

2017 Crop Outlook

Chris Hurt, Professor, Department of Agricultural Economics

Michael Langemeier, Assoc. Director, Center for Commercial Agriculture

James Mintert, Director, Center for Commercial Agriculture

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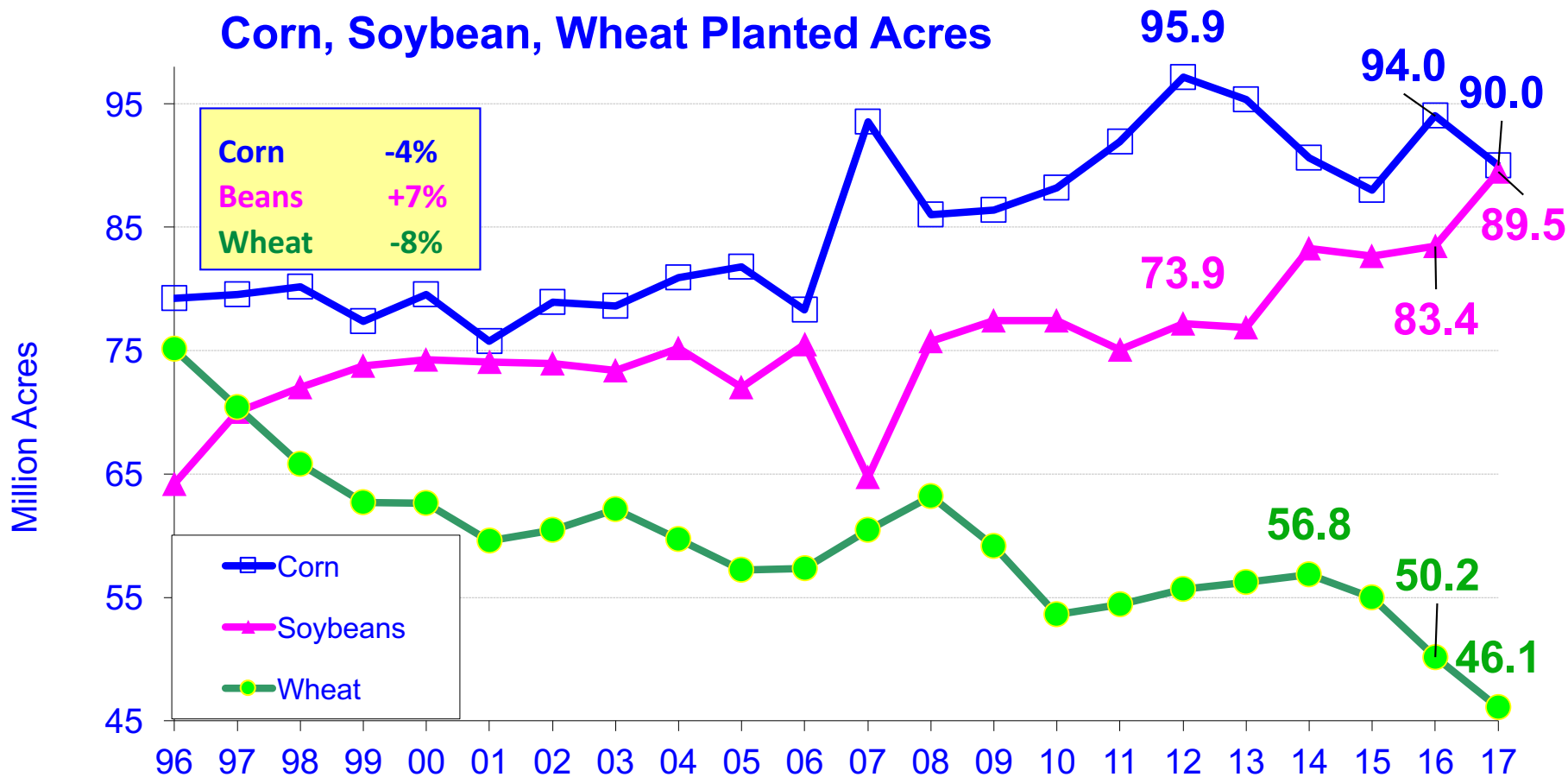
Outline of Presentation

- **Summary of the latest USDA Report**
- **Crop Budget**
- **Grain Market Outlook**
- **Economic Setting**

Stocks Situation

	Stocks March 1	Pre-Report Expectation	Difference
	----- Million Bushels -----		
<u>Corn:</u> <i>Neutral</i>	8,616	8,551	+65
<u>Soybeans</u> <i>Bearish</i>	1,735	1,679	+56
<u>Wheat:</u> <i>Neutral</i>	1,655	1,622	+32

Corn, Soybean, Wheat Planted Acres



U.S. Planted Acres (1,000s)

	15	16	17	17-16 Change	17-16 %
Corn	87,999	94,004	89,996	-4,008	-4.3%
Soybeans	82,650	83,433	89,482	6,049	7.3%
Wheat	54,999	50,154	46,059	-4,095	-8.2%
Cotton	8,581	10,075	12,233	2,159	21.4%
Sorghum	8,459	6,690	5,757	-933	-13.9%
Oats	3,088	2,828	2,699	-129	-4.6%
Barley	3,623	3,052	2,548	-504	-16.5%
Rice	2,614	3,150	2,625	-525	-16.7%
Sunflower	1,859	1,597	1,454	-143	-8.9%
Sum 9 Major	253,872	254,982	252,853	-2,129	-0.8%

2017-16	Corn	Soybeans	Wheat	Tt CSW
NE	4	15	54	73
SE	(485)	284	(75)	(276)
ECB	(450)	1,070	(450)	170
WCB	(1,450)	1,350	(87)	(187)
Delta	(500)	750	(10)	240
SP	(515)	80	(730)	(1,165)
CP	(240)	1,450	(1,313)	(103)
NP	(350)	1,050	(1,401)	(701)
West	(2)		(58)	(60)
PNW	(20)		(25)	(45)
	(4,008)	6,049	(4,095)	(2,054)

U.S. Farm Price (MYA)

