

Arundo donax on the Blanco River



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Arundo donax

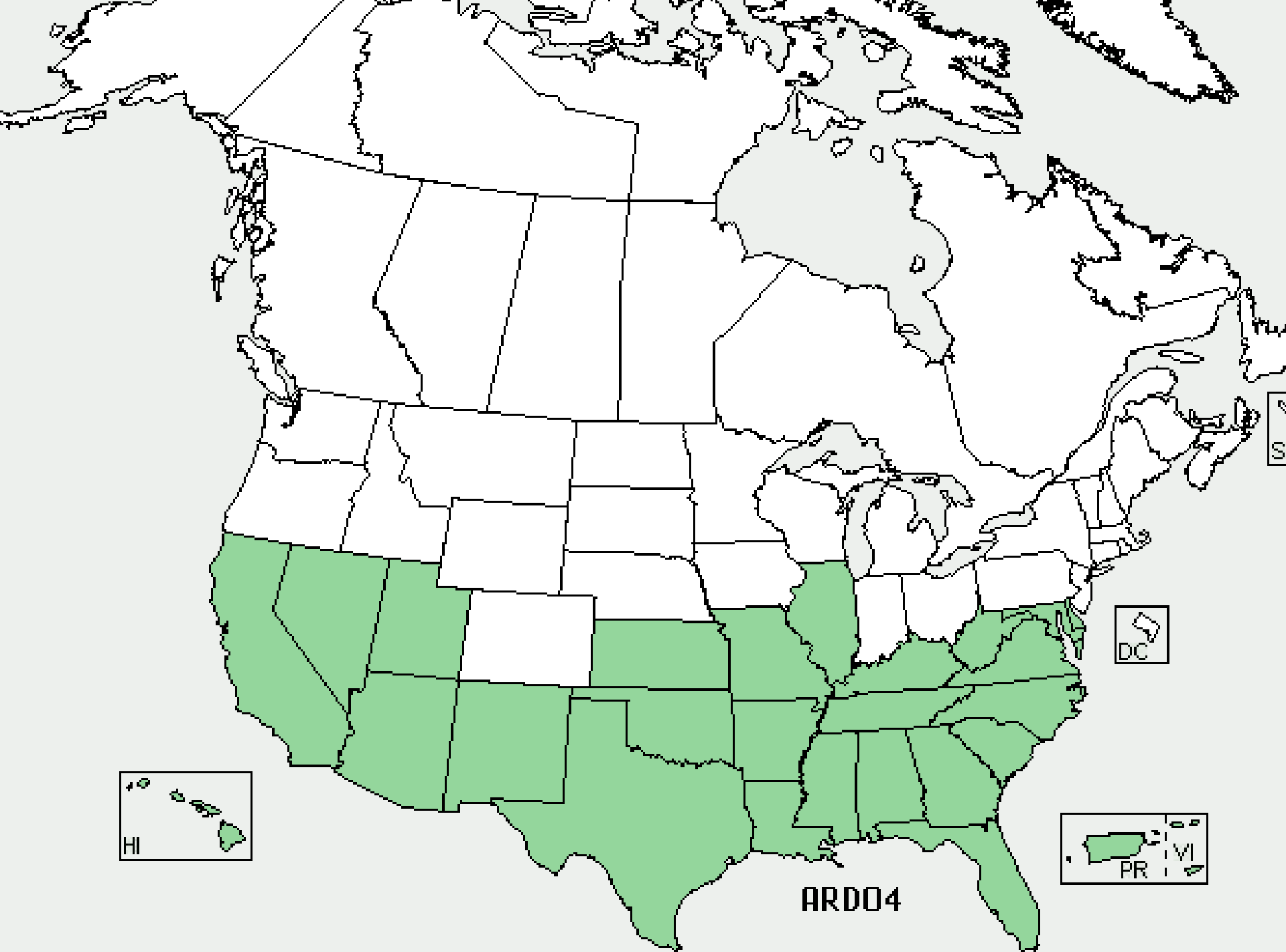
- Giant cane, giant reed, river cane
- Perennial grass that can grow up to 20 feet tall
- Flowers are 2-foot long, dense, plume-like panicles present in August and September.
- Reproduction
 - primarily vegetative
 - rhizomes root and sprout readily
 - Little is known about sexual reproduction, or seed viability, dormancy, germination, and seedling establishment
 - Research on these topics may yield some additional improvements in the management of giant reed.
- **Can grow up to 1 foot per week**



Arundo donax

- Introduced from Western Asia, Southern Africa, and Northern Europe to Los Angeles, California in the early 1800's
- Most of the current range is from intentional introduction
- Widely planted throughout the warmer areas of the United States as an ornamental and in the Southwest, where it was used along ditches for erosion control.





