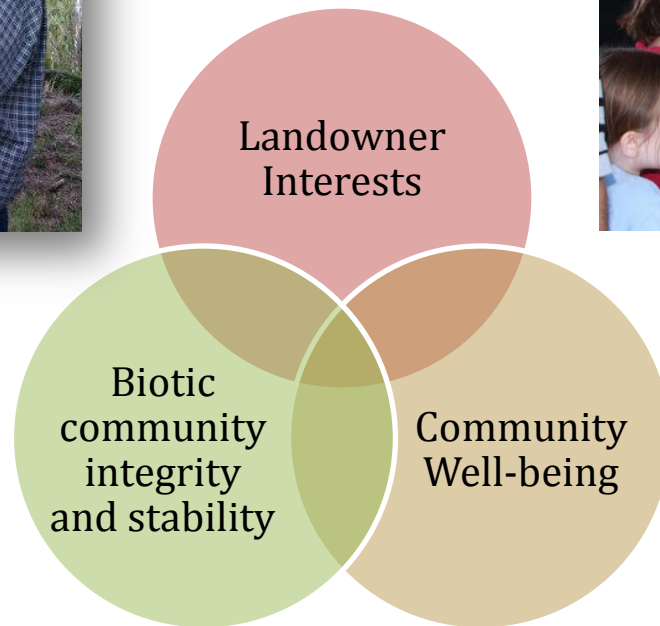


The Public Benefits of Rural Working Lands



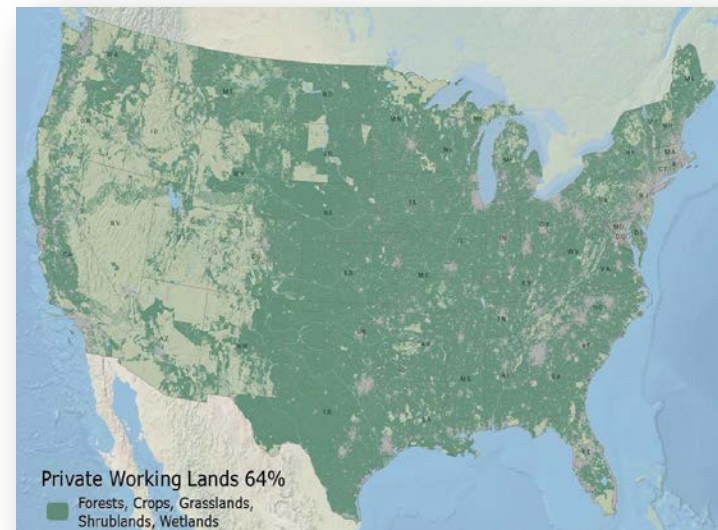
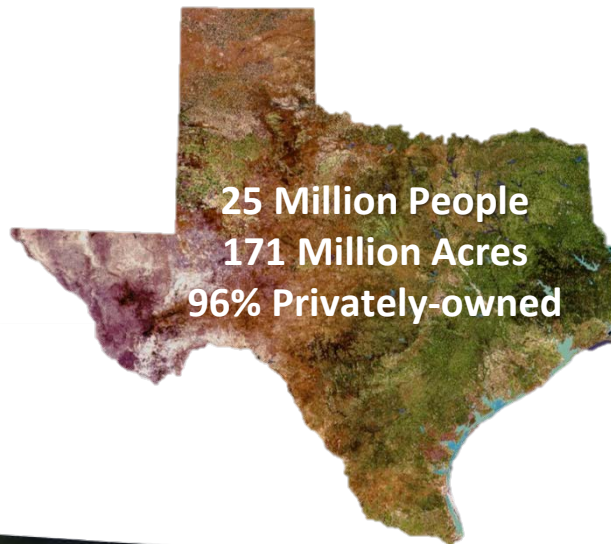
Outline

- The Urban-Rural Disconnect
- Public benefits of rural working lands: *linking the land to the water*
- Texas Land Trends
- Our response



The Issue: *Making the case for rural working lands*

- Private lands in the U.S. are undergoing significant changes (e.g., >1 acre of farmland lost/minute).
- Most lands in U.S. are privately-owned and play an unseen yet critical role in water/food sustainability and national/energy security.



The disconnect

- 95% of Texas is privately owned
- 90% of Texans live in urban areas
- Policy is heavily influenced by the 90%
- Only 13 of 147 counties west of I-35 are considered urban
- Urban taxpayers receive \$1.27 worth of service for every tax dollar spent
- Rural taxpayers receive \$0.33 worth of service for every tax dollar spent
- How do we make the case for rural lands?

Linking the land to the water

- *“Saving the water and the soil must start where the first rain drop falls” (Lyndon B. Johnson)*
- *Working lands produce food and fiber, support rural economies, and provide wildlife habitat, clean air and water, and recreational opportunities*
- *SAWS as a template for success*
 - *Public was willing to pay \$1,566/acre to protect recharge lands*
 - *Self imposed sales tax increase funded protection of rural lands*
 - *Successful leveraging of public funds for private land conservation*

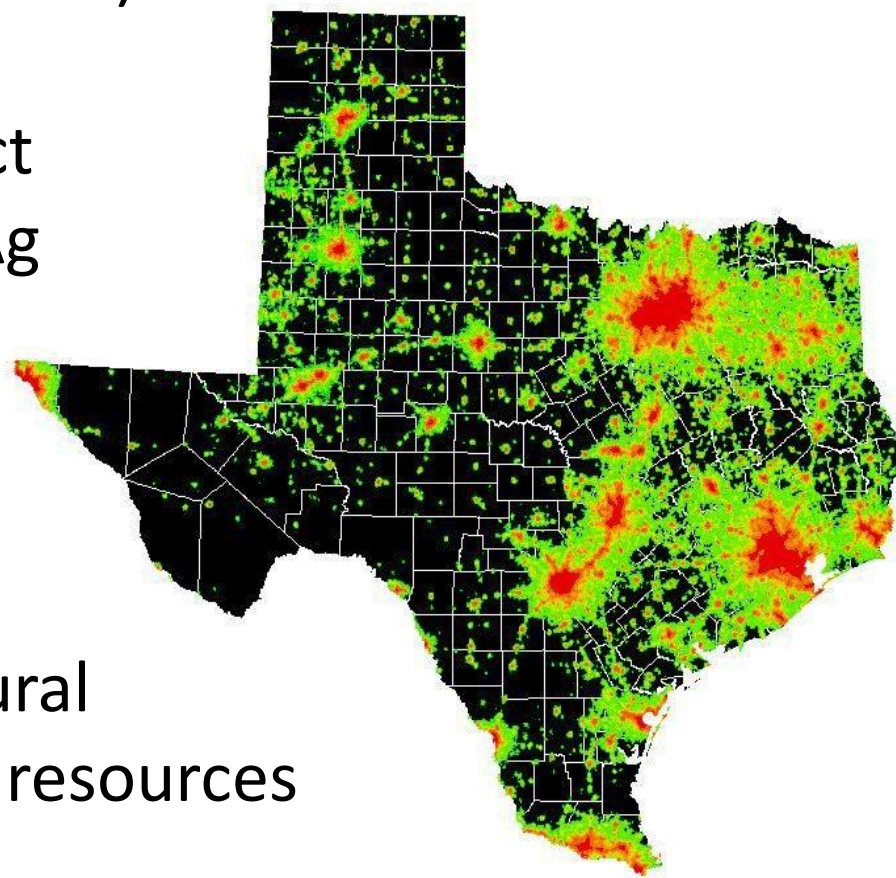


Understanding the drivers



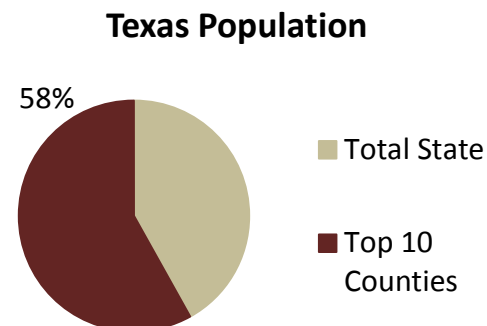
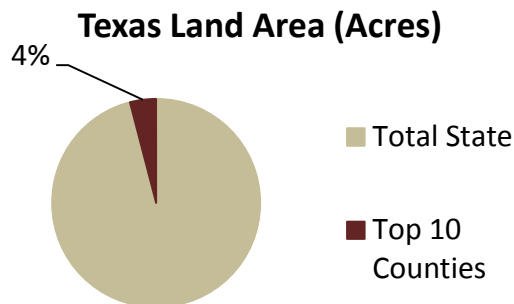
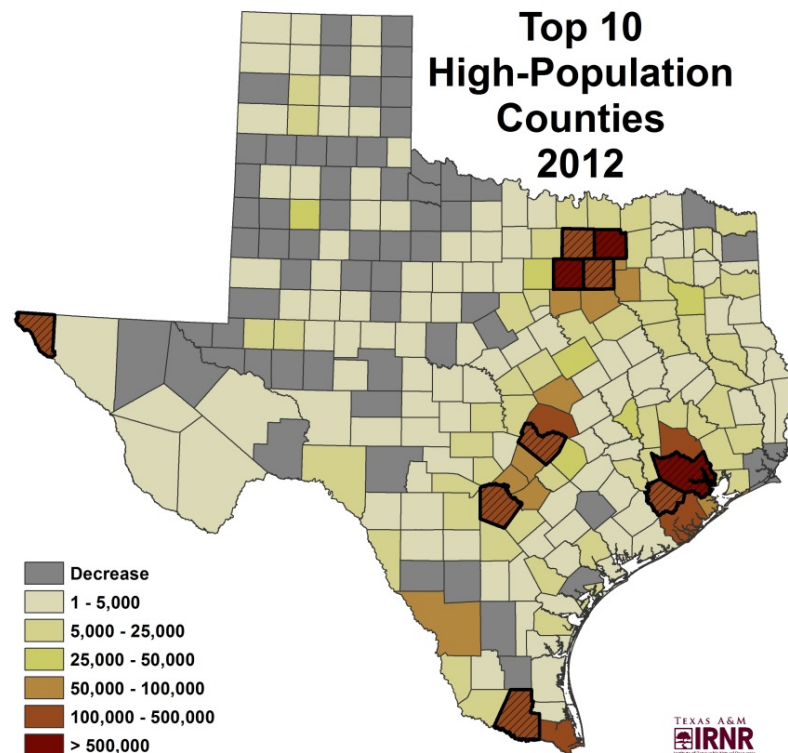
Texas Land Trends – *The Data*

