

# Impacts and Responses to the Drought

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# Outline: Scope Of Impacts

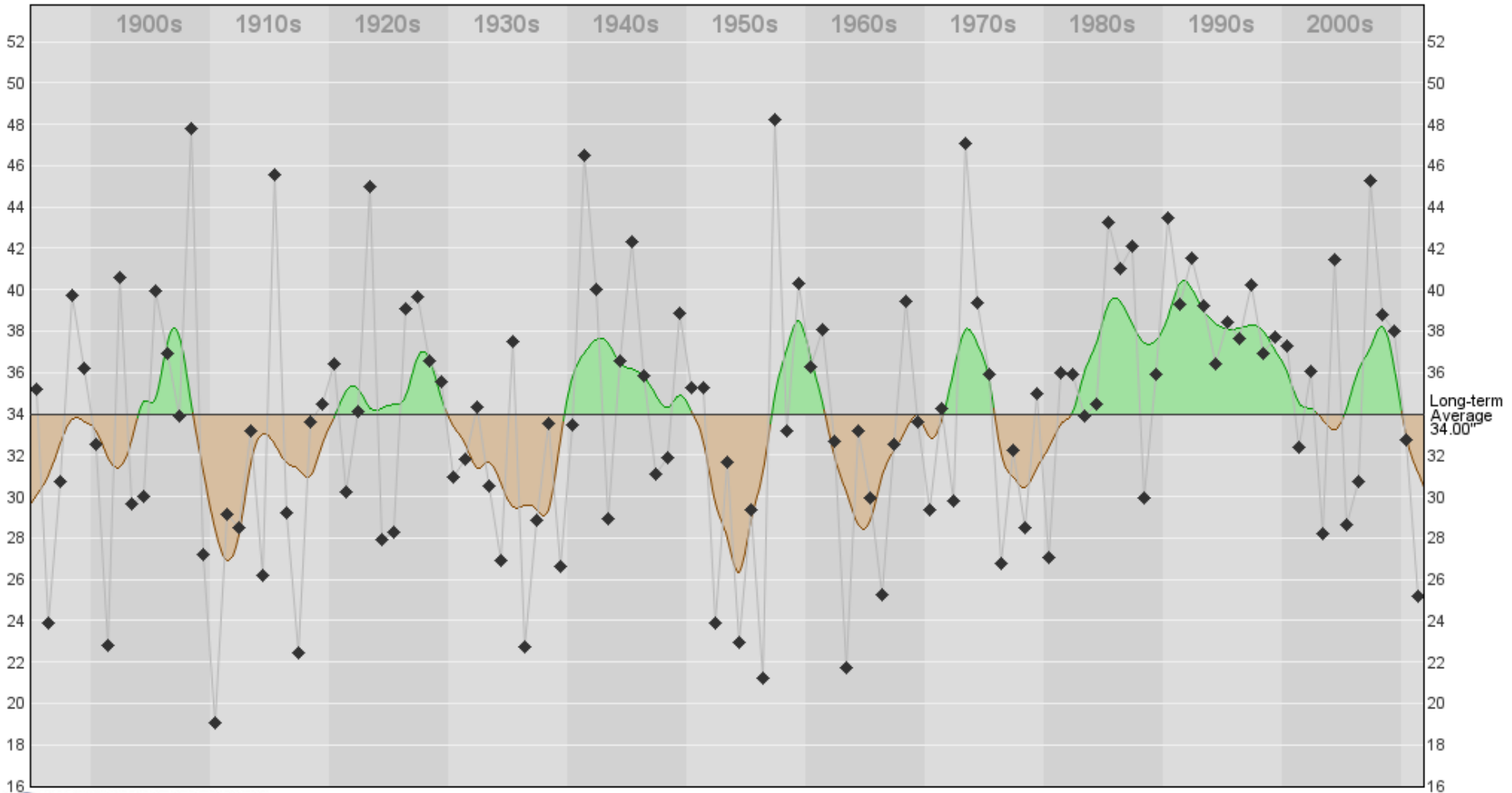
**Historical Perspective**

**2012 Loss Estimates**

**Program Responses:**

- **Beef Extension**
- **Water Demand/Conservation for Local Governments**
- **Policy Education**

