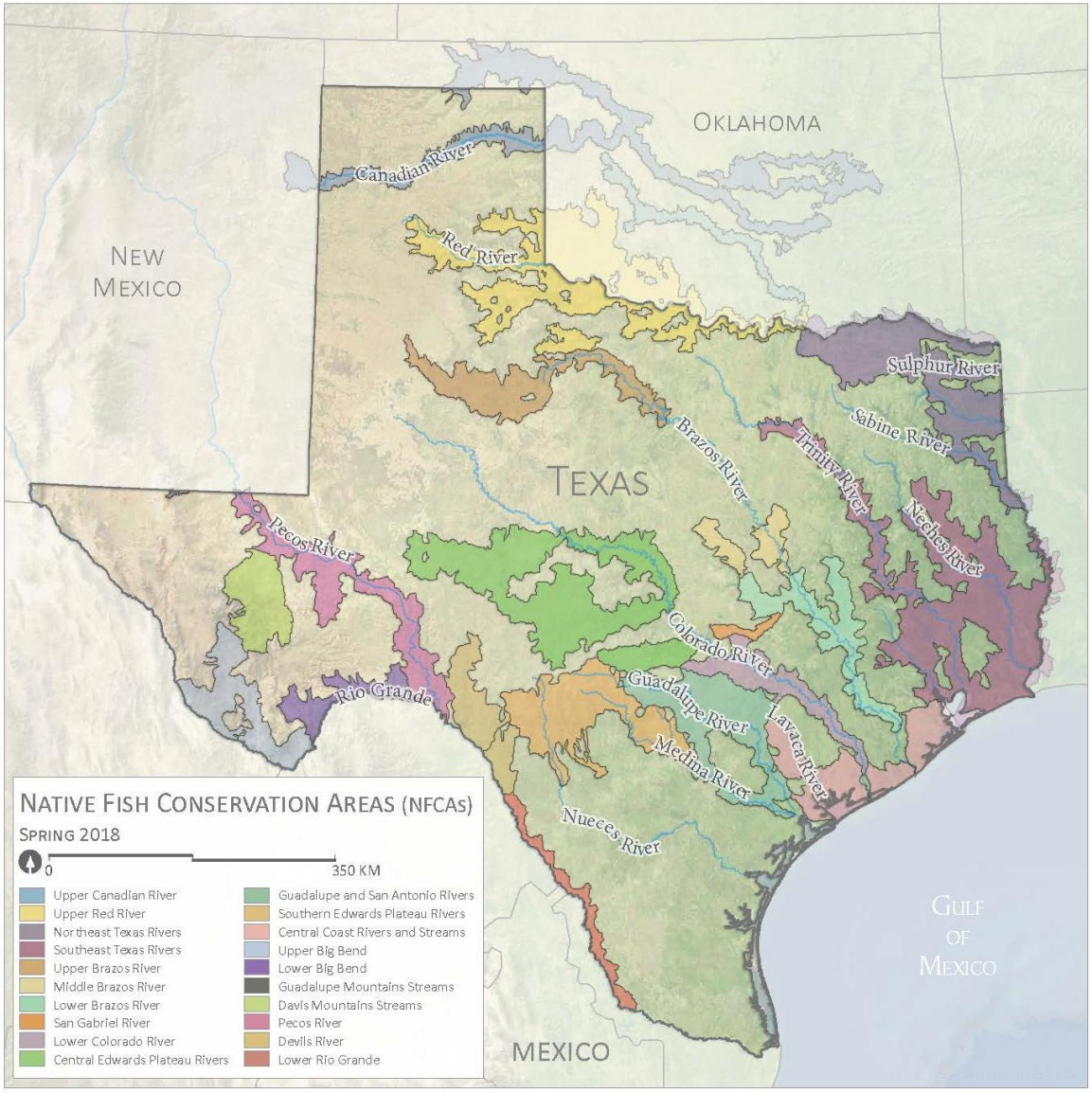
A Framework for Conservation in the Guadalupe Basin: Towards Conservation Action through a Geographic Prioritization Framework and Workshop Stakeholder Process with a Focus on Water Resources: Stakeholder Meeting # 1

October 17, 2018

Produced by Siglo Group and the Meadows Center for Water and the Environment at Texas State University with funding from Texas Parks and Wildlife and the Mitchell Foundation

Texas Native Fish Conservation Areas



A network of watersheds where management emphasizes conservation and restoration for long-term persistence of native fishes and other aquatic species and allows compatible uses.

