

PROGRAM INFO

EQIP, WHIP, WRP, CREP, & CONTINUOUS CRP:

APPLICATIONS FOR FUNDING ASSISTANCE AND ANNUAL PAYMENTS CAN BE TAKEN AT YOUR LOCAL USDA SERVICE CENTER. EQIP RANKING DATES MAY BE MOVED UP A MONTH OR TWO THIS YEAR SO MAKE SURE YOU STOP IN YOUR LOCAL NRCS OFFICE TO GET YOUR APPLICATIONS SIGNED UP.

NSWCP: APPLICATIONS FOR COST-SHARE ASSISTANCE CAN BE TAKEN AT YOUR LOCAL NRCS OFFICE. TO BE CONSIDERED FOR THE SEPTEMBER APPROVALS, APPLICATIONS MUST BE COMPLETED AND SUBMITTED BY AUGUST 31ST.

CALENDAR OF EVENTS

- AUG. 2-4: GOSPER COUNTY FAIR
- AUG. 6: CNPPID BOARD OF DIRECTORS MEETING 9 AM
- AUG. 14: TBNRD BOARD MEETING AND TOUR
- AUG. 16: IRRIGATION STRATEGY FIELD TOUR NEAR LOOMIS.
(SEE OTHER HALF OF THIS PAGE FOR MORE INFORMATION)
- AUG. 22: WHIRLWIND NO-TILL EXPO NEAR BLADEN, NE
GOTO WWW.NOTILL.ORG OR CALL 1-888-330-5142 FOR MORE INFORMATION & REGISTRATION.

* Times are tentative

Start Planning for Last Irrigation!

It is recommended that soil moisture levels drop to 40% (60% depletion) at crop seasons end. This will save water and fuel as well as allow off season moisture to replenish the soil profile. To do this, predicting the last irrigation is important. The information needed to predict last irrigation is: 1. Available Water Capacity (AWC) of soil type 2. current crop stage of growth, 3. predicted water use by the crop to maturity, and 4. amount of usable water in the root zone. This prediction process will assume no rainfall occurs. Should rainfall occur, the process needs to be repeated.

The following is a chart for normal water requirements between various crop stages and maturity.

| | Growth Stage | Approx. Days to Maturity | Water Use To Maturity |
|--------------|--------------------|--------------------------|-----------------------|
| Corn | Bliester | 45 | 10.5" |
| | Dough | 34 | 7.5" |
| | Beg. Dent | 24 | 5.0" |
| | Full Dent | 13 | 2.5" |
| | Maturity | 0 | -- |
| Soy | Full Pod (R4) | 37 | 9.0" |
| Beans | Beg. Seed (R5) | 29 | 6.5" |
| | Full Seed (R6) | 17 | 3.5" |
| | Beg. Maturity (R7) | 0 | -- |

An example of predicting last irrigation is shown on pg. 2. You can also get a copy of NebGuide G82-602-A at your local County Extension office. There is a similar publication online at <http://www.oznet.ksu.edu/library/AGENG2/mf2174.PDF>.

If you have questions or would like assistance in predicting last irrigation, contact Curtis Scheele at 308-995-6121, Ext. 3.

ACROSS THE TRI-BASIN NRD

Numerous Irrigation Strategy Field Tours in August:

During the month of August, there are 10 Irrigation Strategy Field Tours one can attend. The focus is to examine irrigation management strategies to conserve water and save energy expenses. There will be three tours within the Tri-Basin NRD. One is northwest of Minden this evening (Aug. 2nd). Maybe a little late for this info. but hopefully not if you get this via email and have nothing already scheduled. The other two are near Loomis on August 16th. One ½ mile west of 741 and I at 10:00 AM and the other ¼ mile east of 734 & E at 1:30 PM. If you can't make these, others that may be close to you are one north of Alma on August 7th, one on the southeast edge of Bartley on August 23rd, another one on August 23rd near Upland, and one north of Curtis on August 30th. Some further ones would include one near Palisade on August 14th, Ainsworth on August 21st, and Imperial on August 28th.

For more information on locations and agenda items, you can visit <http://ianrnews.unl.edu/static/0707310.shtml> or you can contact Steve Melvin at 308-367-4424.

Stage of Growth:

Corn (Bliester to Dough stage): Corn is still in high demand for water but it should start declining. Just prior to the Dent stage, kernels along the length of the ear begin to dent or dry out. At Dough stage, the kernels have approximately 70% moisture content.

Soybeans (Beginning Pod to Beginning Seed stage): Full pod marks the beginning of the most crucial period of plant development in terms of seed yield. Demand for water and nutrients are large throughout the seed filling period. During this time, half the acquired N, P, & K is from vegetative plant parts and half from soil uptake and nodule activity.