# Historical Perspective



**OKLAHOMA CLIMATOLOGICAL SURVEY** Annual Precipitation History with 5-year Tendencies  
Oklahoma Statewide: 1895-2011

Wetter periods  
Drier periods  
Annual precipitation value



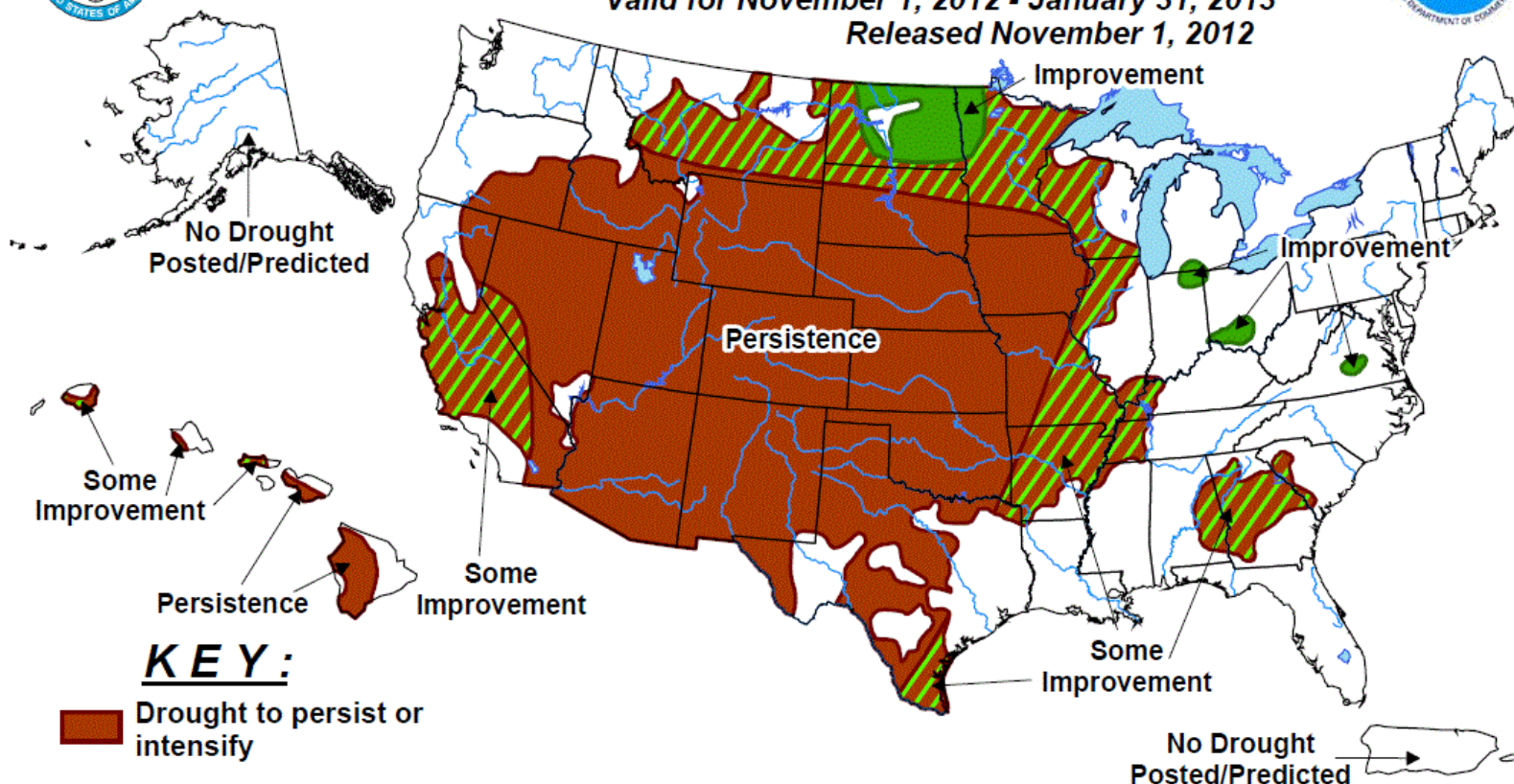
# Precipitation Forecast



## U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for November 1, 2012 - January 31, 2013

Released November 1, 2012



### KEY:

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.