- Trends in land use (1997-2012)
- Primary datasets used
 - County Appraisal District
 - USDA NASS Census of Ag
- Relationships among
 - Land Value
 - Land Ownership
 - Land Use
- Challenges to sustaining rural working lands and natural resources
- <http://txlandtrends.org/>



Texas Population

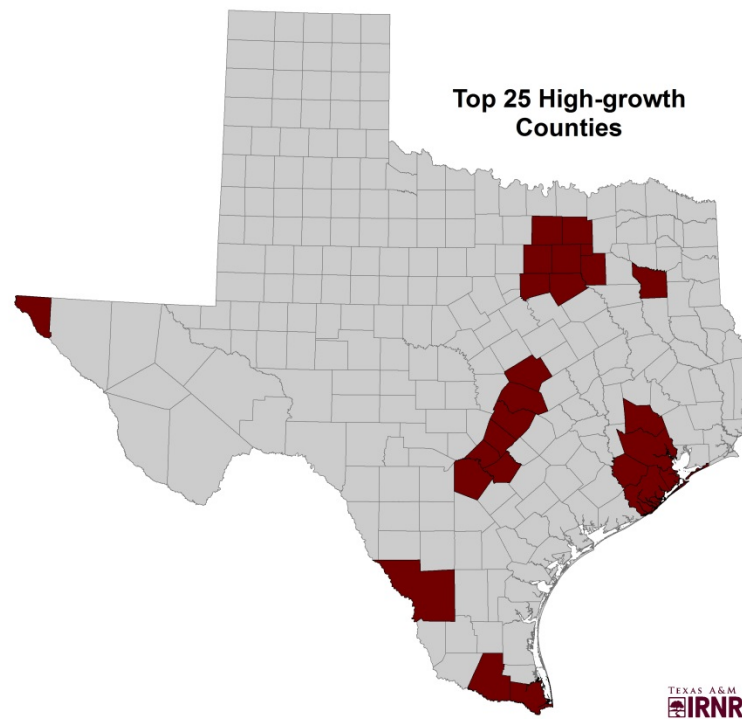
- 1997 – 19 Million
- 2012 – 26 Million
- 36% increase
- 500,000/year
- 65% of increase occurred within *Top Ten Populated Counties*



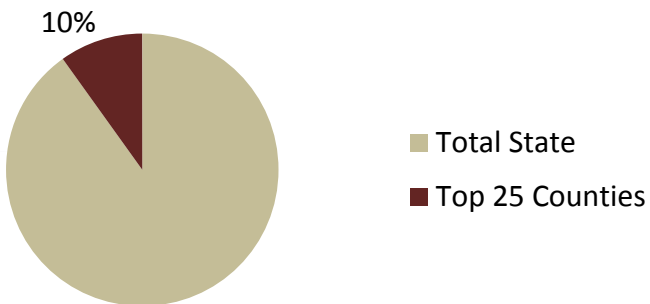
Texas Population

Top 25 Most Populated Counties

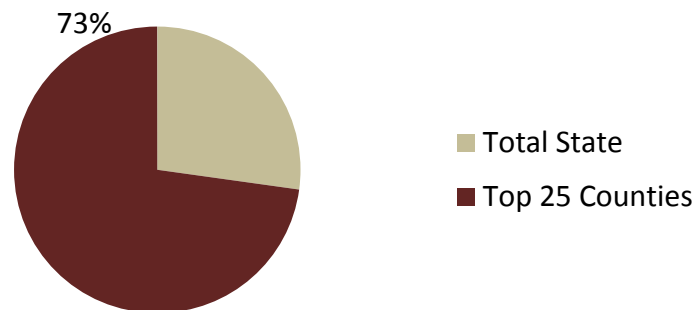
- 1997- 13 Million
- 2012- 19 Million
- Increase- 6 Million
- 10% of total land area
- 73% of total population
- 87% of increase in total state population



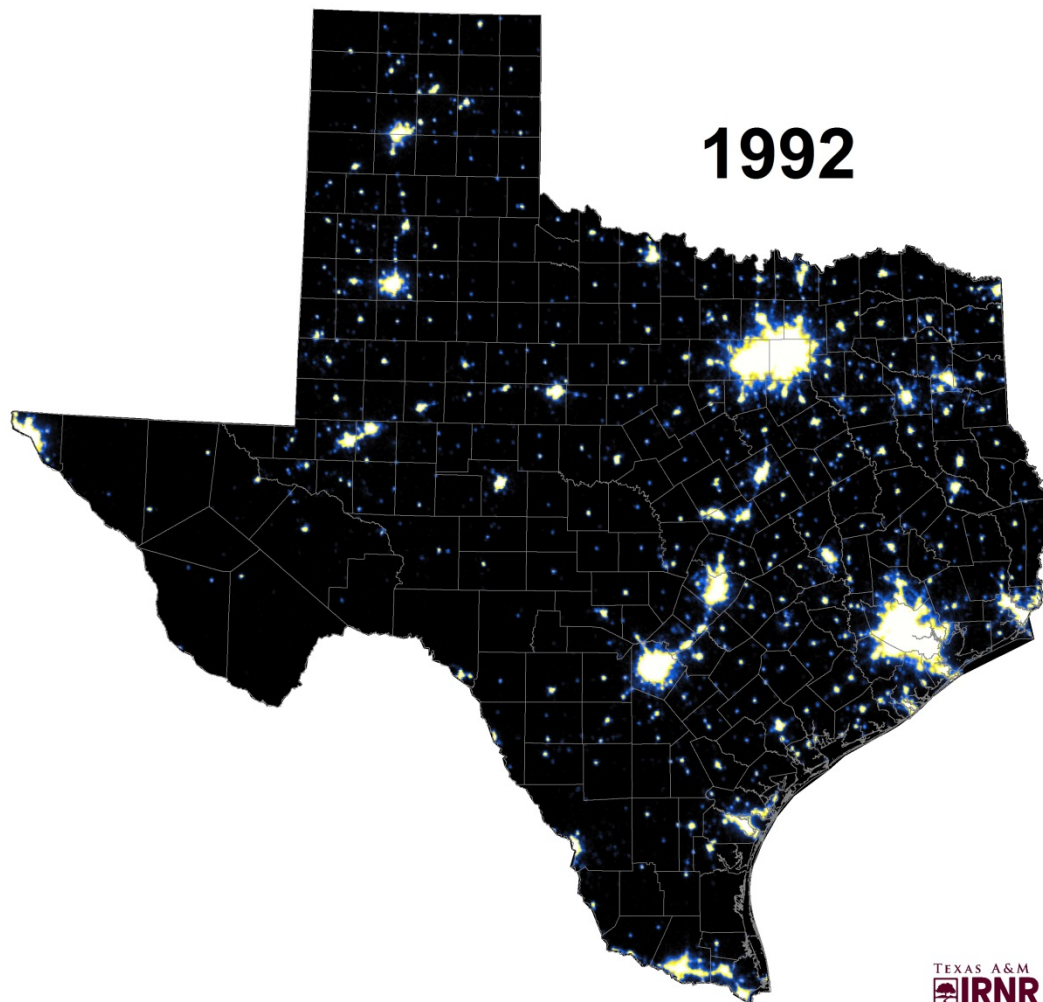
Texas Land Area (Acres)



