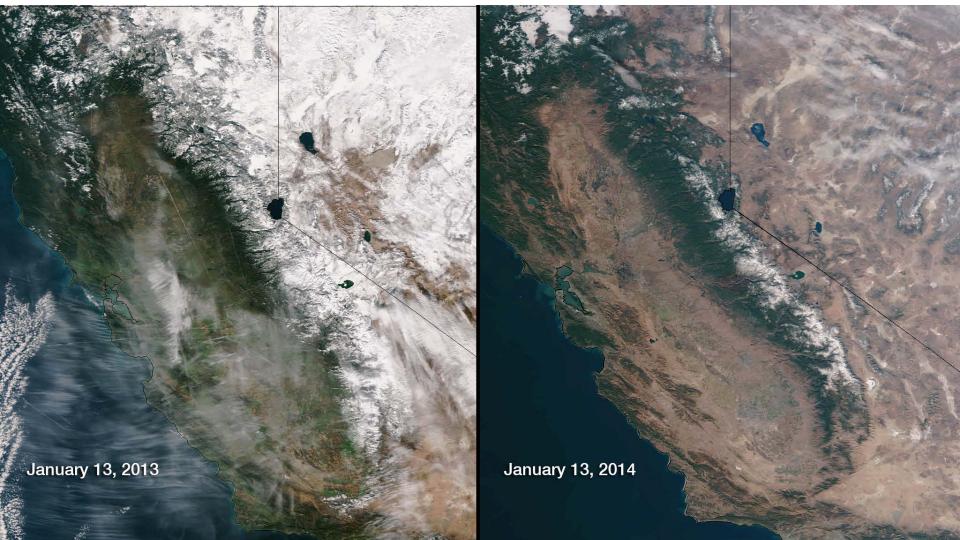
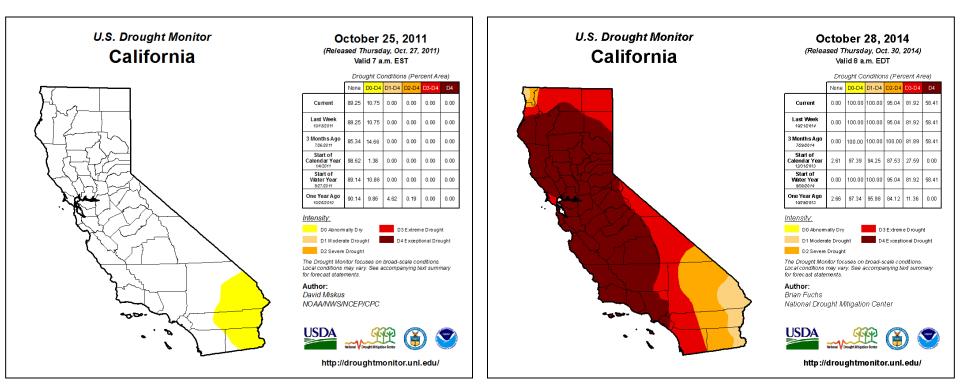
### "CA Drought of 2011-14: Brief History and Current Impacts" Brad Rippey, USDA Meteorologist, Washington, D.C.





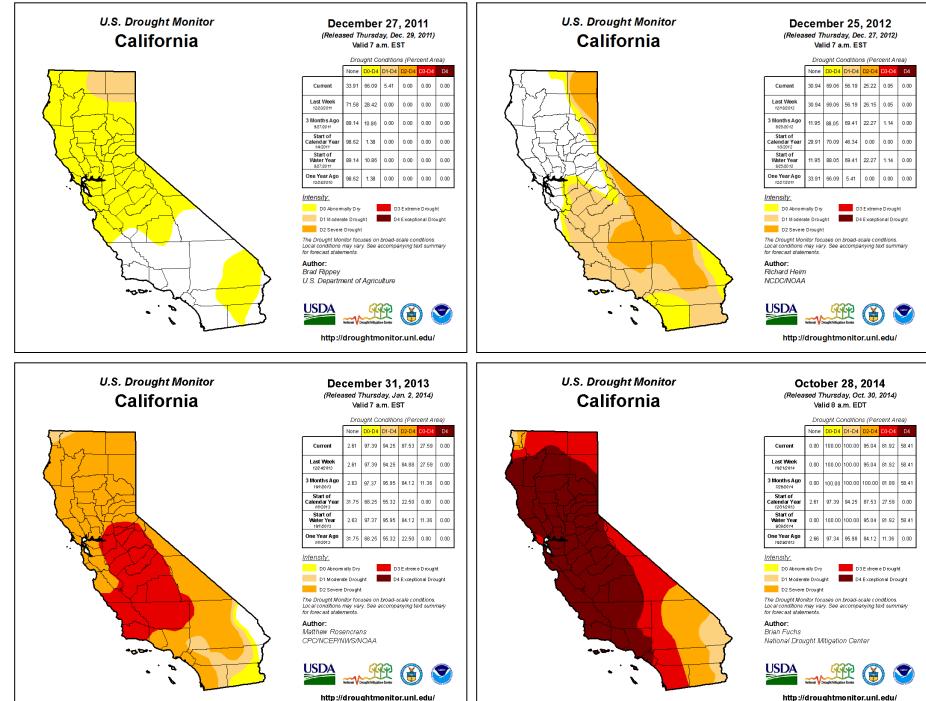
Ranching and California's Drought UC Davis Nov. 7, 2014

## A Comparison to 3 Years Ago



No Drought; 11% Abnormally Dry All in Drou

#### All in Drought; 82% in D3 to D4



http://droughtmonitor.unl.edu/

## Percentiles and the U.S. Drought Monitor

- Advantages of percentiles:
  - Can be applied to any parameter
  - Can be used for any length of data record
  - Puts drought in historical perspective
- D4, Exceptional Drought:
- D3, Extreme Drought:
- D2, Severe Drought:
- D1, Moderate Drought:
- D0, Abnormally Dry:



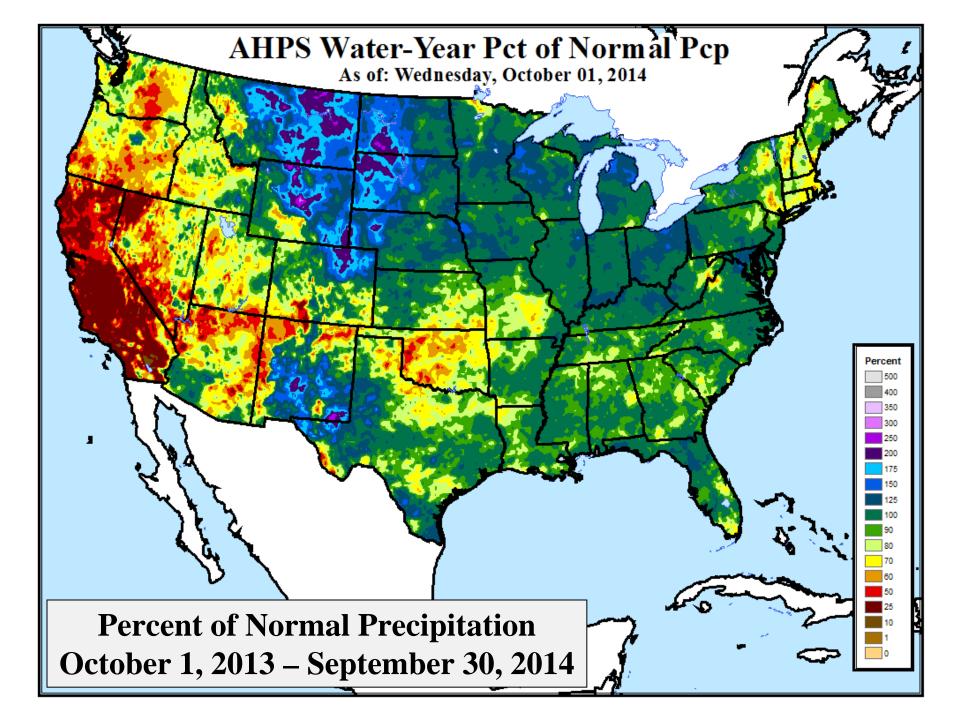
once per 50 to 100 years



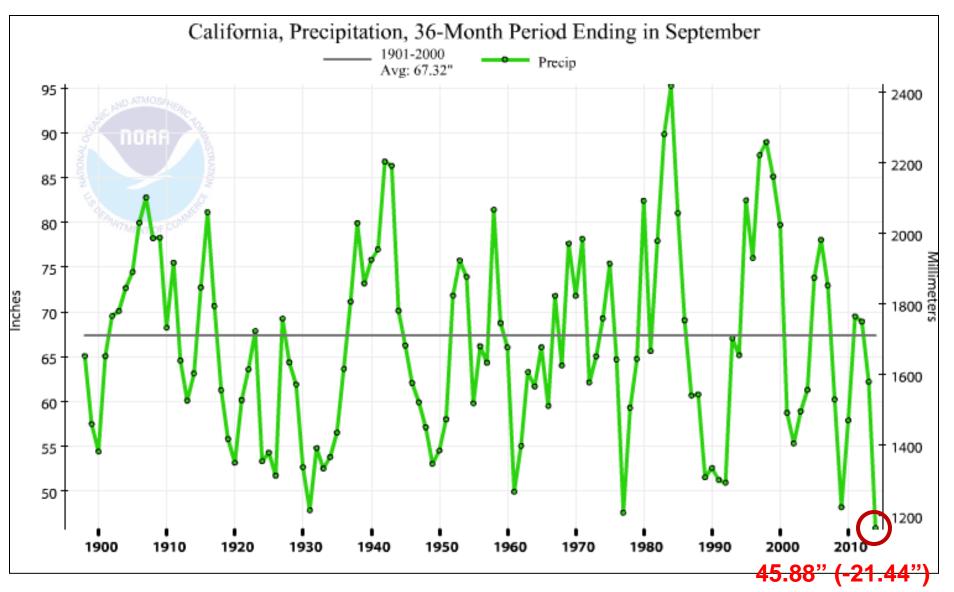
- once per 10 to 20 years
- once per 5 to 10 years

