

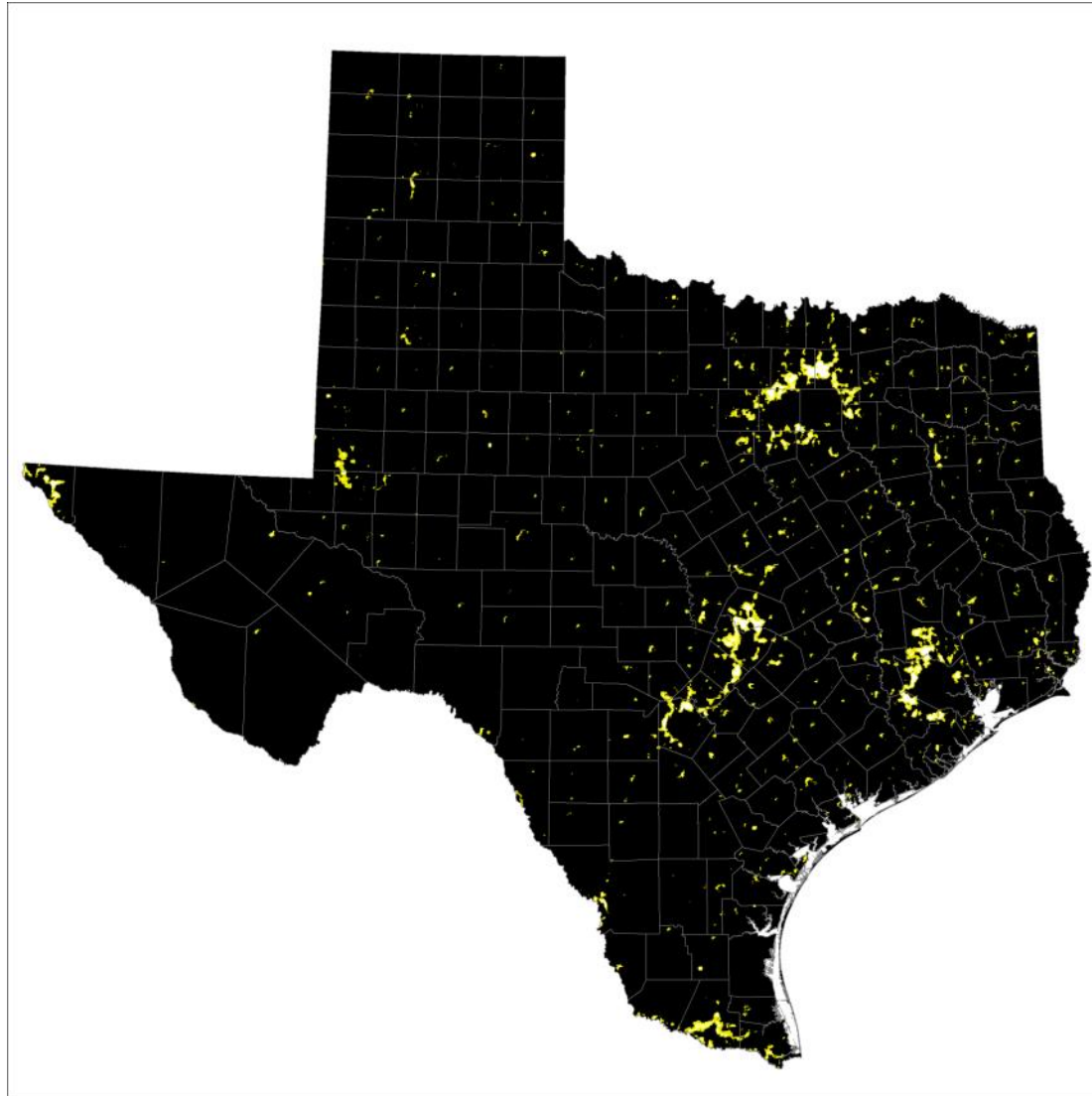
# Texas Land & Water Trends

Realizing the Public Benefit of Rural Working  
Lands

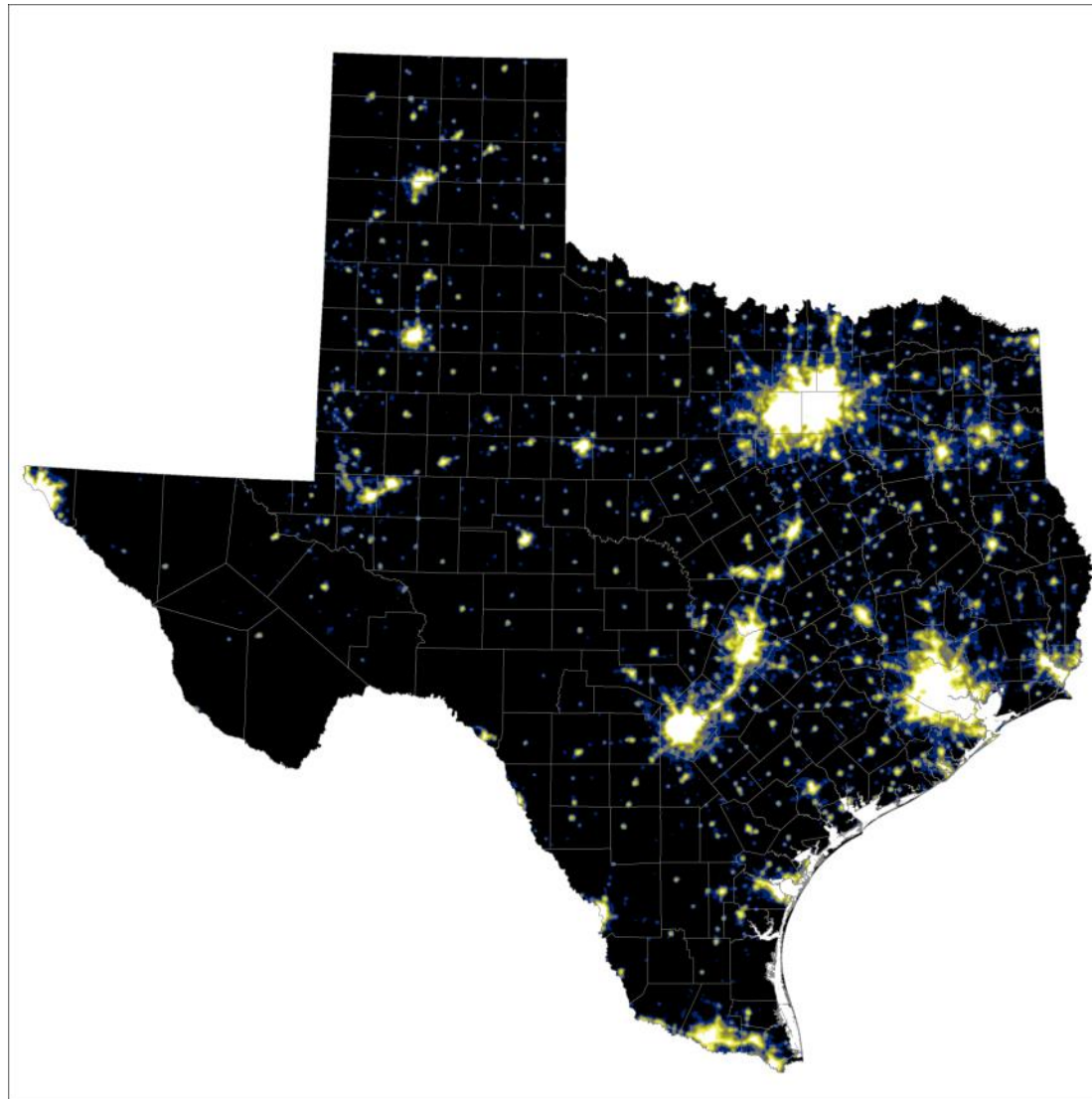
Todd Snelgrove  
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# Texas Land Trends



# Texas Land Trends



## 2000-2010

20.6% Population Growth  
Increase of 4.3 Million to  
25.1 million

## Forecasts for 2020

29.6 Million

## Forecast for 2060

46.3 million (almost  
double from 2010)

# Texas Land Trends

## Growing States, 2000-2010

	2000 Population*	2010 Population*	Numerical Change 2000-2010	Percent Change 2000-2010
United States	281,421,906	308,745,538	27,323,632	9.7%
<b>Texas</b>	<b>20,851,820</b>	<b>25,145,561</b>	<b>4,293,741</b>	<b>20.6%</b>
California	33,871,648	37,253,956	3,382,308	10.0%
Florida	15,982,378	18,801,310	2,818,932	17.6%
Georgia	8,186,453	9,687,653	1,501,200	18.3%
North Carolina	8,049,313	9,535,483	1,486,170	18.5%
Arizona	5,130,632	6,392,017	1,261,385	24.6%

15.7% of numerical change in U.S.

