

Grain Market Review **KSU Ag Economics**

Daniel O'Brien, Extension Agricultural Economist ^{Kansas State University}, for Wednesday, February 15, 2023

I. Grain Futures Closes, Changes & Market Carry on Wednesday, February 15, 2023

CME Corn Futures ^{2/15/2023 Closes}				CME Soybean Futures ^{2/15/2023 Closes}				CME Kansas HRW Wheat ^{2/15/2023 Closes}			
Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo
Mar^{Lead} 23	\$6.76 ¼	↓ \$0.06	---	Mar^{Lead} 23	\$15.25 ¾	↓ \$0.11 ¾	---	Mar^{Lead} 23	\$8.95 ½	↓ \$0.11 ½	---
May 23	\$6.74	↓ \$0.05 ¾	-\$0.01 ¹²⁵	May 23	\$15.19 ½	↓ \$0.10 ½	-\$0.03 ¹²⁵	May 23	\$8.83	↓ \$0.12 ¼	-\$0.06 ²⁵
July 23	\$6.63 ¼	↓ \$0.04 ½	-\$0.05 ³⁷⁵	July 23	\$15.10 ½	↓ \$0.08 ¾	-\$0.04 ⁵⁰	July^{Hvst} 23	\$8.70	↓ \$0.11	-\$0.06 ⁵⁰
Sept 23	\$6.10 ¼	↓ \$0.02 ¾	-\$0.26 ⁵⁰	Aug 23	\$14.75 ½	↓ \$0.07 ½	-\$0.35	Sept 23	\$8.69 ¼	↓ \$0.09 ¾	-\$0.00 ³⁷⁵
Dec^{Hvst} 23	\$5.95 ¼	↓ \$0.02 ½	-\$0.05	Sep 23	\$14.07 ½	↓ \$0.07 ¼	-\$0.68	Dec 23	\$8.73	↓ \$0.09 ¼	+\$0.01 ²⁵
Mar 24	\$6.02 ¼	↓ \$0.02 ½	+\$0.02 ³³³	Nov^{Hvst} 23	\$13.75	↓ \$0.08	-\$0.16 ²⁵	Mar 24	\$8.70 ¾	↓ \$0.09	-\$0.00 ⁷⁵
May 24	\$6.06	↓ \$0.02 ¼	+\$0.01 ⁸⁷⁵	Jan 24	\$13.79 ¾	↓ \$0.06 ¾	+\$0.02 ³⁷⁵	May 24	\$8.62 ¼	↓ \$0.08 ¾	-\$0.04 ²⁵
July 24	\$6.05 ¾	↓ \$0.02 ½	-\$0.00 ¹²⁵	Mar 24	\$13.68 ½	↓ \$0.06	-\$0.05 ⁶²⁵	July^{Hvst} 24	\$8.23 ½	↓ \$0.10	-\$0.19 ³⁷⁵



National Daily Ethanol Report

Agricultural Marketing Service
Livestock, Poultry, and Grain Market News

February 15, 2023

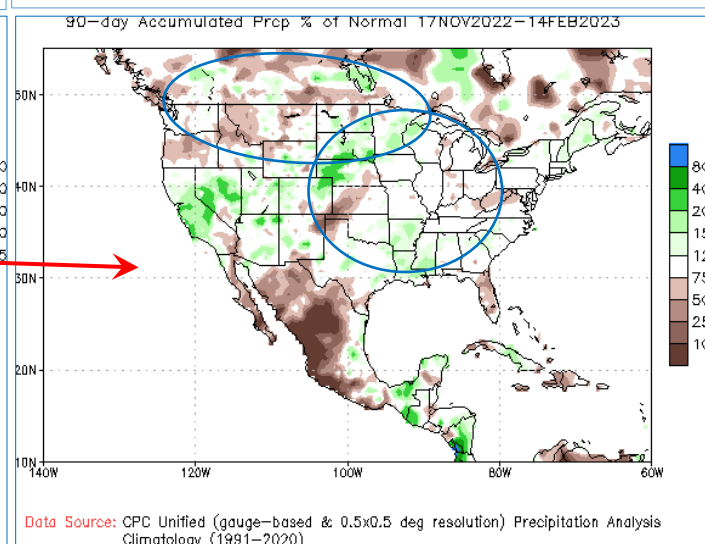
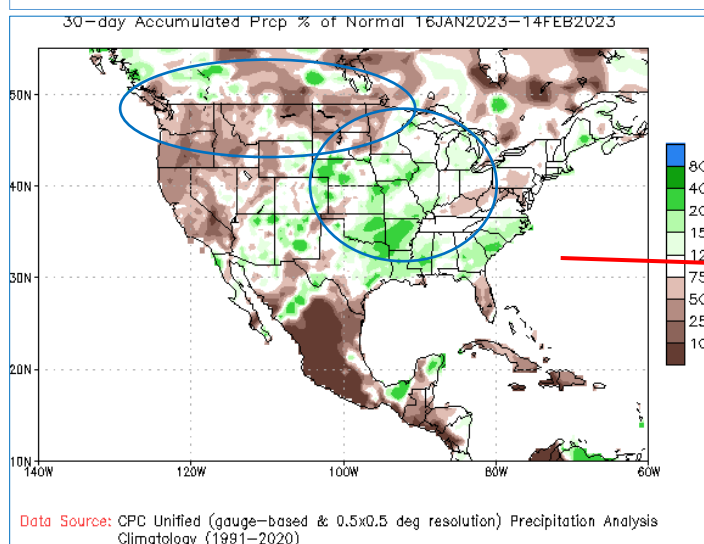
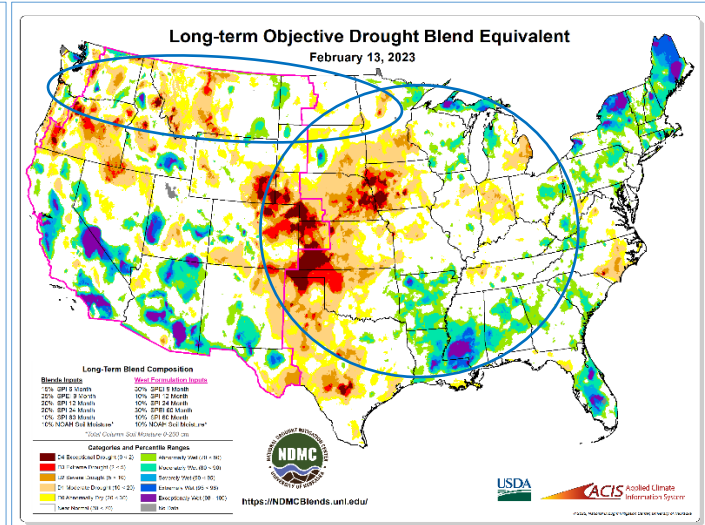
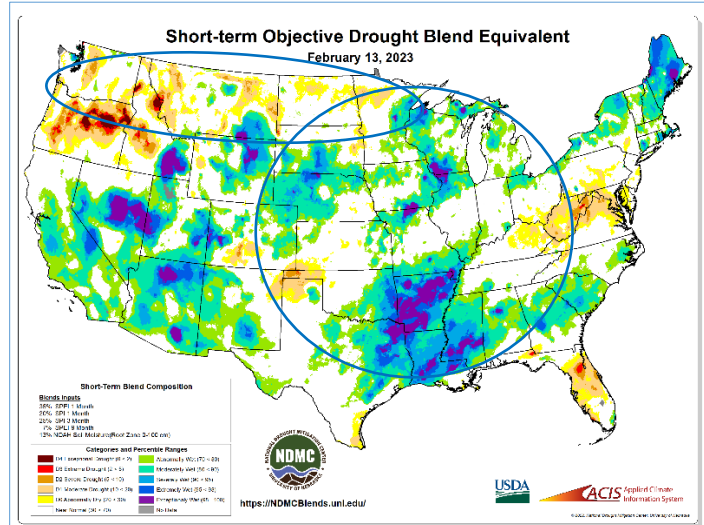
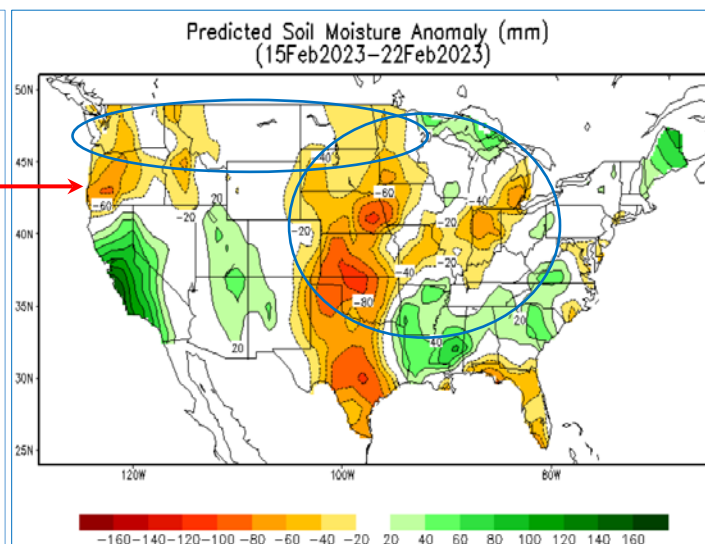
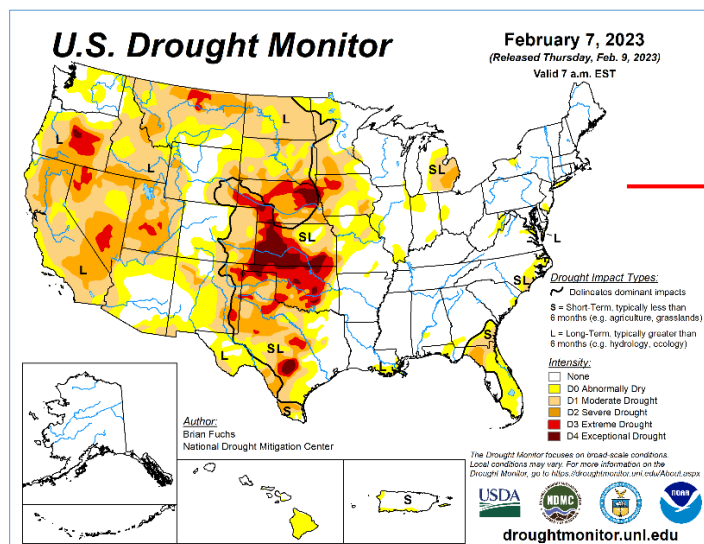
US #2 Yellow Corn -Bulk