once per 3 to 5 years

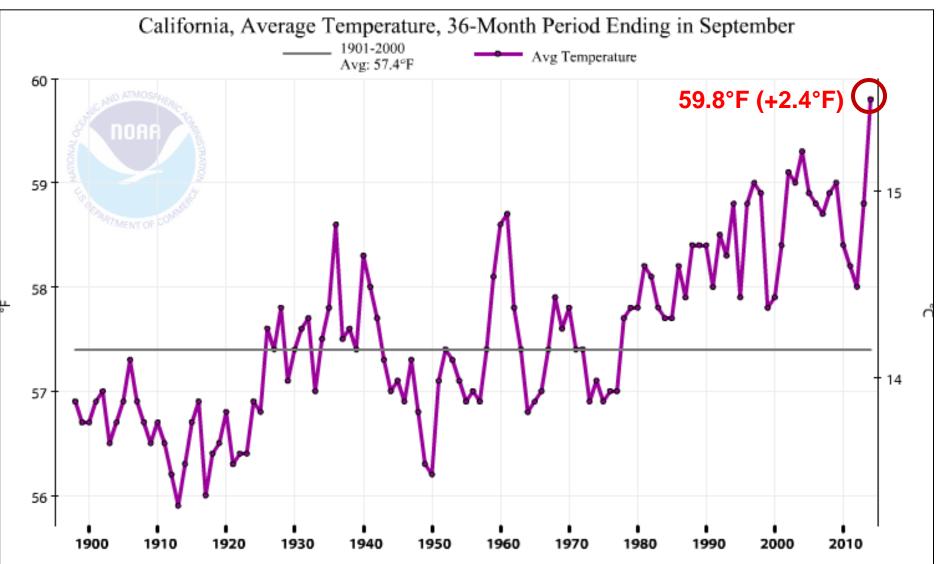




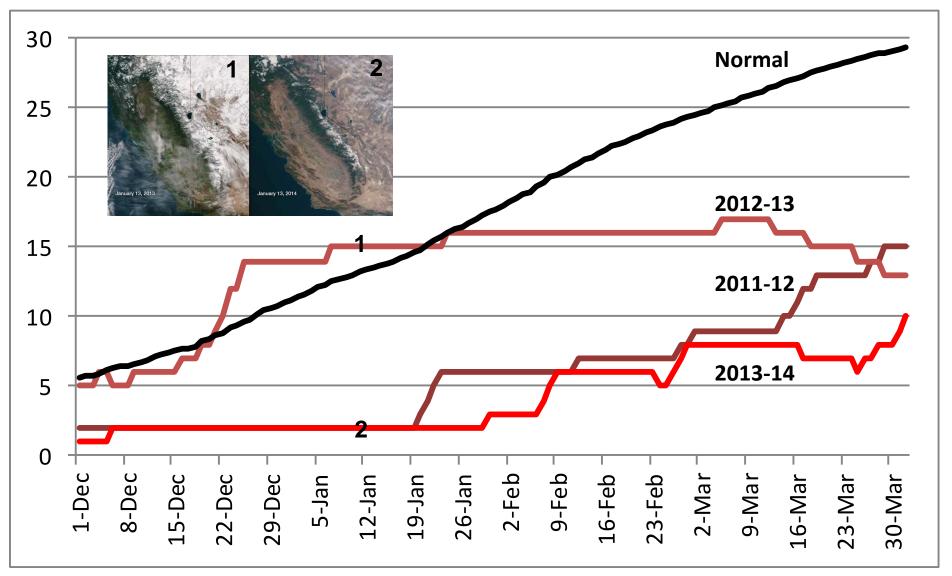
## California Precipitation All 36-Month Periods Ending in September



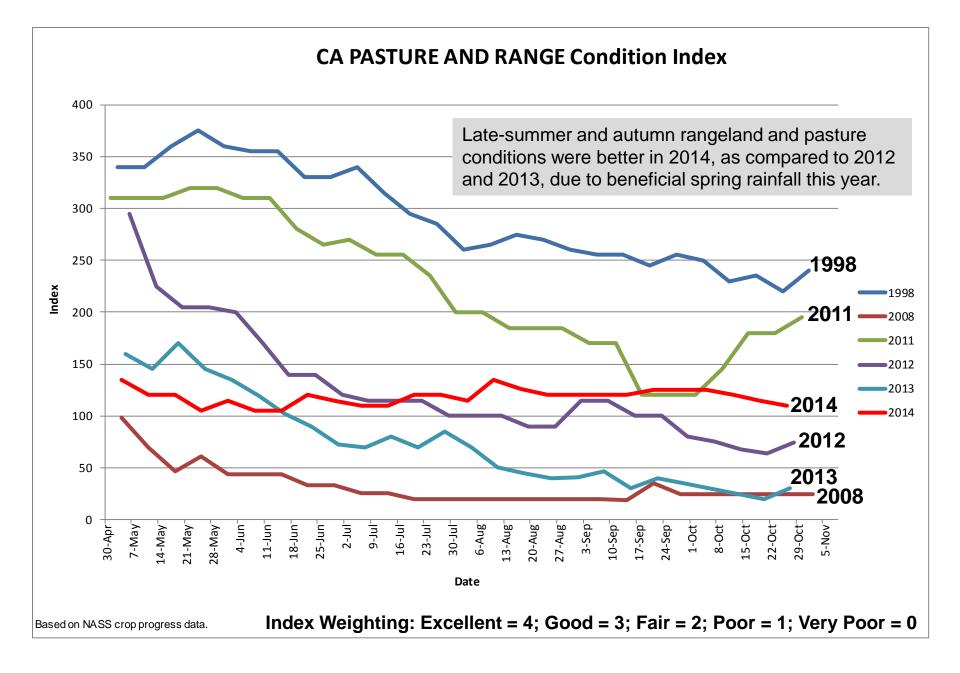
## California Average Temperature All 36-Month Periods Ending in September



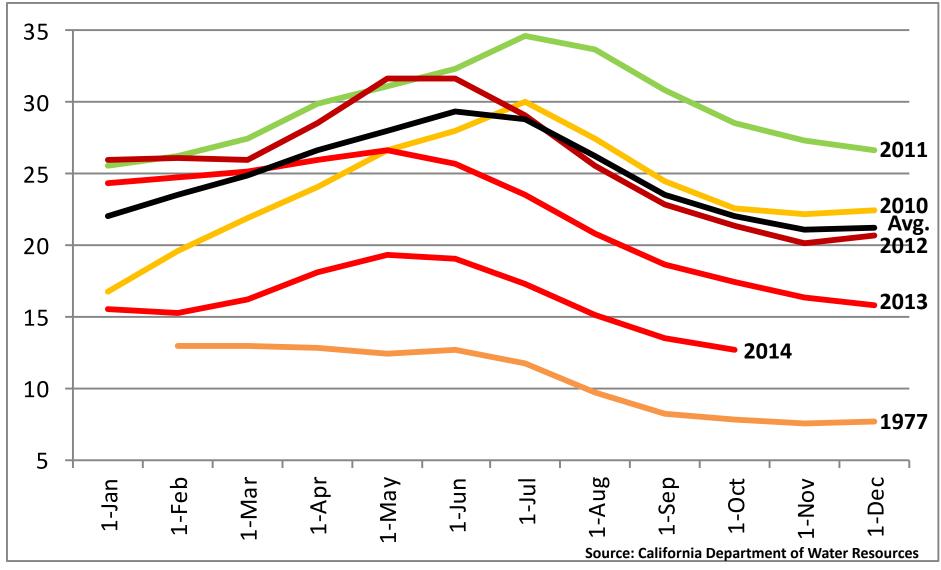
### Daily Sierra Nevada Snowpack (Inches) vs. Normal