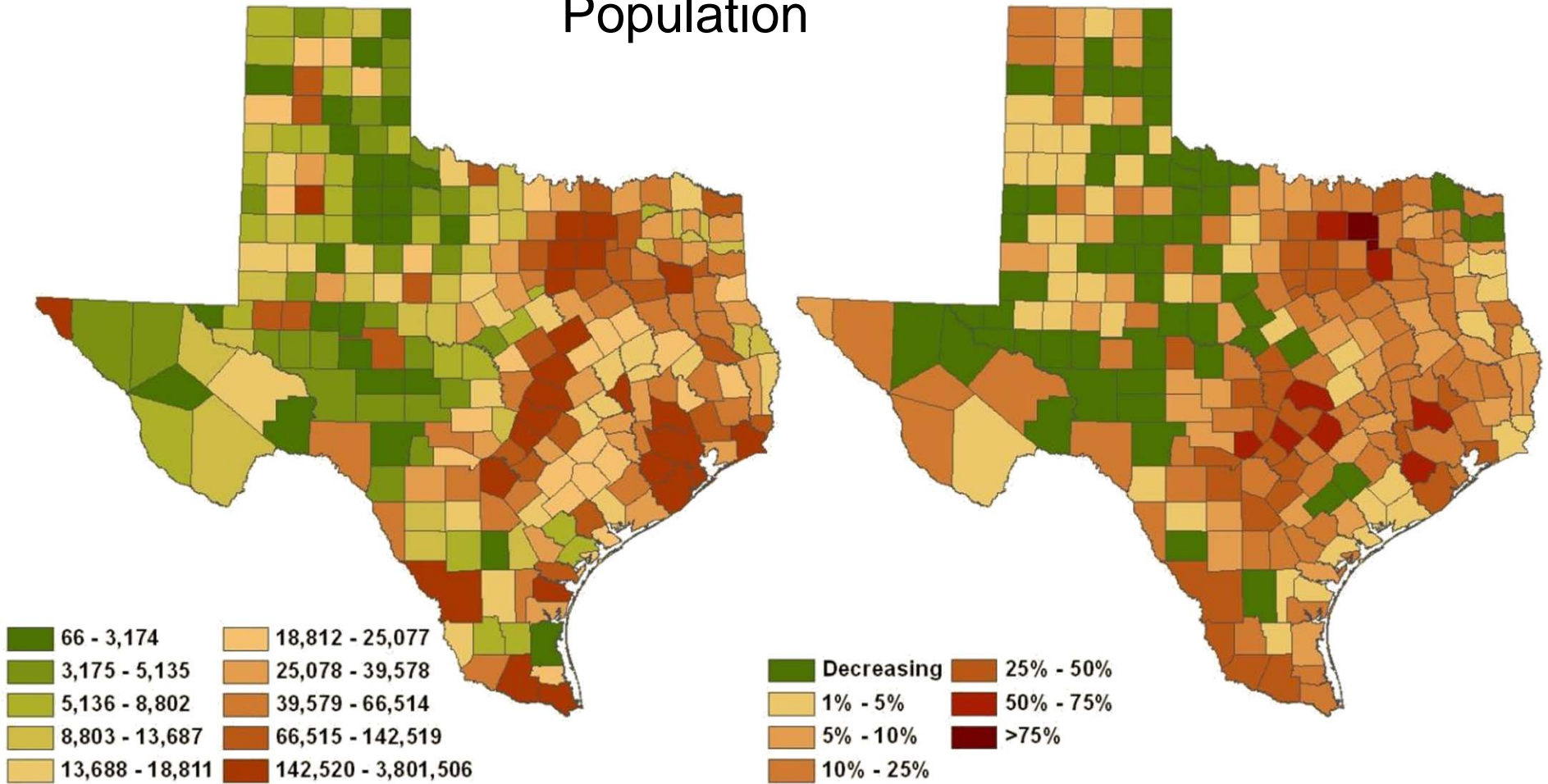


# Texas Land Trends

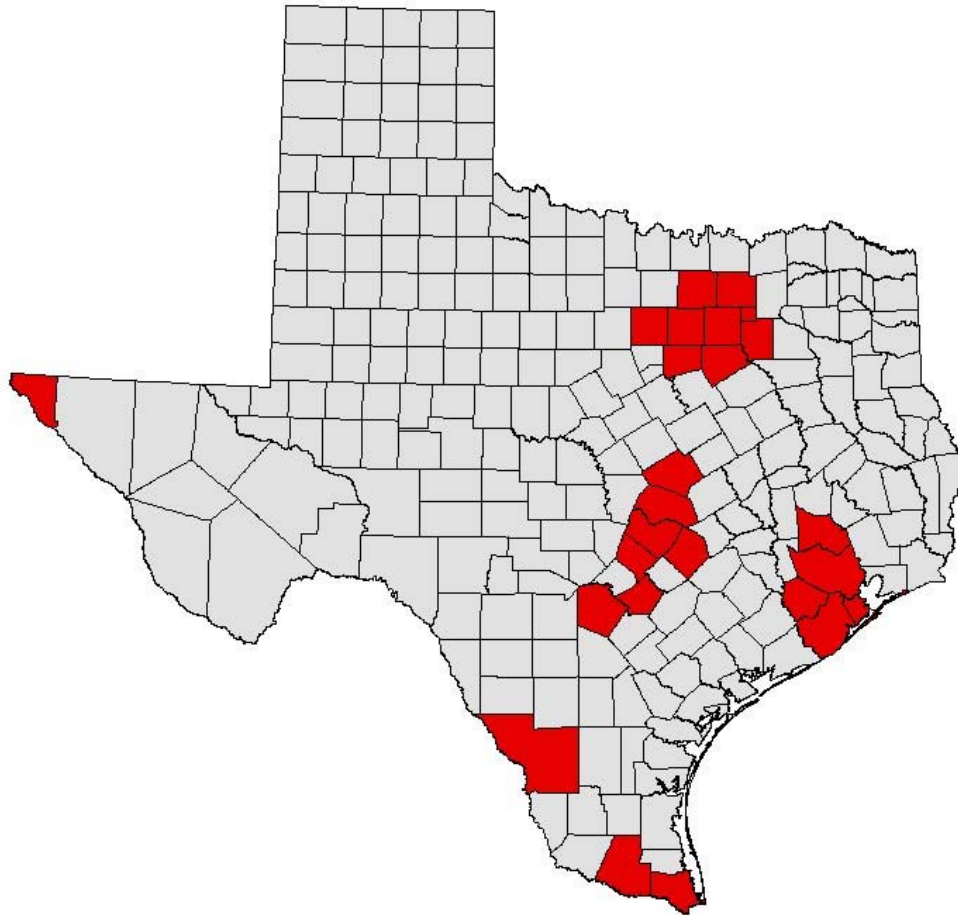
2007

Population

% Change 1997-2007



# Texas Land Trends



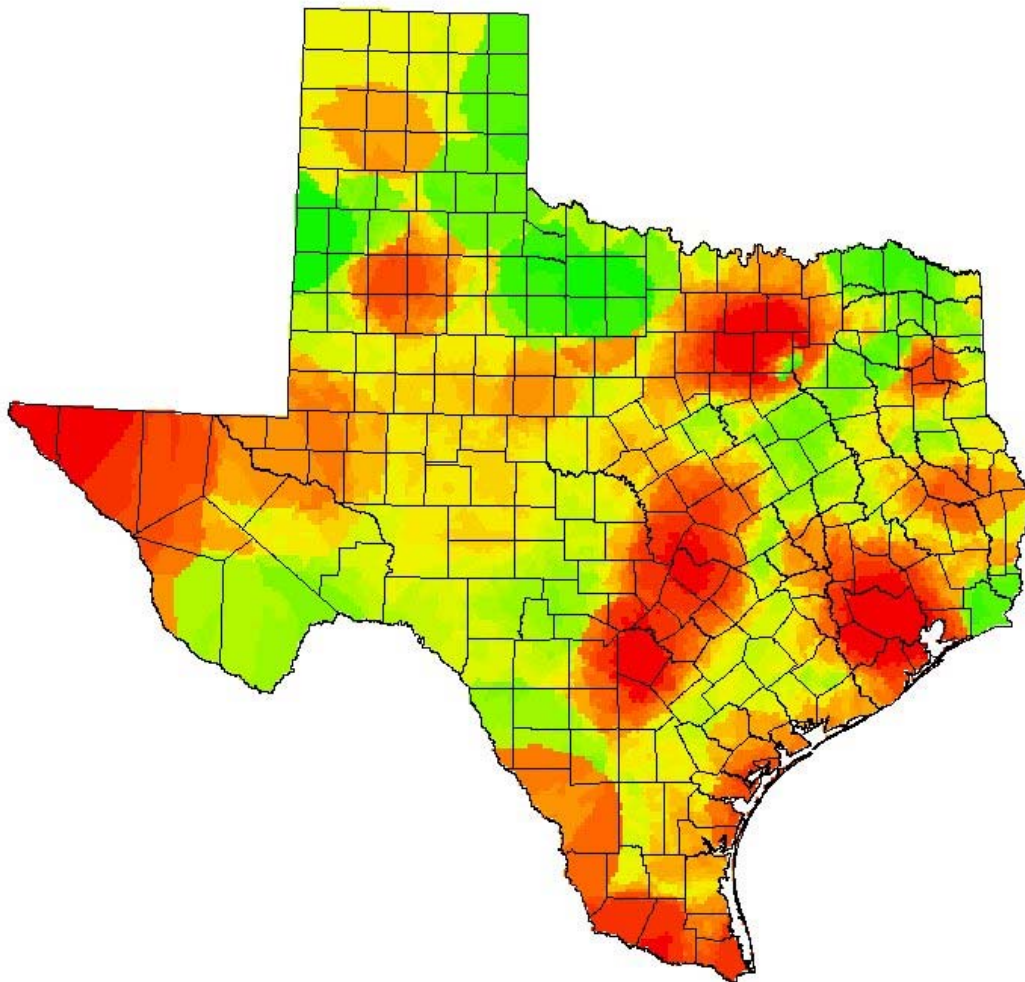
1997-2007

85% of Population Growth in  
25 High-growth Counties.