# 2012 Loss Estimates

## Results

Commodity	Loss Estimate
Crops (Hay, Alfalfa, Soybeans, Cotton, Grain Sorghum)	\$239,299,520
Livestock (Lost pasture production, fewer winter stockers)	\$157,109,000
Wildfire Property Losses	\$27,299,000
Municipal Costs (e.g., removal/replacement landscaping)	\$2,418,000
<b>Total Loss</b>	<b>\$426,125,520</b>



# Extension Responses

- **Beef Extension Drought Resources**
  - [http://www.beefextension.com/new site 2/Drought.html](http://www.beefextension.com/new_site_2/Drought.html)
  - Financing Herd Rebuilding
- **Water Conservation Preferences**
- **Long-term Policies**

# Beef Extension

## Drought Resources

**Maps:** Current drought map, forecasts, rainfall, cattle stress projections

**Forages:** information on testing, toxicity concerns, alternatives, purchasing guidelines

**Hay listings:** links to hay sources

**Supplementation:** information about cattle nutrition

**Management:** information/materials on how to respond to drought-related issues

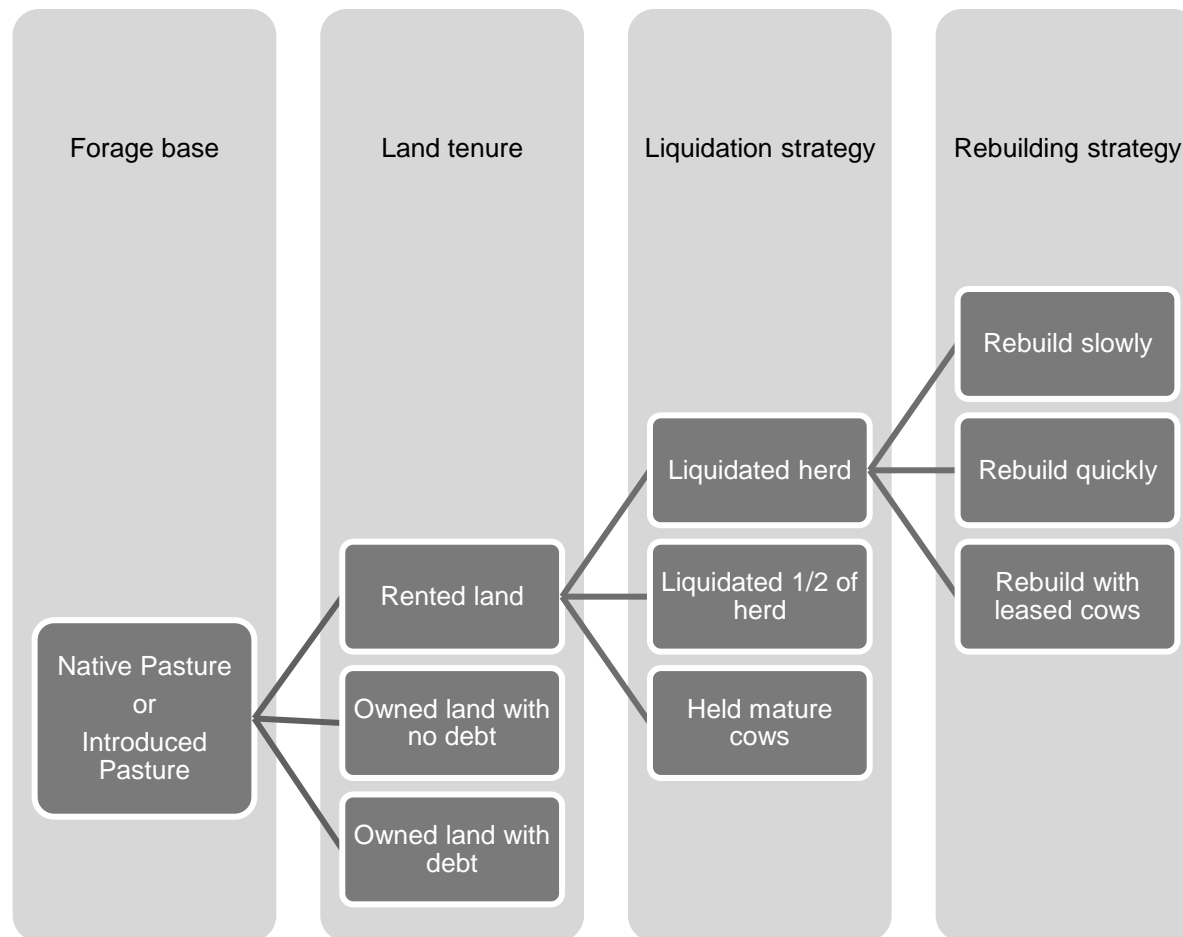
**Financial:** information and web-based tools to help farmers/ranchers make decisions regarding repurchasing, culling, cash flow under alternative management