Source: California Department of Water Resources

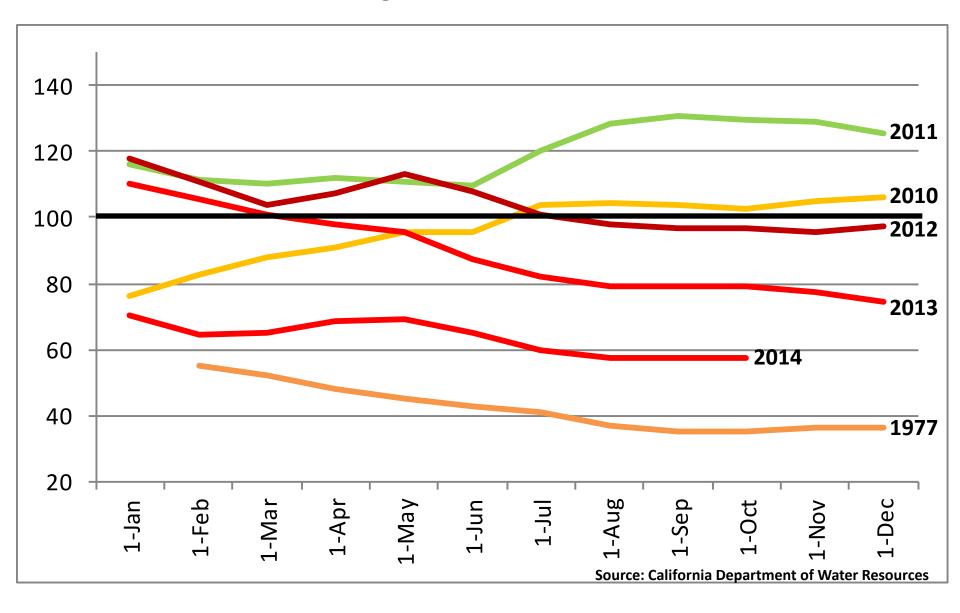


#### California Reservoir Storage, Million Acre-Feet, 1977 and 2010-14



Note: One acre-foot is equal to 325,851 gallons, or the amount of water it takes to cover one acre to a depth of one foot.

#### California Reservoir Storage, Percent of Normal, 1977 and 2010-14



### California Reservoirs, Recharge and Withdrawal Million Acre-Feet and Percent of Average

	<b>Recharge</b>	<u>Withd</u>	<u>Withdrawal</u>	
2010-11	12.47 (151%)	2011	8.78 (107%)	
2011-12	5.79 (70%)	2012	11.54 (140%)	
2012-13	6.52 (79%)	2013	11.49 (139%)	
2013-14	4.17 (51%)	2014	TBD	
Avg.	8.24	Avg.	8.24	

**Notes:** Recharge and withdrawal values are based on end-ofmonth statistics, not daily readings. Through Sep. 30, 2014, withdrawal has totaled 6.74 million acre-feet, 92% of average.

## California Agriculture, 2014 v. 2013

[acres unless otherwise noted; as of Oct. 20, 2014]

<u>Parameter</u>	<u>2014</u>	<u>2013</u>	Drop
Total Field Crops Planted	3,580,000	4,009,000	10.7%
Wheat Harvested	215,000	394,000	45.4%
Barley Harvested	25,000	42,000	40.5%
Corn Harvested	110,000	180,000	38.9%
Oats Harvested	10,000	15,000	33.3%
Sunflower Harvested	42,400	58,000	26.9%
Rice Harvested	428,000	561,000	23.7%
Cotton Harvested	213,000	278,000	23.4%

## **California Production, Selected Crops**

<u>Crop</u>	<u>2013</u>	<u>2014</u>	<b>Reduction</b>
Corn	35.1*	17.6	50%
Rice	47.6*	36.4	24%
Cotton	943*	730	23%
Hay	1.836 *	1.496	19%

\* Respective production units, by crop, are: **corn**, million bushels; **cotton**, thousand 480-pound bales; **rice**, million hundredweight (cwt); and **hay (not including alfalfa)**, million tons.

**Source:** U.S. Crop Production Highlights, October 10, 2014: http://usda.mannlib.cornell.edu/usda/current/CropProd/CropProd-10-10-2014.pdf

# California Agricultural Production Statistics, 2012

- The state's 80,500 farms and ranches received a record \$44.7 billion for their output in 2012, up from \$43.3 billion in 2011 and \$37.9 billion in 2010.
- California is the number one state in cash farm receipts with 11.3 percent of the U.S. total.
- The state accounted for 15 percent of domestic receipts for crops and 7.1 percent of the U.S. revenue for livestock and livestock products.

**Source:** California Department of Agriculture: http://www.cdfa.ca.gov/Statistics/

# California Agricultural Production Statistics, 2012

- Milk: \$6.90 billion
- Grapes: \$4.45 billion
- Almonds: \$4.35 billion
- Nursery plants:

\$3.54 billion

• Cattle, Calves:

\$3.30 billion

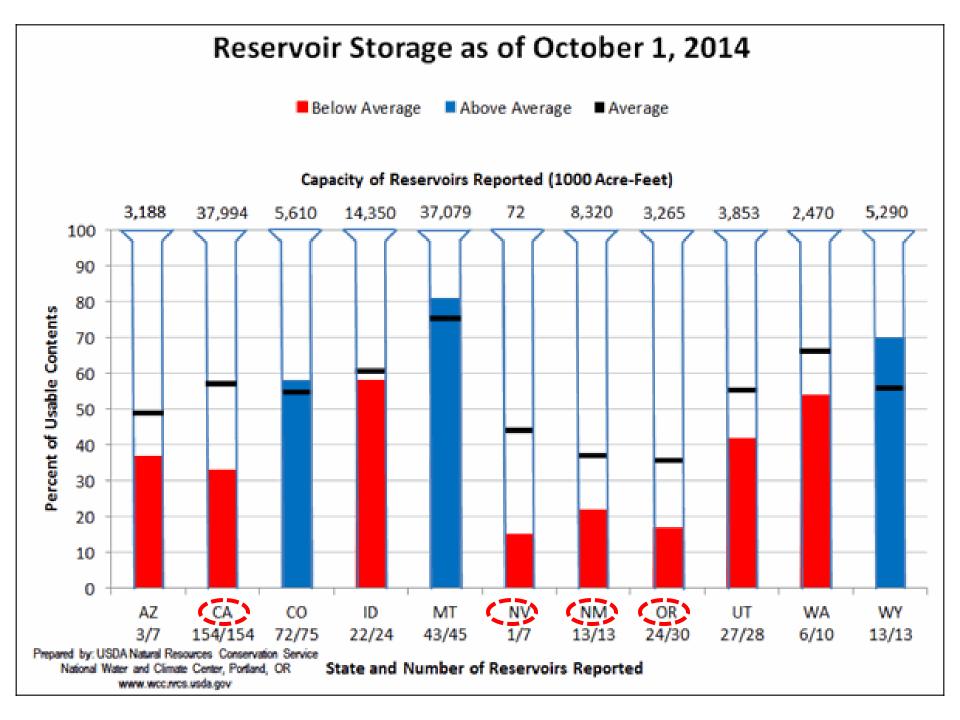
• Strawberries:

\$1.94 billion

- Lettuce: \$1.45 billion
- Walnuts: \$1.35 billion
- Hay: \$1.25 billion
- Tomatoes:
  - \$1.17 billion

Note: These ten commodities accounted for approximately two-thirds of California's agricultural cash receipts in 2012.