# Texas Land Trends

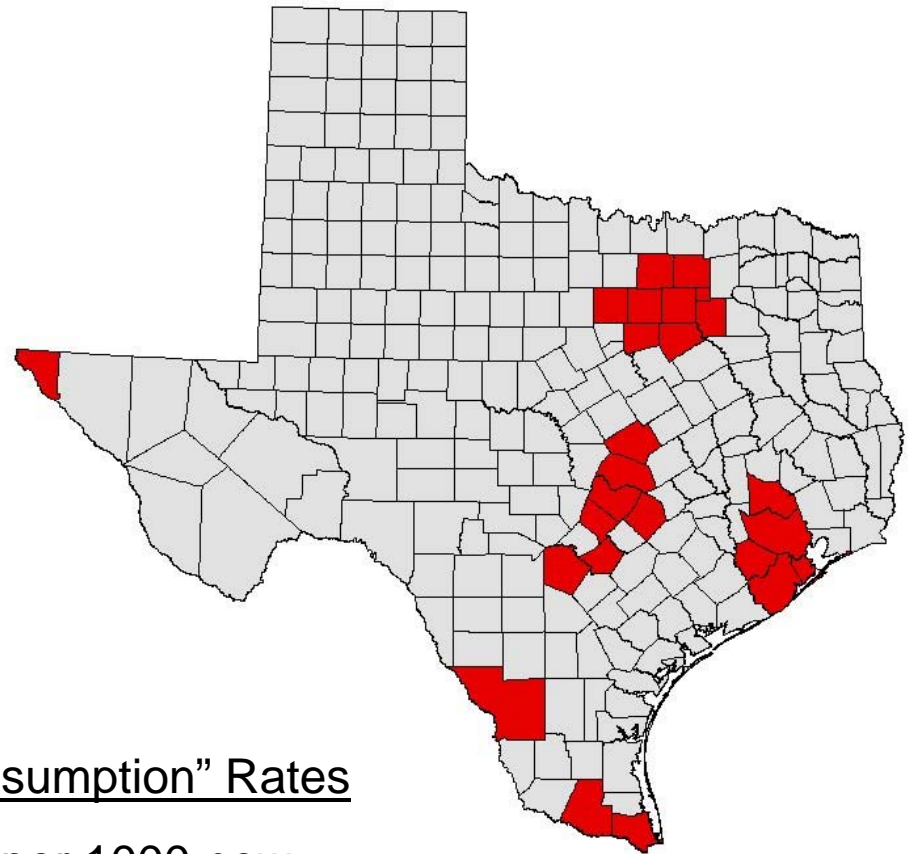
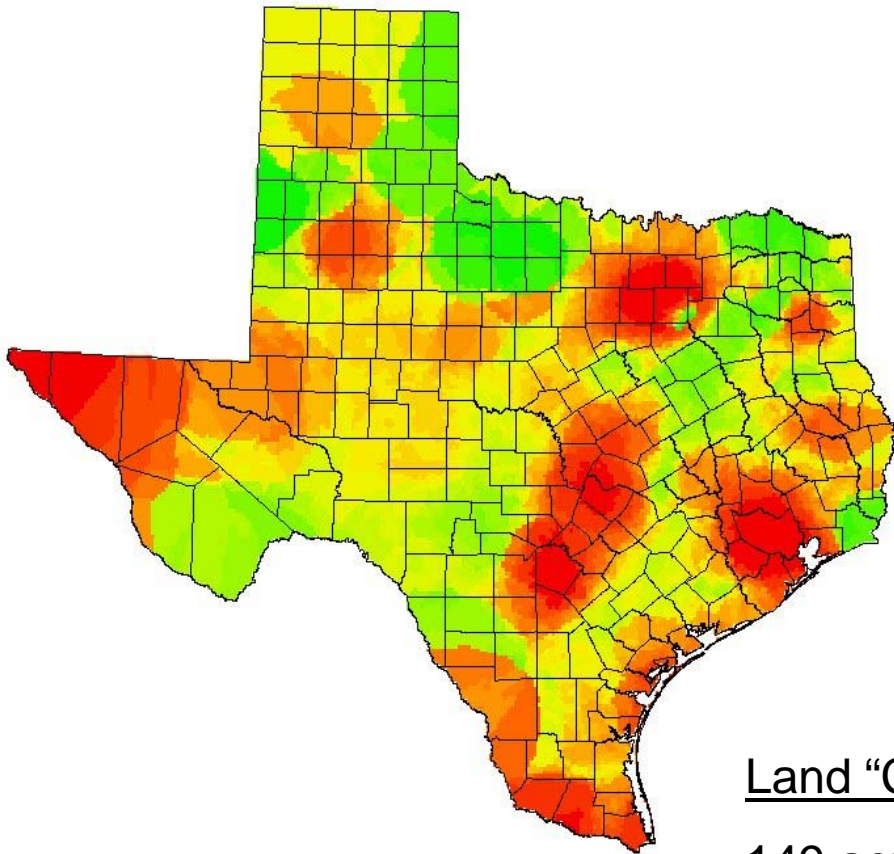
## Loss of Agricultural Lands 1997-2007

- 2.1 Million Acres Converted
- 40% of conversion in the top 25 high-growth counties.



(red indicates high conversion rates)

# Texas Land Trends

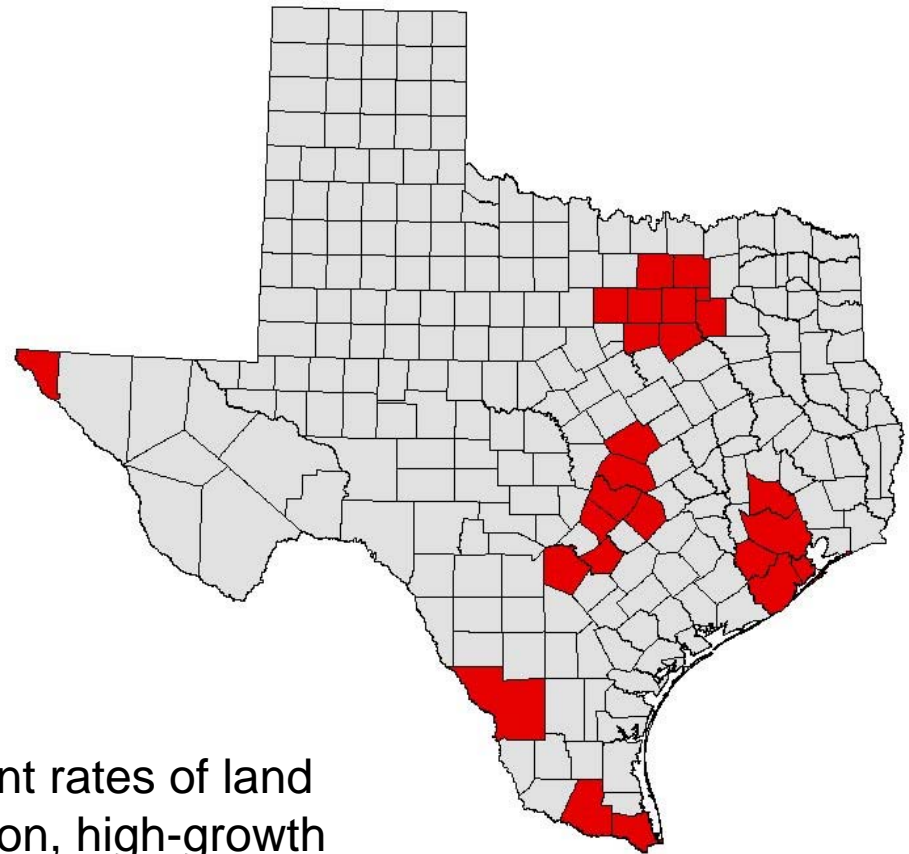
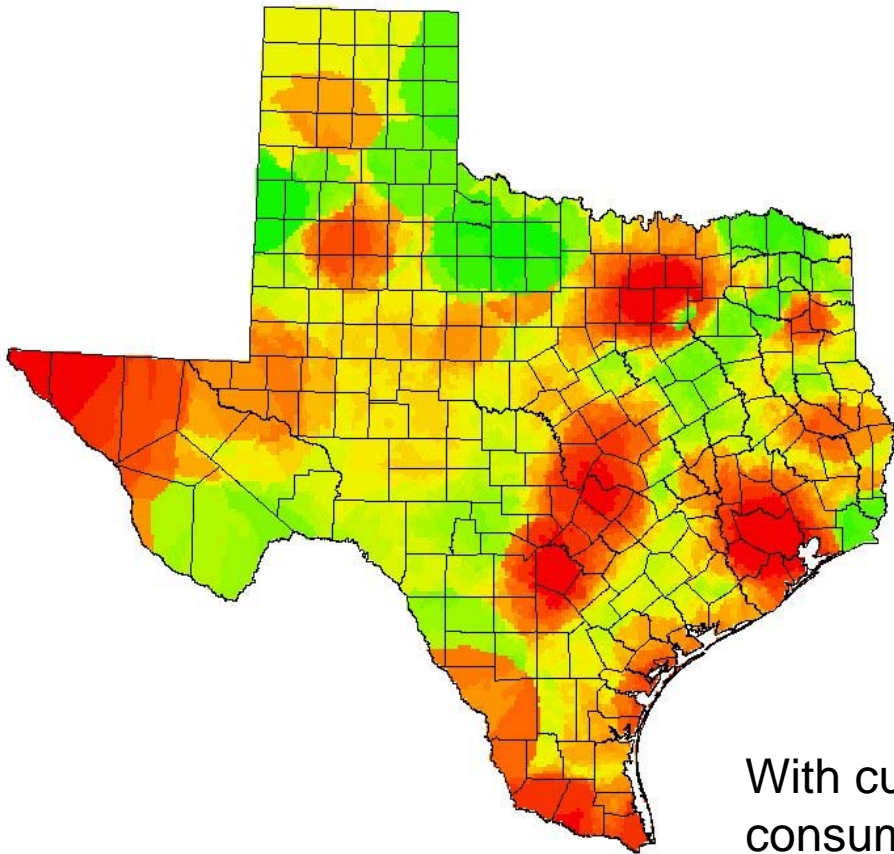


