Guadalupe Bass Restoration Initiative

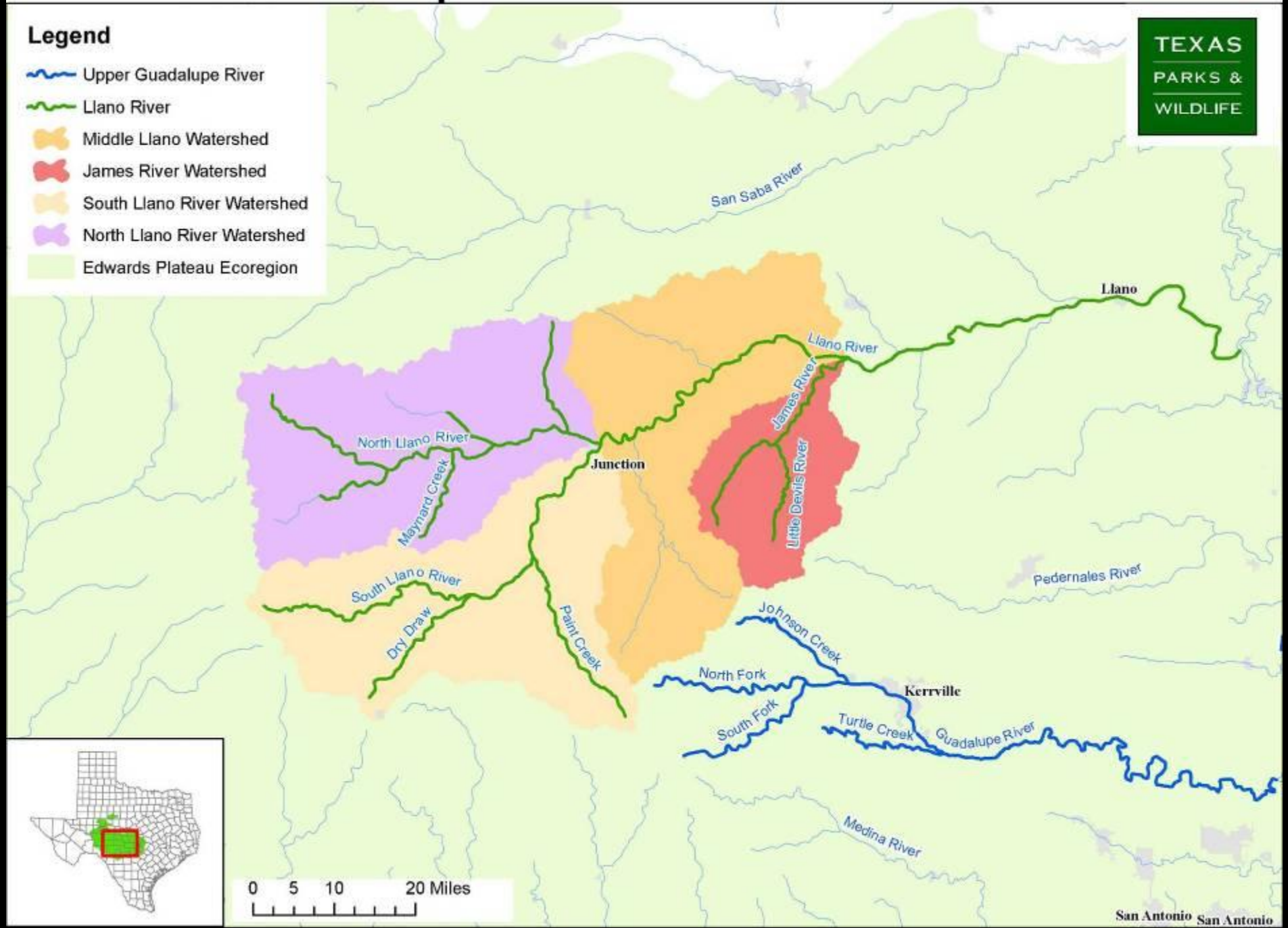
A Community-Based Approach to Stream Restoration in Texas

Gary Garrett, Timothy Birdsong, Megan Bean and Ryan McGillicuddy

Watershed Conservation Program - Develop partnerships to conserve aquatic, riparian and upland habitats essential to environmentally and economically healthy watersheds that benefit the natural resources of the state

