## Curtis W. Scheele

# Water Management Specialist NRCS

Holdrege, Nebraska

USDA – Natural Resources Conservation Service is an Equal Opportunity Provider, Employer, and Lender

Tri-Basin Ag Water Management Network (TBAWIVIN)

#### TBAWMN

#### > Partners









#### TBAWMN

#### > Tool for determining Crop Water Use



#### TBAWIN - INFORMATION

- > Information Collected Each Week
  - > Atmometer Reading
    - > Reference ET
  - > Crop Stage
  - > Rainfall
  - Soil Moisture Sensor Readings

#### TBAWMN - INFORMATION

Reading for week startir	ıg	09/22-09/29	09/15 09/22	09/08-09/15				2011
ETgage Weekly Change		1.40	1.25	0.60		<b>C</b> FVT	LNOIC	) AI
Rain Measurement		0.02	0.00	0.08		r exi	ENSIC	
						<b>®</b>		
Corn					dy crop wat	er use		
Stage	ET Factor	09/22-09/29	09/15-09/ 2	09/08-09/15	09/01-09/08	08/25-09/01	08/18-08/25	08/11
V2	0.1	0.14	0.12	0.06	0.05	0.13	0.10	0.:
V4	0.18	0.25	0.22	0.11	0.09	0.23	0.17	0.:
V6	0.35	0.49	0.44	0.21	0.18	0.45	0.33	0.1
V8	0.51	0.71	0.64	0.31	0.26	0.66	0.48	0.:
V10	0.69	0.97	0.86	0.41	0.34	0.90	0.66	0.6
V12	0.88	1.23	1.10	0.53	0.44	1.14	0.84	3.0
V14	1.01	1.41	1.26	0.61	0.50	1.31	0.96	1.0
V16	1.1	1.54	1.38	0.66	0.55	1.43	1.04	1.3
Full Dent	0.96	1.34	1.20	0.58	0.48	1.25	0.91	2.0
Black layer	0.6	0.84	0.75	0.36	0.30	0.78	0.57	0.6
Full Maturity	0.1	0.14	0.12	0.06	0.05	0.13	0.10	0.:

#### TBAWIN - INFORMATION

#### Crop ET for the Past Week of July 12 - July 18

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		COF	RN		SOYBEAN			
Location	Rainfall Inches for Past Week	Average Crop Stage	Weekly ET for Past Week	Average Daily ET for Past Week	Average Crop Stage	Weekly ET for Past Week	Average Daily ET for Past Week	
CH- #4	0.7	V14 - 14 Leaf	1.41	0.20	R2 - Full Bloom	1.40	0.20	
Site #1 Arapahoe 7 1.30 Northwest	V16 - 16 Leaf	1.54	0.22	R3 - Beginning Pod	1.54	0.22		
	1.30	R1 - Silking	1.54	0.22	R4 - Full Pod	1.54	0.22	
		R2 - Blister	1.54	0.22	R5 - Beginning Seed	1.54	0.22	
Site #2		V14 - 14 Leaf	1.21	0.17	R2 - Full Bloom	1.20	0.17	
	1.43	V16 - 16 Leaf	1.32	0.19	R3 - Beginning Pod	1.32	0.19	
Elwood 1 North	1.45	R1 - Silking	1.32	0.19	R4 - Full Pod	1.32	0.19	
		R2 - Blister	1.32	0.19	R5 - Beginning Seed	1.32	0.19	
Site #3 Bertrand 4 Southwest	1.95	V14 - 14 Leaf	1.11	0.16	R2 - Full Bloom	1.10	0.16	
		V16 - 16 Leaf	1.21	0.17	R3 - Beginning Pod	1.21	0.17	
		R1 - Silking	1.21	0.17	R4 - Full Pod	1.21	0.17	
		R2 - Blister	1.21	0.17	R5 - Beginning Seed	1.21	0.17	
		V14 14 Loof	1 21	0.10	P2 Full Bloom	1 20	0.10	