## Land "Consumption" Rates

149 acres per 1000 new residents.



# Texas Land Trends

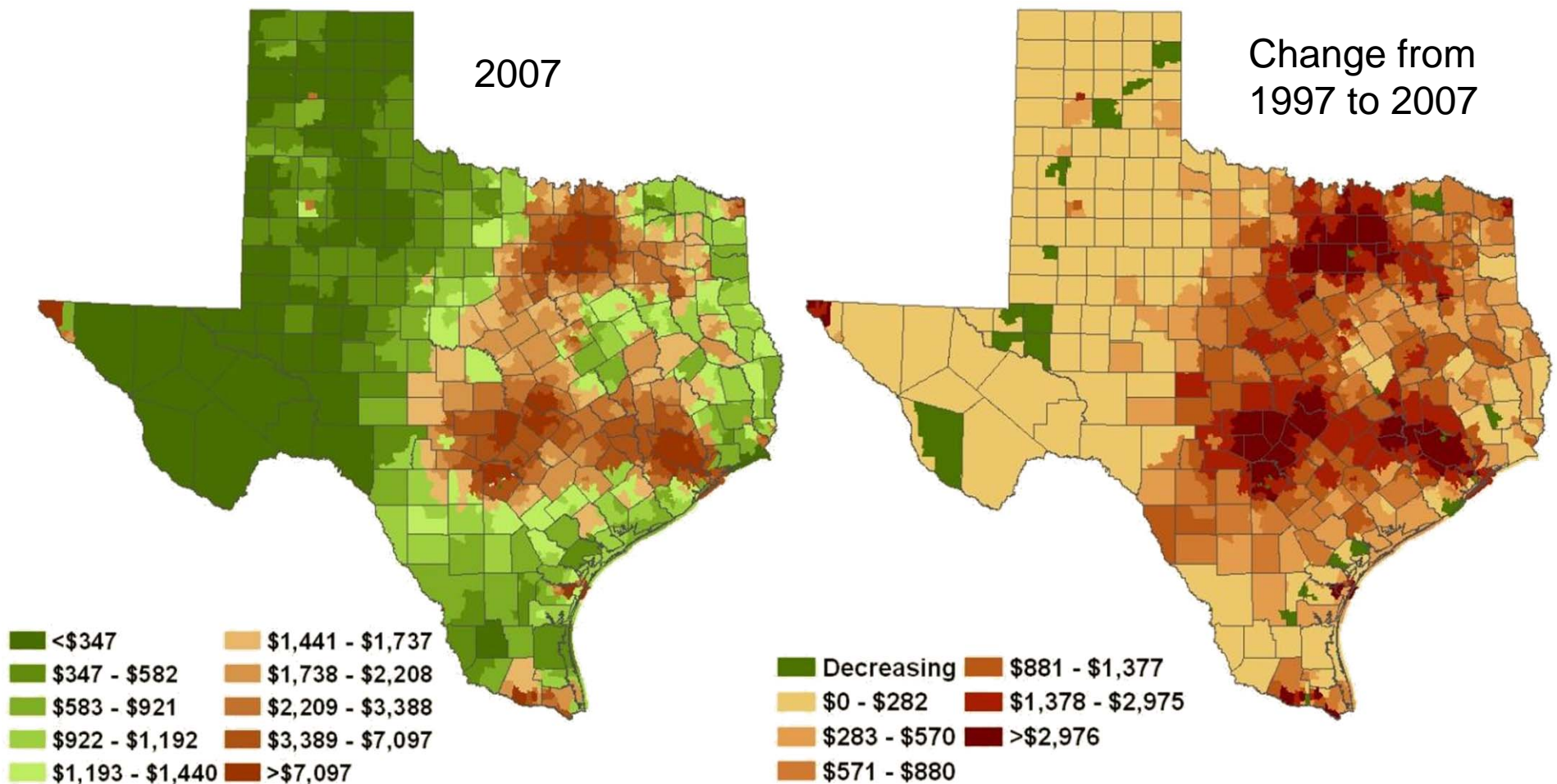


With current rates of land consumption, high-growth areas will consume another 1.4 million acres by 2020.