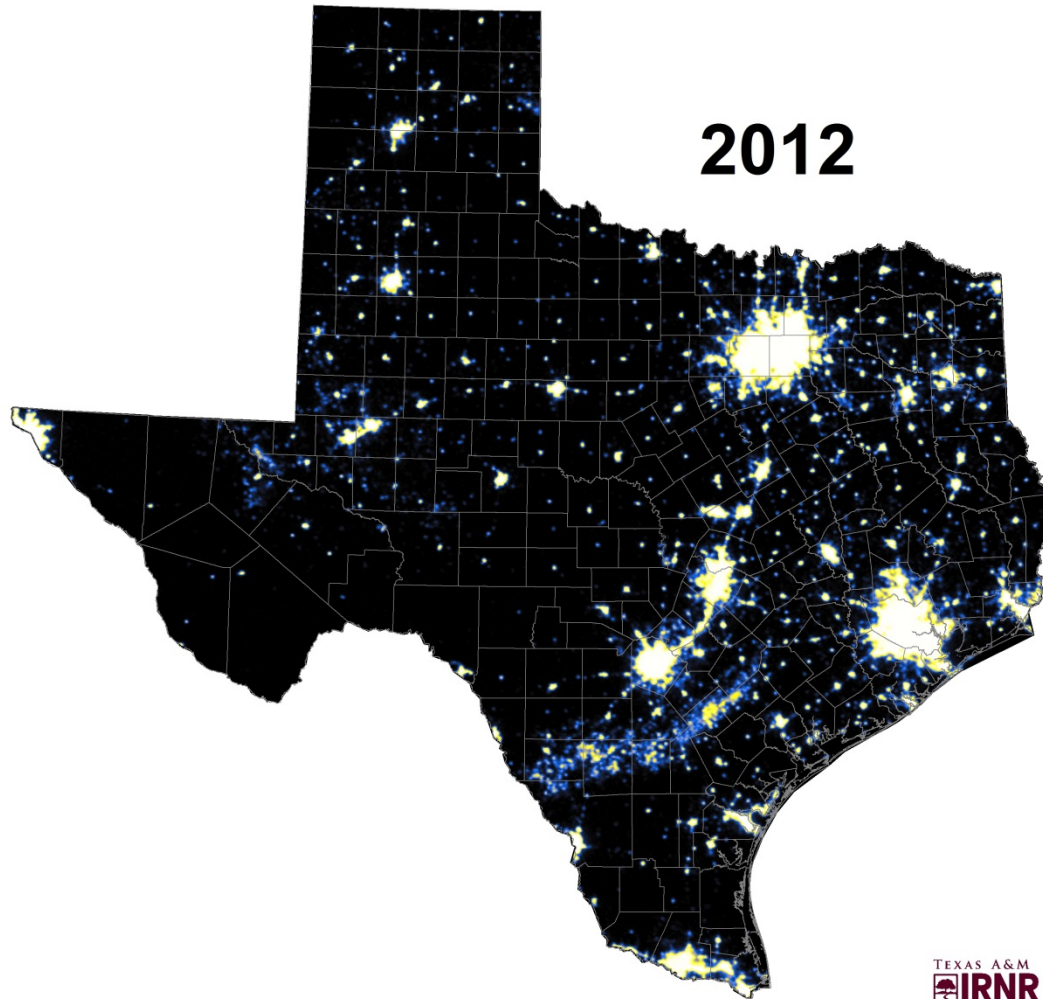
Texas Population



Statewide Night Time Illumination

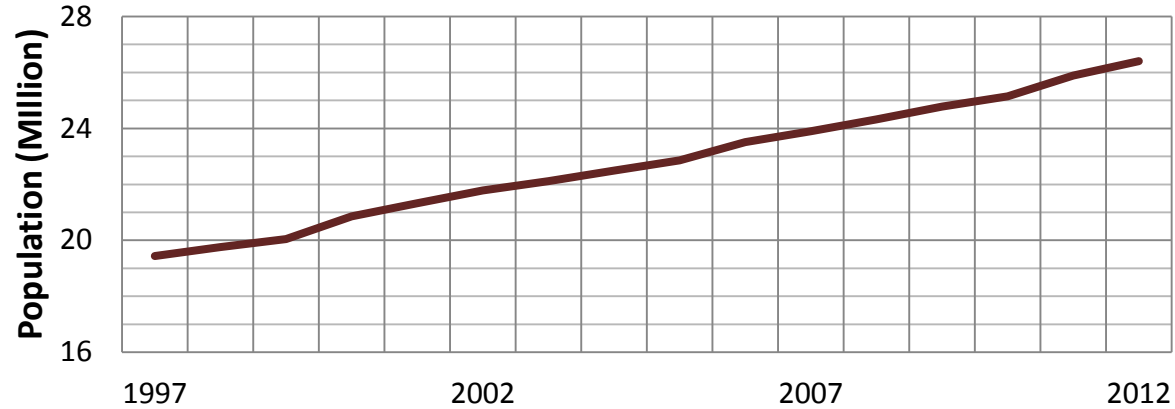


Statewide Night Time Illumination

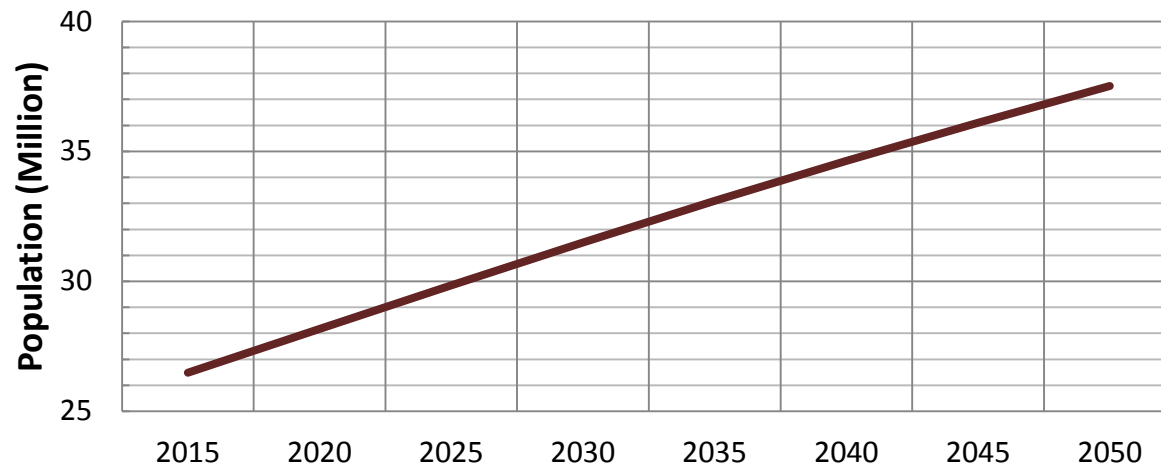


Texas Population

Texas Population 1997-2012

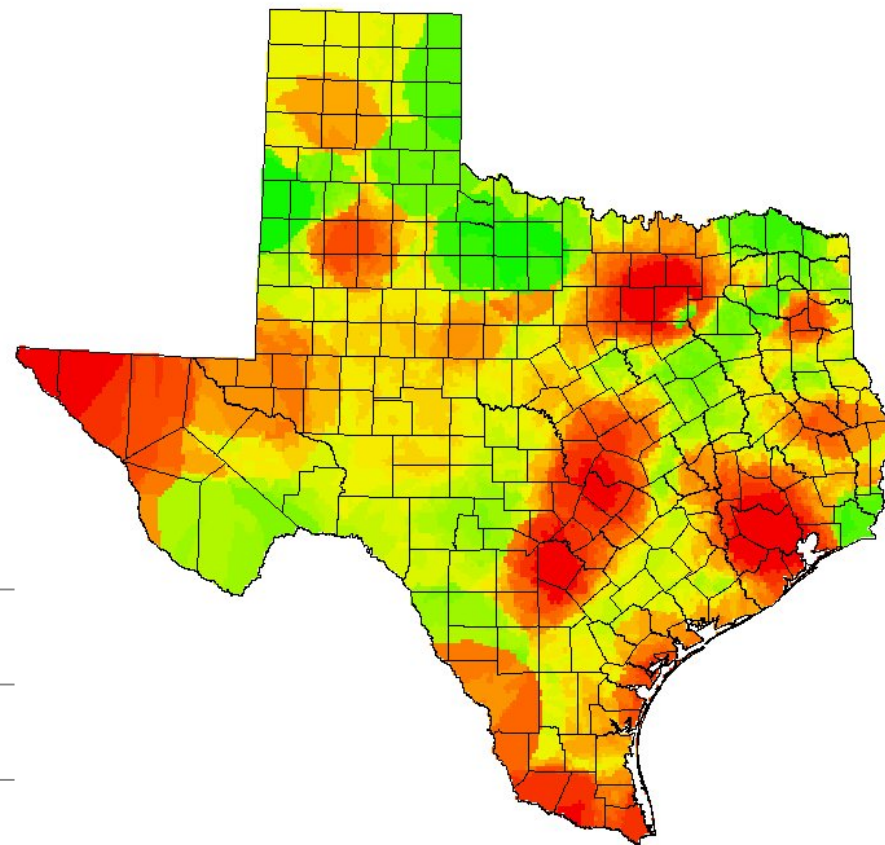
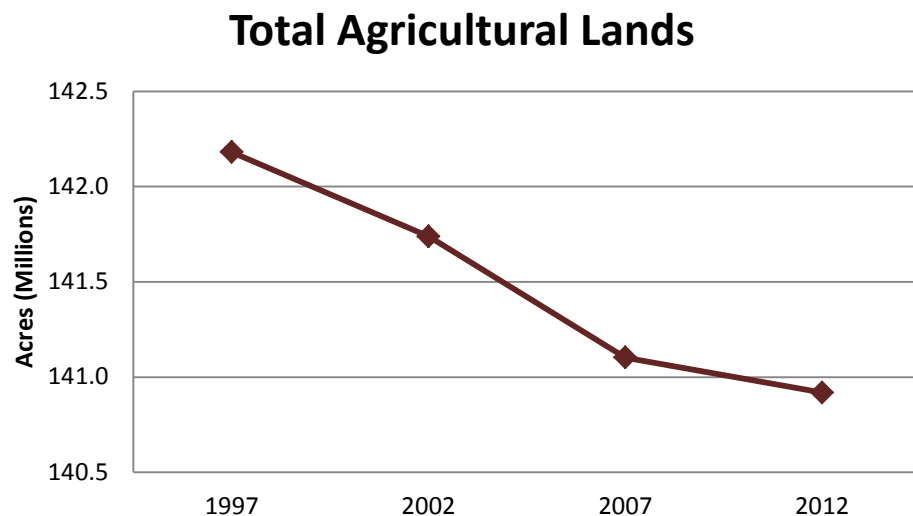


Texas Population Projection 2015-2050



Statewide Working Land Loss

- 1997 – 142 Million acres
- 2012 – 141 Million acres
- Loss 1 Million acres



(red indicates high conversion rates)