**Policy:** information on burn bans, CRP modifications, natural disaster declarations, livestock assistance programs



# Financing Herd Rebuilding

- Scenario based analysis





# Financing Herd Rebuilding

- **Land Tenure:**

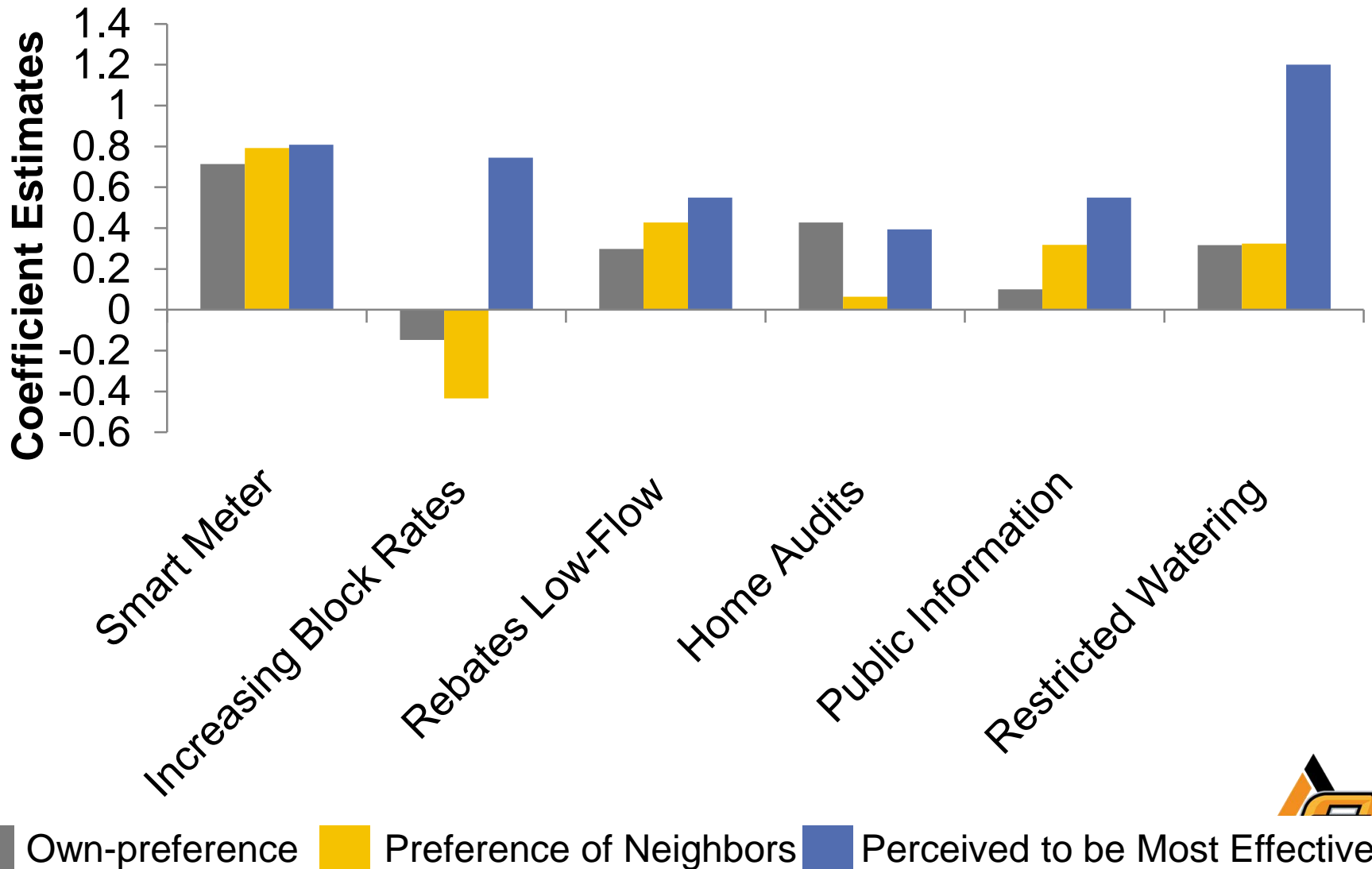
- Producers with significant land debt will face severe cash flow problems in rebuilding unless substantial off-farm income is available;
- Producers without land debt are in good financial position, as they possess the borrowing capacity needed to finance expensive breeding female purchases;
- Producers using leased land are likely to have less financial stress than those with land debt.