	2012	2013	2014	2015	2016 USDA	2017 Purdue	2018 Futures MYA	2019 Futures MYA
Corn	\$6.89	\$4.46	\$3.70	\$3.60	\$3.40	\$3.75	\$3.90	\$4.00
Soybeans	\$14.40	\$13.00	\$10.10	\$8.95	\$9.60	\$9.35	\$9.15	\$9.10
Wheat	\$7.77	\$6.87	\$5.99	\$4.89	\$3.85	\$4.10	\$4.50	\$4.85

Plant 90.0 Hvst. 82.7 * 170bu/ac

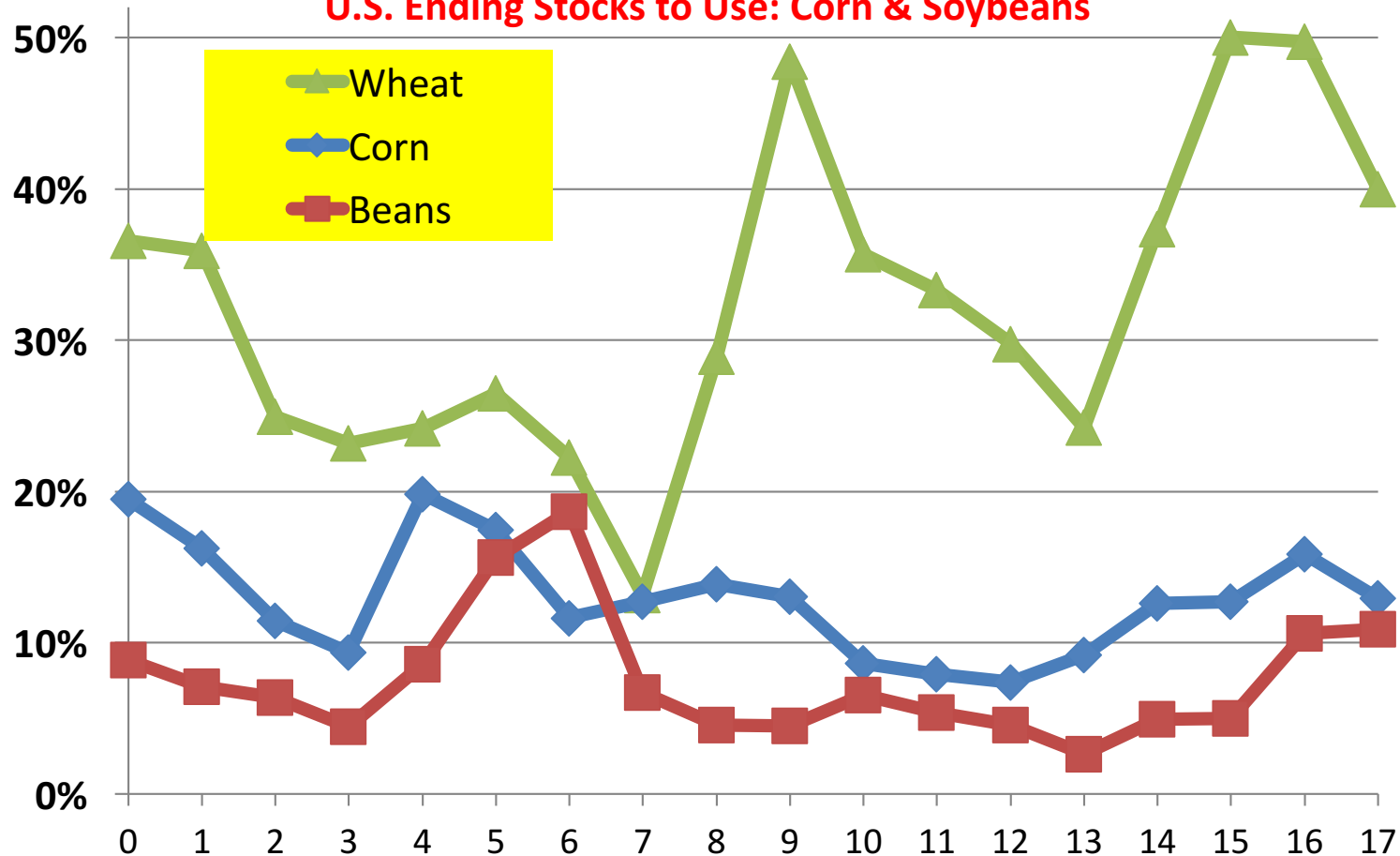
Corn:

	USDA			3/31/17
	3/31/17			Purdue
	14/15	15/16	16/17	17/18
Carry in	1,232	1,731	1,736	2,320
Production	14,216	13,601	15,148	14,057
Total Supply	15,479	15,400	16,940	16,427
Feed & Residual	5,317	5,120	5,550	5,700
FSI Non-Fuel	1,359	1,422	1,445	1,450
FSI Fuel (Ethanol)	5,207	5,224	5,400	5,425
Export	1,865	1,898	2,225	1,975
Total Use	13,748	13,664	14,620	14,550
Ending Stocks	1,731	1,736	2,320	1,877
US Farm Price	\$3.70	\$3.61	\$3.40	\$3.75