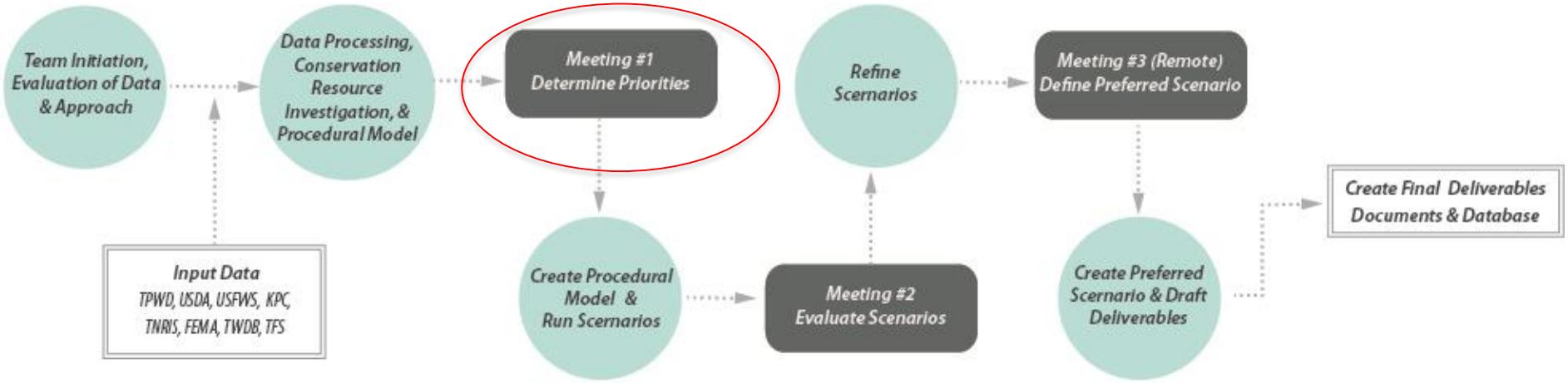
A national NFCA system would include a network of watersheds where resource management would emphasize conservation and restoration for long-term viability of native fish communities, while identifying and allowing compatible uses.

Conservation Planning: Purpose of Project

Goals of the Conservation Prioritization Phase of the Project:

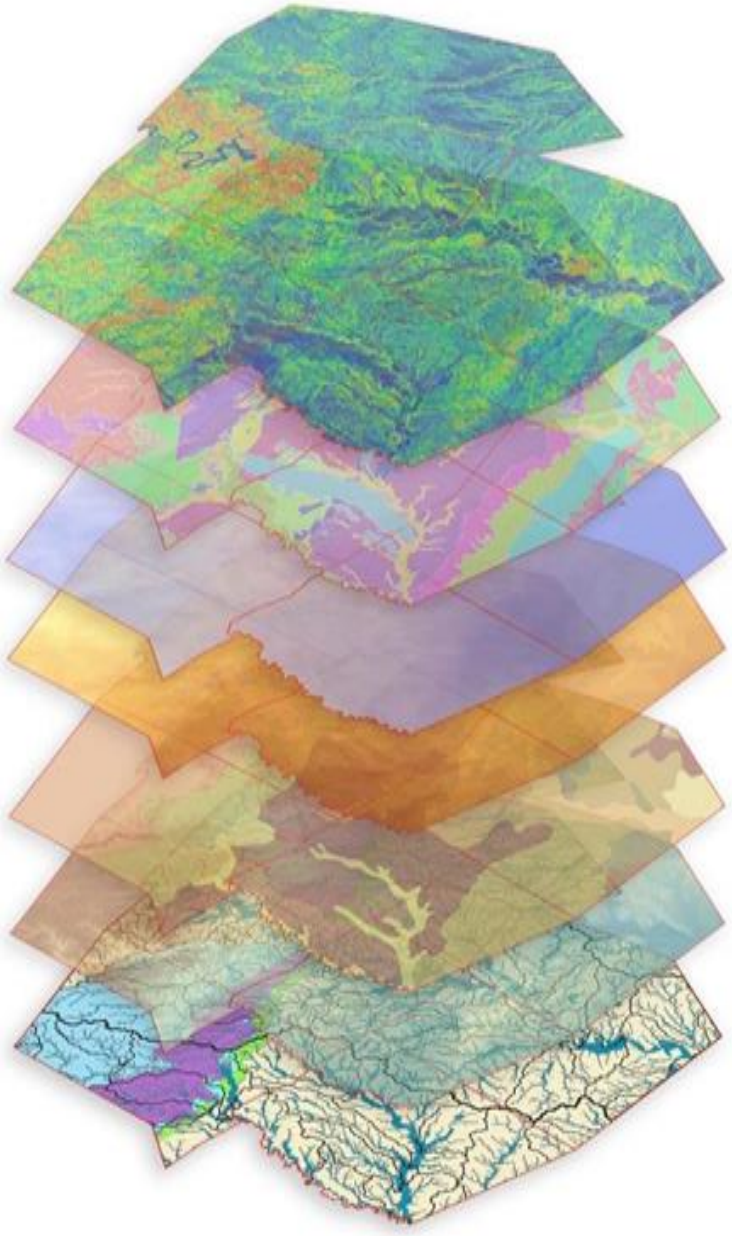
- Catalyze effective and efficient conservation.
- Determine the "Critical Mass" of conservation priorities in the study area.
- Determine highest priority conservation **AREAS** based on stakeholder input and the best available data using a geographic procedural model.
- Provide information that facilitates implementation, fundraising, and education, as well as on the ground conservation and restoration activities that are the outcome of the next phase of the project.
- Instigate a project that brings together agency and non-profit conservation professionals.

We are here!