# Rural Land Values

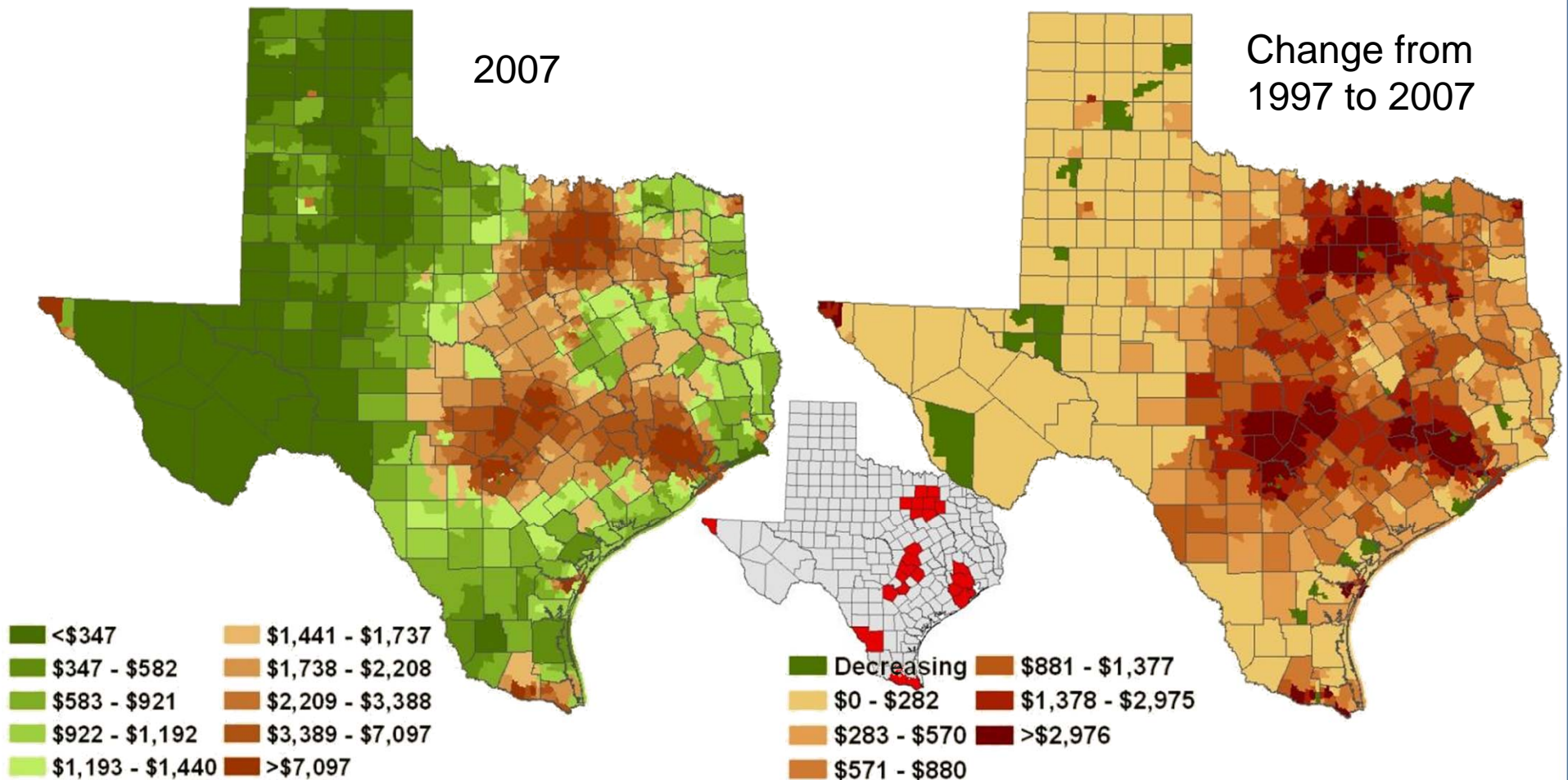
# Texas Land Trends

## Rural Land Values



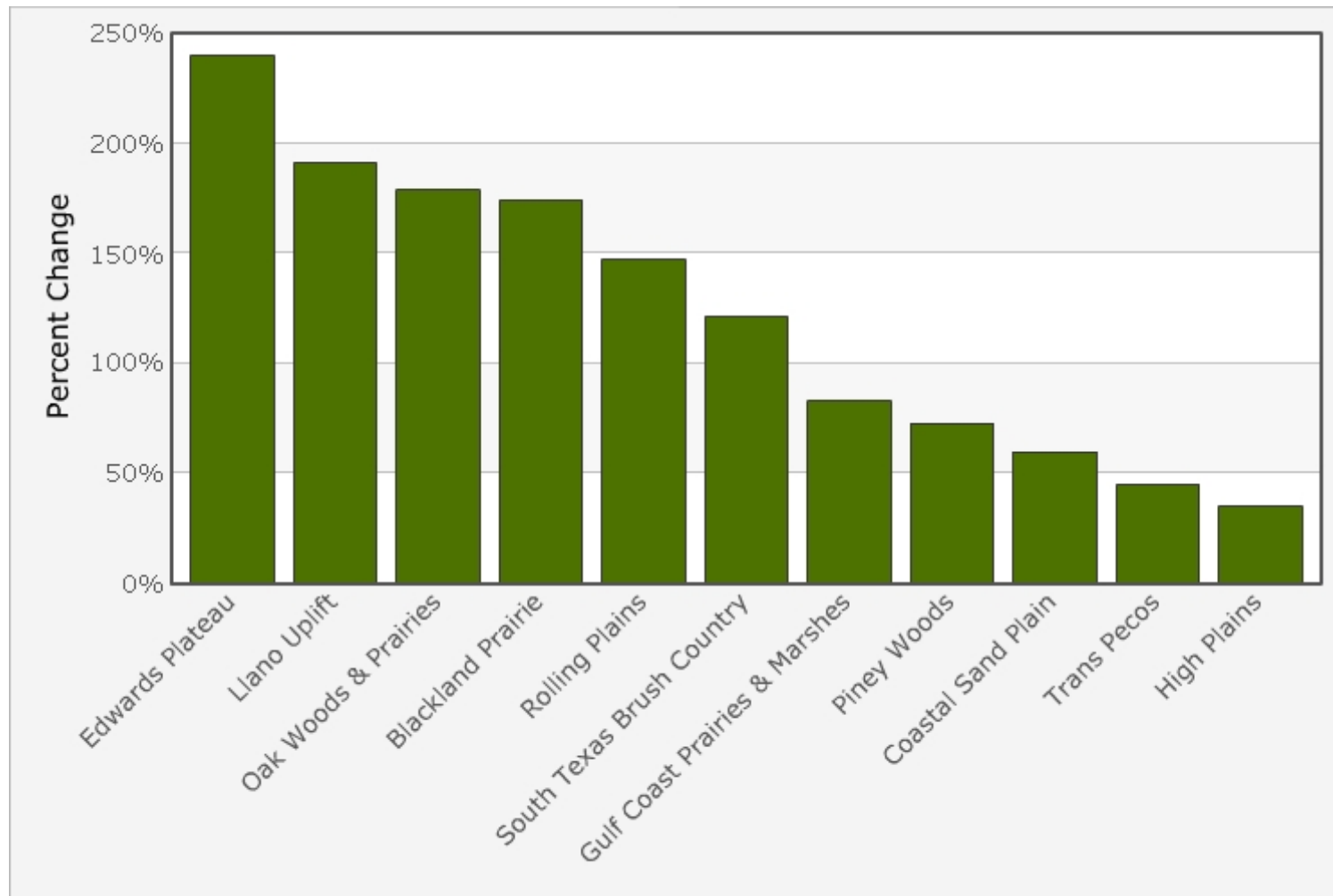
# Texas Land Trends

## Rural Land Values



# Texas Land Trends

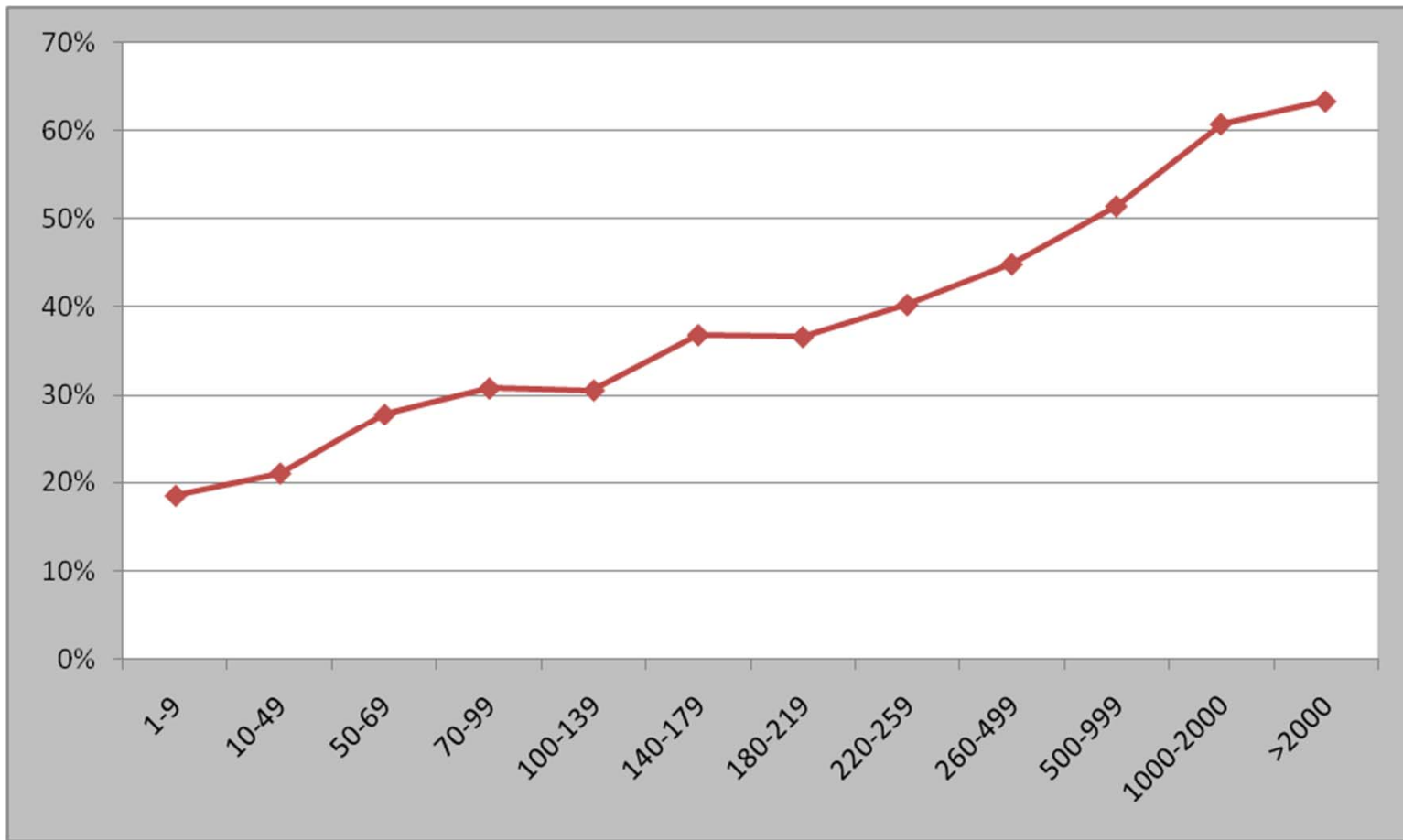
## Trends in Rural Land Values, 1997-2007