\$3.20-\$3.60

\$3.25-\$4.25

U.S. Ending Stocks to Use: Corn & Soybeans



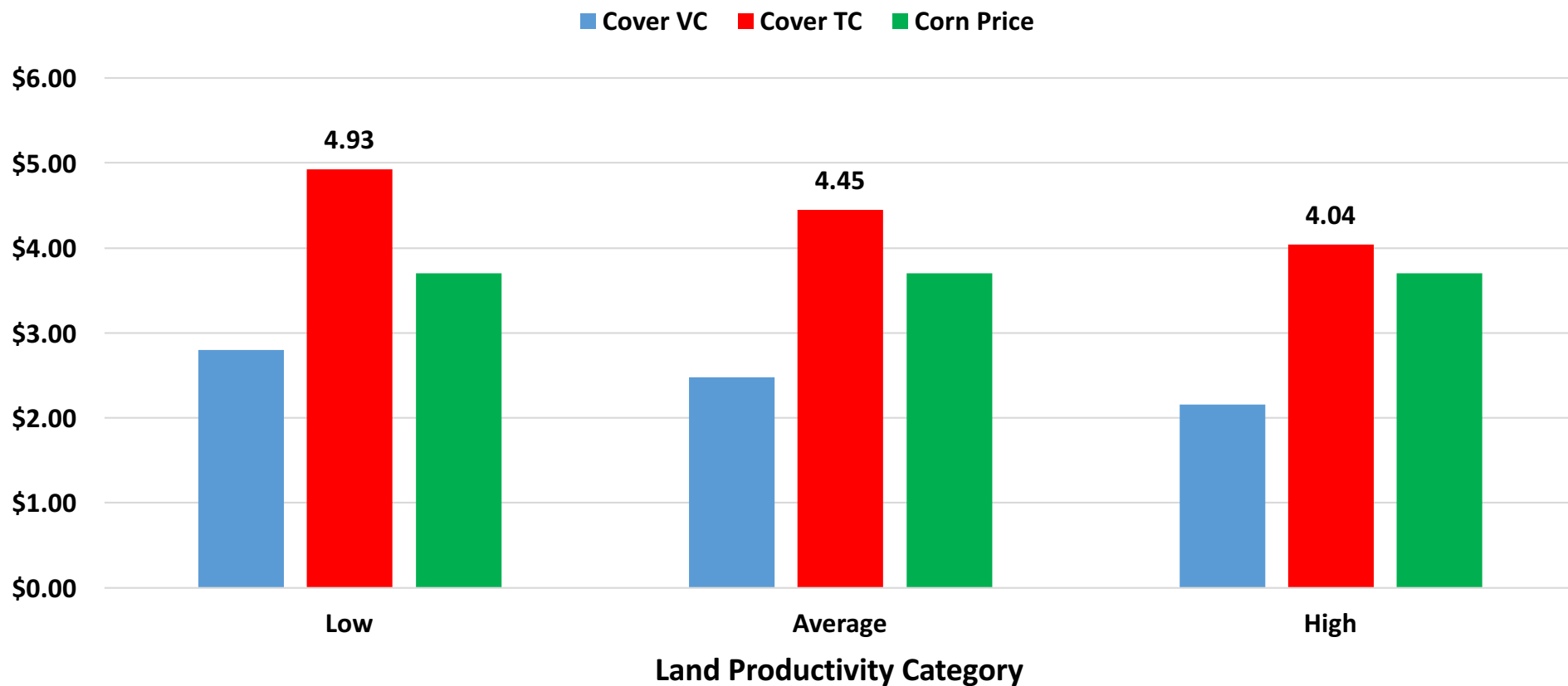
ZCN17 - Corn - Daily OHLC Chart



ZCZ17 - Corn - Daily OHLC Chart



2017 Breakeven Prices for Corn in Indiana



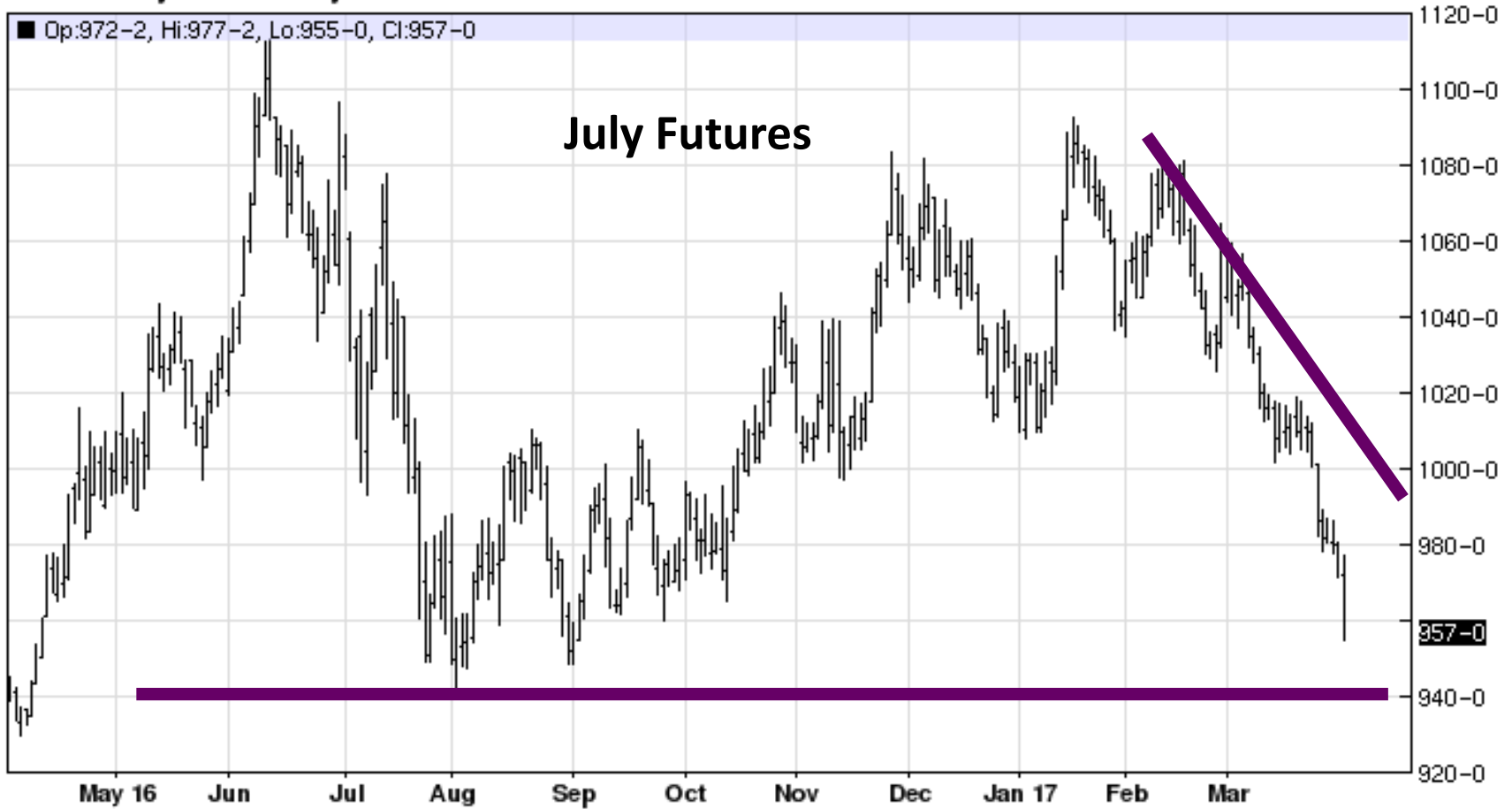
Corn Summary

1. Old crop inventory is abundant with 2.3 billion carryout
2. Basis will struggle in the mid-to-late summer with catch-up sales
3. New crop price will be premium to old crop to provide incentive for commercial industry to store old crop into new
4. Retest of July futures at \$3.85-\$3.95?
5. New crop acres down sharply---shifted to beans