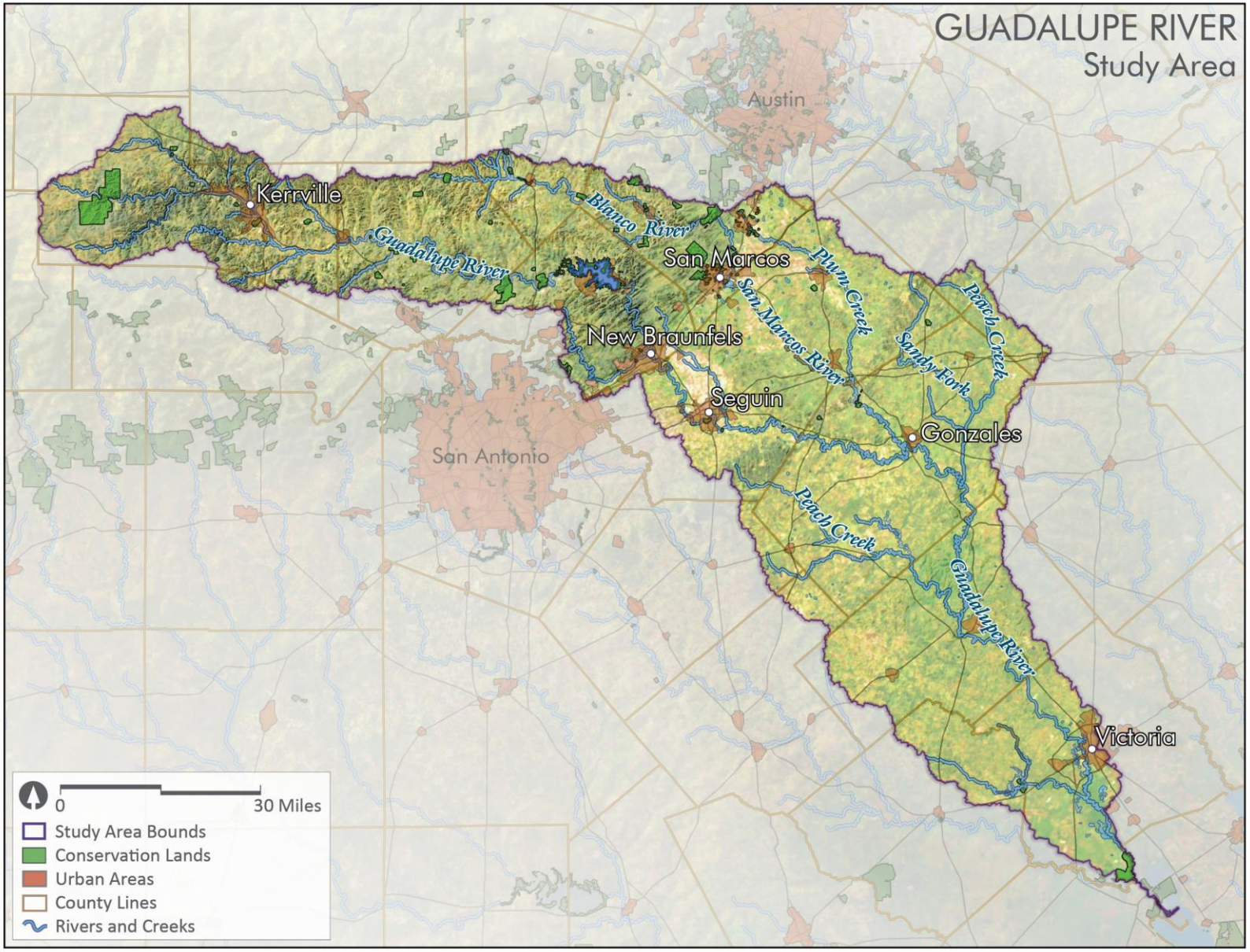


Guadalupe Conservation Planning Stakeholder Meeting #1

1. Study Area and Project Purpose
2. Methodology and Precedent
3. Conservation Resource Explanation, Review and Stakeholder Valuation
4. Next Steps