Arundo donax

- Easily becomes established in moist places such as ditches, streams, and riverbanks, growing best in well drained soils where abundant moisture is available. It tolerates a wide variety of conditions, including high salinity, and can flourish in many soil types from heavy clays to loose sands.





- Chokes riversides and stream channels, crowds out native plants, interferes with flood control, increases fire potential, and reduces habitat for wildlife. The long, fibrous, interconnecting root mats form a framework for debris dams behind bridges, culverts, and other structures that lead to damage. It ignites easily and can create intense fires.
- Can float miles downstream where root and stem fragments may take root and initiate new infestations. Due to its rapid growth rate and vegetative reproduction, it is able to quickly invade new areas and form pure stands at the expense of other species. Once established, giant reed has the ability to outcompete and completely suppress native vegetation.

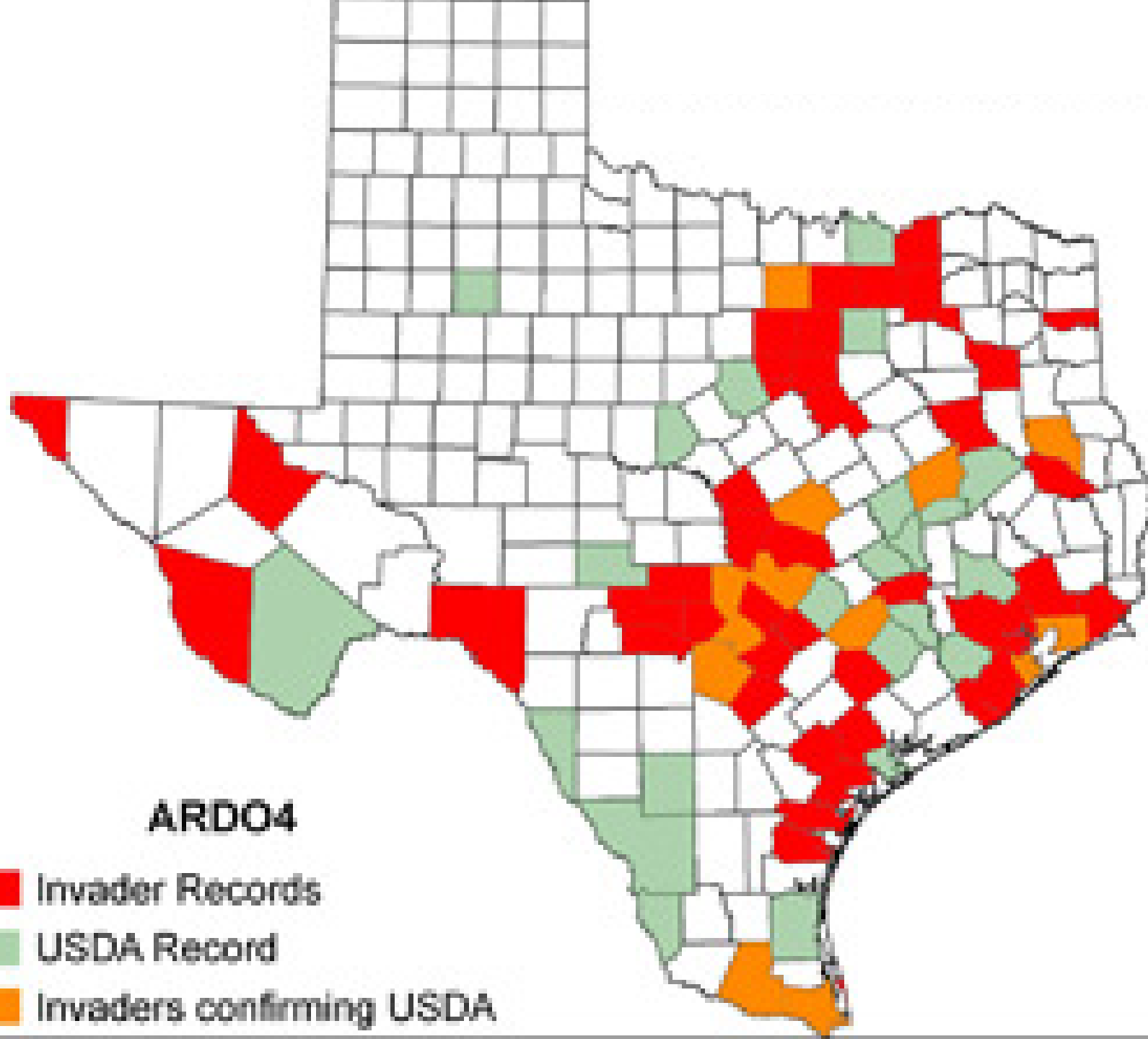
Texas Alternatives

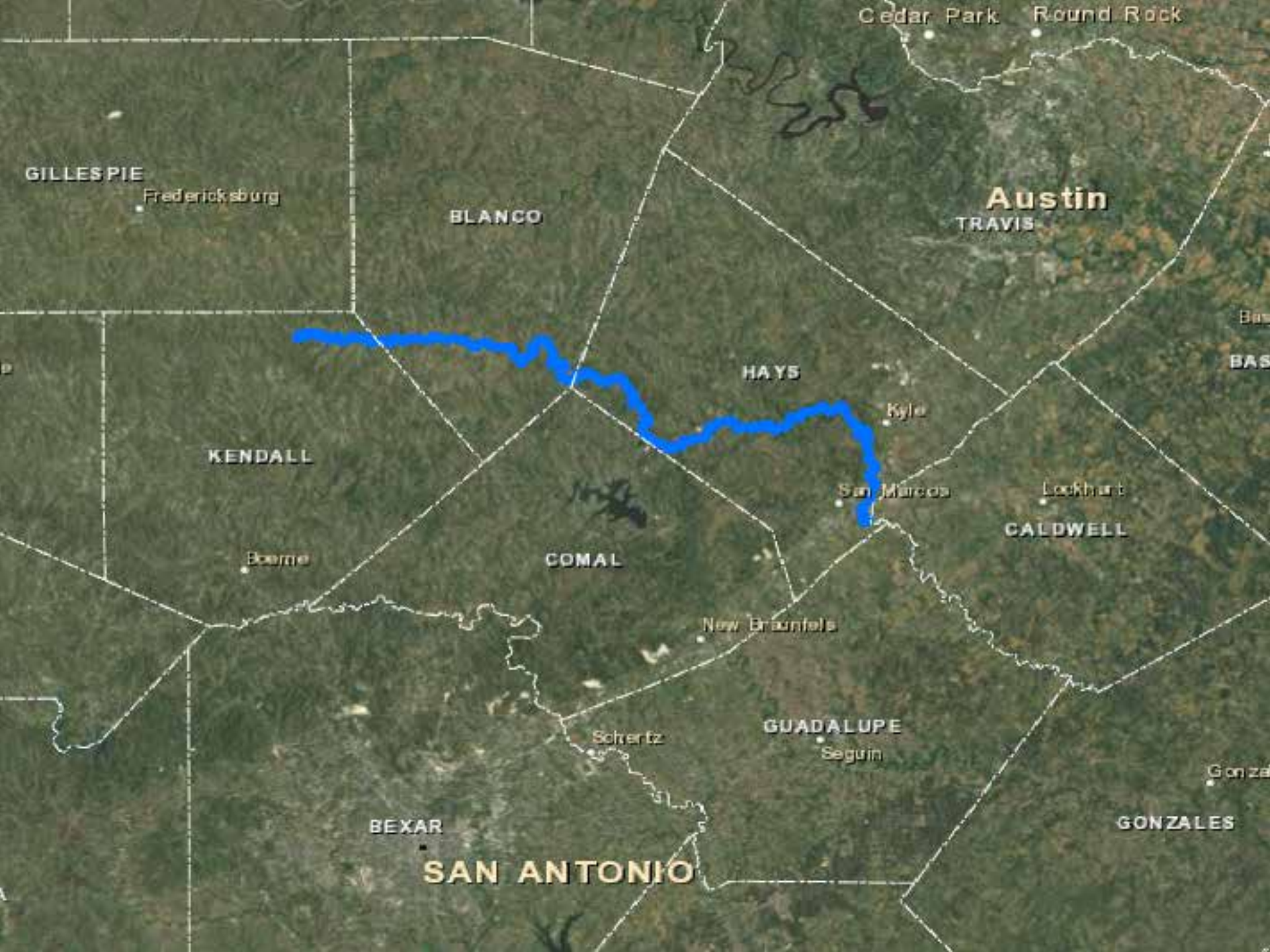
- (some) Texas alternatives
 - Square-stem spikerush (*Eleocharis quadrangulata*)
 - Sugarcane plumegrass (*Saccharum giganteum*)
 - Powdery thalia (*Thalia dealbata*).
 - Big bluestem (*Andropogon gerardii*)
 - Bushy beardgrass (*Andropogon glomeratus*)
 - Switchgrass (*Panicum virgatum*)
 - Big cordgrass (*Spartina cynosuroides*)
 - Eastern gamagrass (*Tripsacum dactyloides*)