6. Beans still remain favorable on Purdue budgets
7. If production concerns arise, \$4.00 December 2017 futures a clear possibility
8. Multi-year direction of corn prices is UP

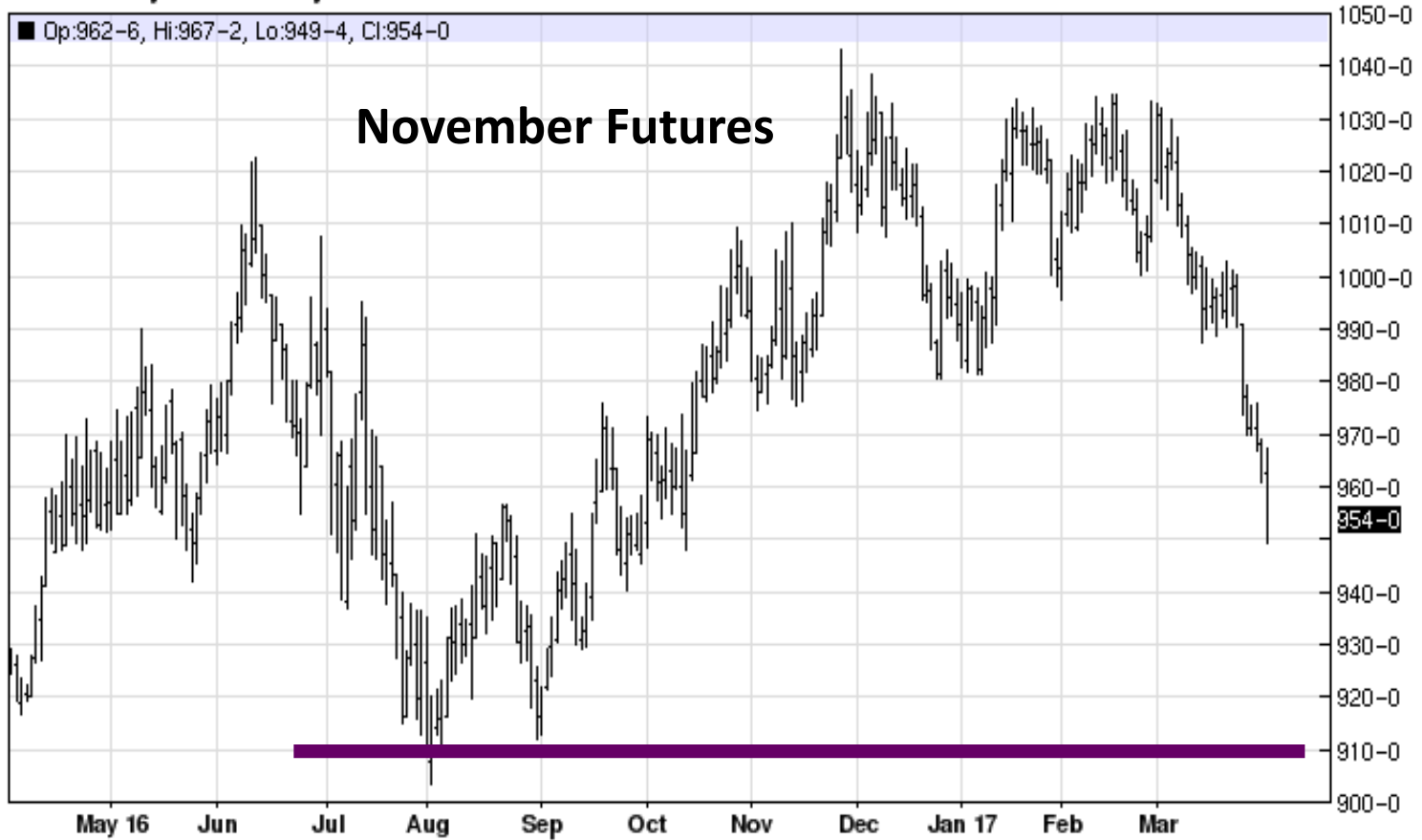
Planted: 89.5 Hvst. 88.7 * 47.7bu/ac

	Soybeans			
				USDA
	3/31/17			Purdue
	14/15	15/16	16/17	17/18
Carry in	92	191	197	435
Production	3,927	3,926	4,307	4,231
Total Supply	4,052	4,140	4,529	4,691
Seed & Residual	143	121	129	135
Crush	1,875	1,886	1,940	1,970
Exports	1,843	1,936	2,025	2,125
Total Use	3,861	3,943	4,094	4,230
Ending Stock	191	197	435	461
Farm Price	\$10.10	\$8.95	\$9.60	\$9.35