Texas Major Aquifers

Recharge Zones

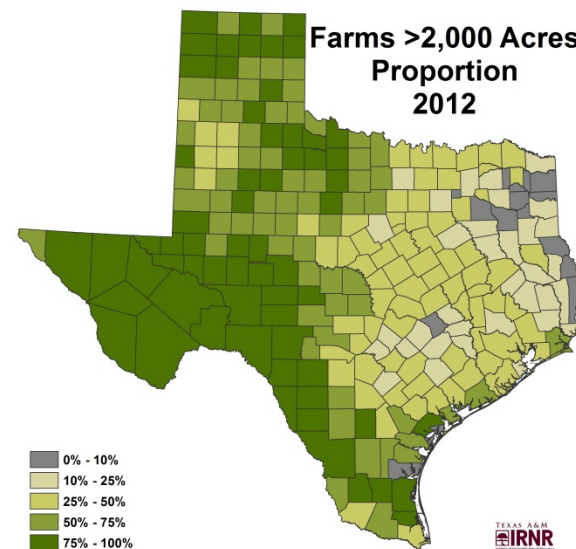
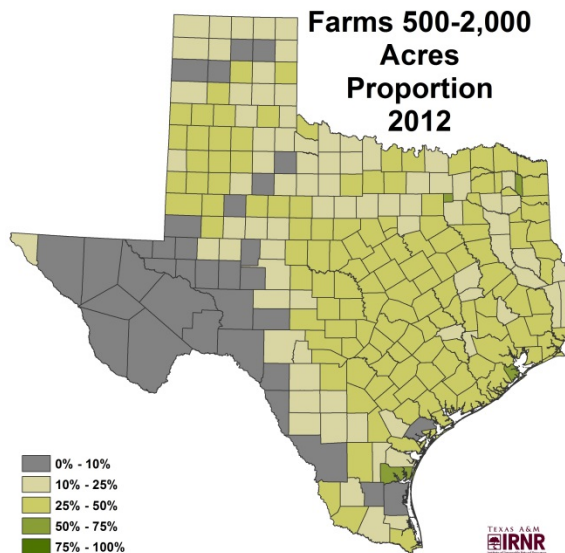
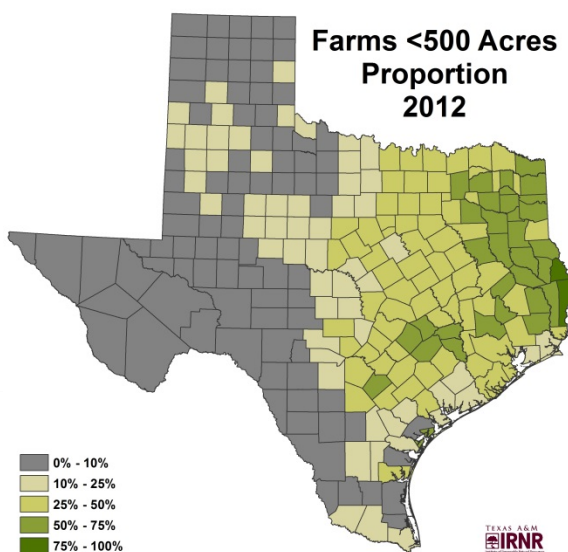
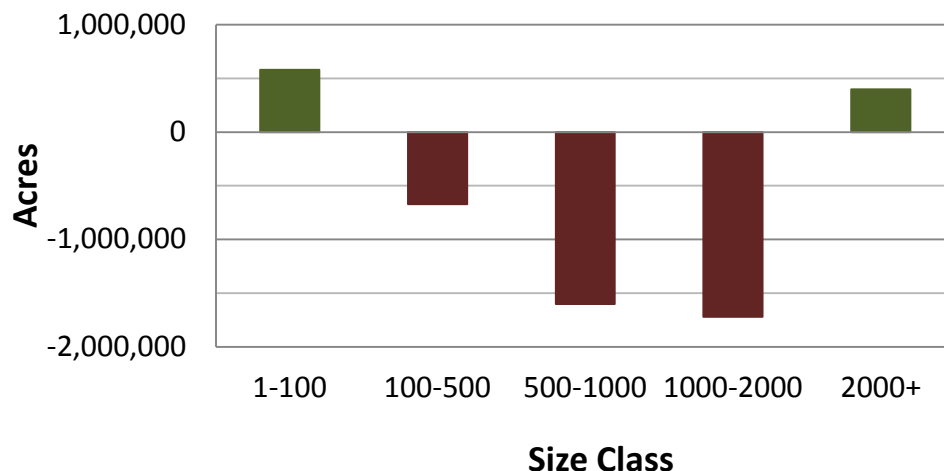
- Total- 35.3 Million acres
 - 21% of total statewide land area
- Working Lands- 28.3 Million acres
 - 20% of total statewide working lands
- 80% of recharge zones is working lands
- 1997- 28.6 Million Acres
- 2012- 28.3 Million Acres
- Decrease- 334K Acres



Ownership Size

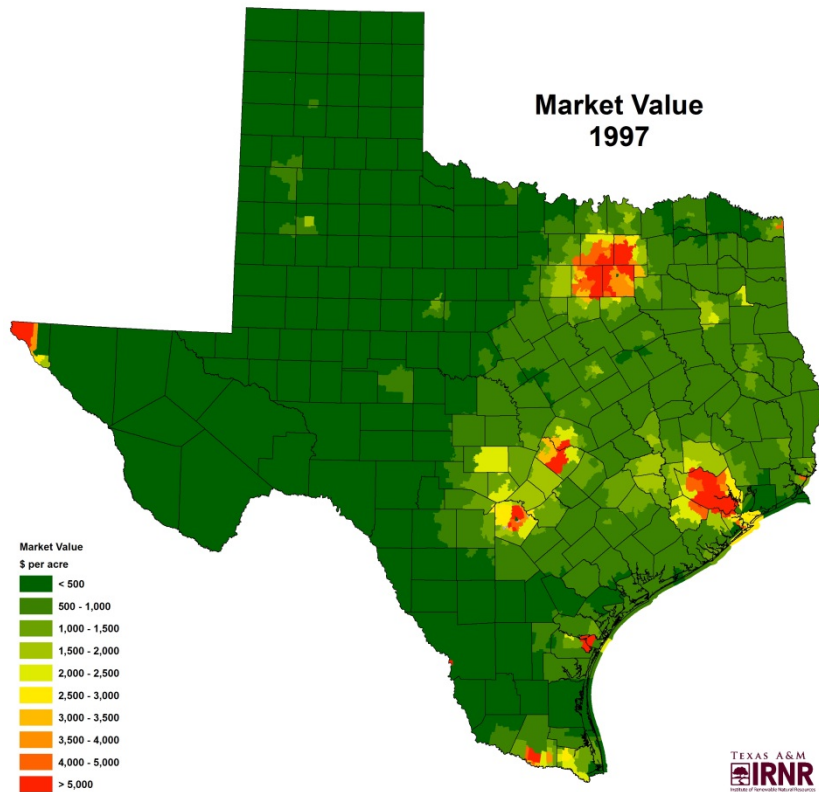
- Farms <100 acres in size
 - Increase of 500K+ acres
- Farms 100-2,000 acres in size
 - Decrease of 4M acres
- Farms > 2,000 acres in size
 - Increase of 400K acres

Acres Change By Size Class (1997-2012)

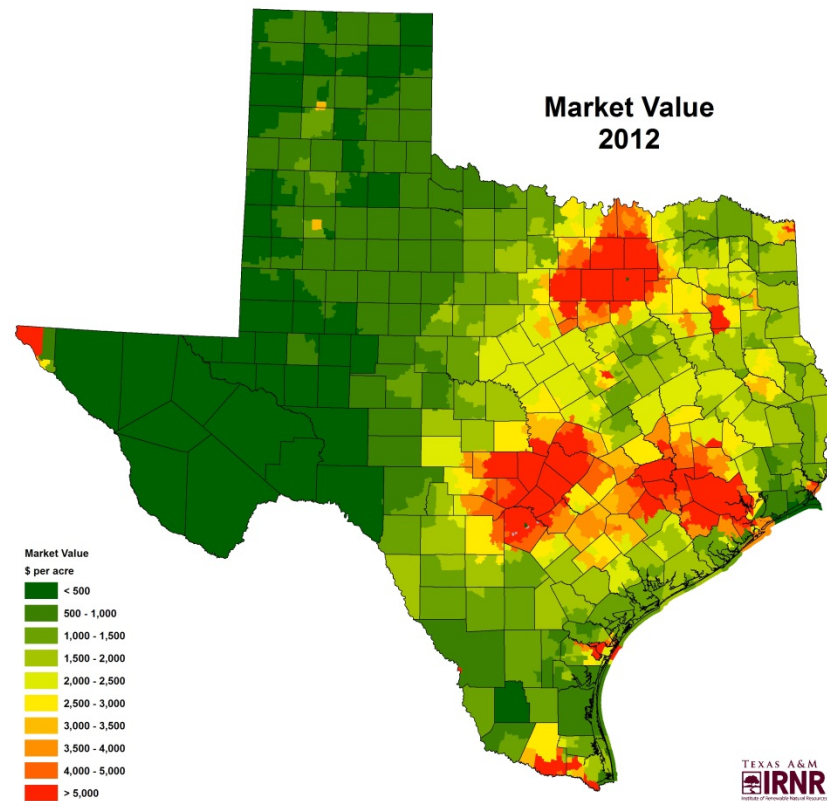


Market Value

Market Value
1997



Market Value
2012

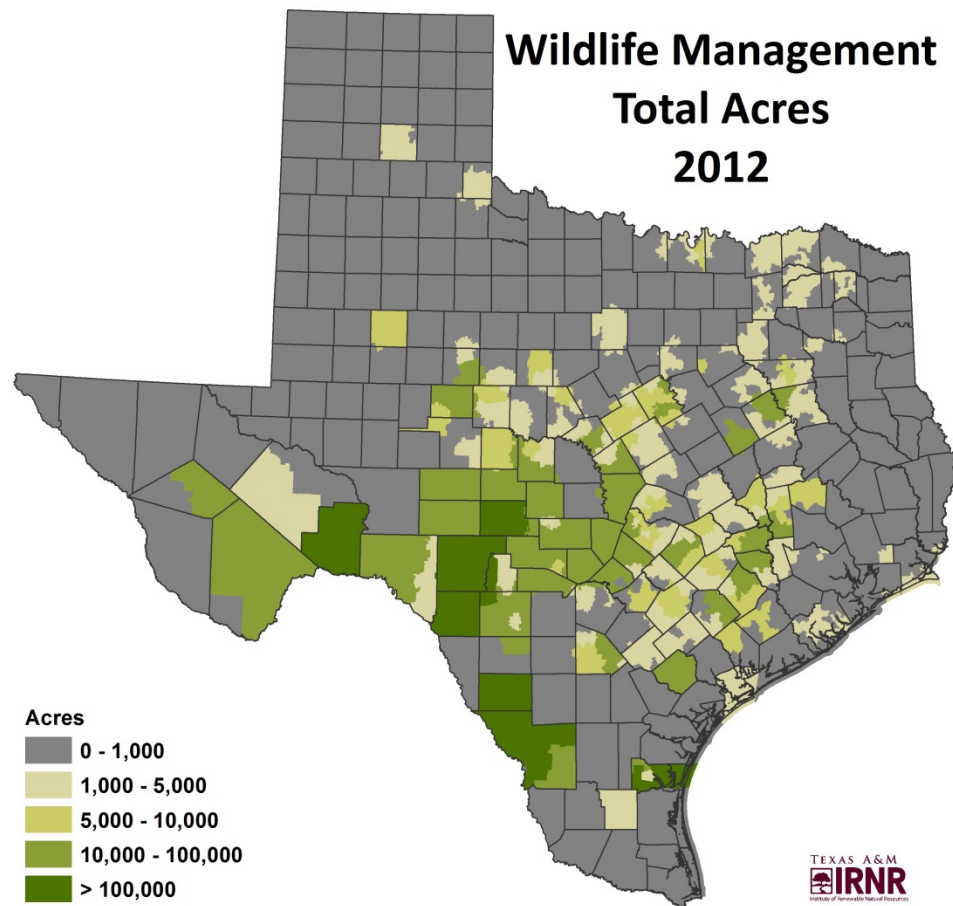
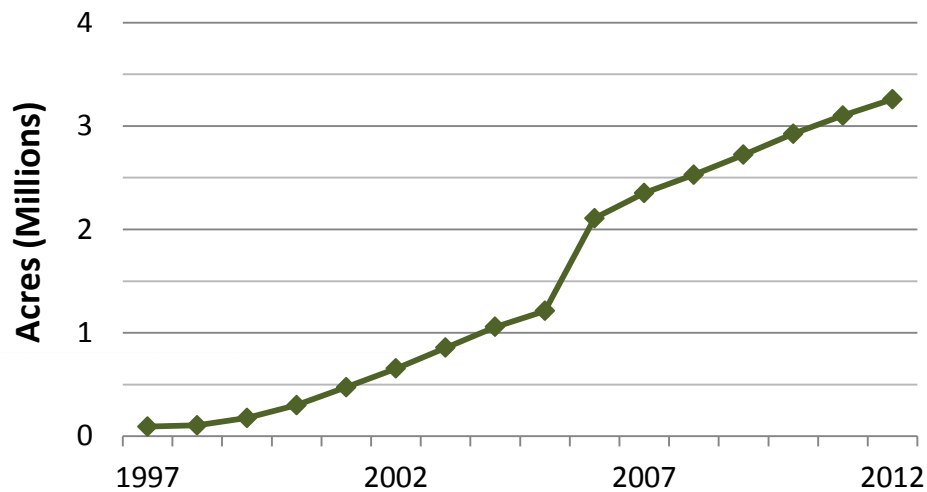