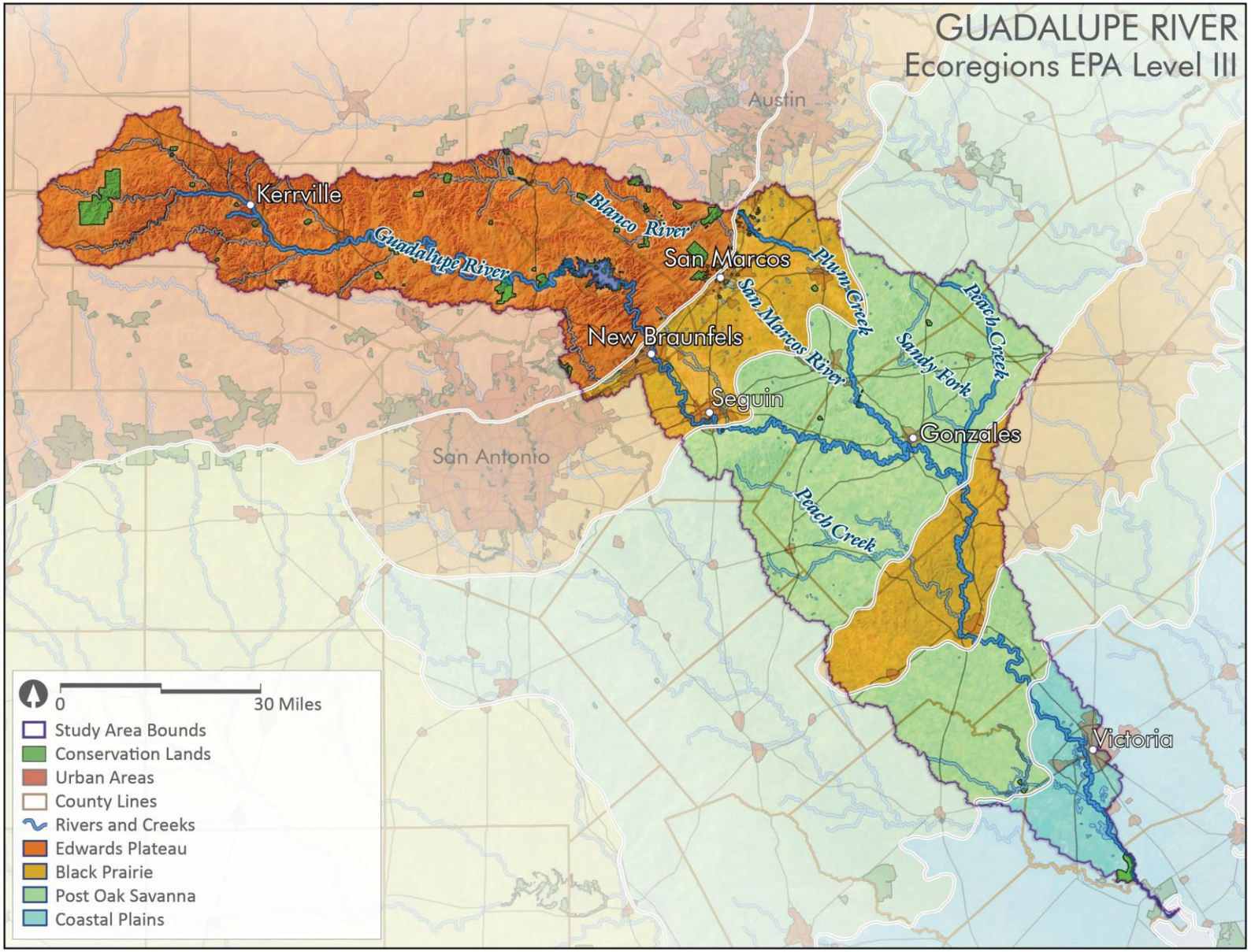


Guadalupe River Basin



Ecosystems

1



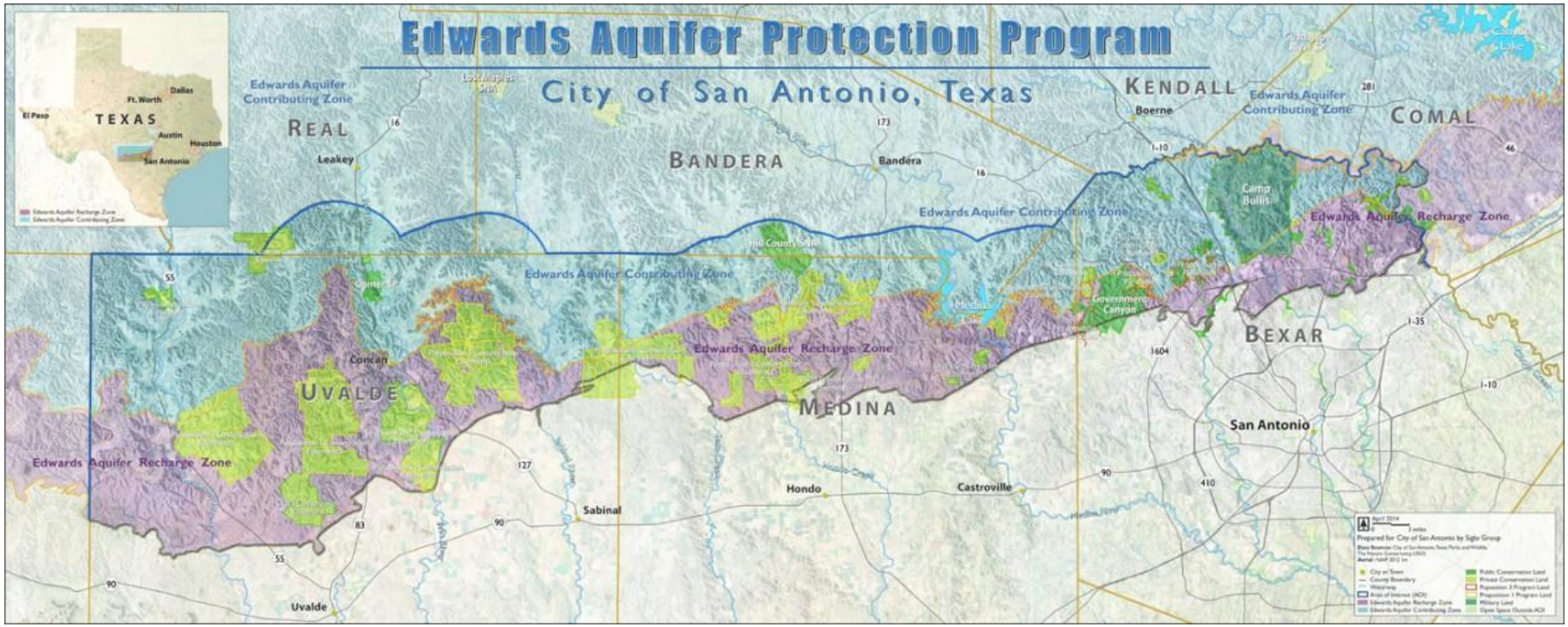
2

Procedural Model for San Antonio Edwards Aquifer Protection Program

Use of spatial model to create consistent results for the prioritization of acquisition parcels for the San Antonio Edwards Aquifer Protection Program.