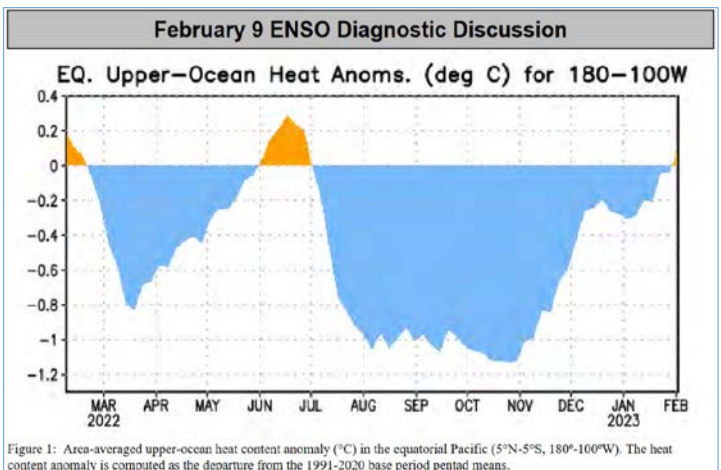
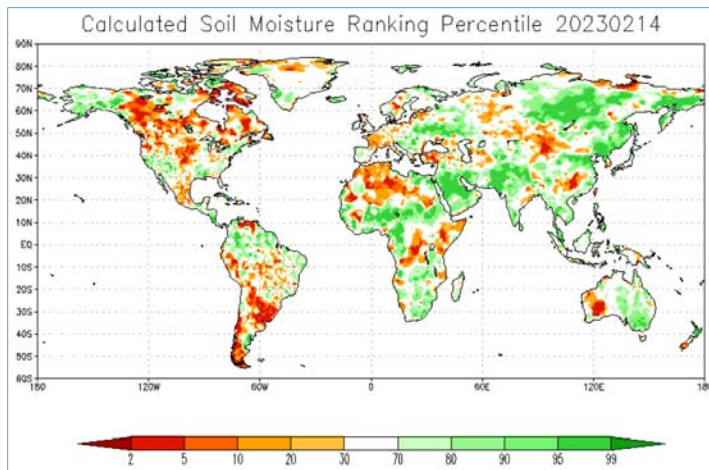
Ethanol Plant

State/Province/Region	Sale Type	Basis (¢/bu)	Basis Change	Price (\$/Bu)	Price Change	Average
Illinois	Bid	-13.00H to 40.00H	UNCH	6.6925-7.2225	DN 0.0275	6.9108
Indiana	Bid	-15.00H to 13.00H	UNCH	6.6725-6.9525	DN 0.0275	6.8769
Iowa East	Bid	-20.00H to 13.00H	UNCH	6.6225-6.9525	DN 0.0275	6.7825
Iowa West	Bid	5.00H to 50.00H	UNCH	6.8725-7.3225	DN 0.0275	7.1280
Kansas	Bid	40.00H to 85.00H	UNCH	7.2225-7.6725	DN 0.0275	7.4725
Michigan	Bid	-30.00H to -17.00H	UNCH	6.5225-6.6525	DN 0.0275	6.5800
Minnesota	Bid	-25.00H to 31.00H	UNCH	6.5725-7.1325	DN 0.0275	6.9042
Missouri	Bid	0.00H to 40.00H	UNCH	6.8225-7.2225	DN 0.0275	6.9700
Nebraska	Bid	20.00H to 85.00H	UNCH	7.0225-7.6725	DN 0.0275	7.2183
Ohio	Bid	-10.00H to 7.00H	UNCH-DN 3	6.7225-6.8925	DN 0.0275-DN 0.0575	6.8092
South Dakota	Bid	-10.00H to 46.00H	UNCH	6.7225-7.2825	DN 0.0275	6.9617
Wisconsin	Bid	-45.00H to -17.00H	UNCH	6.3725-6.6525	DN 0.0275	6.4975

Kansas Cash & Futures Prices							
Date							
2/15/2023 (closes)							
Grain Futures Contracts		Closing \$					
MAR 2023 Corn <small>(2023 Lead contract)</small>		\$6.7625					
DEC 2023 Corn <small>(2023 Harvest Contract)</small>		\$5.9525					
MAR 2023 Soybeans <small>(Lead Contract)</small>		\$15.2575					
NOV 2023 Soybeans <small>(2023 Harvest Contract)</small>		\$13.7500					
MAR 2023 KC HRW Wheat <small>(2023 Lead Contract)</small>		\$8.9450					
SEPT 2023 KC HRW Wheat <small>(2023 Harvest Contract)</small>		\$8.6925					
2/15/2023 (closes)		Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
		Representing the highest bids available at each location					
Cash Market Spot & FC Bids		Colby ^{Area}	Salina ^{Area}	Topeka ^{Area}	Garden City ^{Area}	Hutchinson ^{Area}	Columbus ^{Area}
		NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$		\$7.36	\$7.30	\$7.11	\$8.01	\$7.86	\$7.61
Corn Spot Cash Basis		\$0.60	\$0.54	\$0.35	\$1.25	\$1.10	\$0.85
Corn Harvest FC\$: Fall ²⁰²³		\$5.85	\$5.80	\$5.64	\$6.50	\$5.94	\$5.71
Corn Harvest FC\$ Basis		(\$0.10)	(\$0.15)	(\$0.31)	\$0.55	(\$0.01)	(\$0.24)
Grain Sorghum Spot Cash\$		\$6.96	\$7.11	\$7.16	\$7.16	\$7.26	\$6.88
Sorghum Spot Cash Basis		\$0.20	\$0.35	\$0.40	\$0.40	\$0.50	\$0.12
Grain Sorghum Harvest FC\$: Fall ²⁰²²		\$5.55	\$5.71	\$5.65	\$5.85	\$5.72	\$5.50
Sorghum Harvest FC\$ Basis		(\$0.40)	(\$0.24)	(\$0.30)	(\$0.10)	(\$0.23)	(\$0.45)
Soybean Spot Cash\$		\$14.56	\$15.08	\$15.43	\$15.01	\$15.35	\$15.37
Soybean Spot Cash Basis		(\$0.70)	(\$0.18)	\$0.17	(\$0.25)	\$0.09	\$0.11
Soybean Harvest FC\$: Fall ²⁰²²		\$12.80	\$13.25	\$13.20	\$12.90	\$13.20	\$13.15
Soybean Harvest FC\$ Basis		(\$0.95)	(\$0.50)	(\$0.55)	(\$0.85)	(\$0.55)	(\$0.60)
KC HRW Wheat Harvest Spot Cash\$		\$8.50	\$8.89	\$8.70	\$8.70	\$8.79	\$8.41
HRW Wheat Harvest Spot Cash Basis		(\$0.45)	(\$0.05)	(\$0.25)	(\$0.25)	(\$0.16)	(\$0.54)
KC HRW Wheat FC\$ - Harvest ²⁰²³		\$8.28	\$8.70	\$8.35	\$8.35	\$8.33	\$8.12
HRW Wheat Harvest FC\$ Basis		(\$0.41)	\$0.01	(\$0.34)	(\$0.34)	(\$0.36)	(\$0.57)
"Spot Cash" Soybean vs Corn \$ Ratio		1.98	2.07	2.17	1.87	1.95	2.02
"New Crop" Soybean vs Corn \$ Ratio		2.19	2.28	2.34	1.98	2.22	2.30
"Spot Cash" HRW Wheat vs Corn \$ Ratio		1.15	1.22	1.22	1.09	1.12	1.11
"New Crop" HRW Wheat vs Corn \$ Ratio		1.42	1.50	1.48	1.28	1.40	1.42

II. Key U.S. Weather Patterns Affecting U.S. Agriculture





ENSO Alert System Status: **La Niña Advisory**

Synopsis: ENSO-neutral conditions are expected to begin within the next couple of months, and persist through the Northern Hemisphere spring and early summer

Although a weak La Niña was still apparent during January, below-average sea surface temperatures (SSTs) continued to weaken further across the equatorial Pacific Ocean. The latest weekly Niño index values were mostly near -0.5°C , with the exception of Niño-1+2 which was $+0.1^{\circ}\text{C}$. Like the surface, negative subsurface temperature anomalies continued to weaken (Fig. 1), with above-average subsurface temperatures expanding eastward at depth and near the surface of the eastern Pacific Ocean. Low-level easterly wind anomalies continued, but were confined to the western and central Pacific Ocean. Upper-level westerly wind anomalies were evident over the east-central Pacific. Suppressed convection persisted over the western and central tropical Pacific, while enhanced convection was observed over western Indonesia. Overall, the coupled ocean-atmosphere system continued to reflect La Niña.