# Texas Land Trends

## Percent of Farm & Ranch Operations Reporting Positive Net Proceeds by Size, 2007.

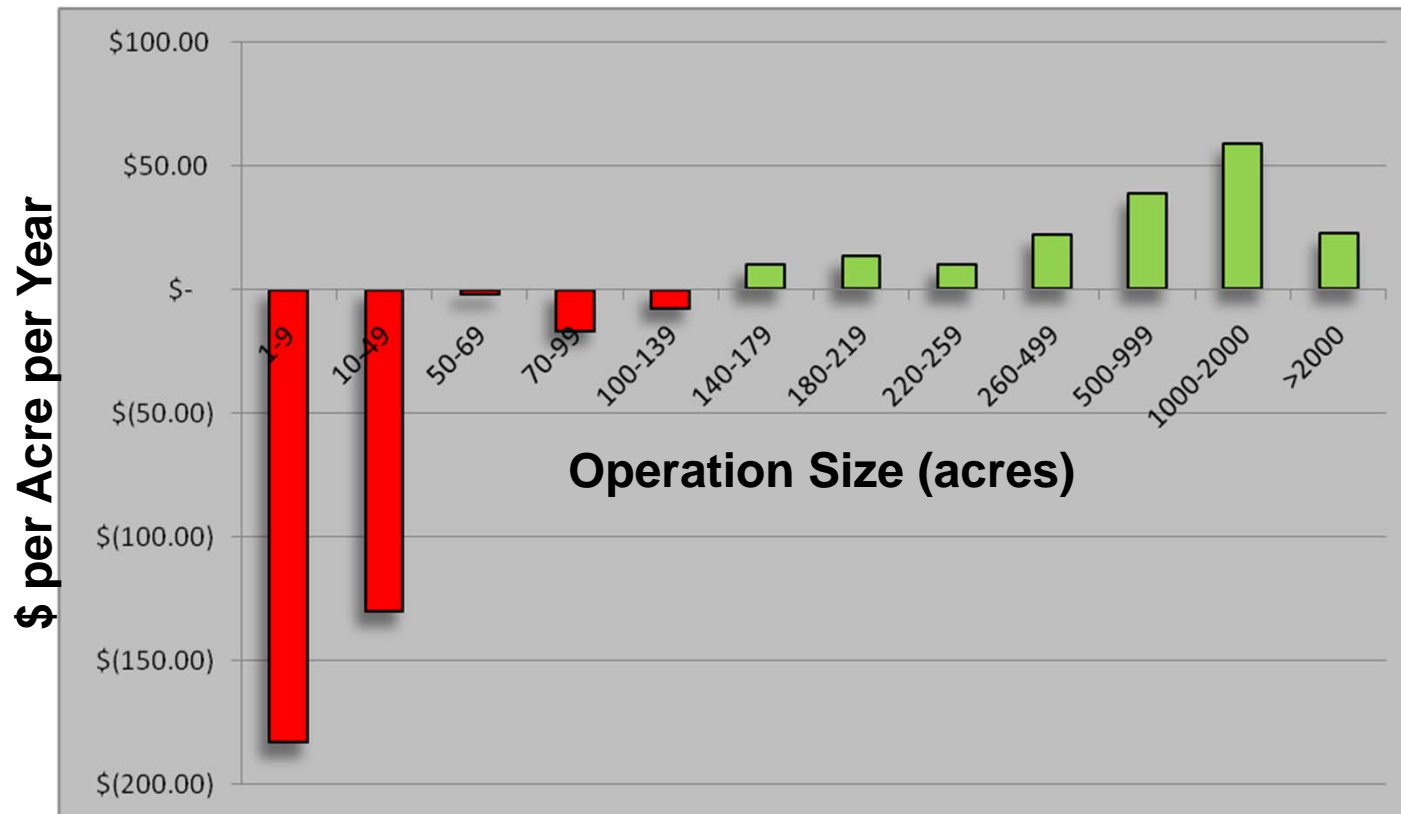
### Texas -- Statewide



Area (acres)

# Texas Land Trends

## Net Farm & Ranch Proceeds by Ownership Size, 2007. Texas – Statewide



# Texas Land Trends

## Change in area of Farms & Ranches by Size Class, 2002-2007

### Texas – Statewide





## Status and Trends of Land Use (97-07)

Dry Cropland	20.3 million	-7.5%
Native Rangeland	92.6 million	-1.77%
Non-Native Pasture	11.0 million	+3%
Forest	7.7 million	+3%
Irrigated Cropland	5.4 million	+0.3%
Wildlife Mgmt.	2.4 million	+2,407 %

**2.1 million acres of rural working lands  
converted to non-open space uses**

# Texas Land Trends

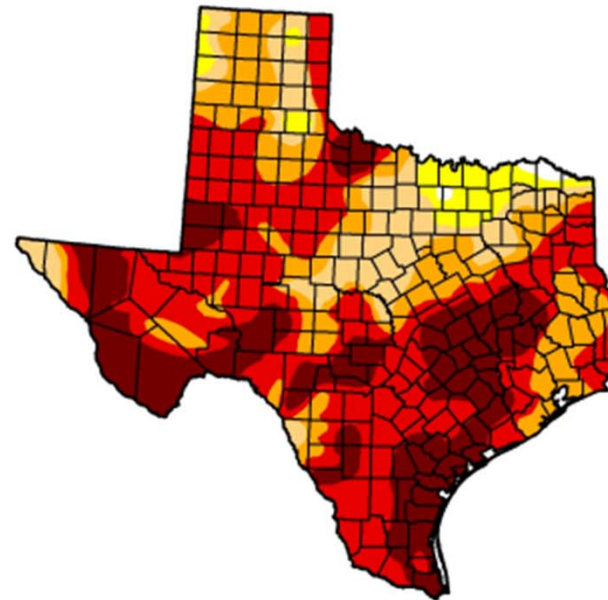
## U.S. Drought Monitor Texas

January 17, 2012

Valid 7 a.m. EST

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.52	99.48	95.08	82.60	62.47	25.27
Last Week (01/10/2012 map)	0.52	99.48	95.51	82.69	62.47	25.27
3 Months Ago (10/18/2011 map)	0.00	100.00	100.00	98.60	91.87	72.61
Start of Calendar Year (12/27/2011 map)	0.01	99.99	97.83	84.81	67.32	32.36
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	99.16	96.65	85.75
One Year Ago (01/11/2011 map)	20.16	79.84	59.13	25.36	9.48	0.00



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



Released Thursday, January 19, 2012

Laura Edwards, Western Regional Climate Center and South Dakota S

<http://droughtmonitor.unl.edu>

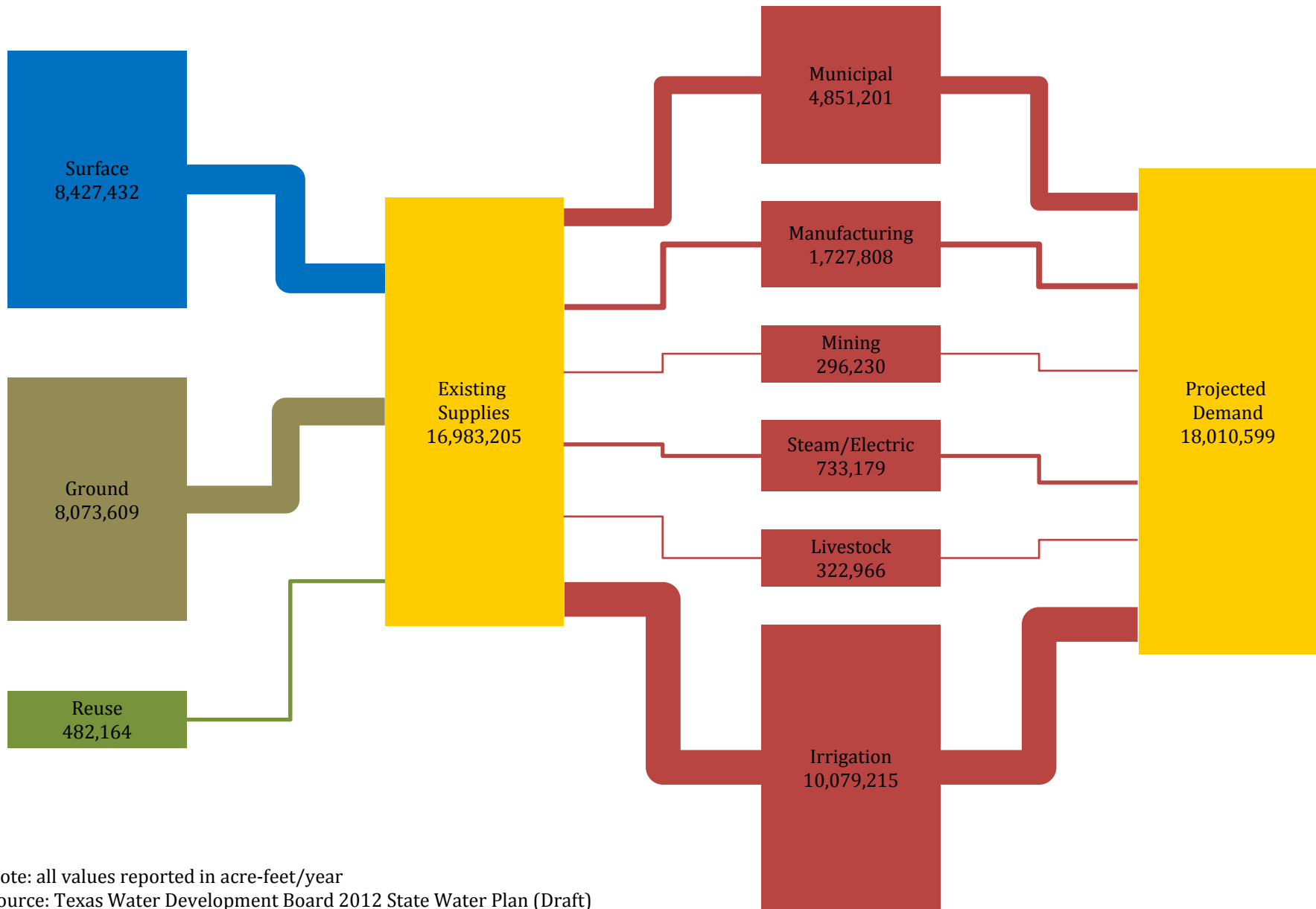
# 2012 Texas State Water Plan

- Adopted December 15, 2011
- Sent to the Governor January 5, 2012
- Represents the 9<sup>th</sup> water plan since the inception of the Texas Water Development Board in 1957 after the drought of the 1950's