Program and program partners to date has conserved over 200,000 acres of land over the Recharge and Contributing Zones of the Edwards Aquifer.

Parameters for variables were determined by a Scientific Evaluation Team appointed by the City of San Antonio– equivalent to this stakeholder group.

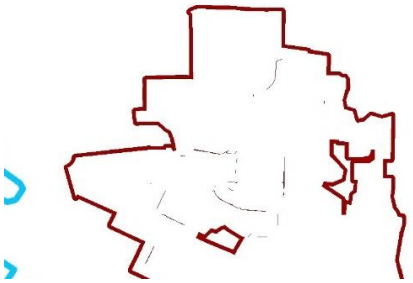


2

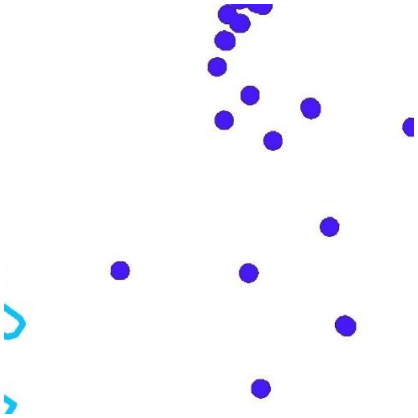
What on the landscape do we want to conserve? What will we prioritize?