- Promote awareness and stewardship of habitats
- Organize community involvement in local habitat conservation projects
- Establish local conservation partnerships and leverage available resources
- Provide technical guidance and planning assistance

Guadalupe Bass Restoration Initiative



Conservation Strategies

- Maintain intact, healthy habitats
- Restore degraded habitats
- Ameliorate effects of invasive species

- Conduct research to fill critical information gaps
- Provide coordination and adaptive management

Partners & Technical Guidance

- South Llano Watershed Alliance & other private landowners
- TPWD
- Texas Tech University
- Texas State University
- The University of Texas
- U.S. Fish and Wildlife Service
- Natural Resources Conservation Service
- Texas Forest Service
- Texas Nature Conservancy

Protect and maintain intact, healthy habitats

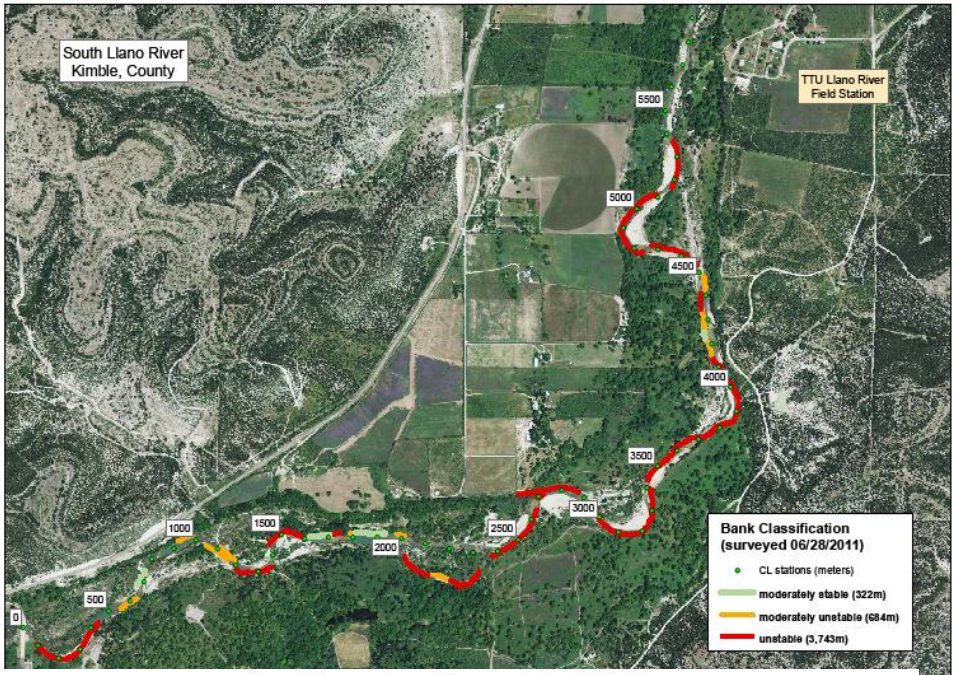
Conservation Actions:

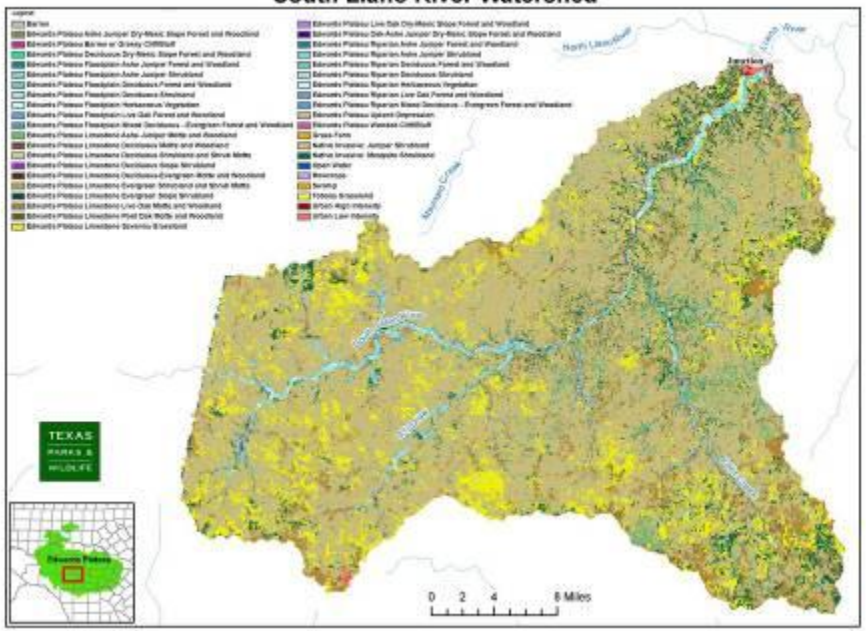
- Develop a Watershed Conservation Plan for the upper Llano River Watershed
- Encourage & support stewardship of natural resources
- Provide guidance on Best Management Practices