Arundo donax

- TDA Noxious Weed
- TPWD Prohibited Exotic Species
- Federal Noxious Weed
 - The APHIS Federal noxious weed program is designed to prevent the introduction into the United States of nonindigenous invasive plants and to prevent the spread of newly introduced invasive plants within the United States.
 - APHIS noxious weed activities include exclusion, permitting, eradication of incipient infestations, survey, data management, public education, and (in cooperation with other agencies and state agencies) integrated management of introduced weeds, including biological control.





Cedar Park Round Rock

GILLESPIE
Fredericksburg

BLANCO

Austin
TRAVIS

KENDALL

HAYS

Kyle

San Marcos

Lookhart

CALDWELL

Boerne

COMAL

New Braunfels

Schertz

GUADALUPE
Seguin

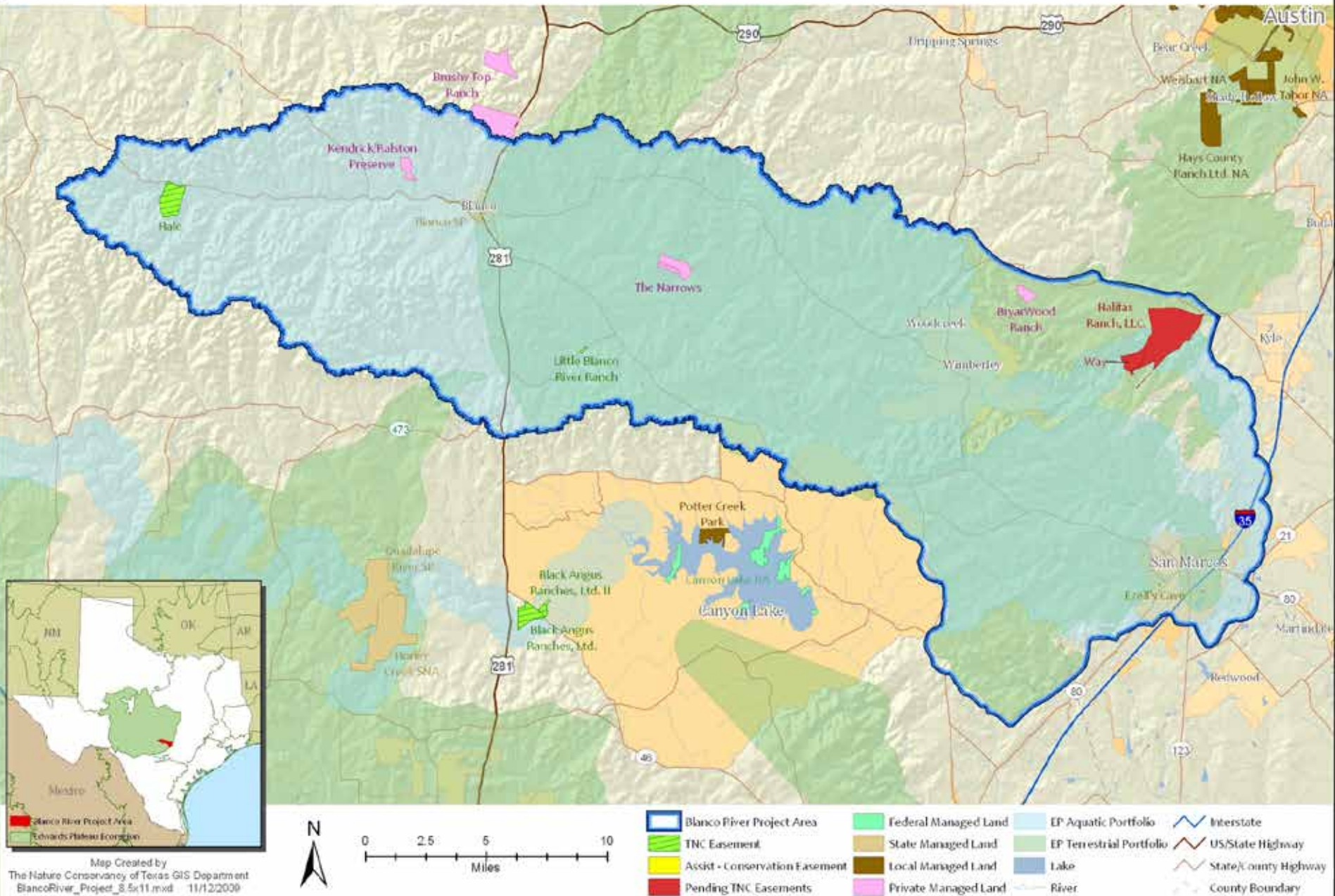
Gonzales

BEXAR

GONZALES

SAN ANTONIO

Blanco River Project Area Edwards Plateau Ecoregion

