Some of the San Antonio Examples

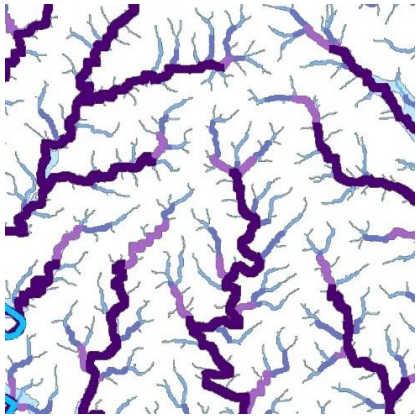
Openspace Buffers



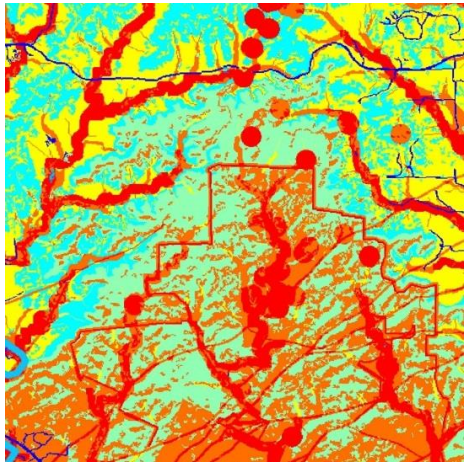
Spring Buffers

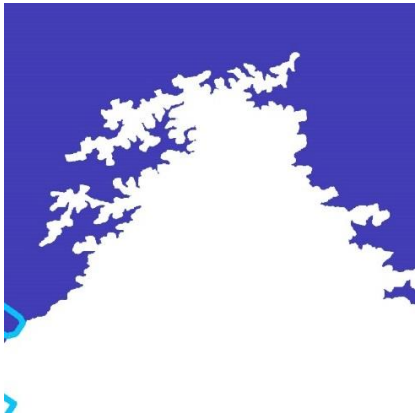


Water Quality Buffers

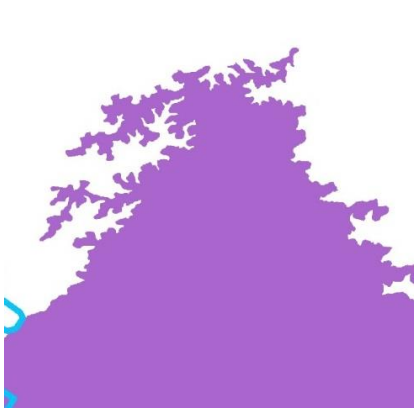


Suitable Sites

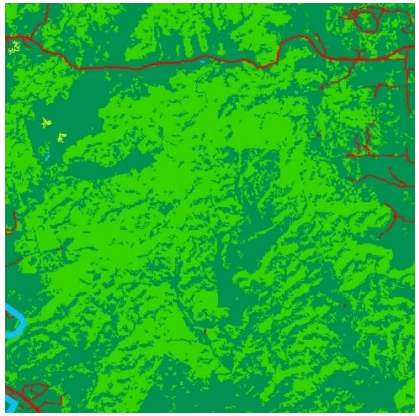




Contributing Zone



Recharge Zone



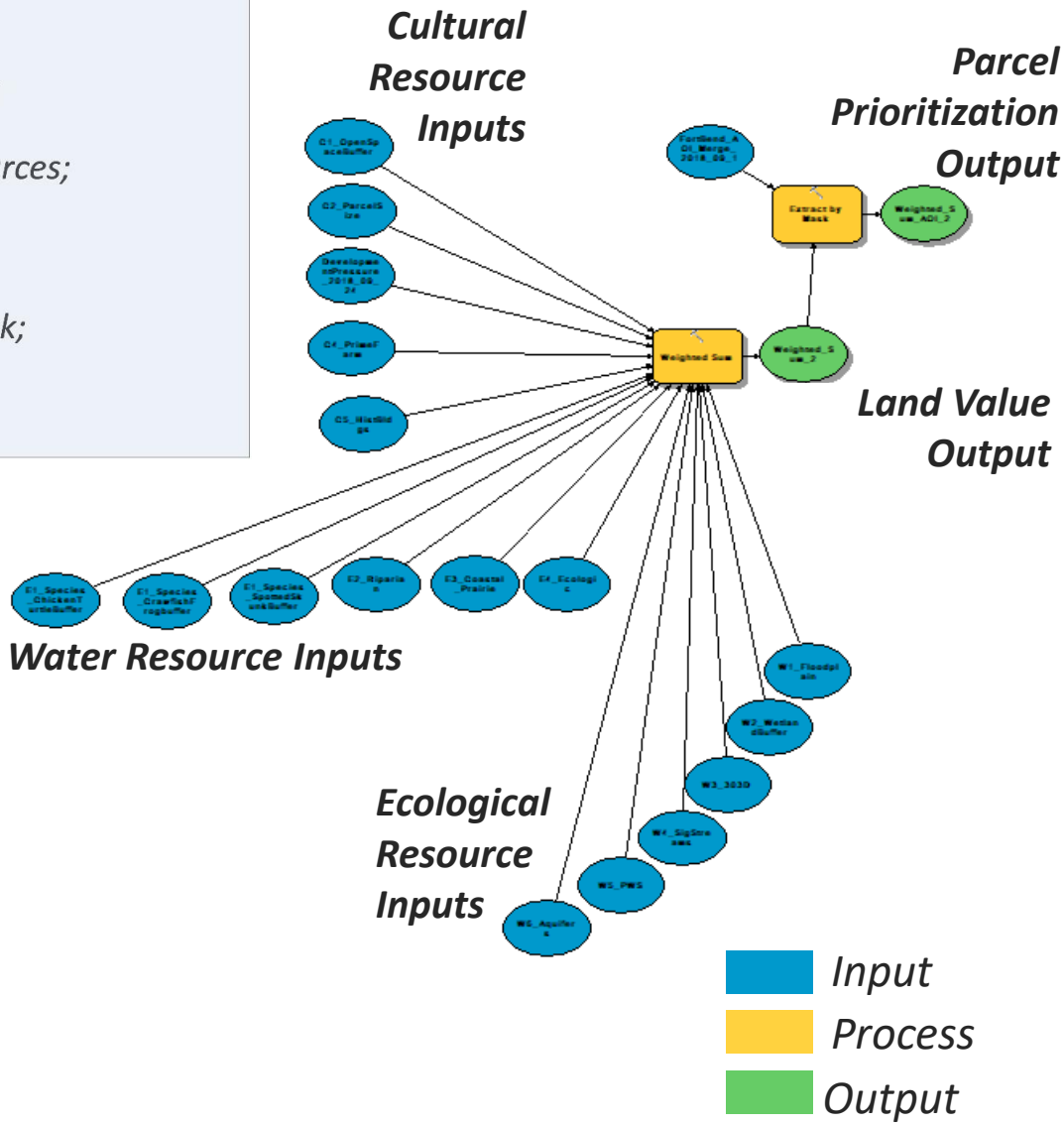
