. Under low temperatures, nitrogen losses through denitrification can be 3 to 4 percent of nitrate-nitrogen per water-logged day. When crops leaves are yellow due to nitrogen losses, it is recommended to collect soil samples and check nitrogen levels. Also, use the new free Extension "cornsoywater.unl.edu" real-time irrigation scheduling software App for adjusting water and fertilizer applications rates. Seedling diseases (blight; Pythium damping off; root rot & Goss's wilt) may also cause yellowing.

NAWMN CROP ET INFORMATION

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

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

Site	May 2 – May 8		May 9 – May 15	
	Evaporation	Rain	Evaporation	Rain
1	NA	NA	NA	NA
2	NA	NA	NA	NA
3	NA	NA	NA	NA
4	NA	NA	NA	NA
5	NA	NA	NA	NA
6	NA	NA	NA	NA
7	NA	NA	NA	NA
8	NA	NA	1.00	0.85
9	NA	NA	NA	NA
10	NA	NA	NA	NA
11	NA	NA	NA	NA
12	NA	NA	NA	NA
13	NA	NA	NA	NA
14	NA	NA	NA	NA
15	NA	NA	NA	NA
16	NA	NA	NA	NA
17	NA	NA	NA	NA



2016 Map of NAWMN Sites across the Tri-Basin NRD.

Crop Coefficients (K _c)			
Corn		Soybeans	
Stage	K _c	Stage	K _c
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 (Planted to V2-2 Leaf stage): The growing point is below the soil surface at the 2-Leaf stage.

Avg. daily water use from May 9 – May 15 was 0.00"-0.03".

Soybeans (Not Planted to Planted stage):

Avg. daily water use from May 9 – May 15 was 0.00"-0.00".

May 9-May 15 (17 of 17 NAWMN sites reporting): Average weekly rainfall was NA (range NA to NA). Average weekly ET for corn was NA and for soybeans was NA.

ET INFORMATION SITES

NAWMN Sites:

http://www.cnppid.com/news-info/weatheret-data/nebraska-agricultural-water-management-network/http://elkhorn.unl.edu/ETGage/xml/NE_counties_2.jsp

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

CNPPID: <http://www.cnppid.com/news-info/weatheret-data/>

Water Use Hotline: 1-800-993-2507

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)

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://www.cnppid.com/wp-content/uploads/2016/05/WPelevation_flows.html.

	May 18, 2016, 8:00 AM	1 Year Ago
Capacity of Lake McConaughy	90.6%	78.2%
Inflows to Lake McConaughy	7980 cfs	2643 cfs
Flows on the North Platte at North Platte	NA cfs	534 cfs
Flows on the South Platte at North Platte	NA cfs	6177 cfs
Flows on the Platte at Overton	7180 cfs	6311 cfs

The good for which we are born into this world is that we may learn to love.

- George Macdonald

WEBSITES OF INTEREST

SAM Registration www.sam.gov
 Climate agclimatenebraska.weebly.com
 NRCS Nebraska www.ne.nrcs.usda.gov
 Central Irrigation District www.cnppid.com
 TBNRD Home Page tribasinprd.org
 Farm Service Agency www.fsa.usda.gov
 UNL Cropwatch cropwatch.unl.edu
 UNL Extension <http://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 <http://nerain.dnr.ne.gov/NeRAIN/docs/report.asp>.

Location:	May 5 – May 18	May 1 – May 18
Arapahoe 6.9 NW:	0.88	0.98
Bertrand 6.1 mi. SE:	1.22	1.44
Funk 4.1 mi. NNE:	1.30	2.07
Minden 0.855 mi. W:	1.06	1.94
Minden 8.8 mi. ESE:	0.75	0.87

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@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

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