ZSN17 - Soybeans - Daily OHLC Chart



ZSX17 - Soybeans - Daily OHLC Chart



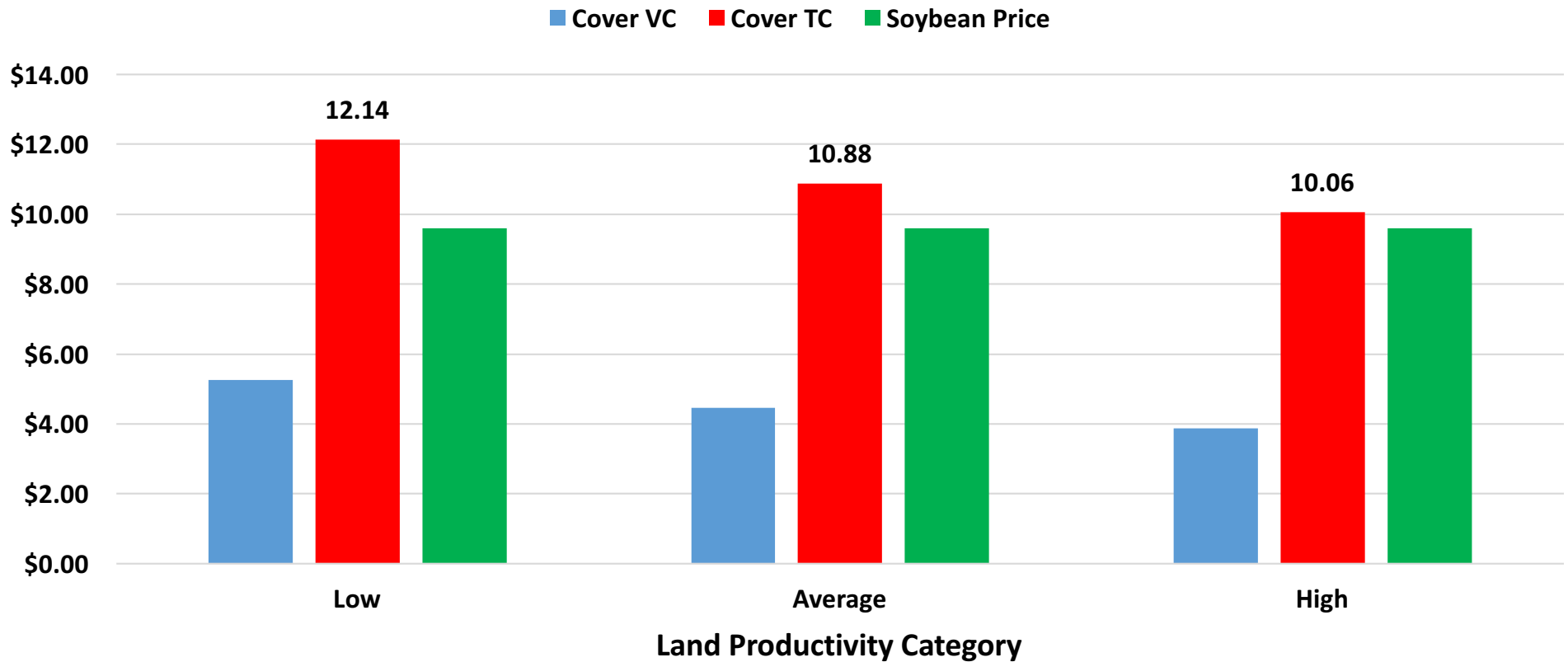
ZSY00/ZCY00 - Spread Chart



Relationships Matter!

<u>Corn Price</u>	Ratio Bean/Corn Price	
	2.5	3.0
\$2.75	\$6.74	\$8.25
\$3.00	\$7.35	\$9.00
\$3.25	\$7.96	\$9.75
\$3.50	\$8.58	\$10.50
\$3.75	\$9.19	\$11.25
\$4.00	\$9.80	\$12.00
\$4.25	\$10.41	\$12.75
\$4.50	\$11.03	\$13.50
\$4.75	\$11.64	\$14.25
\$5.00	\$12.25	\$15.00

2017 Breakeven Prices for Soybeans in Indiana



Soybean Summary

1. Record South American Crop (+6% from '16)
2. U.S. stocks +56 M more than expected
3. USDA may add 25-30 million to old crop carryout
4. 2017 Acreage higher than expected
5. New Crop carry outs expected to grow
6. Old crop beans should be sold on any rally
7. Weather concerns now largest hope for better prices
8. Bean prices re-setting versus corn prices
9. Cash prices of \$9.50 or higher is now the goal

Current Prices Favor Rotation Soybeans Over Continuous Corn

Corn Prices Required to Produce Per Acre Returns Equivalent to Soybeans

Soybean Price	Low Productivity (C=128; SB=42)	Avg. Productivity (C=160; SB=52)	High Productivity (C=192; SB=62)
\$8.50	\$4.18	\$4.07	\$3.89
\$9.00	\$4.34	\$4.23	\$4.05
\$9.50	\$4.51	\$4.39	\$4.21
\$10.00	\$4.67	\$4.56	\$4.38
\$10.50	\$4.84	\$4.72	\$4.54
\$11.00	\$5.00	\$4.88	\$4.70