The most recent IRI plume predicts a transition from La Niña to ENSO-neutral in the next couple of months. The forecaster consensus is largely in agreement. ENSO-neutral is expected to prevail during the spring and early

summer. There are increasing chances of El Niño at longer forecast horizons, though uncertainty remains high because of the spring prediction barrier, which typically is associated with lower forecast accuracy. In summary, ENSO-neutral conditions are expected to begin within the next couple of months, and persist through the Northern Hemisphere spring and early summer.

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center website ([El Niño/La Niña Current Conditions and Expert Discussions](#)). Additional perspectives and analyses are also available in an [ENSO blog](#). A probabilistic strength forecast is [available here](#). The next ENSO Diagnostics Discussion is scheduled for **9 March 2023**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.ensu-update@noaa.gov.

International Weather and Crop Summary

February 5-11, 2023

International Weather and Crop Highlights and Summaries provided by USDA/WAOB

HIGHLIGHTS

EUROPE: Dry but cold conditions prevailed over much of the continent.

MIDDLE EAST: Very cold weather was accompanied by rain and snow from Turkey into northern and western Iran.

NORTHWESTERN AFRICA: Chilly conditions continued to slow winter grain development, with dry weather in the west contrasting with beneficial rain in the east.

SOUTHEAST ASIA: Showers continued in eastern and southern sections of the region, with downpours in western Malaysia.

AUSTRALIA: Mostly dry weather in southern Queensland promoted early summer crop harvesting.

SOUTH AFRICA: Widespread showers maintained favorable prospects of corn and other rain-fed summer crops.

ARGENTINA: Heat and dryness renewed stress on immature summer crops.

BRAZIL: Untimely warmth and dryness reduced moisture for immature summer crops in southern Brazil, while periodic dryness supported seasonal fieldwork farther north.



For additional information contact: mark.brusberg@usda.gov



International

- **Europe – Dry But Cold**
 - Chilly but dry weather prevailed over much of **Europe**; conditions remained overall favorable for dormant (**central** and **north**) to semi-dormant (**south**) winter grains and oilseeds.
- **Middle East – Cold And Snowy**
 - Unseasonably cold weather along with rain and snow boosted moisture supplies for dormant (**north**) to vegetative (**south**) winter grains but hampered earthquake recovery efforts in **Turkey** and **Syria**.
- **Northwestern Africa – Chilly, With Rain In The East But Dry In The West**
 - Persistent chilly weather continued to slow winter grain development across the entire region, though additional rain improved prospects for wheat and barley in **eastern crop areas**.
 - Dry weather exacerbated drought in **central and southwestern Morocco** as well as **western Algeria**.
- **South Asia – Warm Weather In India**
 - Warmer-than-normal conditions in **northern India** promoted rapeseed and wheat development, while early-season heat began building in **interior southern sections**.
- **East Asia – Mild Weather And Showers**
 - Mild weather and showers in **eastern and southern China** benefited overwintering wheat and rapeseed.
- **Southeast Asia – Favorable Rainfall In Indonesia**
 - Wet weather in **southern Indonesia (Java)** maintained ample moisture supplies for immature rice.
- **Australia – Overall Favorable For Summer Crops**
 - Dry weather in **southern Queensland** aided maturation and harvesting of the earliest planted sorghum.
 - Showers in **New South Wales** maintained adequate soil moisture for summer crop development.
- **South America – Dry, Occasionally Hot Weather Dominated Argentina**
 - Heat and dryness renewed stress on immature summer crops throughout **Argentina**. Similar conditions reached **north and eastward into Paraguay and Uruguay**.
 - Dry weather dominated much of **southern Brazil**, with periodic heat (highs reaching the upper 30s degrees C) in traditionally warmer **western locations**. Meanwhile, seasonal fieldwork – notably soybean harvesting and planting of corn and cotton – progressed **farther north**.
- **South Africa – Beneficial Rainfall Overspread The Region**
 - Conditions remained overall favorable for corn and other rain-fed summer crops.

IV. Corn & Grain Sorghum Market Information

Daily CME MARCH 2023 Corn Futures



U.S. Corn Exports: "Bearish" short-term corn shipments & "Neutral-Positive" long-term prospects for "Current" MY 2022/23

- Weekly Export Shipments week of 2/9/2023 = 20.14 mb (Bearish)
vs 48.65 mb/wk needed to meet USDA's February 8th projn. of 1.925 bb exports
- Total shipments through 2/9/2023 for "Current" MY 2022/23 = 514.14 mb
i.e., 26.7% of 1.925 bb USDA projn with 44.2% of MY complete (23/52 weeks)
- Total sales through 2/2/2023 for "Current" MY 2022/23 = 1.054,76 bb (Neutral-Positive)
i.e., 54.8% of 1.925 bb USDA projn w. 42.3% of MY complete (22/52 weeks)

World & U.S. Corn Supply-Demand Fundamentals

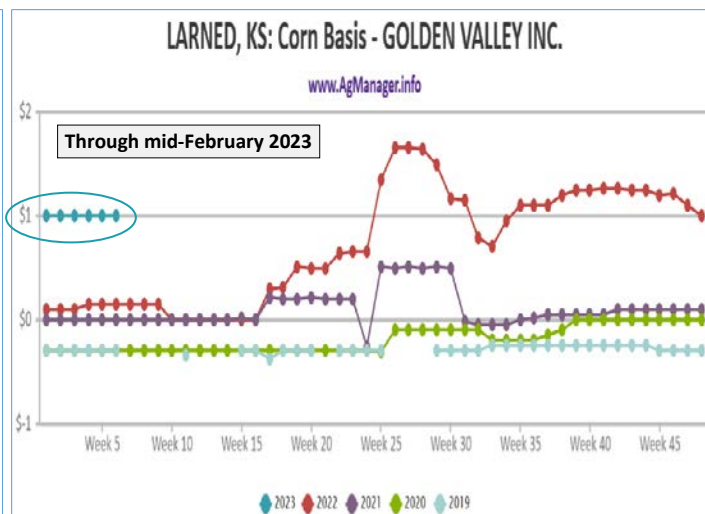
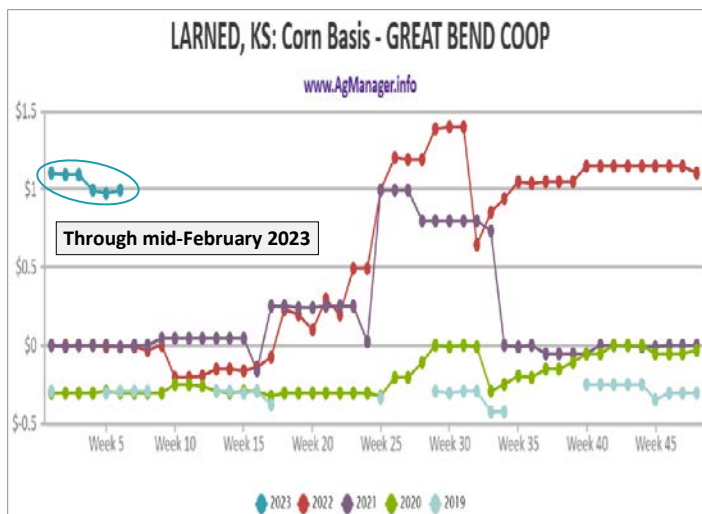
Mktg Yr	World S/U	Wld-China S/U	U.S. % S/U	U.S. \$/bu	U.S. Crop
2017/18	31.2% S/U	14.3% S/U	14.5% S/U	\$3.36 /bu	14.609 bln bu
2018/19	28.1% S/U	12.7% S/U	15.5% S/U	\$3.61 /bu	14.340 bln bu
2019/20	27.0% S/U	12.3% S/U	13.7% S/U	\$3.56 /bu	13.620 bln bu
2020/21	25.6% S/U	10.1% S/U	8.3% S/U	\$4.53 /bu	14.111 bln bu
2021/22	25.5% S/U	10.7% S/U	9.2% S/U	\$6.00 /bu	15.074 bln bu
2022/23 ^{USDA}	25.4% S/U	10.2% S/U	9.1% S/U	\$6.70 /bu	13.730 bln bu

U.S. Grain Sorghum Exports: "Bearish" short-term shipments & "Bearish" long-term prospects for "Current" MY 2022/23

- Weekly Export Shipments week of 2/9/2023 for MY 2022/23 = 0.036 mb (Bearish)
vs 2.615 mb/wk needed to meet USDA's February 12th projn of 90 mb exports
- Total shipments through 2/9/2023 for "Current" MY 2022/23 = 19.59 mb
i.e., 21.8% of 90 mb USDA projn with 44.2% of MY complete (23/52 weeks)
- Total sales through 2/2/2023 for "Current" MY 2022/23 = 30.873 mb (Bearish)
i.e., 34.3% of 90 mb USDA projn w. 42.3% of MY complete (22/52 weeks)