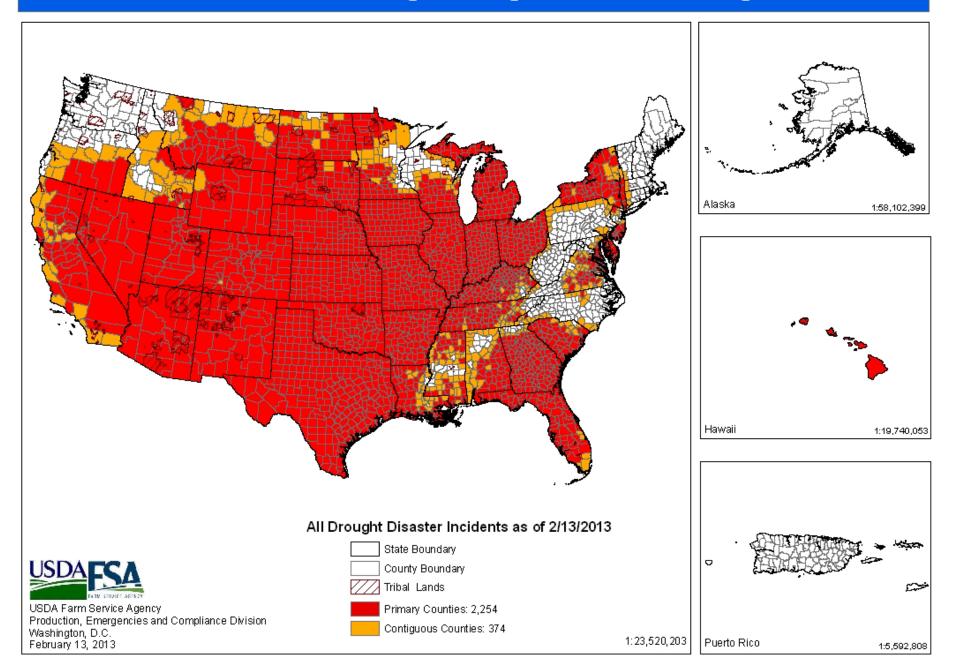
Source: California Department of Food and Agriculture



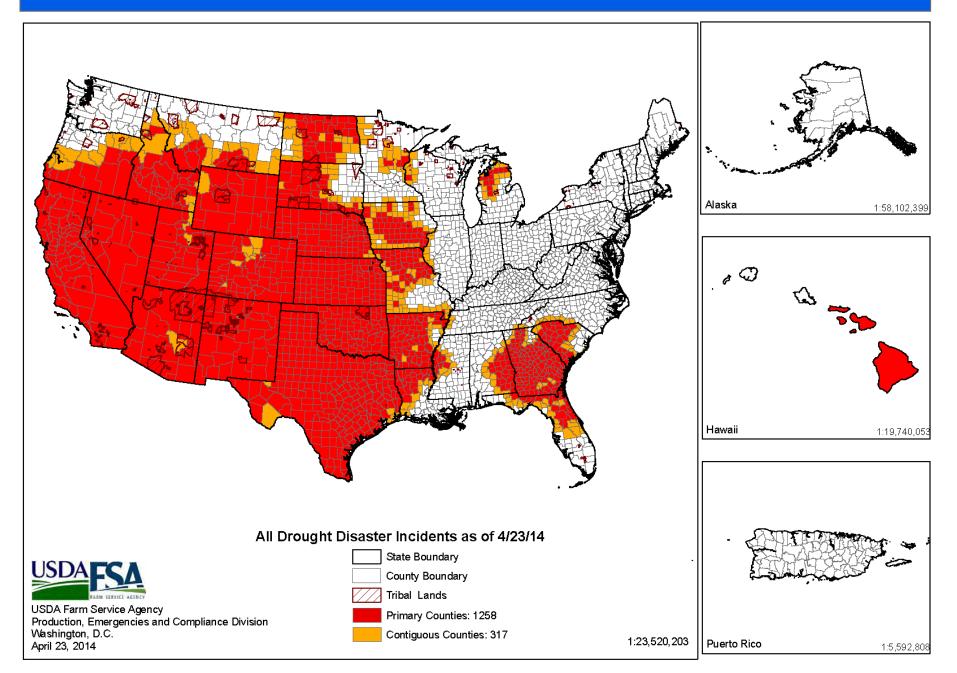
# **"Fast Track" Secretarial Disaster Designation Process**

- Streamlines the USDA Secretarial designation process by eliminating steps from the current process;
- A reduced interest rate for emergency loans that effectively lowers the current rate from 3.75 percent to 2.25 percent;
- Preserves the ability of a state governor or Indian Tribal Council to request a Secretarial Disaster Designation;
- Removes the requirement that a request for a disaster designation be initiated only by a state governor or Indian Tribal Council;
- Further streamlines the disaster designation process for severe drought occurrences by utilizing the U.S. Drought Monitor as a tool to automatically trigger disaster areas with no further documentation;
- Does not impose any new requirements on producers or the public.
- In 2012, led to drought disaster declarations in 2,254 primary counties in 39 states.

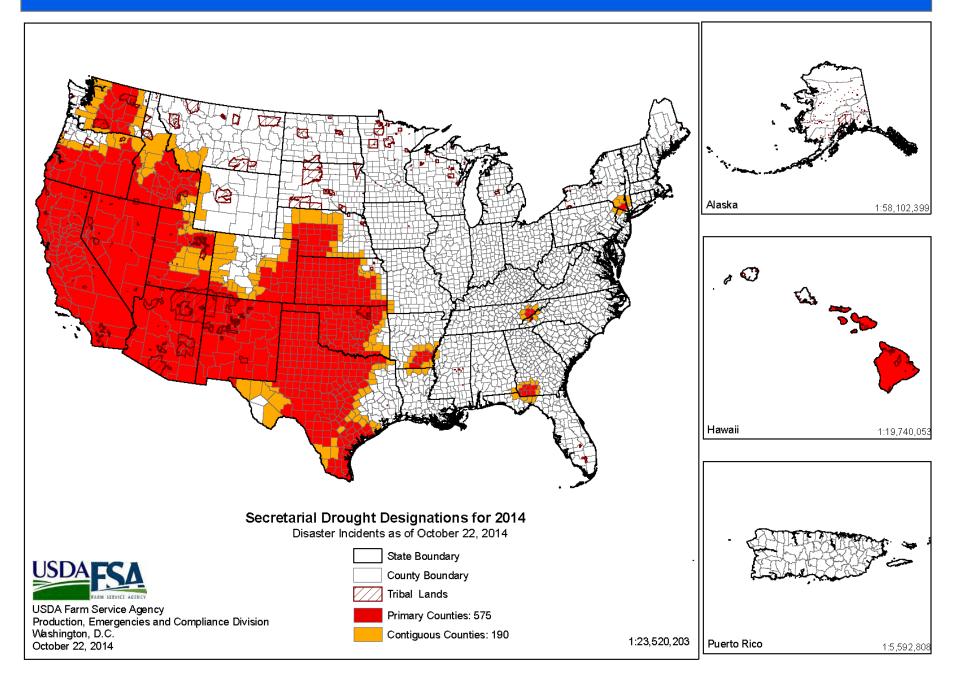
#### 2012 Secretarial Drought Designations - All Drought