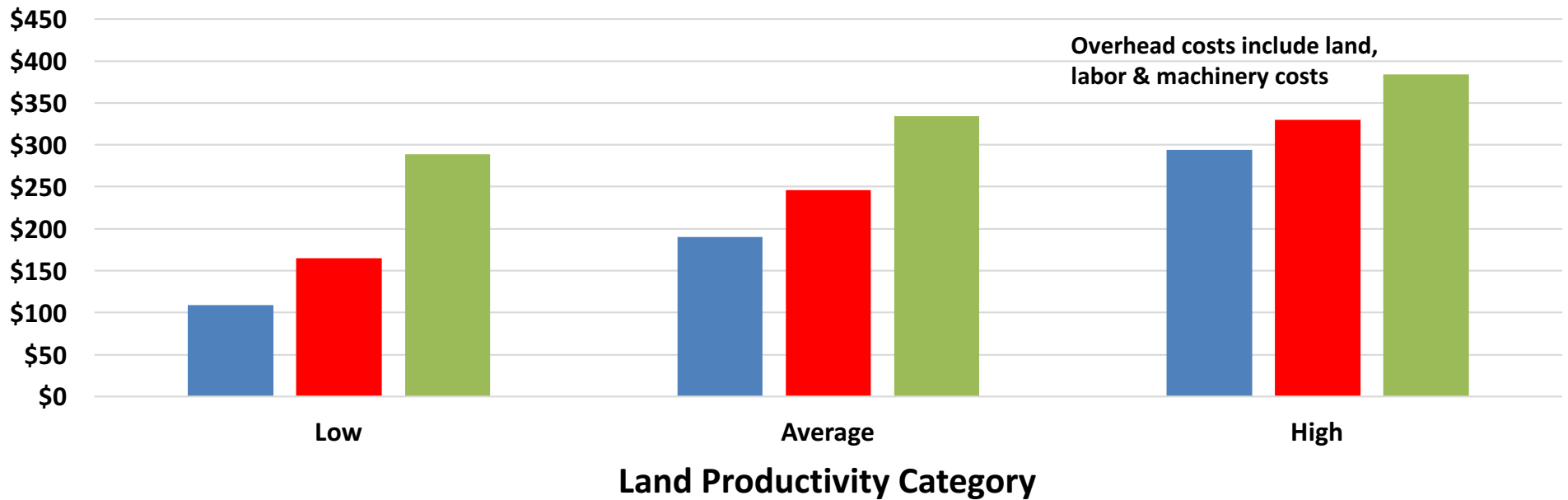
Continuous Soybeans and Rotation Corn Comparison

Corn Prices Required to Produce Per Acre Returns Equivalent to Soybeans

Soybean Price	Low Productivity (C=136; SB=42)	Avg. Productivity (C=170; SB=52)	High Productivity (C=204; SB=62)
\$8.50	\$3.80	\$3.72	\$3.56
\$9.00	\$3.96	\$3.87	\$3.72
\$9.50	\$4.11	\$4.02	\$3.87
\$10.00	\$4.26	\$4.18	\$4.02
\$10.50	\$4.42	\$4.33	\$4.17
\$11.00	\$4.57	\$4.48	\$4.32

2017 Contribution Margin per Acre for Corn and Soybeans in Indiana

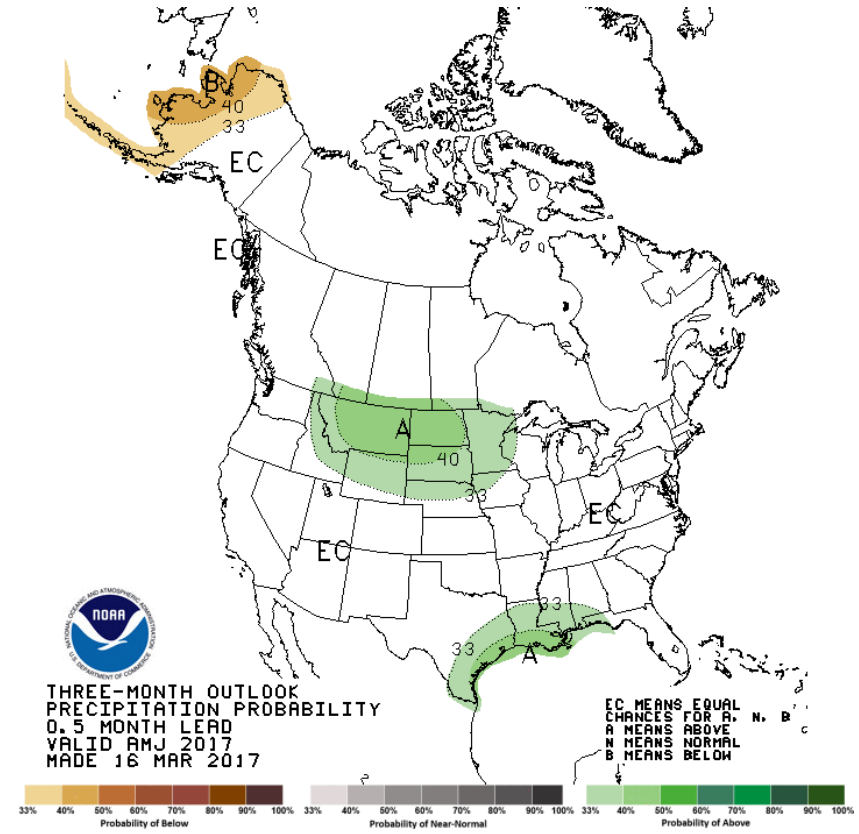
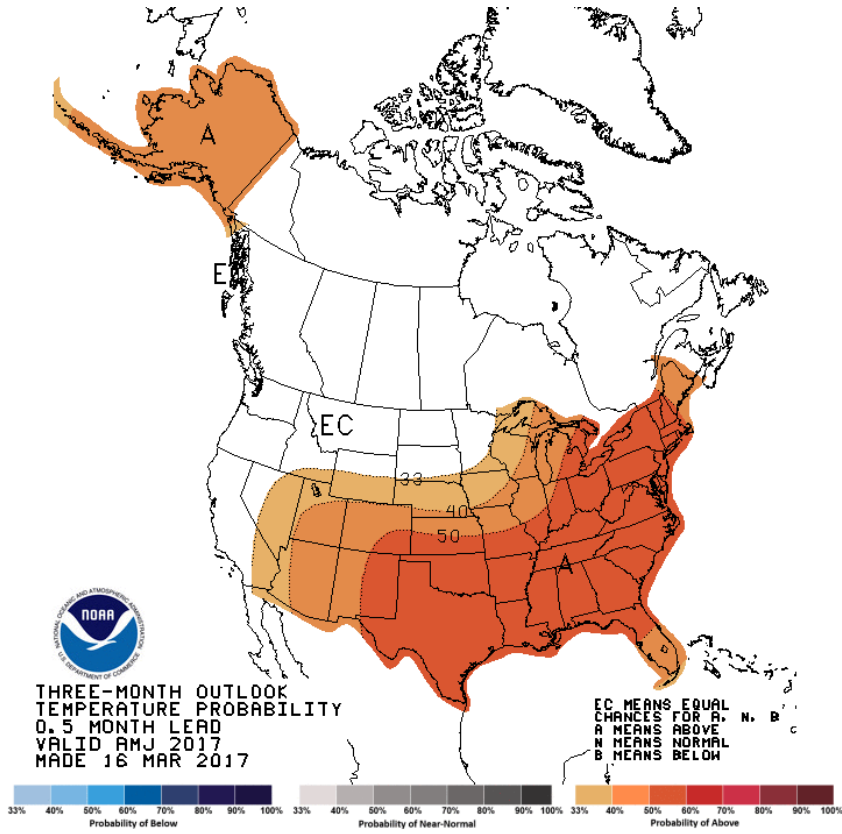
■ Corn ■ Soybeans ■ Overhead