**In serious drought conditions, Texas does not and will not have enough water to meet the needs of its people, businesses, and agricultural enterprises.**

# 2010 Existing Supplies

Amount of water that can be produced with current permits, contracts, and existing infrastructure during drought

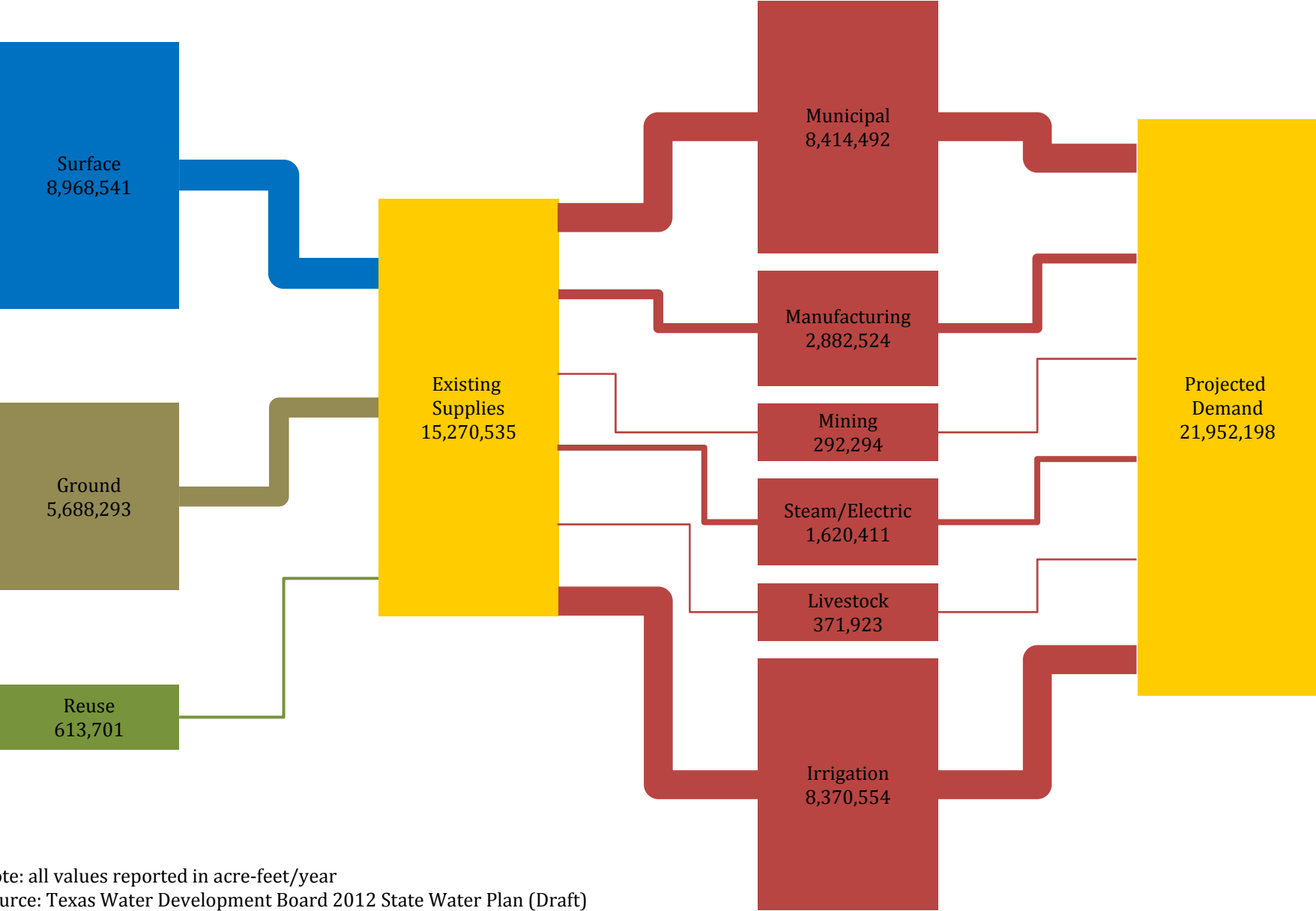


Note: all values reported in acre-feet/year

Source: Texas Water Development Board 2012 State Water Plan (Draft)

# 2060 Scenario

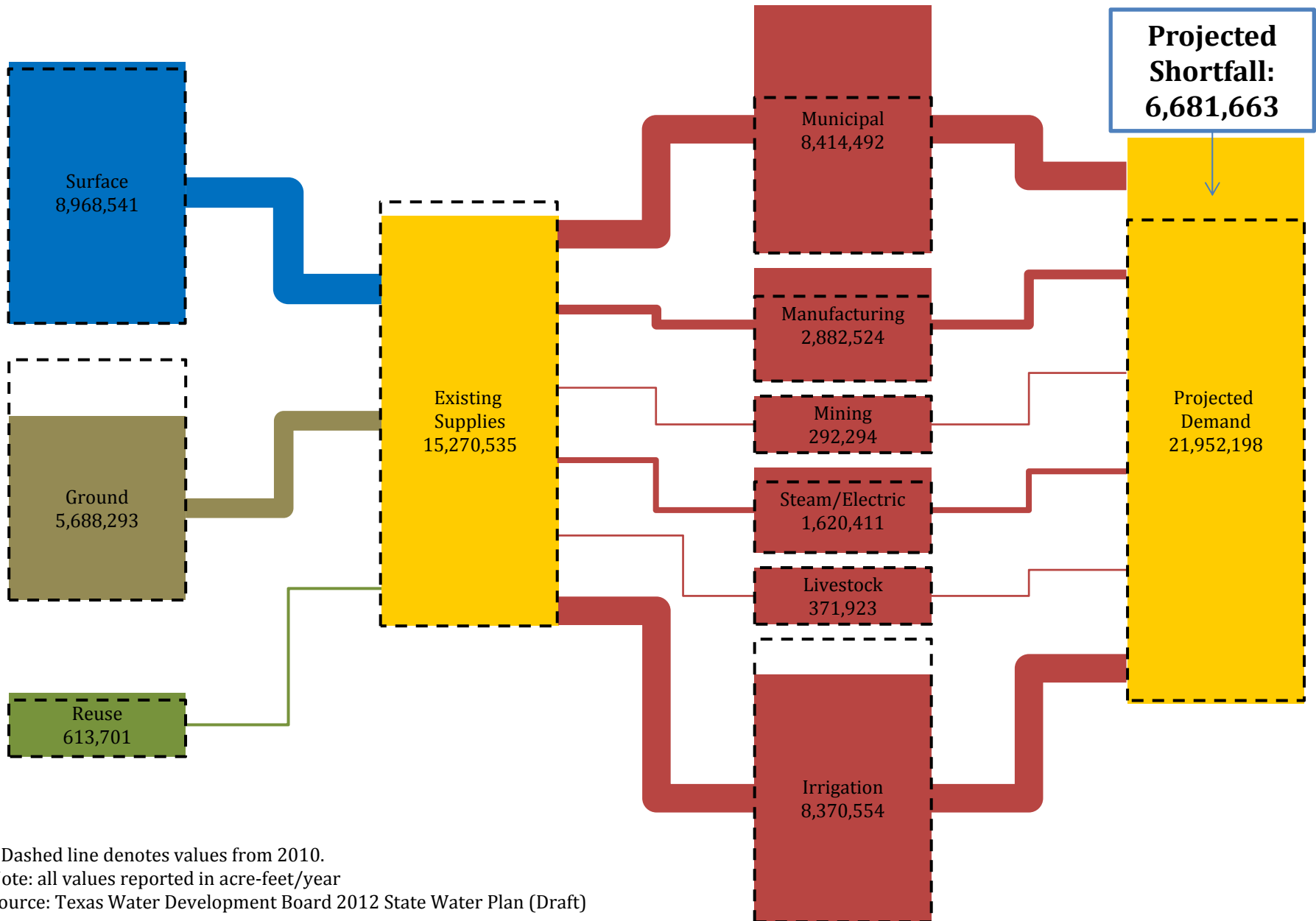
Amount of water that can be produced with current permits, contracts, and existing infrastructure during drought



Note: all values reported in acre-feet/year  
Source: Texas Water Development Board 2012 State Water Plan (Draft)