World Coarse Grain & U.S. Sorghum Supply-Demand Fundamentals

Mktg Yr	World S/U	Wld-China S/U	U.S. % S/U	U.S. \$/bu	U.S. Exports
2019/20	23.5% S/U	12.0% S/U	8.0% S/U	\$3.34 /bu	203 mln bu
2020/21	22.2% S/U	10.1% S/U	5.2% S/U	\$5.04 /bu	279 mln bu
2021/22	22.4% S/U	10.6% S/U	11.2% S/U	\$5.94 /bu	294 mln bu
2022/23 ^{USDA}	22.1% S/U	10.0% S/U	11.9% S/U	\$6.90 /bu	90 mln bu



My DTN Cash Bids - My DTN Cash Bids for Postal Code 67550, Radius 300 miles - Market Closes on February 15, 2023

Elevator/Location	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Sep 2023	Oct 2023	Nov 2023
PAWNEE COUNTY COOP LARNED, KS	7.74	---	---	---	---	---	---	5.80	---
PAWNEE COUNTY COOP GARFIELD, KS	7.74	---	---	---	---	---	---	5.80	---
GOLDEN VALLEY INC. LARNED, KS	7.76	---	---	---	---	---	---	6.00	---
AMERICAN PLAINS COOP PAWNEE ROCK, KS	7.56	---	---	---	---	---	---	5.85	---
GOLDEN VALLEY INC. ROZEL, KS	7.76	---	---	---	---	---	---	6.00	---
AMERICAN PLAINS COOP LARNED, KS	7.56	---	---	---	---	---	---	5.85	---
ALLIANCE AG AND GRAIN LLC BELPRE, KS	7.76	---	---	---	---	---	---	---	6.05
ALLIANCE AG AND GRAIN LLC LEWIS, KS	7.76	---	---	---	---	---	---	---	6.05
PAWNEE COUNTY COOP MACKSVILLE, KS	7.74	---	---	---	---	---	---	5.80	---
GOLDEN VALLEY INC. BURDETT, KS	7.76	---	---	---	---	---	---	6.00	---
PRIDE AG RESOURCES BURDETT, KS	---	---	---	---	---	---	---	---	---
MID STATE FARMERS COOP TIMKEN, KS	7.36	---	---	---	---	---	---	5.85	---

2023 Corn Cost-Return Budget in South Central Kansas

-----Average yields

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

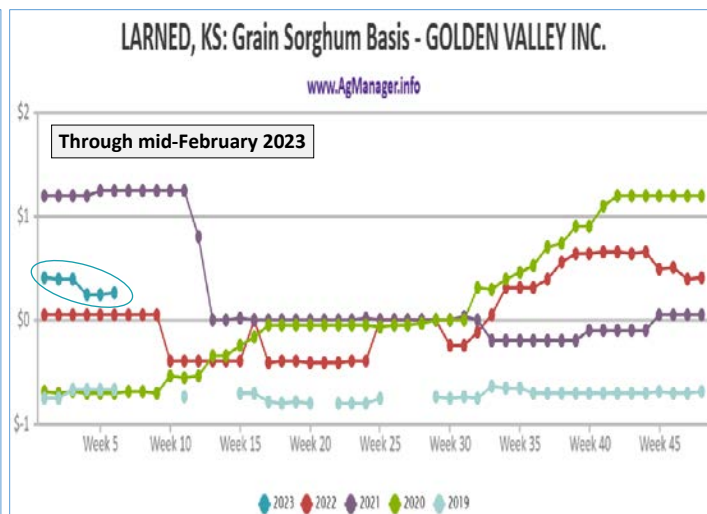
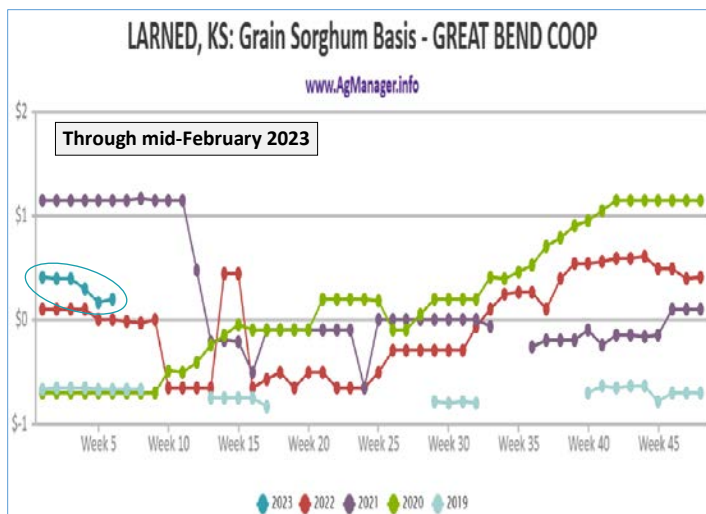
Date: Nov-01-2022

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Corn - South Central KS	bu	\$6.08	110.00	\$668.80	\$668.80	_____
--TOTAL INCOME--					\$668.80	_____
DIRECT EXPENSES						
					\$0.00	_____
Additional labor					\$0.75	_____
Crop insurance					\$24.58	_____
Custom Operations					\$19.32	_____
Diesel					\$20.61	_____
Fertilizers					\$130.53	_____
Herbicides					\$65.60	_____
Miscellaneous					\$7.26	_____
Operator labor					\$8.08	_____
Repair & Maintenance					\$16.89	_____
Seeds					\$65.45	_____
Interest on operating capital	8% percent on direct expenses				\$14.36	_____
--TOTAL DIRECT EXPENSES--					\$373.43	_____
-----Total direct expenses per bu	\$3.39					
FIXED EXPENSES						
Cash rent					\$50.00	_____
Capital recovery (depreciation + interest)					\$62.51	_____
--TOTAL FIXED EXPENSES--					\$112.51	_____
-----Total expenses per bu	\$4.42					
RETURNS ABOVE DIRECT EXPENSES					\$295.37	=====
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$182.86	

2023 Irrigated Corn (center-pivot) Cost-Return Budget

-----South Central Kansas (Average yields)

item	unit	price	quantity	amount	Sub-total
INCOME					
Product					
Corn - South Central KS	bu	\$6.08	240.00	\$1,459.20	\$1,459.20
--TOTAL INCOME--					\$1,459.20
DIRECT EXPENSES					
					\$0.00
Additional labor					\$0.81
Crop insurance					\$17.53
Custom Operations					\$29.76
Diesel					\$22.91
Fertilizers					\$265.29
Herbicides					\$110.63
Irrigation energy (NG)					\$53.20
Irrigation labor					\$8.10
Miscellaneous					\$12.10
Operator labor					\$8.39
Repair & Maintenance					\$23.50
Seeds					\$133.02
Interest on operating capital		8% percent on direct expenses			\$27.41
--TOTAL DIRECT EXPENSES--					\$712.66
-----Total direct expenses per bu \$2.97					
FIXED EXPENSES					
Cash rent					\$175.00
Capital recovery (depreciation + interest)					\$251.62
--TOTAL FIXED EXPENSES--					\$426.62
-----Total expenses per bu \$4.75					
RETURNS ABOVE DIRECT EXPENSES					\$746.54
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$319.92
13.5 acre-inches of water applied					
150 foot well depth					
\$ 3.94 fuel cost per acre-inch of water applied					
.4 Mcf of natural gas per acre-inch of water applied					
\$ 9.75 per Mcf for cost of natural gas					
5.46 Mcf of fuel used in total					



My DTN Cash Bids - My DTN Cash Bids for Postal Code 67550, Radius 300 miles - Market Closes on February 15, 2023

Elevator/Location	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023
PAWNEE COUNTY COOP LARNED, KS	6.79	---	---	---	---	---	---	---	5.80	---
PAWNEE COUNTY COOP GARFIELD, KS	6.79	---	---	---	---	---	---	---	5.80	---
GOLDEN VALLEY INC. LARNED, KS	7.01	---	---	---	---	---	---	---	5.60	---
AMERICAN PLAINS COOP PAWNEE ROCK, KS	7.11	---	---	---	---	---	---	---	5.45	---
GOLDEN VALLEY INC. ROZEL, KS	7.01	---	---	---	---	---	---	---	5.60	---
AMERICAN PLAINS COOP LARNED, KS	7.11	---	---	---	---	---	---	---	5.45	---
ALLIANCE AG AND GRAIN LLC BELPRE, KS	7.21	---	---	---	---	---	---	---	---	5.55
ALLIANCE AG AND GRAIN LLC LEWIS, KS	7.21	---	---	---	---	---	---	---	---	5.55
PAWNEE COUNTY COOP MACKSVILLE, KS	6.79	---	---	---	---	---	---	---	5.80	---
GOLDEN VALLEY INC. BURDETT, KS	7.01	---	---	---	---	---	---	---	5.60	---
PRIDE AG RESOURCES BURDETT, KS	---	---	---	---	---	---	---	---	---	---
MID STATE FARMERS COOP TIMKEN, KS	6.91	---	---	---	---	---	---	---	5.50	---