April-May-June

Temperature

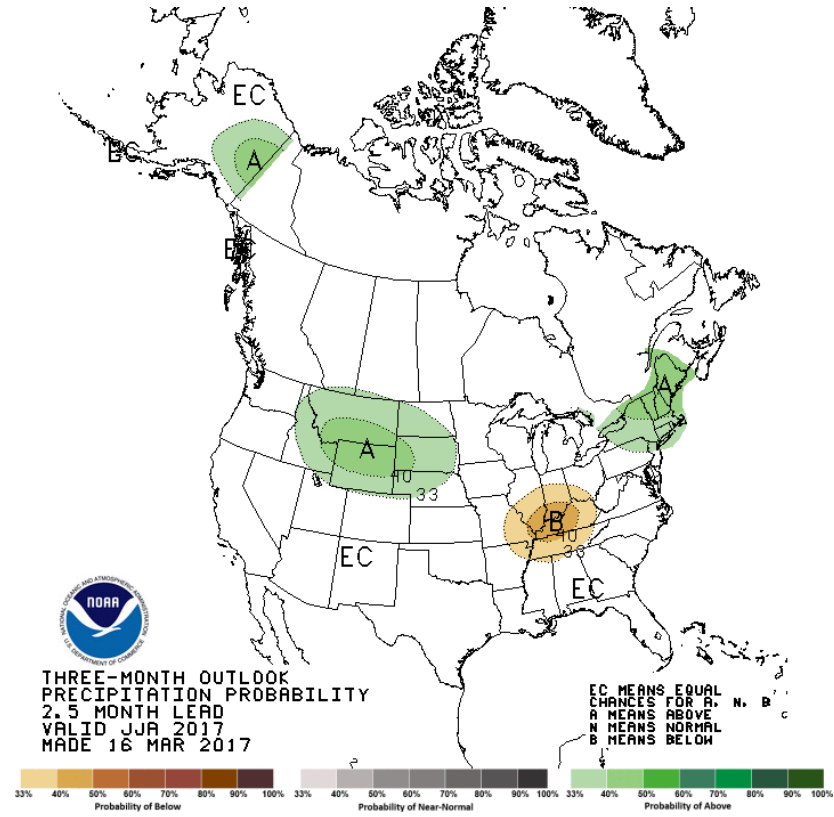
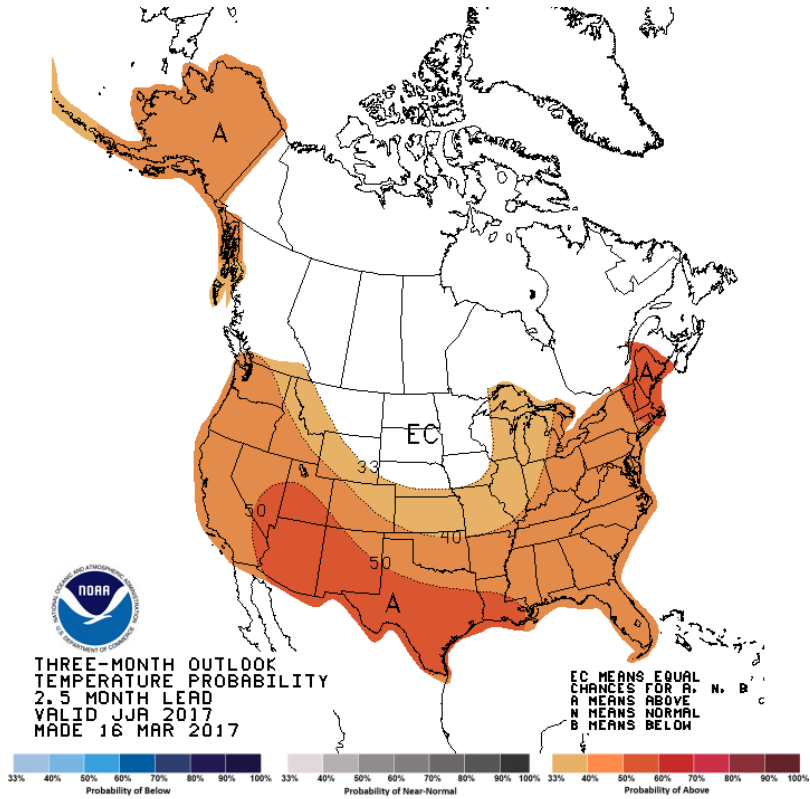
Precipitation