# 2060 Existing Supplies vs. Projected Demands

Amount of water that can be produced with current permits, contracts, and existing infrastructure during drought

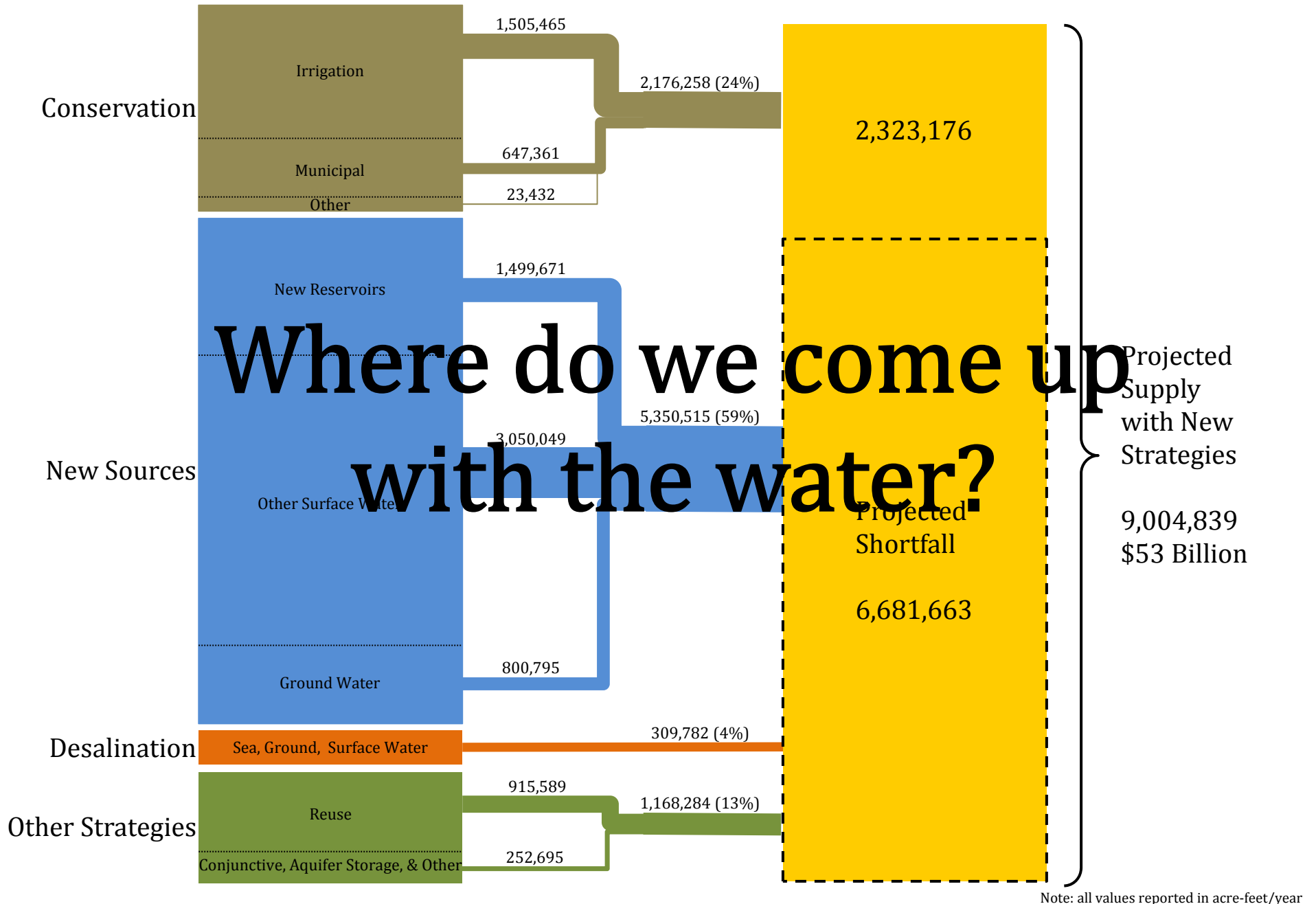


\* Dashed line denotes values from 2010.

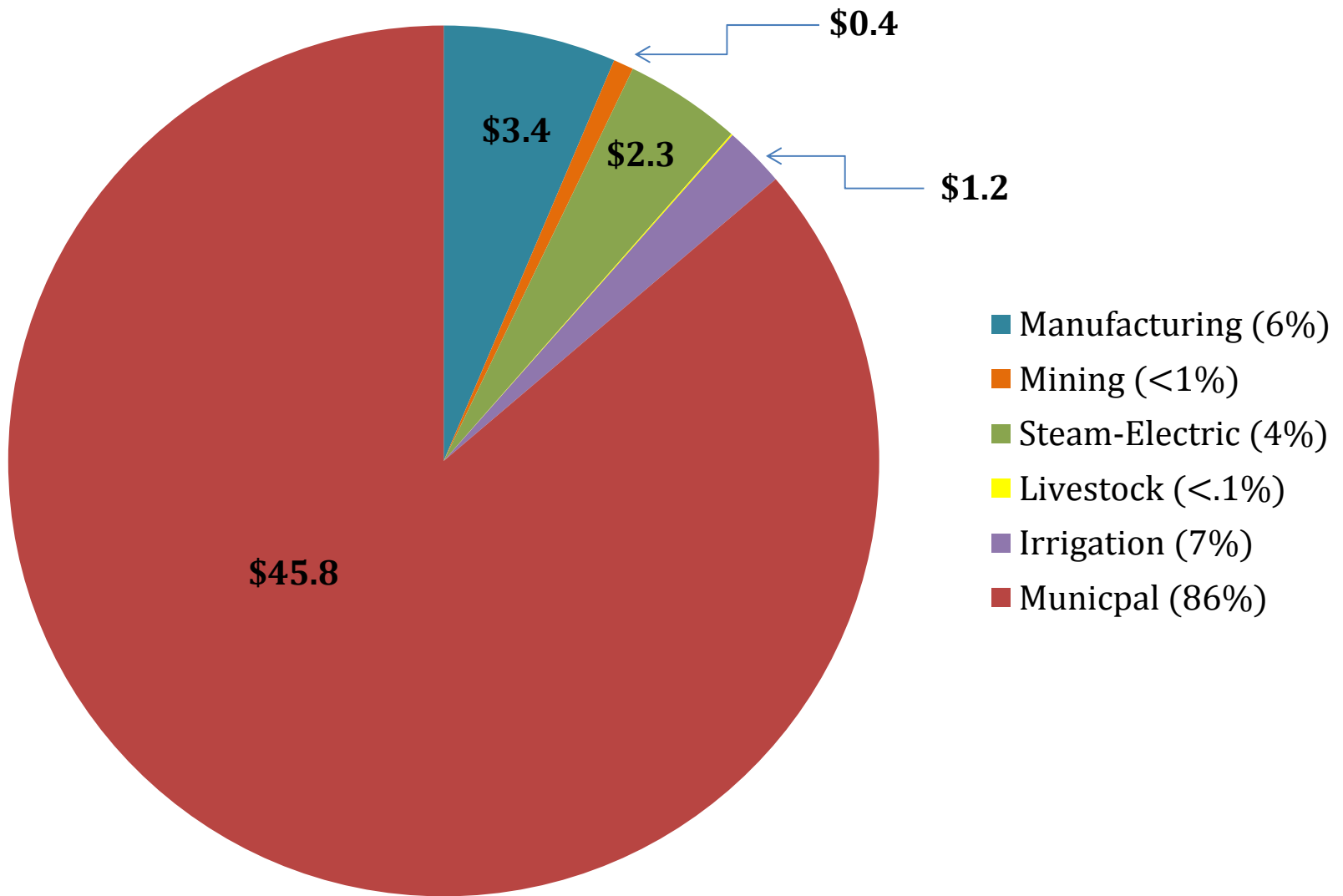
Note: all values reported in acre-feet/year

Source: Texas Water Development Board 2012 State Water Plan (Draft)

# 2060 Recommended Water Mgmt. Strategies



# Total Capital Costs of Recommended Water Management Strategies By Water use Category (\$53.1 Billion)





## A Few Take Home Points

- Rate of rural land conversion have increased
- Population of Texas expected to double by 2060
- Tremendous demand for land and water
- ~85% of Texans live in metropolitan areas
- History shows that after major droughts significant legislative action has been taken to address water issues

# Realizing the Link between Private Lands and Public Benefit

“Saving the water and the  
soil must start where the  
first raindrop falls.”

*Lyndon B. Johnson, 1947*

# Realizing the Link between Private Lands and Public Benefit

- Commodities
  - Food and fiber
  - Water quality/quantity
- Ecosystem Services
  - Clean air
  - Wildlife habitat
  - Flood mitigation
  - Open Space (*links to national defense*)

## Challenge

- Primary predictor of land conversion is loss of economic profitability
- Development of ecosystem markets
  - Wildlife habitat
  - Flood mitigation
  - Open Space (*links to national defense*)
- Incentivizes conservation
- Additional revenue for the landowner

<http://www.texaslandtrends.org>

Or

<http://www.txlandtrends.org>