#### 2013 Secretarial Drought Designations - All Drought



#### 2014 Secretarial Drought Designations - All Drought



- U.S. Drought Monitor Usage by FSA
- Agricultural Act of 2014 ("Farm Bill") re-authorizes the Livestock Forage Disaster Program (LFP)
  - Grazing loss because of drought on owned or leased grazing land or pastureland that is physically located in a county experiencing:
    - D2 intensity for at least 8 consecutive weeks during normal grazing period will be eligible to receive an amount equal to 1 monthly payment
    - D3 intensity during the normal grazing period will be eligible to receive an amount equal to 3 monthly payments
    - D3 intensity for at least 4 weeks or a D4 intensity any time during the grazing period will be eligible to receive an amount equal to 4 monthly payments

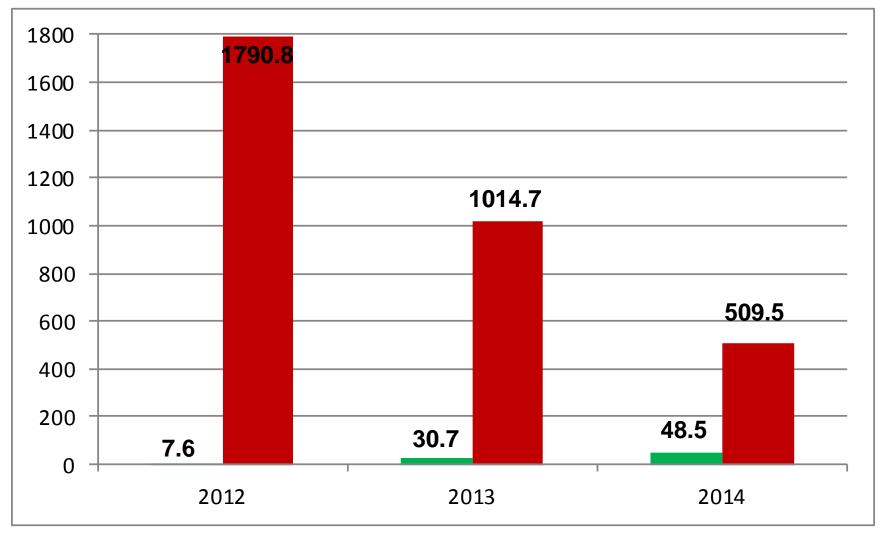




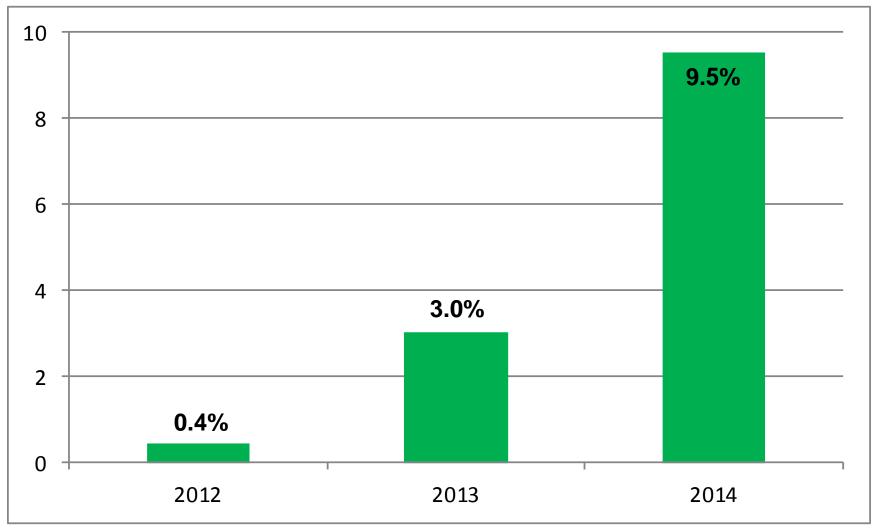
## **Retroactive LFP Payouts**

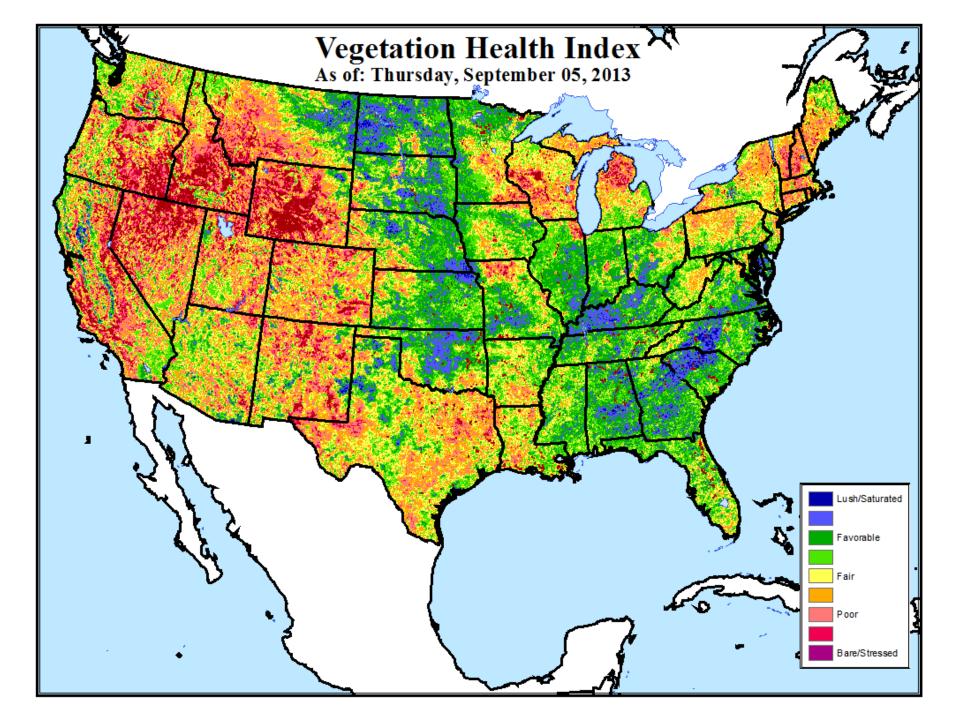
The 2014 Farm Bill contains permanent livestock disaster programs including the Livestock Forage Disaster Program, which will help producers in California and other areas recover from the drought. At President Obama's direction, USDA is making implementation of the disaster programs a top priority and plans to have the programs available for sign up in 60 days. **Producers will be able to sign up for the livestock disaster** programs for losses not only for 2014 but for losses they experienced in 2012 and 2013. While these livestock programs took over a year to get assistance out the door under the last Farm Bill, USDA has committed to cut that time by more than 80 percent and begin sign-up in April. California alone could potentially receive up to \$100 million for 2014 losses and up to \$50 million for previous years.