2023 Grain Sorghum Cost-Return Budget In South Central Kansas

-----Average yields

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

Date: Nov-01-2022

Item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - South Central KS	bu	\$6.16	115.00	\$708.40	\$708.40	_____
--TOTAL INCOME--					\$708.40	_____
DIRECT EXPENSES						
					\$0.00	_____
Additional labor					\$0.59	_____
Crop insurance					\$20.57	_____
Custom Operations					\$19.32	_____
Diesel					\$19.30	_____
Fertilizers					\$128.37	_____
Herbicides					\$25.98	_____
Miscellaneous					\$7.26	_____
Operator labor					\$7.29	_____
Repair & Maintenance					\$13.23	_____
Seeds					\$9.37	_____
Interest on operating capital		8% percent on direct expenses			\$10.05	_____
--TOTAL DIRECT EXPENSES--					\$261.34	_____
-----Total direct expenses per bu		\$2.27				
FIXED EXPENSES						
Cash rent					\$50.00	_____
Capital recovery (depreciation + interest)					\$54.84	_____
--TOTAL FIXED EXPENSES--					\$104.84	_____
-----Total expenses per bu		\$3.18				
RETURNS ABOVE DIRECT EXPENSES					\$447.06	=====
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$342.22	

2023 Irrigated Grain Sorghum (center-pivot) Cost-Return Budget

-----South Central KS - Average yields

item	unit	price	quantity	amount	Sub-total
INCOME					
Product					
Grain Sorghum - South Central KS	bu	\$6.16	160.00	\$985.60	\$985.60
--TOTAL INCOME--					\$985.60
DIRECT EXPENSES					
Additional labor					\$0.86
Crop consulting					\$7.28
Crop insurance					\$26.50
Custom Operations					\$19.32
Diesel					\$18.04
Fertilizers					\$172.90
Herbicides					\$56.79
Irrigation energy (NG)					\$39.41
Irrigation labor					\$6.00
Miscellaneous					\$12.10
Operator labor					\$6.73
Repair & Maintenance					\$17.40
Seeds					\$14.99
Interest on operating capital		8% percent on direct expenses			\$15.93
--TOTAL DIRECT EXPENSES--					\$414.27
-----Total direct expenses per bu \$2.59					
FIXED EXPENSES					
Cash rent					\$175.00
Capital recovery (depreciation + interest)					\$236.55
--TOTAL FIXED EXPENSES--					\$411.55
-----Total expenses per bu \$5.16					
RETURNS ABOVE DIRECT EXPENSES					\$571.33
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$159.78
10 acre-inches of water applied					
150 foot well depth					
\$ 3.94 fuel cost per acre-inch of water applied					
.4 Mcf of natural gas per acre-inch of water applied					
\$ 9.75 per Mcf for cost of natural gas					
4.04 Mcf of fuel used in total					

V. Wheat Market Outlook

Daily MARCH 2023 KS HRW Wheat



U.S. All Wheat Exports: "Positive" short-term Export Shipments & "Neutral-Positive" long-term prospects for "Current" MY 2022/23

- Weekly Export Shipments wk of 2/9/2023 for "Current" MY 2022/23 = 17.355 mb vs 14.711 mb /wk needed to meet USDA's February 8th projn of **775 mb exports** (Positive)
- Total shipments through 2/9/2023 for "Current" MY 2022/23 = 524.92 mb i.e., 67.7% of **775 mb** USDA projn with 69.2% of MY complete (36/52 weeks)
- Total shipments + new sales thru 2/2/2023 for "Current" MY 2022/23 = 599.00 mb i.e., 77.3% of **775 mb** USDA #'s with 67.3% of MY complete (35/52 weeks) (Neutral-Positive)

U.S. Hard Red Winter (HRW) Wheat Exports: "Neutral" short-term Shipments with "Neutral" long-term prospects for "Current" MY 2022/23

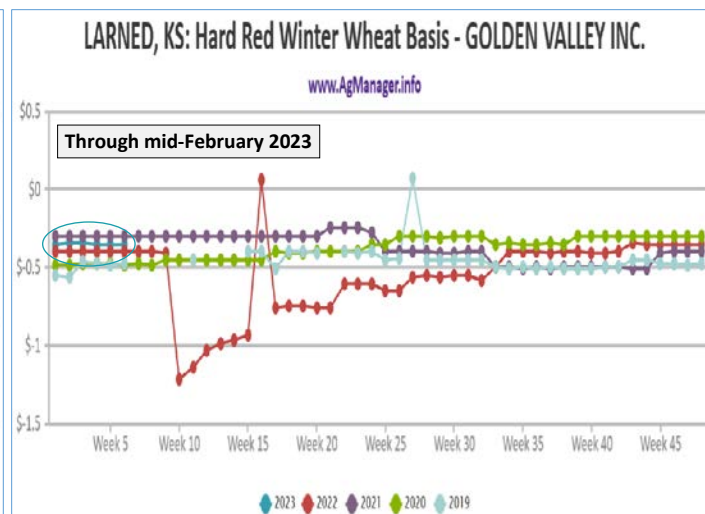
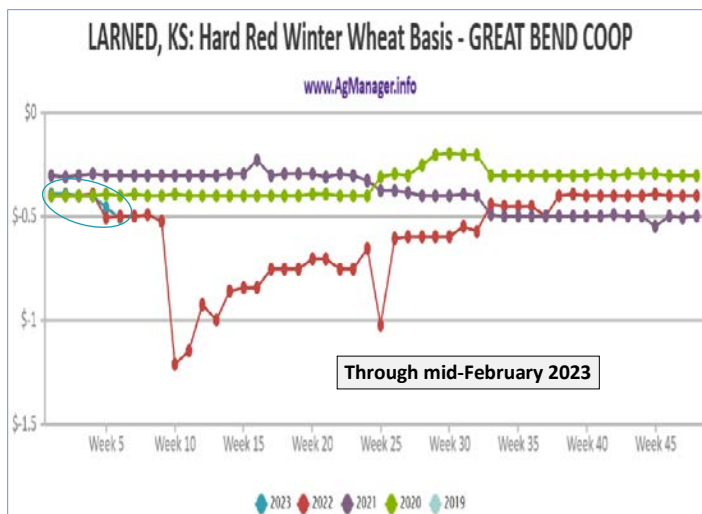
- Weekly Export Shipments wk of 2/2/2023 for "Current" MY 2022/23 = 3.843 mb vs 5.176 mb /wk needed to meet USDA's Feb. 8th projn of **220 mb HRW** wheat exports (Neutral)
- Total shipments through 2/2/2023 for "Current" MY 2022/23 = 132.0 mb i.e., 60.0% of **220 mb** USDA HRWW exports with 67.3% of MY complete (35/52 weeks)
- Total shipments + new sales thru 2/2/2023 for "Current" MY 2022/23 = 164.86 mb i.e., 74.9% of **220 mb** USDA HRWW exports w. 67.3% of MY 2022/23 (35/52 weeks) (Neutral)

U.S. Hard Red Spring (HRS) Wheat Exports: "Bearish" short-term Shipments with "Neutral-Positive" long-term prospects for "Current" MY 2022/23

- Weekly Export Shipments wk of 2/2/2023 for "Current" MY 2022/23 = 4.688 mb vs 5.512 mb /wk needed to meet USDA's Feb. 8th projn of **230 mb HRS** wheat exports (Bearish)
- Total shipments through 2/2/2023 for "Current" MY 2022/23 = 136.3 mb i.e., 59.3% of **230 mb** USDA HRSW exports with 67.3% of MY complete (35/52 weeks)
- Total shipments + new sales thru 2/2/2023 for "Current" MY 2022/23 = 179.16 mb i.e., 77.9% of **230 mb** USDA HRSW exports w. 67.3% of MY complete (35/52 wks) (Neutral-Positive)

World & U.S. Wheat S/D Fundamentals

Mktg Yr	World % S/U	Wld-China S/U	U.S. % S/U	U.S. \$/bu	U.S. Exports
2013/14	29.2% S/U	23.4% S/U	24.2% S/U	\$6.87 /bu	1,176 mln bu
2014/15	32.3% S/U	25.3% S/U	37.3% S/U	\$5.99 /bu	864 mln bu
2015/16	34.8% S/U	25.4% S/U	50.0% S/U	\$4.89 /bu	778 mln bu
2016/17	36.4% S/U	24.7% S/U	53.1% S/U	\$3.89 /bu	1,051 mln bu
2017/18	38.7% S/U	25.1% S/U	55.5% S/U	\$4.72 /bu	906 mln bu
2018/19	38.6% S/U	23.6% S/U	53.0% S/U	\$5.16 /bu	937 mln bu
2019/20	39.7% S/U	23.7% S/U	49.2% S/U	\$4.58 /bu	969 mln bu
2020/21	37.1% S/U	23.1% S/U	40.0% S/U	\$5.05 /bu	994 mln bu
2021/22 ^{USDA}	34.9% S/U	20.9% S/U	37.0% S/U	\$7.63 /bu	800 mln bu
2022/23 ^{USDA}	34.0% S/U	19.3% S/U	29.9% S/U	\$9.00 /bu	775 mln bu



My DTN Cash Bids - My DTN Cash Bids for Postal Code 67550, Radius 300 miles - Market Closes on February 15, 2023

Elevator/Location	Feb 2023	May 2023	Jun 2023	Jul 2023	Aug 2023
PAWNEE COUNTY COOP LARNED, KS	8.44	---	8.05	---	---
PAWNEE COUNTY COOP GARFIELD, KS	8.44	---	8.05	---	---
GOLDEN VALLEY INC. LARNED, KS	8.60	---	8.30	---	---
AMERICAN PLAINS COOP PAWNEE ROCK, KS	8.75	---	---	8.30	---
GOLDEN VALLEY INC. ROZEL, KS	8.60	---	8.30	---	---
AMERICAN PLAINS COOP LARNED, KS	8.75	---	---	8.30	---
ALLIANCE AG AND GRAIN LLC BELPRE, KS	8.64	---	---	8.35	---
ALLIANCE AG AND GRAIN LLC LEWIS, KS	8.64	---	---	8.35	---
PAWNEE COUNTY COOP MACKSVILLE, KS	8.44	---	8.05	---	---
GOLDEN VALLEY INC. BURDETT, KS	8.60	---	8.30	---	---
PRIDE AG RESOURCES BURDETT, KS	---	---	8.35	---	---
MID STATE FARMERS COOP TIMKEN, KS	8.48	---	8.25	---	---