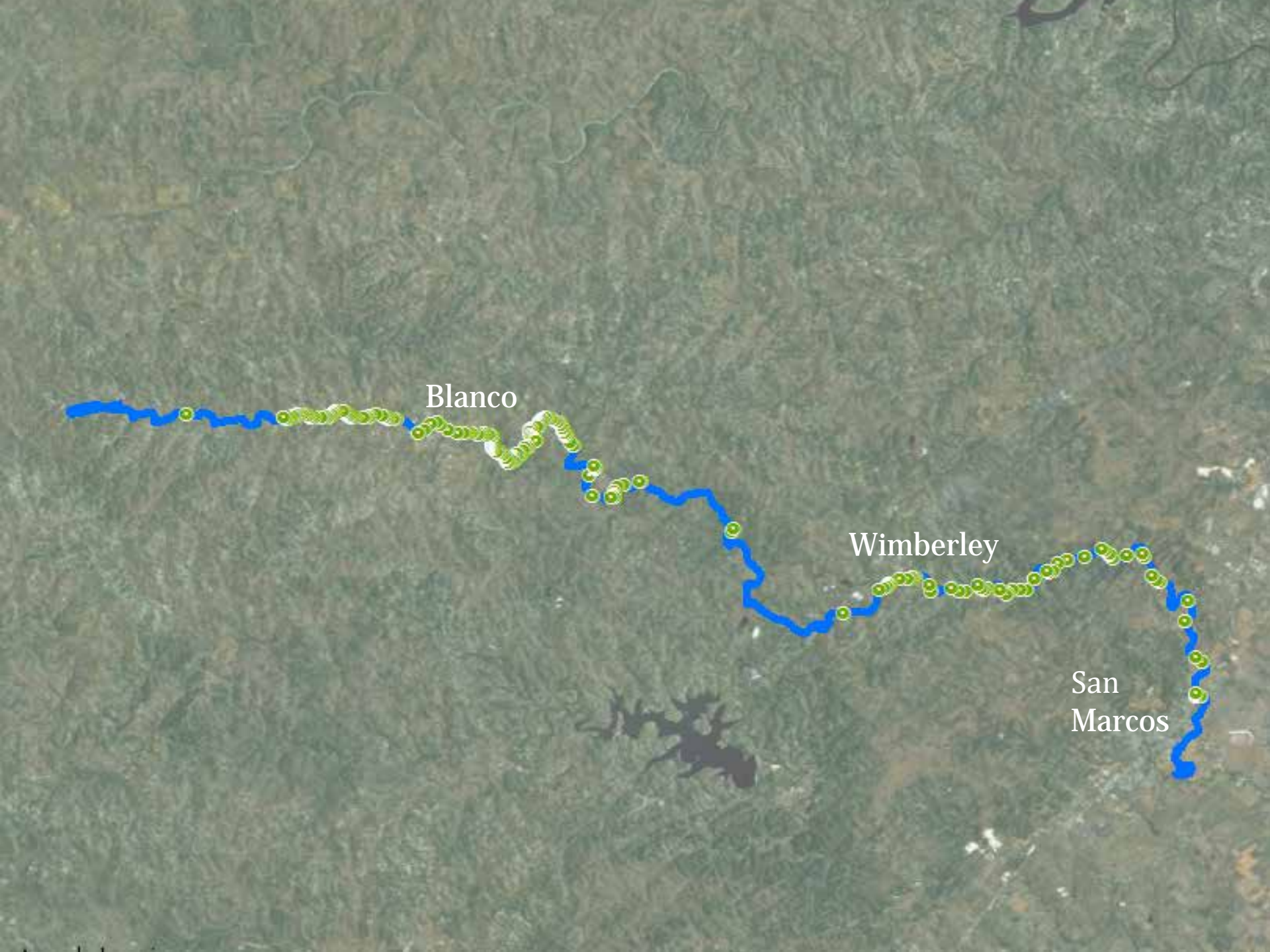










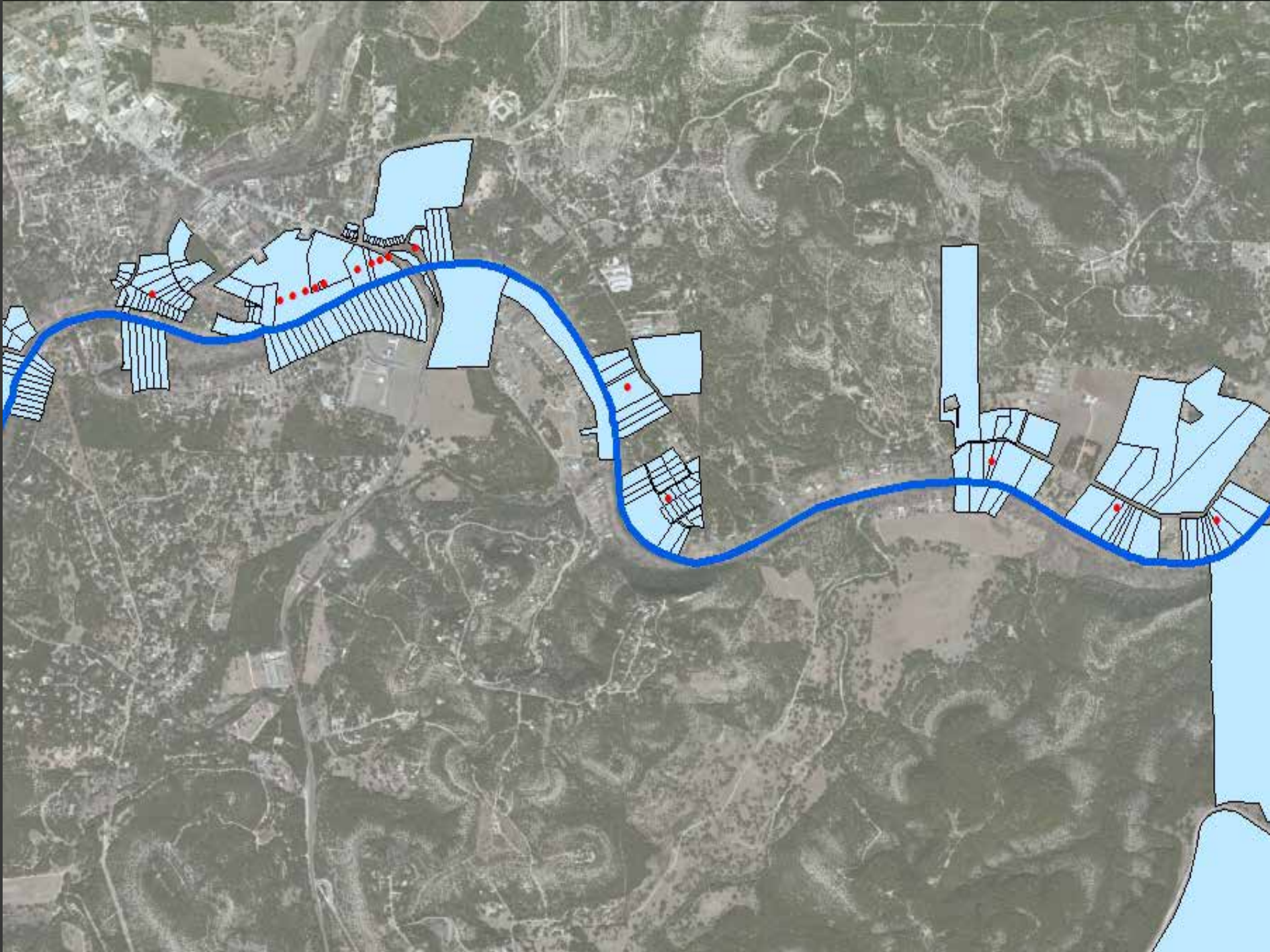


Blanco

Wimberley

San
Marcos



























Next Steps

- Apply for funding (Fall 2013)
- Contact landowners (Winter 2013-2014)
- Site visits (Spring 2014)
- Fly River with camera to establish baseline (April/early May 2014)
- Setup herbicide treatments (May 2014)
- Site visits/follow up treatments (August 2014 & Spring/Summer 2015)