Irrigation:

Rains continue to come at the right times. The dryland crops were starting to look stressed but the recent rains have given them a nice boost. A lot of wells have been shut off this week due to recent rains.

To conserve storage water, CNPPID will reduce releases from Lake McConaughy and use storage water from Johnson, Jeffrey, and Midway lakes during the last irrigation deliveries. Deliveries are scheduled to end on August 21st. Scheduled reductions could be delayed if significant precipitation occurs.

Lake McConaughy is at 30.2% capacity versus 24.4% a year ago. Flows on the North Platte River @ Lewellen are at 371 cfs versus 176 cfs a year ago. Flows on the South Platte River @ Roscoe are at 50 cfs versus 0 cfs a year ago.

Rainfall:

Rainfall amounts come from NeRAIN which can be found at website <http://dnrdata.dnr.ne.gov/NeRAIN/index.asp?&>.

Rainfall totals – **July 19 thru August 1:**

| | |
|---------------------|-------|
| Arapahoe 6.9 mi. NW | 1.31" |
| Bertrand 6.1 mi. SE | 2.33" |
| Funk 12.5 mi. N | 2.48" |
| Wilcox 0.3 mi. SW | 1.76" |
| Heartwell 3.7 mi. S | 3.93" |

CROP ET (JULY 19 THRU AUGUST 1) AND GDD (AUGUST 1)

Crop ET data comes from CNPPID's website which can be found at www.cnppid.com/

The following information provided is for:

Corn (emergence = May 15th)

GDD (med. season maturity = 2450)

Weather Station: Holdrege 4 North GDD = 1580

Total Water Use (ET) in last 2 weeks 3.36 inches

Average Daily Water Use (ET) in last 2 weeks 0.24 inches

Weather Station: Minden GDD = 1594

Total Water Use (ET) in last 2 weeks 3.05 inches

Average Daily Water Use (ET) in last 2 weeks 0.22 inches

Weather Station: Smithfield GDD = 1547

Total Water Use (ET) in last 2 weeks 3.38 inches

Average Daily Water Use (ET) in last 2 weeks 0.24 inches

The following information provided is for:

Soybean (emergence = May 25th)

GDD (med. season maturity = 2360)

Weather Station: Holdrege 4 North GDD = 1452

Total Water Use (ET) in last 2 weeks 3.27 inches

Average Daily Water Use (ET) in last 2 weeks 0.23 inches

Weather Station: Minden GDD = 1464

Total Water Use (ET) in last 2 weeks 2.97 inches

Average Daily Water Use (ET) in last 2 weeks 0.21 inches

Weather Station: Smithfield GDD = 1414

Total Water Use (ET) in last 2 weeks 3.25 inches

Average Daily Water Use (ET) in last 2 weeks 0.23 inches

ET Information Sites:

Water Use Hotline – dial 1-800-993-2507

Central Irrigation District: www.cnppid.com/

KRVN radio broadcasts or <http://krvn.com/>

Check out these web sites:

NRCS Nebraska www.ne.nrcs.usda.gov/

Farm Service Agency www.fsa.usda.gov/

Central Irrigation District www.cnppid.com/

HPRCC www.hprcc.unl.edu

TBNRD Home Page www.tribasinrd.org

UNL – Water extension-water.unl.edu/

Farmers Almanac www.farmersalmanac.com

Chat 'n Chew Café www.kingcorn.org/cafe

No-till On The Plains www.notill.org

UNL Cropwatch cropwatch.unl.edu/

Predicting Last Irrigation Example

Crop: Corn Growth Stage: Dough

Water required to maturity (see chart on pg. 1): 7.5 in.

Soil Type: Holdrege Silt Loam AWC: 2.3 in. per ft.
(Soil information available at your local NRCS office)

1. AWC x root zone (4 ft. depth) = **9.2 in. Total AWC**
2. Maximum water depletion of 60% x 9.2 = **5.52 in. of maximum water depletion in 4 ft. root zone**
3. Current soil water depletion (measured) = **2.76 in.**
(30% depletion x 2.3 in./ft. x 4 ft.)
4. Remaining plant available water = **2.76 in.**
(5.52 maximum depletion minus 2.76 already depleted)
5. Irrigation requirement = **4.74 inches of irrigation water needed for plant to reach maturity.**
(7.5 in. of water to reach maturity minus 2.76 in. of water available)

Note: This all assumes no rainfall. Should rainfall occur, the process needs to be repeated.

Our cup will truly run over only after we have sealed the character cracks.

- John D. Rockefeller

*** If you would like 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 your local NRCS office at the addresses or phone numbers listed below. ***

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