2023 Wheat (Rotation) Cost-Return Budget In South Central KS

Budget abstract

-----Average yield

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Date: Nov-01-2022

Item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Wheat - South Central KS	bu	\$9.54	50.00	\$477.00	\$477.00	_____
--TOTAL INCOME--					\$477.00	_____
DIRECT EXPENSES						
Additional labor					\$1.03	_____
Crop insurance					\$11.60	_____
Diesel					\$18.11	_____
Fertilizers					\$108.39	_____
Fungicides					\$8.84	_____
Herbicides					\$5.54	_____
Miscellaneous					\$7.26	_____
Operator labor					\$6.69	_____
Repair & Maintenance					\$13.00	_____
Seeds					\$25.24	_____
Interest on operating capital		8% percent on direct expenses			\$8.23	_____
--TOTAL DIRECT EXPENSES--					\$213.93	
-----Total direct expenses per bu					\$4.28	
FIXED EXPENSES						
Cash rent					\$50.00	_____
Capital recovery (depreciation + interest)					\$52.16	_____
--TOTAL FIXED EXPENSES--					\$102.16	
-----Total expenses per bu					\$6.32	
RETURNS ABOVE DIRECT EXPENSES					\$263.07	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$160.91	

VI. Soybean Market Outlook

Daily MAR 2023 Soybean Futures



❖ U.S. Soybean Exports: “Bullish” short-term export shipments & “Bullish” long term Total Sales for “New Crop” MY 2022/23

- **Weekly Export Shipments** week of 2/9/2023 for “Current” MY 2022/23 = 57.14 mb (Bullish) vs 18.52 mb /wk needed to meet USDA’s February 8th projn of **1.990 bb exports**
- **Total shipments** through 2/9/2023 for “Current” MY 2022/23 = 1.452,85 bb i.e., 73.0% of **1.990 bb** USDA projn with 44.2% of MY complete (23/52 weeks)
- **Total sales** through 2/2/2023 for “Current” MY 2022/23 = 1.753,81 bb (Bullish) i.e., 88.1% of **1.990 bb** USDA^{KSU} projn w. 42.3% of MY complete (22/52 weeks)

❖ U.S. Soybean Meal Exports: “Bullish” short-term export shipments & “Bullish” “Current” MY 2022/23 sales

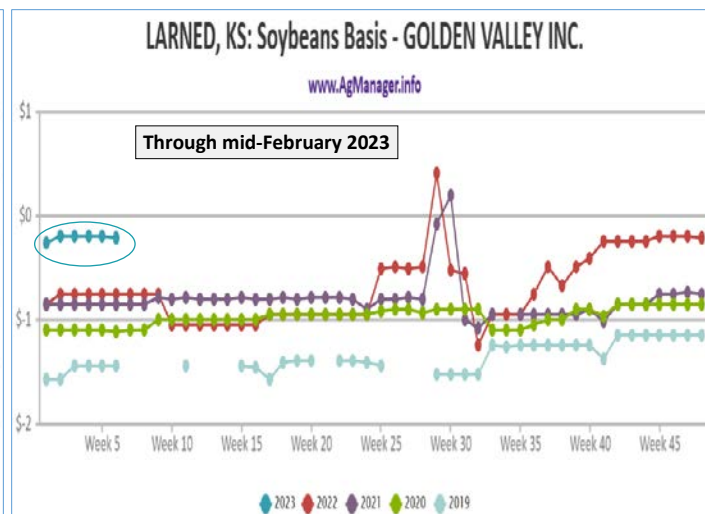
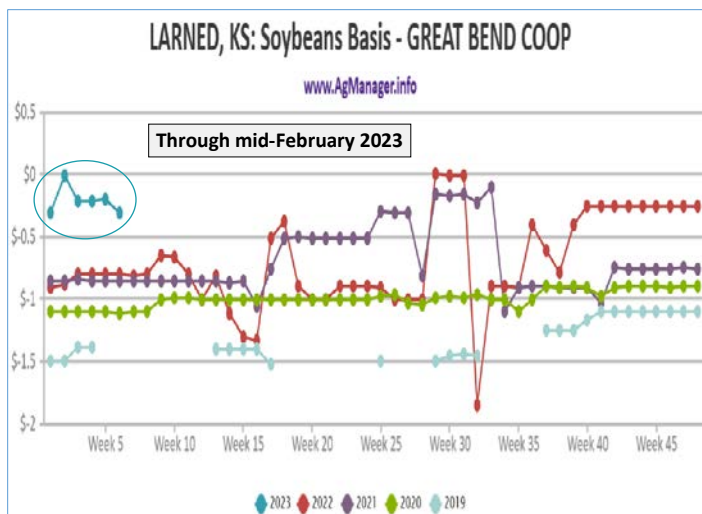
- **Export Shipments** for week of 2/2/2023 for “Current” MY 2022/23 = 312,800 mt (Bullish) vs 242,115 mt/wk needed to meet USDA’s February 8th projn of 12.430 mmt exports
- **Total shipments** through 2/2/2023 for “Current” MY 2022/23 = 4.198,100 mmt i.e., 33.8% of 12.430 mmt USDA projn with 34.6% of MY complete (18/52 weeks)
- **Total shipments & new sales** (2/2/2023) for “Current” MY 2022/23 = 7.216,7 mmt i.e., 58.06% of 12.430 mmt USDA projn with 34.6% of MY complete (18/52 wks) (Bullish)

❖ U.S. Soybean Oil Exports: “Bearish” short-term export shipments in “Current” MY 2020/21 and “Bearish” intermediate-term “Current” MY total sales

- **Export Shipments** for week of 2/2/2023 for “Current” MY 2022/23 = 2,300 mt (Bearish) vs 8,600 mt/wk needed to meet USDA’s February 8th projn of 317,515 mt exports
- **Total shipments** through 2/2/2023 for “Current” MY 2022/23 = 25,100 mt i.e., 7.91% of 317,515 mt USDA projn with 34.6% of MY complete (18/52 weeks)
- **Total shipments & new sales** (2/2/2023) for “Current” MY 2022/23 = 43,400 mt i.e., 13.7% of 317,515 mt USDA projn with 34.6% of MY complete (18/52 wks) (Bearish)

❖ World & U.S. Soybean Supply-Demand Fundamentals

Mktg Yr	World % S/U	Wrld-China S/U	U.S. % S/U	U.S. \$/bu	U.S. Exports
2013/14	22.8% S/U	25.1% S/U	2.7% S/U	\$13.00 /bu	1.639 bln bu
2014/15	25.7% S/U	28.3% S/U	4.9% S/U	\$10.10 /bu	1.842 bln bu
2015/16	24.8% S/U	28.0% S/U	5.0% S/U	\$8.95 /bu	1.943 bln bu
2016/17	28.4% S/U	32.5% S/U	7.2% S/U	\$9.47 /bu	2.166 bln bu
2017/18	29.2% S/U	32.7% S/U	10.2% S/U	\$9.33 /bu	2.134 bln bu
2018/19	33.0% S/U	38.9% S/U	22.9% S/U	\$8.48 /bu	1.752 bln bu
2019/20	27.1% S/U	28.2% S/U	13.3% S/U	\$8.57 /bu	1.679 bln bu
2020/21 ^{USDA}	27.4% S/U	27.3% S/U	5.7% S/U	\$10.80 /bu	2.266 bln bu
2021/22 ^{USDA}	27.3% S/U	26.5% S/U	6.1% S/U	\$13.30 /bu	2.158 bln bu
2022/23 ^{USDA}	27.1% S/U	26.7% S/U	5.2% S/U	\$14.30 /bu	1.990 bln bu



My DTN Cash Bids - My DTN Cash Bids for Postal Code 67550, Radius 300 miles - Market Closes on February 15, 2023

Elevator/Location	Feb 2023	Oct 2023	Nov 2023	Dec 2023
PAWNEE COUNTY COOP LARNED, KS	14.93	12.65	---	---
PAWNEE COUNTY COOP GARFIELD, KS	14.93	12.65	---	---
GOLDEN VALLEY INC. LARNED, KS	15.06	12.75	---	---
AMERICAN PLAINS COOP PAWNEE ROCK, KS	15.16	12.85	---	---
GOLDEN VALLEY INC. ROZEL, KS	15.06	12.75	---	---
AMERICAN PLAINS COOP LARNED, KS	15.16	12.85	---	---
ALLIANCE AG AND GRAIN LLC BELPRE, KS	15.21	---	12.95	---
ALLIANCE AG AND GRAIN LLC LEWIS, KS	15.21	---	12.95	---
PAWNEE COUNTY COOP MACKSVILLE, KS	14.93	12.65	---	---
GOLDEN VALLEY INC. BURDETT, KS	15.06	12.75	---	---
PRIDE AG RESOURCES BURDETT, KS	---	---	---	---
MID STATE FARMERS COOP TIMKEN, KS	14.72	13.00	---	---