# Financing Herd Rebuilding

- **Rebuilding Strategy:**

- Leasing cows minimizes borrowing but slows the rebuilding of an owned cow herd by several years;
- Using stockers, another slow rebuilding strategy, was feasible because the profitable stocker enterprise provided cash flow to self-finance heifer retention and some purchases of cow/calf pairs, as well as service land debt;
- Rebuilding quickly through the purchase of cow/calf pair provided initial cash flow through calf sales in the first year, but financing costs can become burdensome in the long-run; this strategy yielded the highest net cash flow in 2015.

# Water Conservation Preferences



# Policy Education

## Framing the Drought Issue:

Because of extended drought in the OK-TX region, and its expansion to much of the rest of the country, there is growing concern that US agriculture, consumers of food, feed, fiber and biofuel, and rural economies face adverse impacts that may suggest preventative and mitigation public intervention of a short term or long term nature.

# Drought Management Policy Options & Consequences

	Status Quo (limited federal aid)	State & Federal Limited Programs	State & Federal Major Programs	No Public Aid; Private Market Only
DISCUSSION	Education/research limited; Crop and livestock insurance; Limited state aid	Education/research limited; State aid to willing owners; Implement state programs w/federal coordination	Education/research expanded; Expand state & federal programs; Expand federally -subsidized insurance	De-fund gov't programs; Private insurance; volatile production & land values
BENEFITS	Limited gov't expenditure; Some financial certainty for producers	Prevention could reduce future losses	Reduced cost to land-owners and extreme fire risk; More market certainty	No cost to gov't; Private market insurance
COSTS	Federal budget exposure high (\$7-10 bil for crop ins); Producers' expenses vary; Wildfires /extreme fire risk; Rising food/feed costs	State expenditures up Limits landowner expense	Increased expense to taxpayers; Delays enterprise transition if climate change long term	Hi cost to landowners; Uncertainty grows w/r/t commodity prices, crop & livestock insurance, wildfire risk, etc.; Prices likely to rise

# Questions?

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