June-July-Aug

Temperature

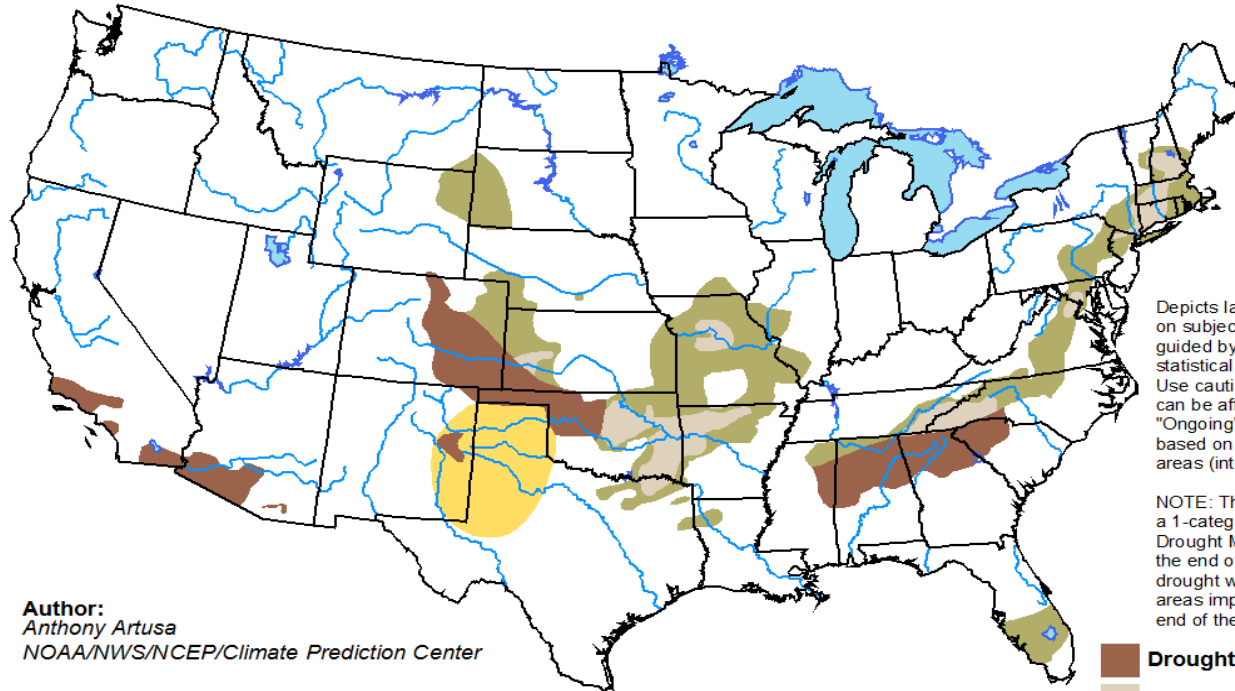
Precipitation



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for March 16 - June 30, 2017
Released March 16, 2017

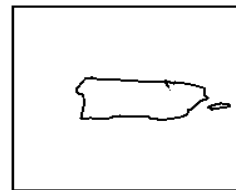
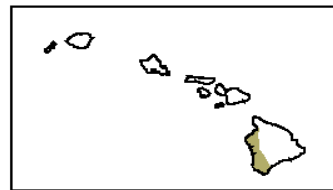
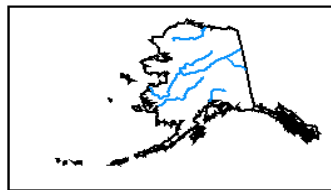


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

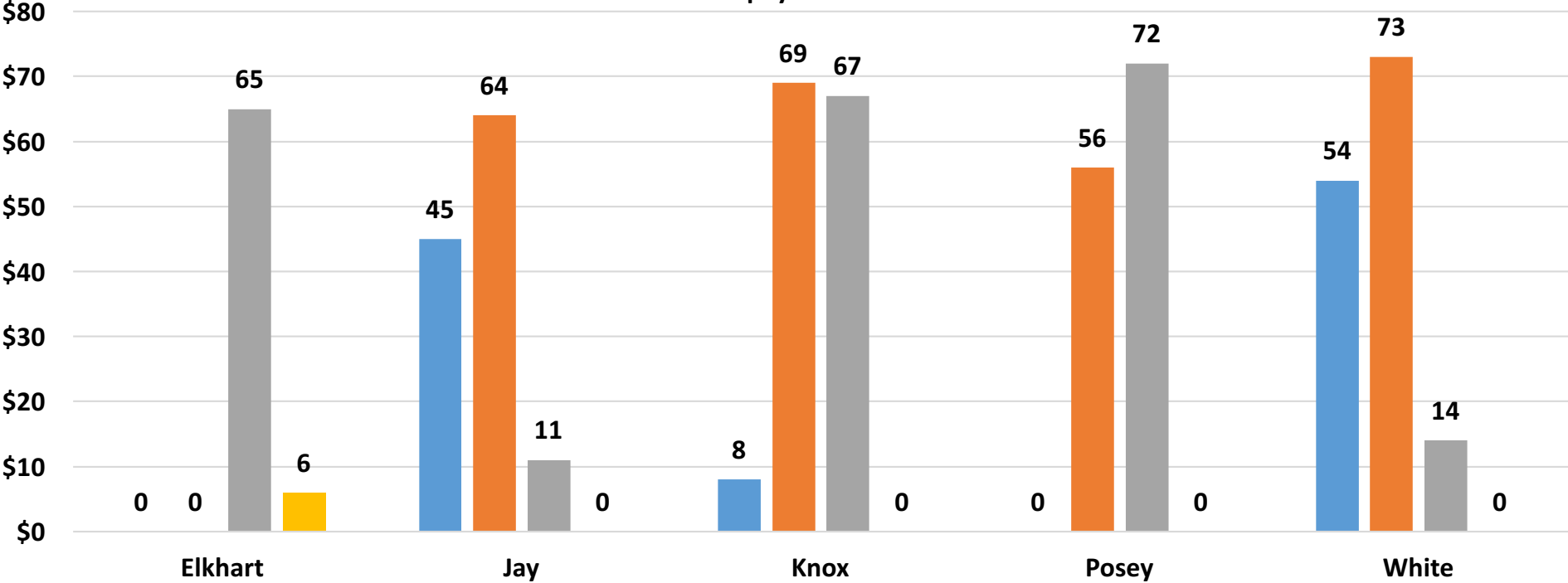


<http://go.usa.gov/3eZ73>

Projected ARC County Payment for Corn per Acre Selected Counties in Indiana

2014 2015 2016 2017

Note: No payments in 2018.



Strategies

- **Tight margin period continues**
- **Downward adjustments in land prices & cash rents expected to continue**
 - **Strongest pressure on lower productivity farmland**
- **Corn & soybean acreage shift pushing corn/soybean price ratio back to historical average**

Thank You

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