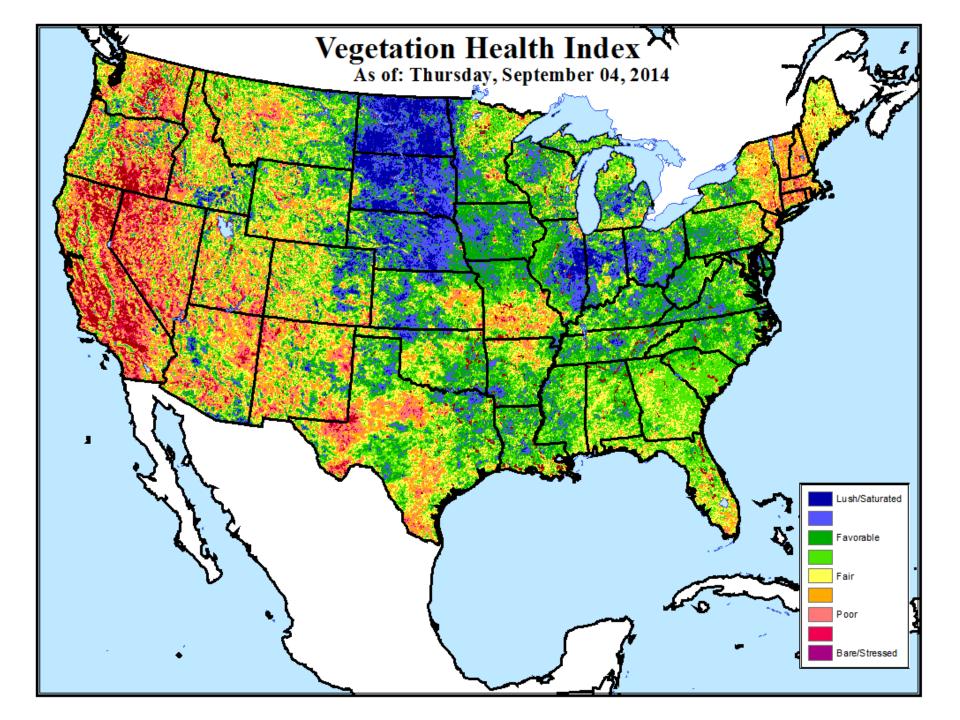
## LFP Payouts, 2012-14, U.S. and California Million Dollars



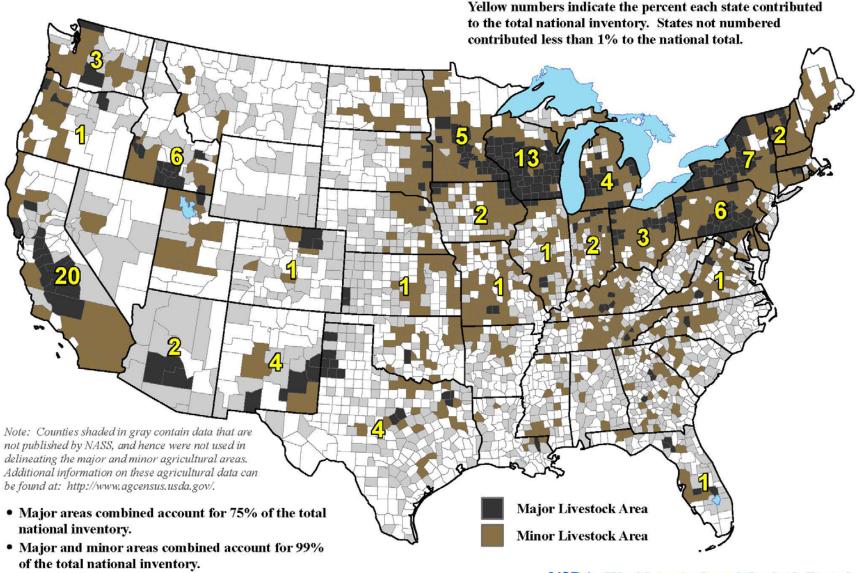
## California LFP Payouts, 2012-14 Percent of U.S. Total







#### **United States: Milk Cows**



 Major and minor areas and state inventory percentages are derived from NASS 2007 Census of Agriculture data. USDA World Agricultural Outlook Board Joint Agricultural Weather Facility

http://www.usda.gov/oce/weather/pubs/Other/MWCACP/index.htm

#### **United States: Sheep & Lambs**

Yellow numbers indicate the percent each state contributed to the total national inventory. States not numbered contributed less than 1% to the national total.

Note: Counties shaded in gray contain data that are not published by NASS, and hence were not used in delineating the major and minor agricultural areas. Additional information on these agricultural data can be found at: http://www.agcensus.usda.gov/.

- Major areas combined account for 75% of the total national inventory.
- Major and minor areas combined account for 99% of the total national inventory.
- Major and minor areas and state inventory percentages are derived from NASS 2007 Census of Agriculture data.