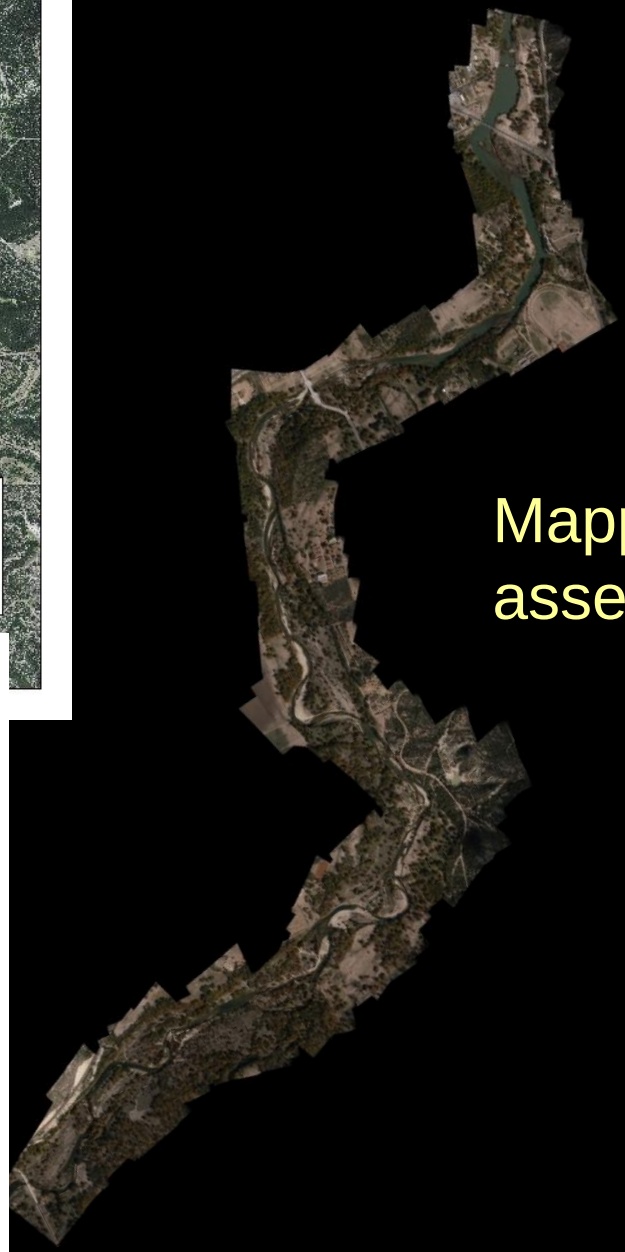
Restore Habitats

Conservation Actions:

- Mapping and assessment of instream and riparian habitats in the Llano River
- Aquatic community and habitat use assessment in the Llano River
- Instream and riparian habitat restoration







Mapping and assessment

20 June 2012

8 November 2012

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Texas Orthoimagery
© 2010 Google
Dates: Mar 31, 2008 - Apr 1, 2008
30°26'57.47" N 99°48'32.80" W

SLR State Park
State Park Rd 78
23'
85'
120'
78'
© 2013 Google
Google earth
imagery Date: 6/18/2011
1995
30°26'57.82" N 99°48'39.49" W elev 1716 ft
Eye alt 2891 ft