Wildlife Management

Statewide

- 1997 – 92K acres
- 2012 – 3.3 Million acres
- Gain of 3.2 Million acres

Wildlife Management Use
1997-2012



Education and Outreach

- Part of the Teer Leadership Institute project
- Campaign to highlight the public benefits that working lands provide to 4 specific groups:
 - Policy Makers
 - Teachers
 - Community
 - Youth
- Potential benefits include:
 - Opening up funding streams
 - New York and San Antonio models
 - SRF dollars (rate payers→land conservation)
 - Urban water conservation
 - Conservation tied to livelihood

Policy Makers

- Target Audience-Texas House and Senate
 - Potential Committees
 - House-Env. Regulation, Land and Resource Mgmt, Urban Affairs
 - Senate- Education, Natural Resources, Economic Development
- Implementation
 - Testimony by partners
 - Groundwater Summit
 - “Range Tours”
- Some potential partners
 - TCTWS, TALT, TPWD, SRM, SWCRA, TSSWCB

Teachers

- Program WET (Water Education for Teachers)
 - Nationally established program
 - Curriculum for formal and informal teaching
 - Fulfills educational standards (TEKS)
 - Experiential learning
 - Connect with local river authority to highlight local issues
- Target Audience- K-5 teachers
- Implementation
 - Need more Project WET partners throughout Texas
 - Integrate Working Land Stewardship into WET curriculum

Youth

- Youth Outreach Event (Water Education for K-8)
- Integrate into an Earth Day event
- Stations might include:
 - Wetlands
 - Soils
 - Water Cycle
 - Water Conservation
 - Water Simulator
- Partners might include
 - TWDB, TWRI, River Authority, TXMastNat, SWCD

Urban Community Event



Water and Community Event Announcement

Where Does Your Water Come From?

Saturday, October 1st, 2015

Come on out and learn more about your community's water supply, how drought affects your family, and water conservation techniques. There will be presentations, activities, and door prizes, and giveaways!

Urban Community Event

- Hold it at an HEB
 - Piggy back on farm to table movement
 - Water and implications for food
 - Drawing for door prizes (HEB gift card)
 - Multiple short presentations
 - Those who participate get an HEB reuseable bag full of goodies
 - Pamphlets, flyers, informational 1-pagers

Areas of Opportunity

- Increasing population
 - Increasing water demand
 - Increasing working land loss and fragmentation
- Water quality concerns (e.g. 303d impairments)
- Candidate, Threatened, and Endangered species
- Wildlife management on private land
- Energy development

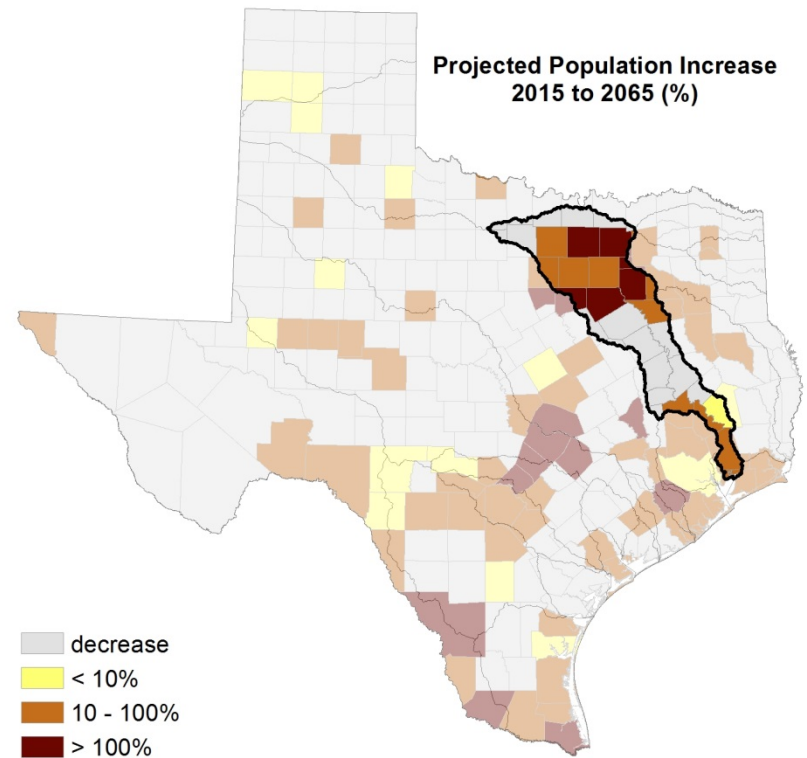
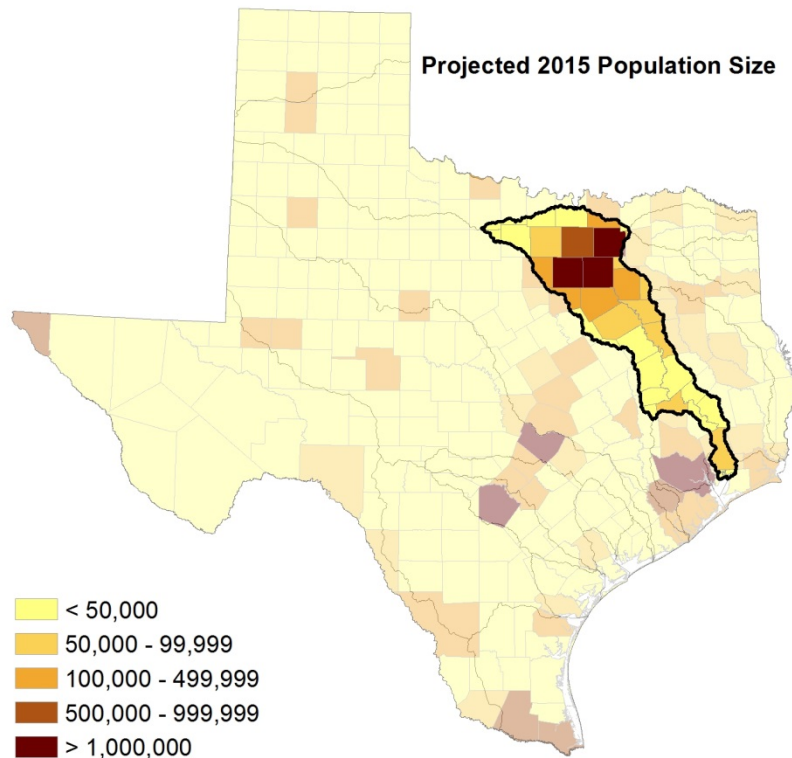


North & East Texas: Trinity River Basin

- 18,001 mi² (> 11.5 million acres)
- 5,022 stream miles
- 38 counties
- DFW Area