2023 Soybean Cost-Return Budget In South Central Kansas

Budget abstract

-----Average yields

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Date: Nov-01-2022

Item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Soybeans - South Central KS	bu	\$11.92	31.00	\$369.52	\$369.52	_____
--TOTAL INCOME--					\$369.52	_____
DIRECT EXPENSES						
Additional labor					\$1.06	_____
Crop insurance					\$18.40	_____
Diesel					\$16.77	_____
Fertilizers					\$36.78	_____
Herbicides					\$64.23	_____
Miscellaneous					\$7.26	_____
Operator labor					\$6.22	_____
Repair & Maintenance					\$14.86	_____
Seeds					\$59.67	_____
Interest on operating capital		8% percent on direct expenses			\$9.01	_____
--TOTAL DIRECT EXPENSES--					\$234.27	
-----Total direct expenses per bu		\$7.56				
FIXED EXPENSES						
Cash rent					\$50.00	_____
Capital recovery (depreciation + interest)					\$54.28	_____
--TOTAL FIXED EXPENSES--					\$104.28	
-----Total expenses per bu		\$10.92				
RETURNS ABOVE DIRECT EXPENSES					\$135.25	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$30.97	

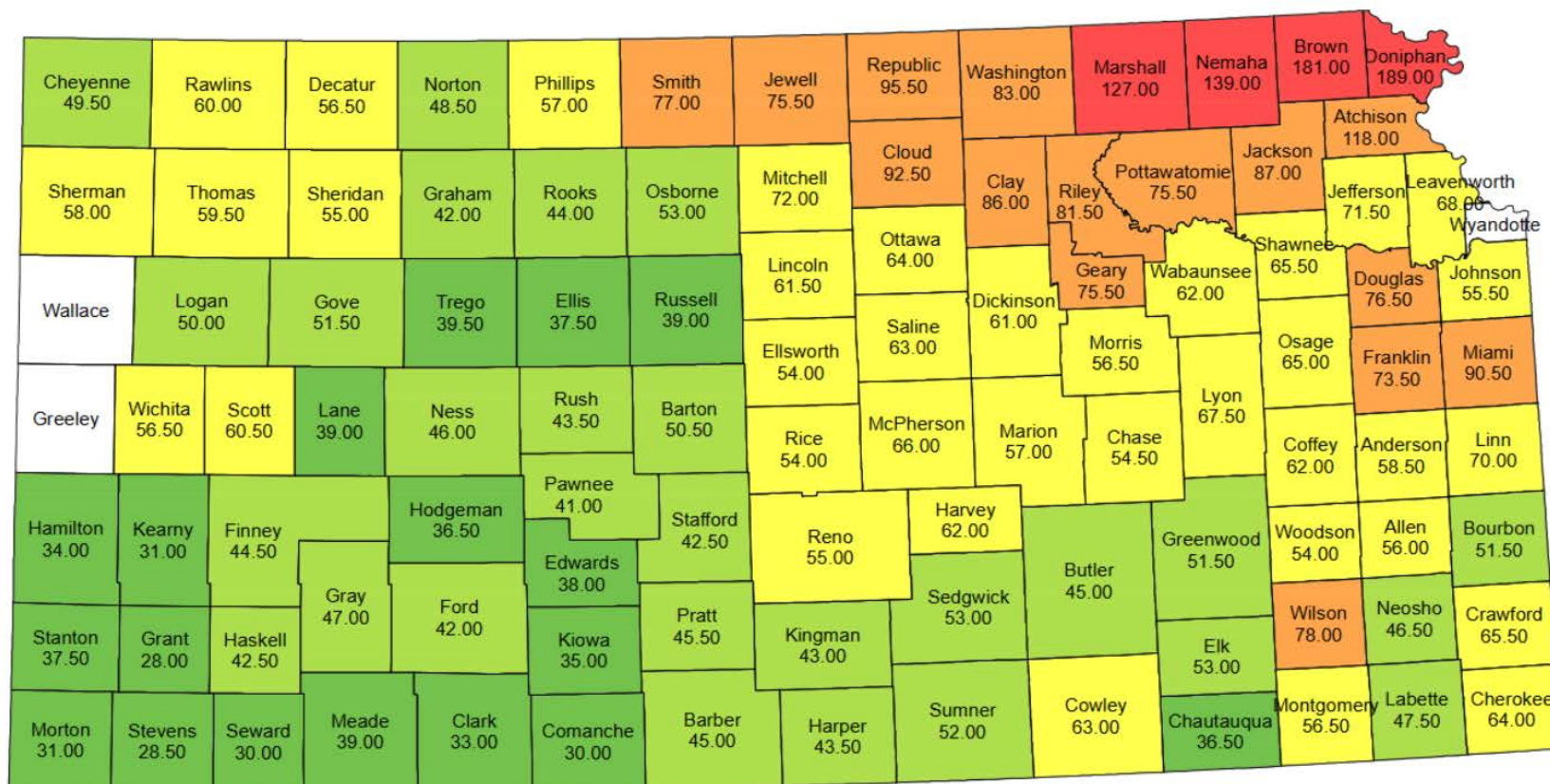
2023 Irrigated Soybeans (center-pivot) Cost-Return Budget

-----South Central KS - Average yields

item	unit	price	quantity	amount	Sub-total
INCOME					
Product					
Soybeans - South Central KS	bu	\$11.92	75.00	\$894.00	\$894.00
--TOTAL INCOME--					\$894.00
DIRECT EXPENSES					
Additional labor					\$1.09
Crop insurance					\$12.64
Diesel					\$16.06
Fertilizers					\$66.98
Herbicides					\$82.63
Irrigation energy (NG)					\$53.20
Irrigation labor					\$8.10
Miscellaneous					\$12.10
Operator labor					\$5.77
Repair & Maintenance					\$19.41
Seeds					\$64.26
Interest on operating capital		8% percent on direct expenses			\$13.69
--TOTAL DIRECT EXPENSES--					\$355.93
-----Total direct expenses per bu \$4.75					
FIXED EXPENSES					
Cash rent					\$175.00
Capital recovery (depreciation + interest)					\$235.02
--TOTAL FIXED EXPENSES--					\$410.02
-----Total expenses per bu \$10.21					
RETURNS ABOVE DIRECT EXPENSES					\$538.07
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$128.05
13.5 acre-inches of water applied					
150 foot well depth					
\$ 3.94 fuel cost per acre-inch of water applied					
.4 Mcf of natural gas per acre-inch of water applied					
\$ 9.75 per Mcf for cost of natural gas					
5.46 Mcf of fuel used in total					



2022 Non-Irrigated Cropland Cash Rent Paid Per Acre Kansas



Cash Rent Paid
Dollars Per Acre

118.01 - 189.00	53.01 - 72.00
72.01 - 118.00	39.51 - 53.00
	28.00 - 39.50
	Not Published

0 15 30 60 90 120 Miles

Source: USDA National Agricultural Statistics Service
August 26, 2022

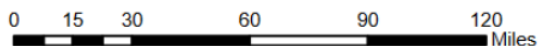
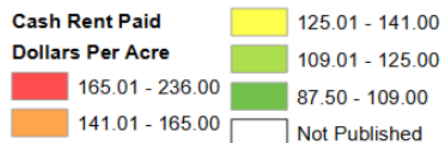
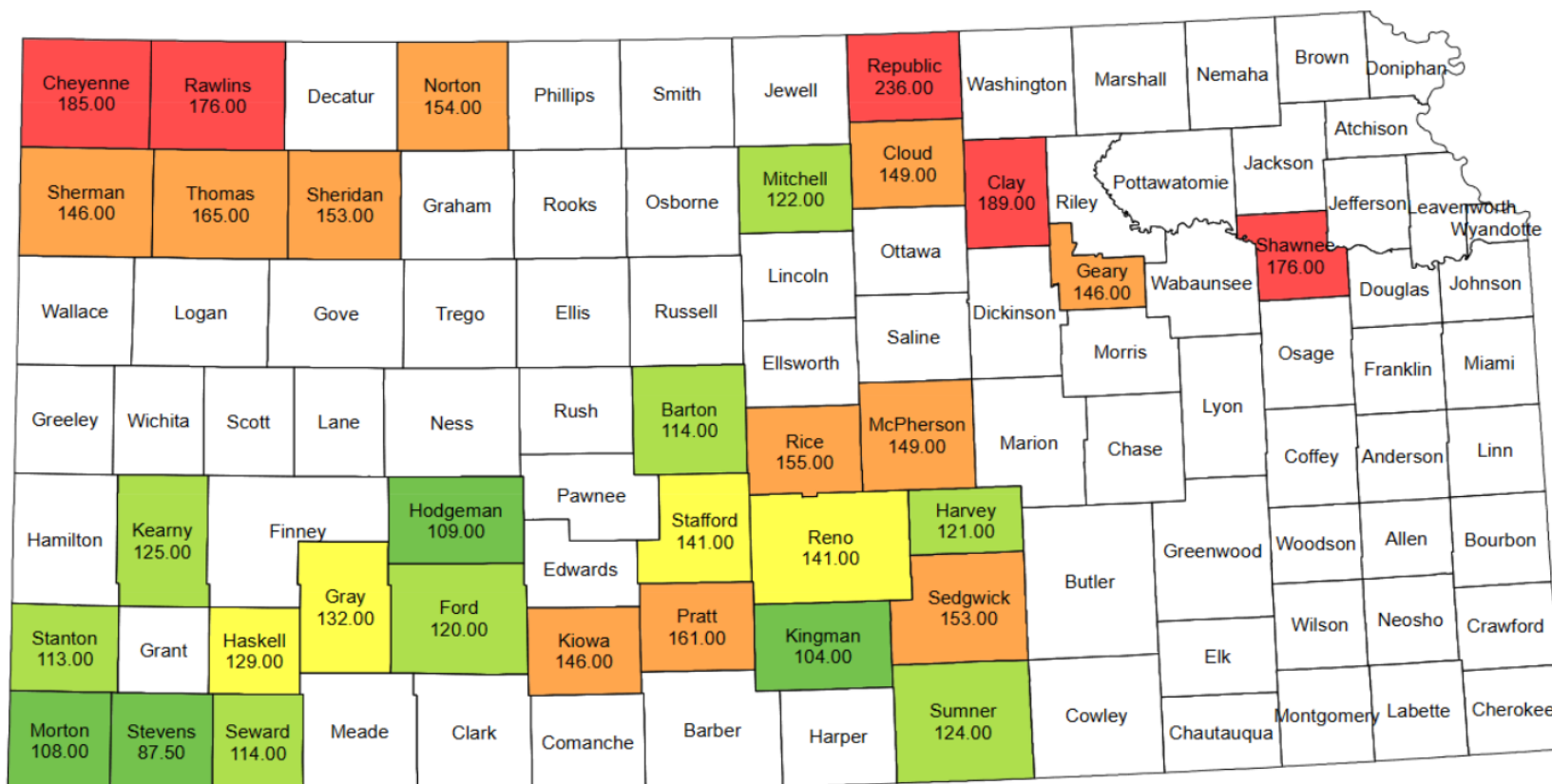