#### TBAWMN - INFORMATION



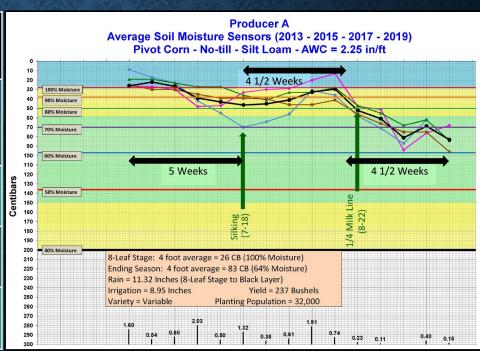
#### **TBAWMN**

## INFORMATION



#### TBAWMN - PROMOTE IWM

	Producer Brown	Producer Green
Water Applied (Inches)	13.1	11.2
Rainfall (Inches)	11.4	11.7
Yield (Bushels)	254	255
Year End Moisture	79% (-2.0 In)	66% (-3.2 In)



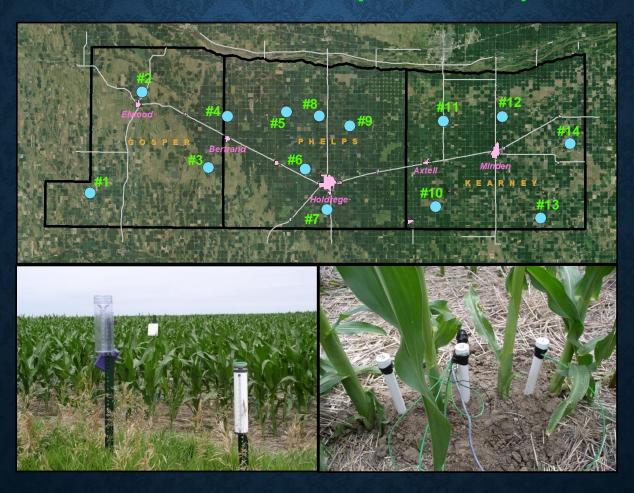
#### TBAWMN - PROMOTE IWM

- > Written Correspondance
  - > Tri-Basin Irrigator Newsletters
  - > NRD Newsletters
  - > Other Correspondance
- > Meetings
  - Pesticide/Nitrogen Certification
  - > Crop Consultant
  - Other Meetings

# NRCS Earth Team Volunteer Program

2022

> 15 Earth Team Volunteers (Producers)



- ➤ Allowed me to install the equipment in the spring and remove the equipment in the fall on their property.
- ➤ Spent 230 hours of their time traveling to these sites, reading the equipment, and calling in this information every Monday during the crop season.

- > Saved NRCS one person one full day a week to read the information.
- Saved NRCS vehicle mileage for the year of 3100 miles.
- Provided a total estimated dollar savings to NRCS of \$5800.00

- ➤ Each pivot within the TBNRD saving 1 inch of water saves 3.2 million gallons of water pumped.
- > Approximately 3800 pivots across the TBNRD.
- ➤ Based upon the amount of water Holdrege uses, if all TBNRD pivots saved 1 inch of water, that provides enough water for the entire TBNRD population for

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nearly 7 years.

#### NRCS Earth Team

Annually the Earth Team program offers a number of awards to recognize volunteers who help NRCS achieve its mission.

### NRCS Earth Team

# 2022 National Group Award Winner

Tri-Basin Ag Water

Nanagement Network

Gosper County	Phelps County	<b>Kearney County</b>	
Randy Helms	Brenden Kreutzer	Scott Lundeen	
Bryant Knoerzer	Rick Bergman	Jeff Nelson	
T J Wilcox	Mike Ecklun	Brian Peterson	
Fred Klintworth	Matt Ecklun	Ned Berkeypile	
	Justin Johnson	Tim Johnson	
	Erick Erickson Jr.		