1995

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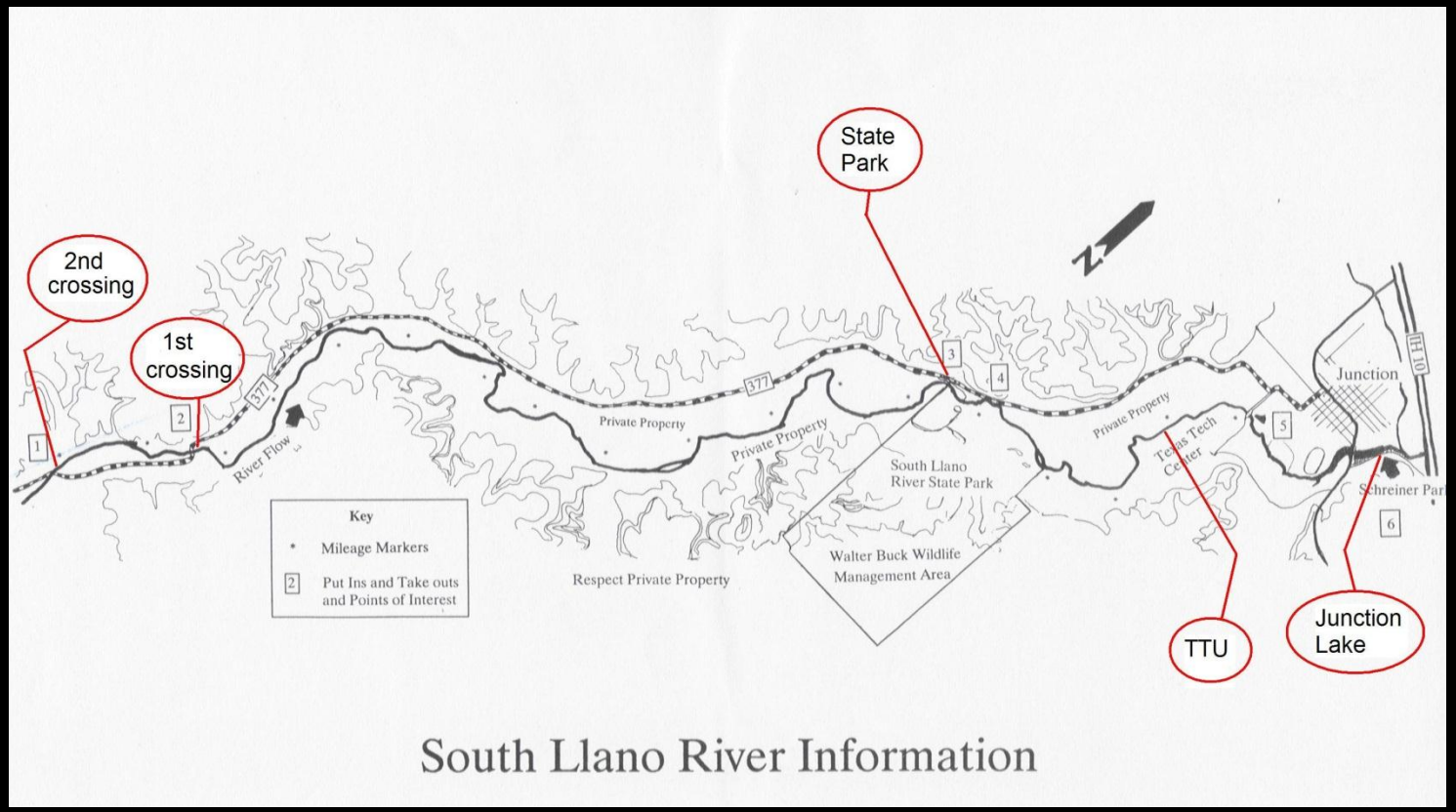
2011

GBRI Conservation Demonstration Area



Watershed Conservation Workshops

Oasis Pipeline Fire
April 2011

Fire Ecology & Restoration Workshop

Watershed LIP - implement on-the-ground conservation projects to restore and enhance the ecological function of selected watersheds

- restore riparian areas
- reduce soil erosion and runoff
- increase infiltration and aquifer recharge
- improve water quality in streams and enhance spring flows
- enhance habitat for both aquatic and terrestrial species

- Projects on 17 ranches & 53,000 acres of the Llano River Watershed.
- restore 2,000 acres of riparian, spring and upland habitats
- directly affects >35 miles of the Llano River and tributaries.

Paddling Trails

Guadalupe bass restoration

Conservation Actions:

- Broodstock collection to include genetic analysis and development of a restoration plan for the headwaters region
- Conservation stockings (~175,000 annually) in the North and South Llano rivers
- Fish community and habitat analysis in the North Llano, South Llano, and upper mainstem

"…the Guadalupe bass is a living testament to the sparkling purity of our state's freshwater tributaries…"