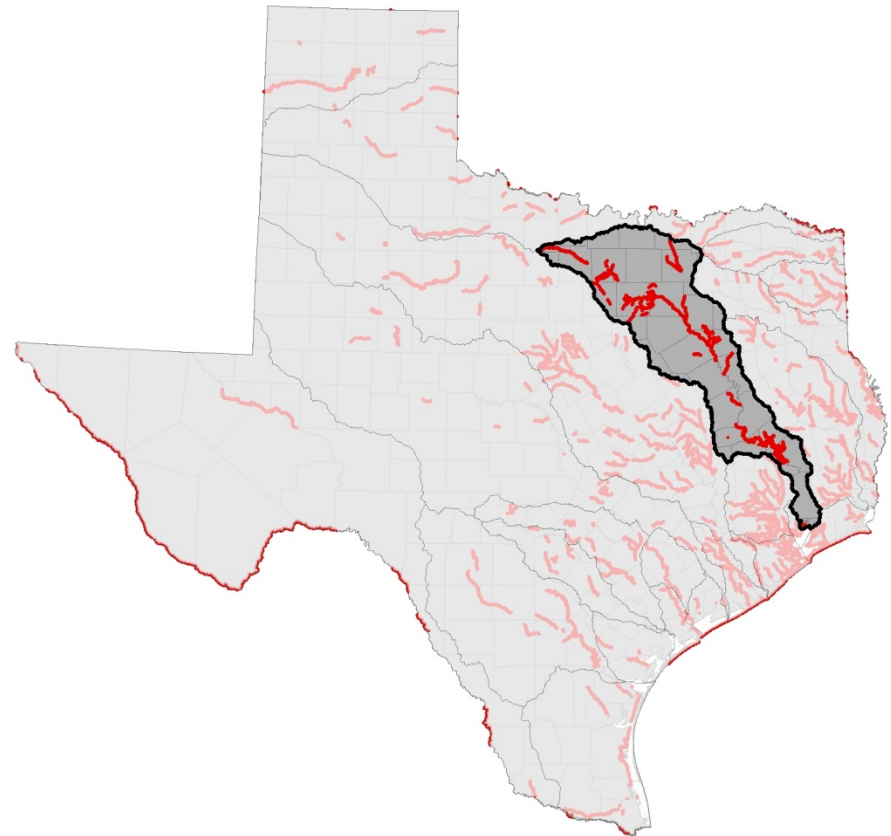
Population



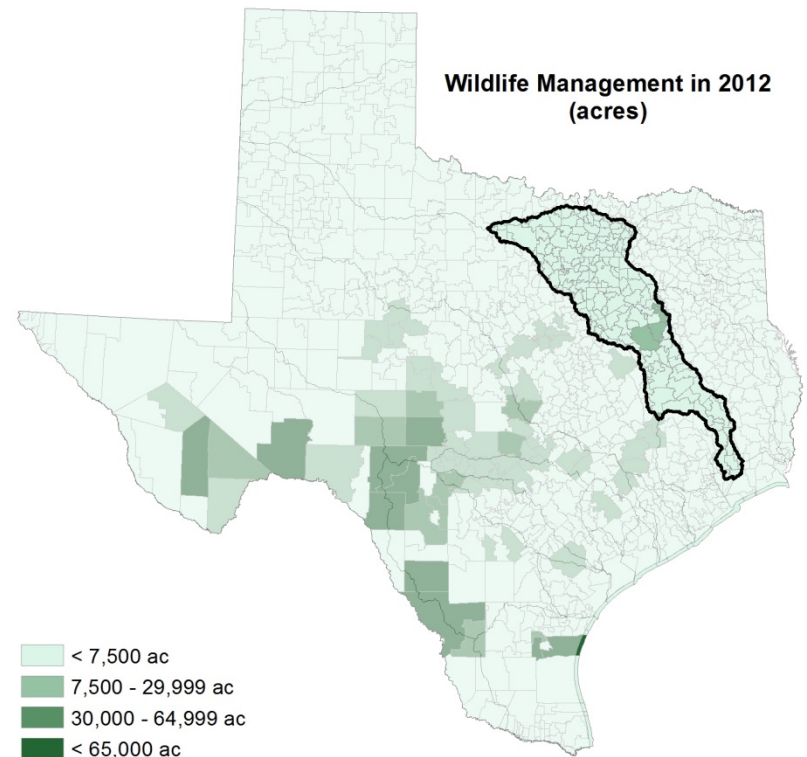
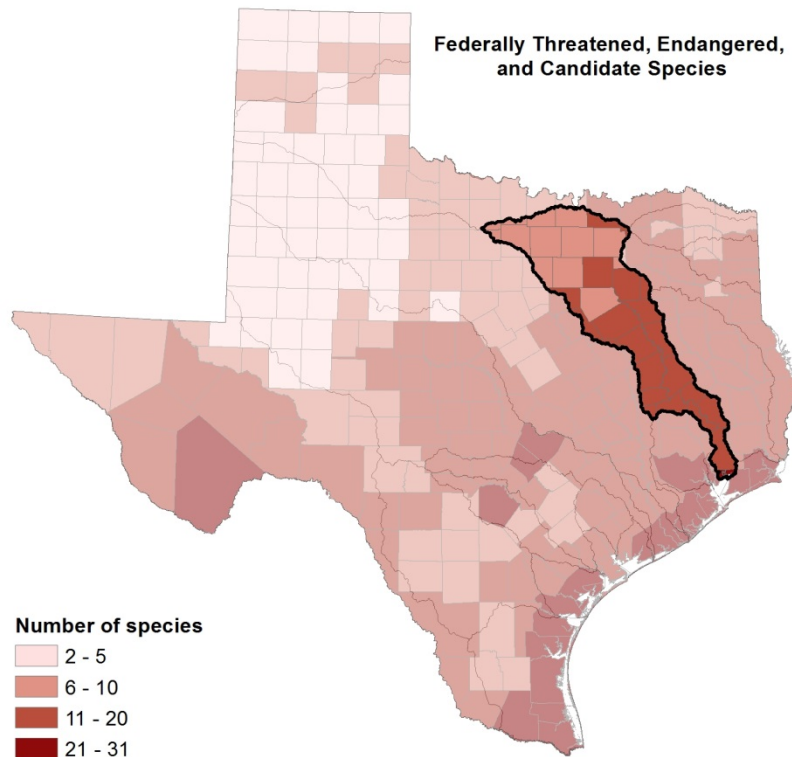
- 2015 estimated population: 7.8 million
- 45% projected increase over next 50 years

Impaired (303d) Streams

- 992 miles (20% of total stream length) classified as impaired.



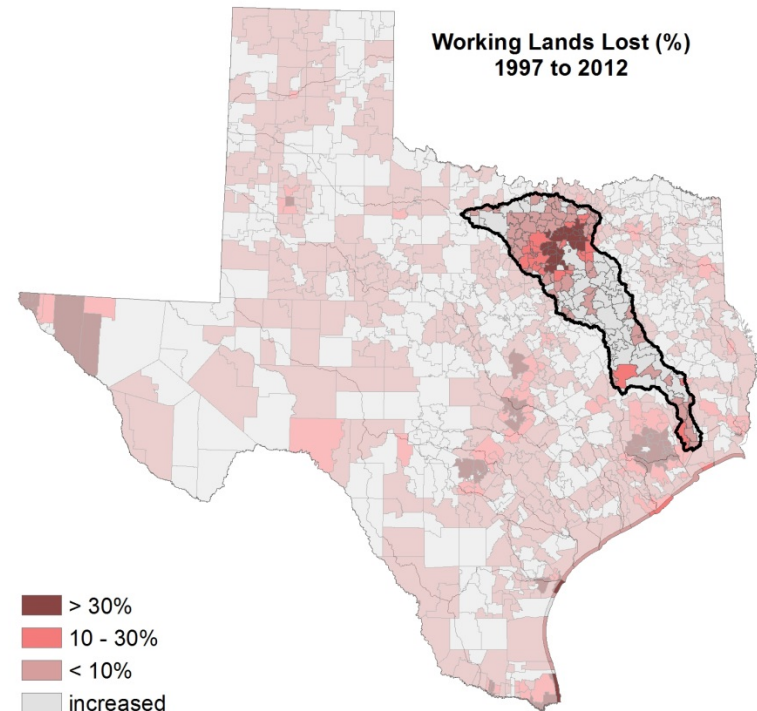
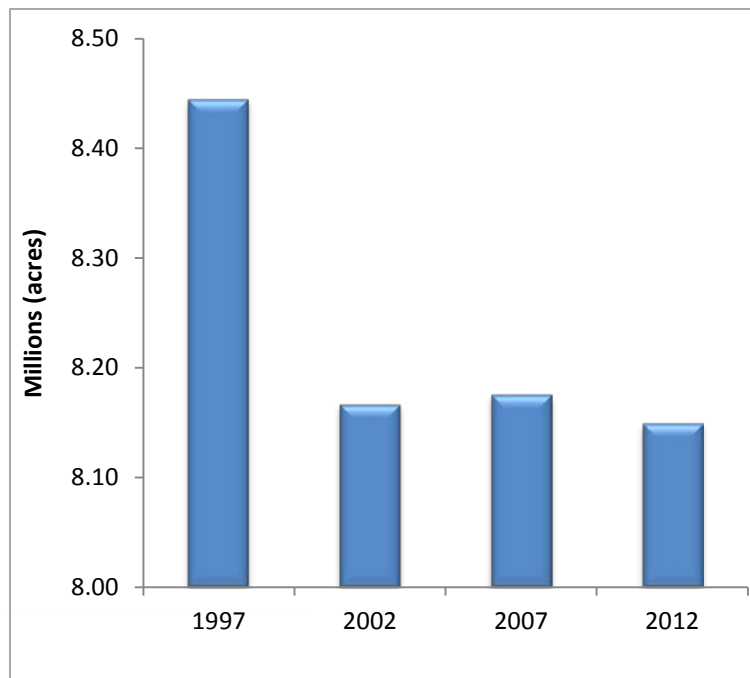
Wildlife



- Avg. of 12 listed/candidate species per county within basin
- 109,018 acres under wildlife management in 2012
 - 216% increase since 2002

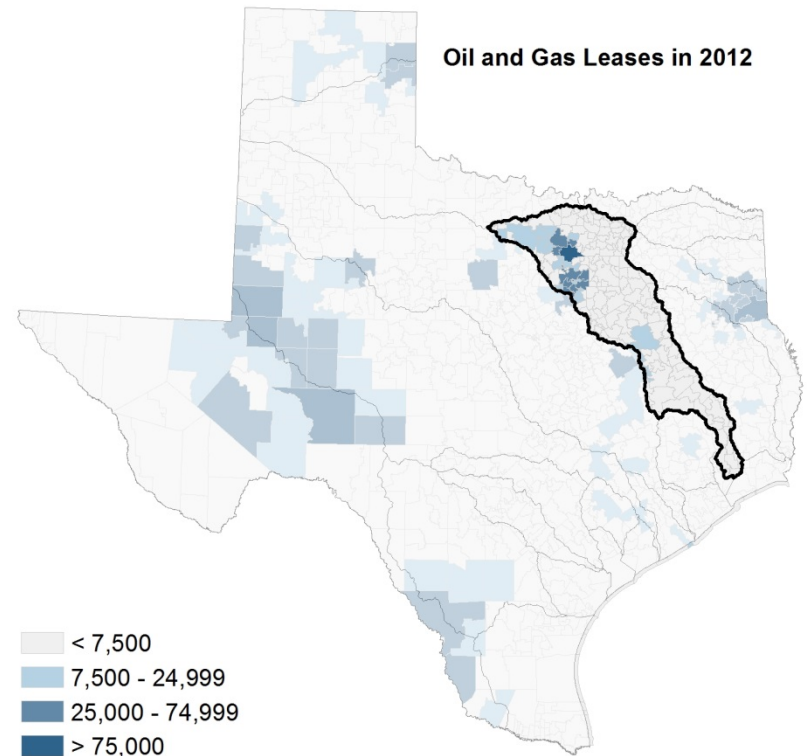
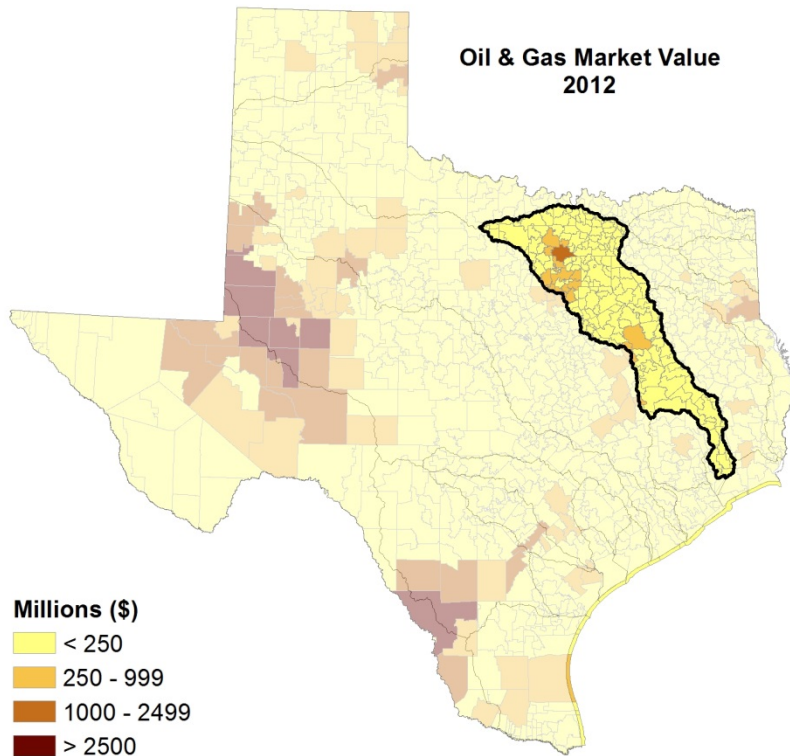
Working Lands