Table 2. Estimated Cash Rental Rates for Non-Irrigated Cropland in Central Kansas

Region	County	2021 NASS	2022 KSU	2022 NASS	2023 KSU	25th Percentile	75th Percentile
South Central	Barber	45	45	45	45	37	56
	Comanche	32	32	30	30	25	38
	Edwards	41	42	38	48	39	60
	Harper	40	40	44	44	36	54
	Harvey	59	59	62	62	51	78
	Kingman	42	42	43	43	35	54
	Kiowa	37	48	35	49	40	61
	Pawnee	41	57	41	57	47	72
	Pratt	44	44	46	46	37	57
	Reno	50	50	55	55	45	69
	Sedgwick	54	54	53	53	44	66
	Stafford	40	40	43	43	35	53
	Sumner	50	50	52	52	43	65



2022 Irrigated Cropland Cash Rent Paid Per Acre Kansas



Source: USDA National Agricultural Statistics Service
August 26, 2022



Table 1. Capital Recovery Costs (Depreciation and Interest) for Irrigation Equipment in Kansas.

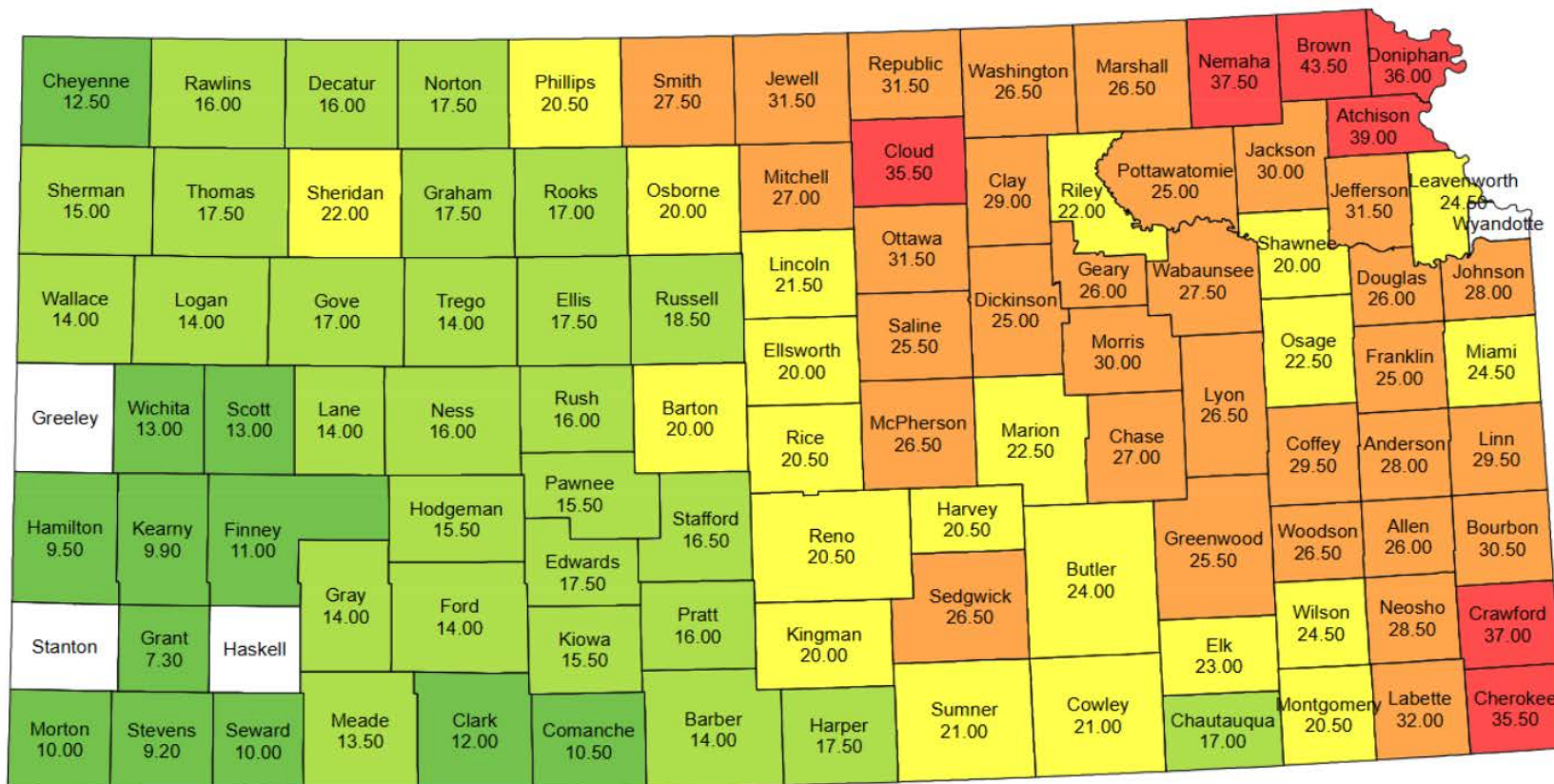
	Western KS		Central KS	
Center Pivot	\$	70.38	\$	70.38
Power unit	\$	26.29	\$	14.84
Well, pump, and gearhead	\$	90.40	\$	60.46

Table 3. Estimated Cash Rental Rates for Irrigated Cropland in Central Kansas

Region	County	2021 NASS	2022 KSU	2022 NASS	2023 KSU	25th Percentile	75th Percentile
South Central	Barber		134		161	132	201
	Comanche						
	Edwards	122	183		186	153	233
	Harper						
	Harvey	159	159	121	157	129	196
	Kingman	104	130	104			
	Kiowa	147	221	146	204	168	256
	Pawnee	121	164		174	143	218
	Pratt	134	191	161	202	166	253
	Reno	130	148	141	165	136	207
	Sedgwick	153	153	153	167	137	209
	Stafford	119	167	141	163	134	204
	Sumner		134	124	146	120	183



2022 Pasture Cash Rent Paid Per Acre Kansas



Cash Rent Paid
Dollars Per Acre

18.51 - 24.50
13.01 - 18.50
32.01 - 43.50
24.51 - 32.00
7.30 - 13.00
Not Published

0 15 30 60 90 120 Miles

Source: USDA National Agricultural Statistics Service
August 26, 2022





Kansas Direct Hay Report

AMS Livestock, Poultry and Grain Market News
KS Dept. of Ag Market News

Tue Feb 14, 2023

South Central

Alfalfa - Good (Trade/Per Ton)

	<u>Qty</u>	<u>Price Range</u>	<u>Wtd Avg</u>	<u>Freight/Use</u>
Large Square 3x4	25	290.00	290.00	F.O.B.-Farm/Ranch
Large Square 3x4	357	300.00	300.00	F.O.B.-Feedlot/dairy

Alfalfa - Fair/Good (Trade/Per Ton)

Large Round	184.5	297.00	297.00	Delivered-Dealer/Mill/Processor
Large Round	548	250.00-275.00	272.81	F.O.B.
Large Round	725	290.00-295.00	290.52	Delivered-Feedlot/dairy

Bluestem Grass - Good (Trade/Per Ton)

Large Square 3x4	23	165.00	165.00	Delivered ⇒ Off of CRP
------------------	----	--------	--------	------------------------

Grass - Good (Trade/Per Ton)

Large Round	23	125.00	125.00	F.O.B.
Large Round	125	100.00	100.00	F.O.B. ⇒ Off of CRP

Straw (Conventional)

Corn Stalk - (Trade/Per Ton)

	<u>Qty</u>	<u>Price Range</u>	<u>Wtd Avg</u>	<u>Freight/Use</u>
Round	357	110.00	110.00	Delivered

Wheat - (Trade/Per Ton)

	<u>Qty</u>	<u>Price Range</u>	<u>Wtd Avg</u>	<u>Freight/Use</u>
Round	357	100.00	100.00	F.O.B.