USDA World Agricultural Outlook Board Joint Agricultural Weather Facility

Major Livestock Area

Minor Livestock Area

http://www.usda.gov/oce/weather/pubs/Other/MWCACP/index.htm

#### **United States: Cattle**

Yellow numbers indicate the percent each state contributed to the total national inventory. States not numbered contributed less than 1% to the national total.

Note: Counties shaded in gray contain data that are not published by NASS, and hence were not used in delineating the major and minor agricultural areas. Additional information on these agricultural data can be found at: http://www.agcensus.usda.gov/.

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- Major and minor areas combined account for 99% of the total national inventory.
- Major and minor areas and state inventory percentages are derived from NASS 2007 Census of Agriculture data.

USDA World Agricultural Outlook Board Joint Agricultural Weather Facility

Major Livestock Area

Minor Livestock Area

http://www.usda.gov/oce/weather/pubs/Other/MWCACP/index.htm

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#### United States: Alfalfa Hay

Yellow numbers indicate the percent each state contributed to the total national acreage. States not numbered contributed less than 1% to the national total. 10 3 2 Note: Counties shaded in gray contain data that are not published by NASS, and hence were not used in delineating the major and minor agricultural areas. Additional information on these agricultural data can be found at: http://www.agcensus.usda.gov/. Major Hay Area • Major areas combined account for 75% of the total national acreage. Minor Hay Area • Major and minor areas combined account for 99% of the total national acreage.

• Major and minor areas and state acreage percentages are derived from NASS 2007 Census of Agriculture data.

USDA World Agricultural Outlook Board Joint Agricultural Weather Facility

http://www.usda.gov/oce/weather/pubs/Other/MWCACP/index.htm

#### **United States: Hay**

2

Yellow numbers indicate the percent each state contributed to the total national acreage. States not numbered contributed less than 1% to the national total.

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USDA World Agricultural Outlook Board Joint Agricultural Weather Facility

http://www.usda.gov/oce/weather/pubs/Other/MWCACP/index.htm

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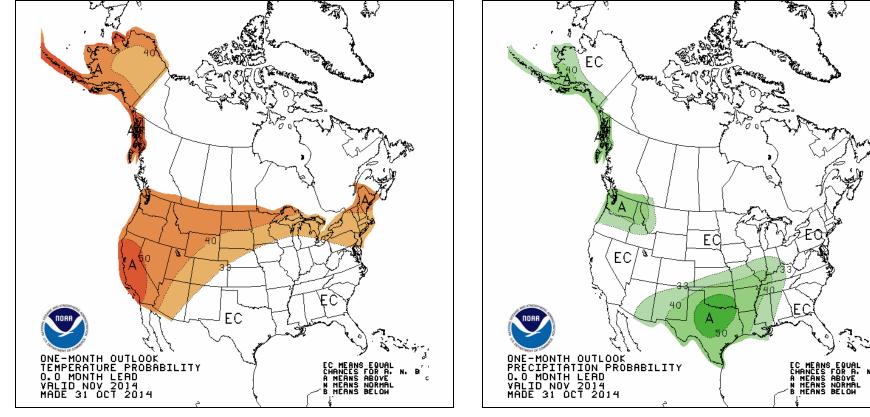
Major Hay Area

Minor Hay Area

2

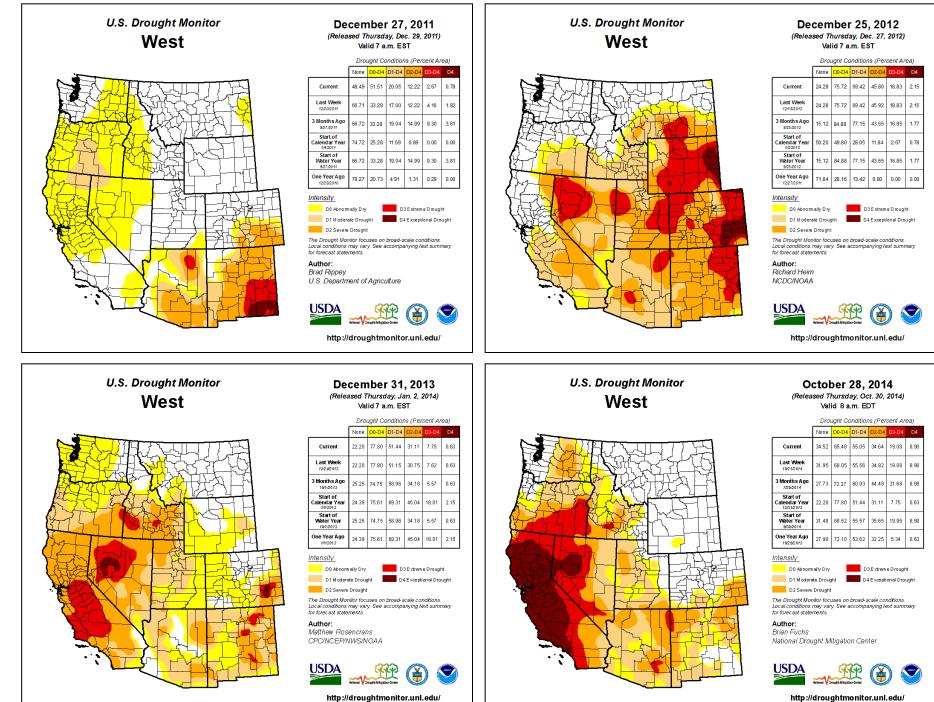
## Thank you!

- Contact info
  - e-mail: <a href="mailto:brippey@oce.usda.gov">brippey@oce.usda.gov</a>
  - phone: (202) 720-2397



Nov. 2014 Temp Outlook

### Nov. 2014 Precip Outlook



http://droughtmonitor.unl.edu/

- U.S. Drought Monitor Usage by FSA
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    - D3 intensity for at least 4 weeks or a D4 intensity any time during the grazing period will be eligible to receive an amount equal to 3 monthly payments



- 2008 "Farm Bill" Livestock Forage Disaster Program (LFP) Payouts (financial assistance to producers who suffered grazing losses due to drought or fire on or after January 1, 2008, and before October 1, 2011, during the calendar year in which the loss occurs):
  - 2008 calendar year:
  - 2009 calendar year:
  - 2010 calendar year:
  - 2011 calendar year:
  - LFP total, 2008-11:

- \$165,540,837
- \$ 98,739,950
- \$ 33,334,458
- \$180,950,088
- \$478,565,333