Almost 300,000 acres (3.5%) lost from 1997 to 2012.



*Working lands are privately owned *farms, ranches, and forests* that produce food and fiber, support rural economies, and provide wildlife habitat, clean air and water, and recreational opportunities.

Energy



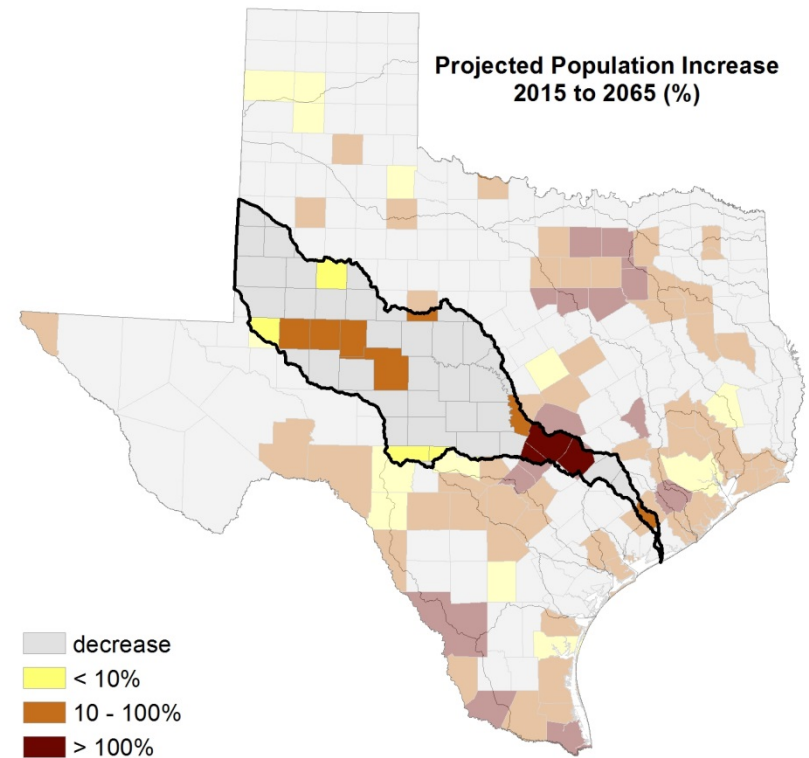
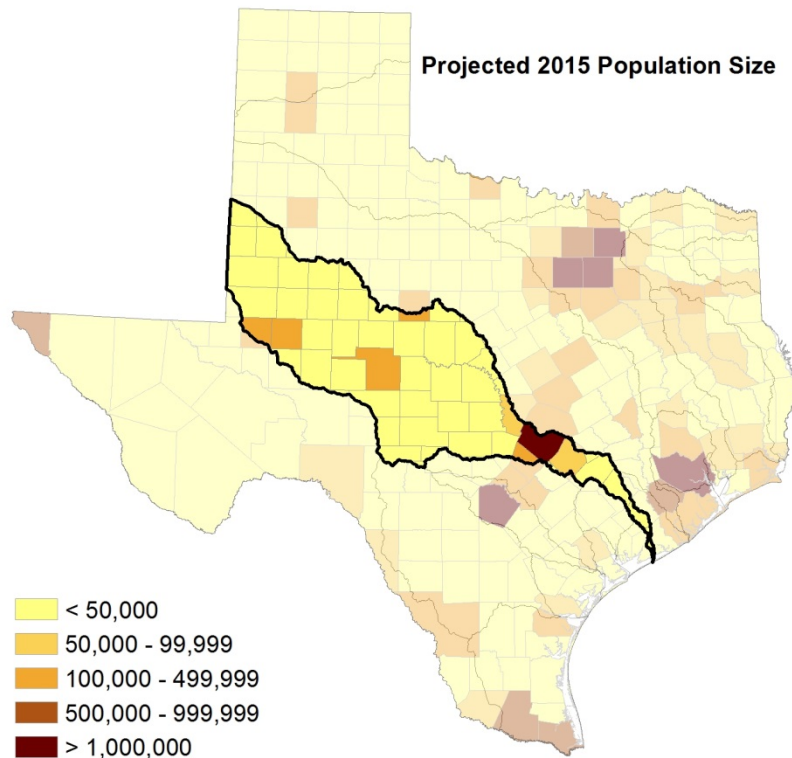
- From 1997 to 2012:
 - 716% increase in number of oil/gas leases
 - \$11.3 billion increase in market value

West & Central Texas: Colorado River Basin

- 39,611 mi² (> 25.4 million acres)
- 4,634 stream miles
- 63 counties



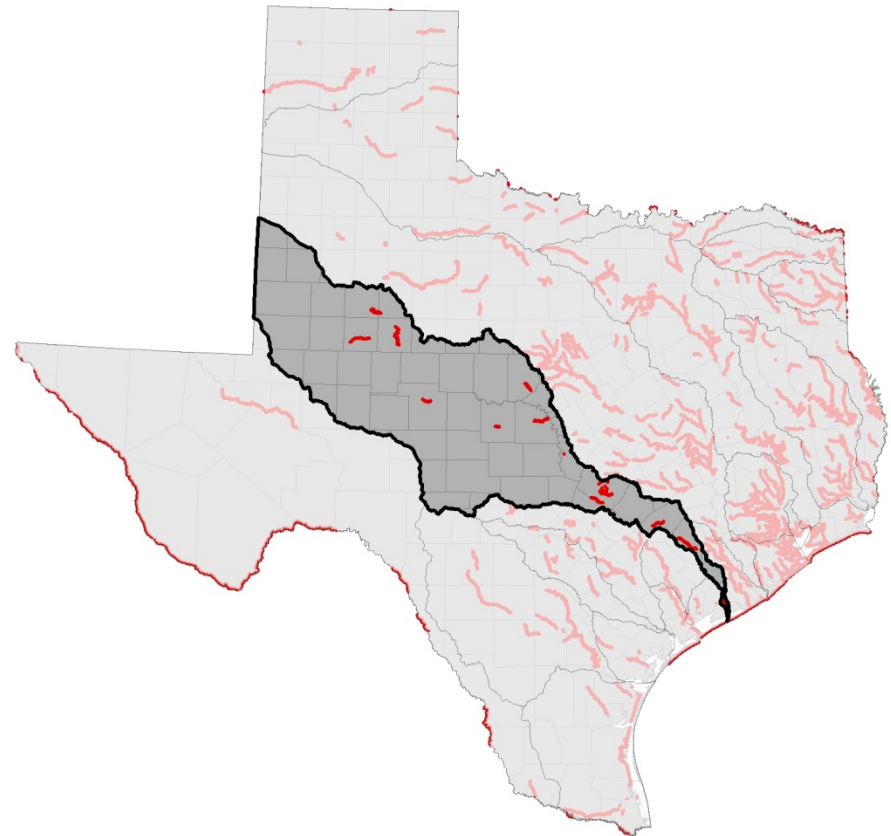
Population



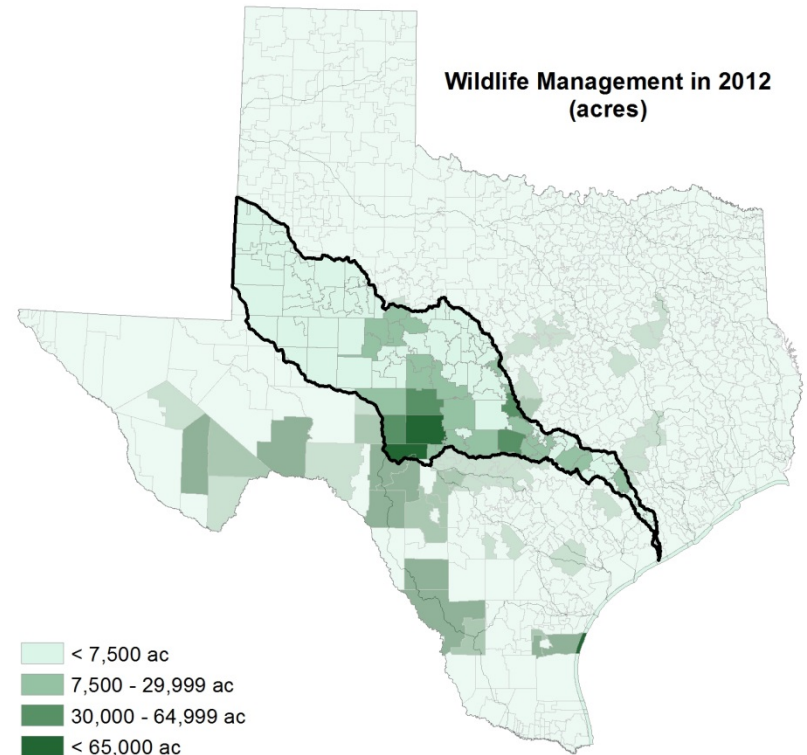
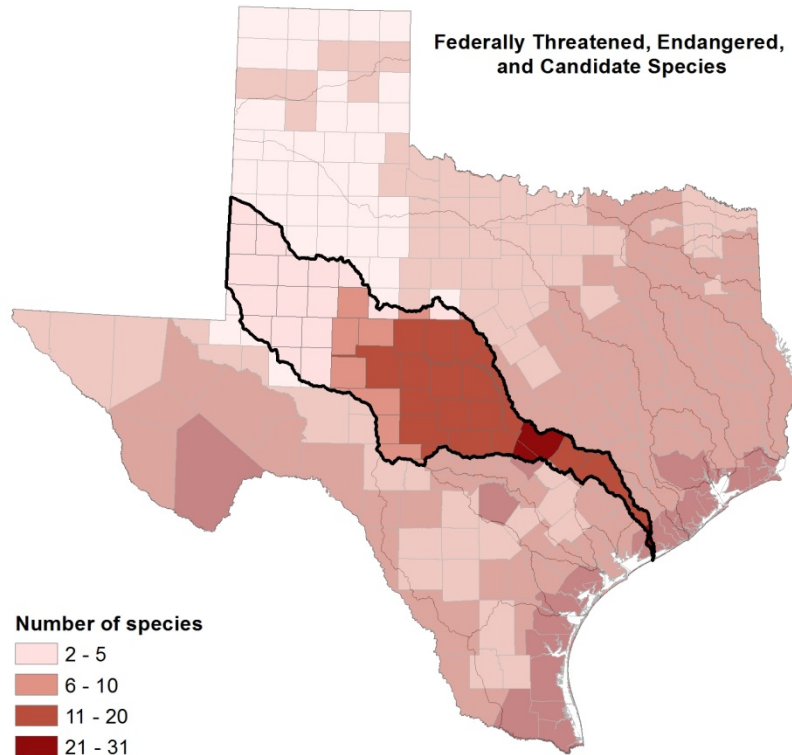
- 2015 estimated population: 2.4 million
- 44% projected increase over next 50 years

Impaired (303d) Streams

- 248 miles (5% of total stream length) classified as impaired.



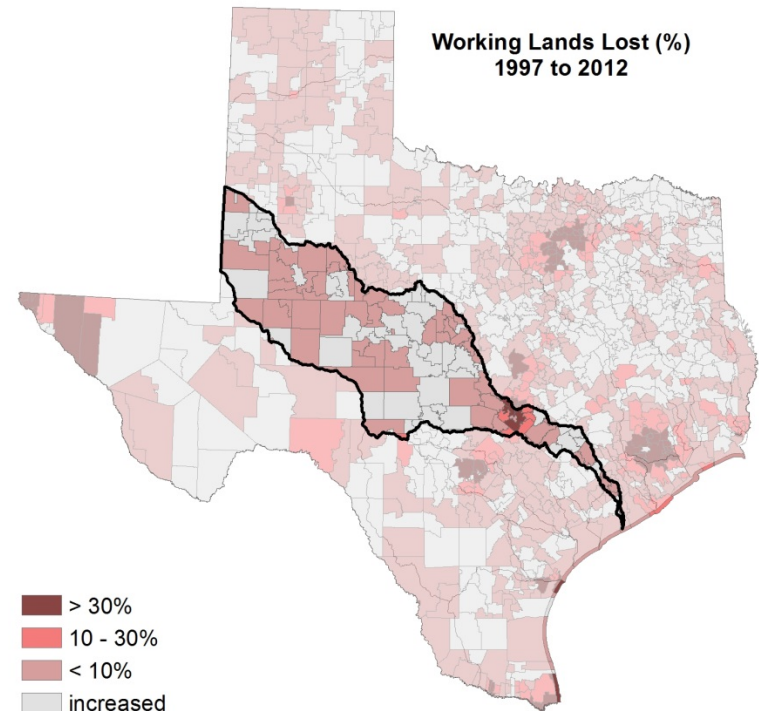
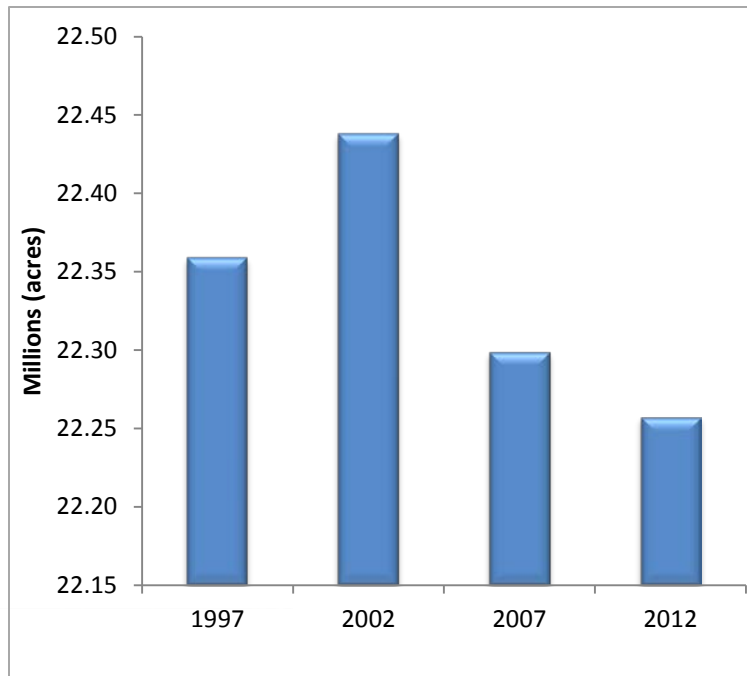
Wildlife



- Avg. of 10 listed/candidate species per county within basin
- 634,173 acres under wildlife management in 2012
 - 285% increase since 2002

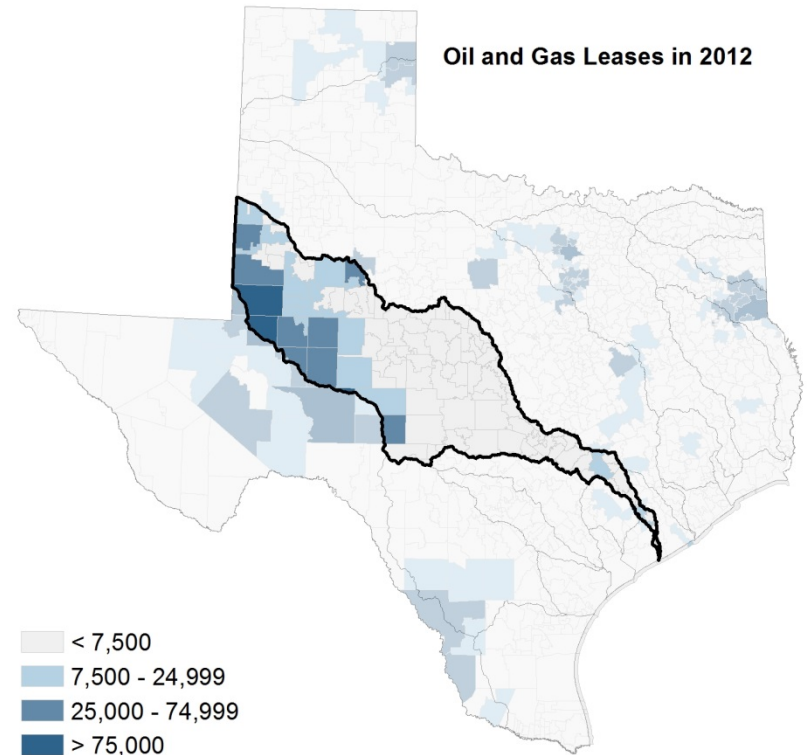
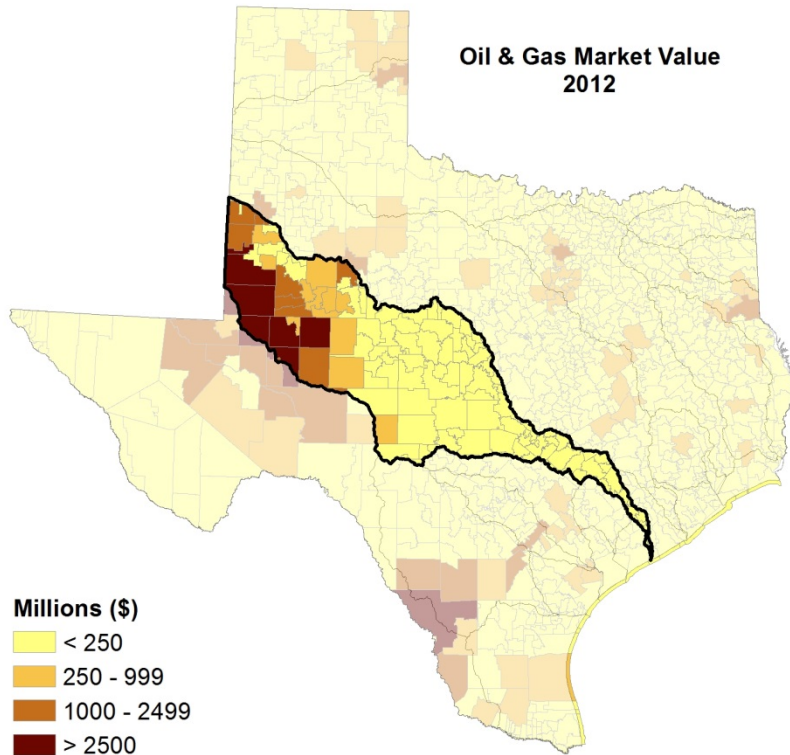
Working Lands

Over 100,000 acres (0.45%) lost from 1997 to 2012.



*Working lands are privately owned *farms, ranches, and forests* that produce food and fiber, support rural economies, and provide wildlife habitat, clean air and water, and recreational opportunities.

Energy



- From 1997 to 2012:
 - 86% increase in number of oil/gas leases
 - \$37.2 billion increase in market value

New York as a Model

- Grey to Green Infrastructure
- Largest unfiltered water supply in the U.S.
- Saved over \$6 billion
- Ratepayers opened up SRF funding



***Promoting Private Lands Stewardship through
Research, Education, and Policy.***

**<http://irnr.tamu.edu/>
<http://txlandtrends.org/>**



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