Land Cover

Methodology and Precedent

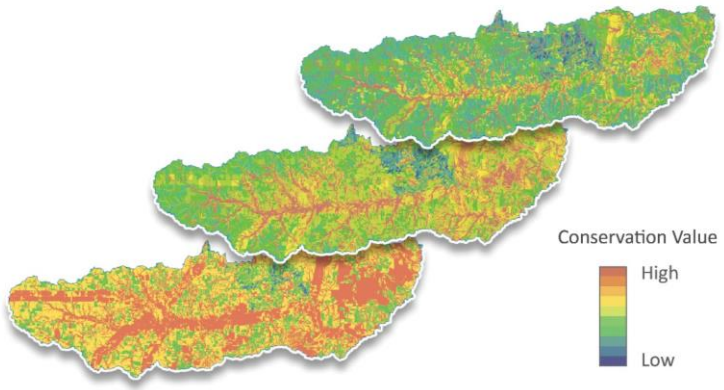
STEPS IN RUNNING THE MODEL

1. *Evaluate and adjust the existing conservation lands file as conditions change;*
2. *Add or delete individual conservation resources;*
3. *Adjust the values/weights of conservation resources;*
4. *Run model;*
6. *Evaluate results and obtain stakeholder feedback;*
7. *Repeat as needed.*

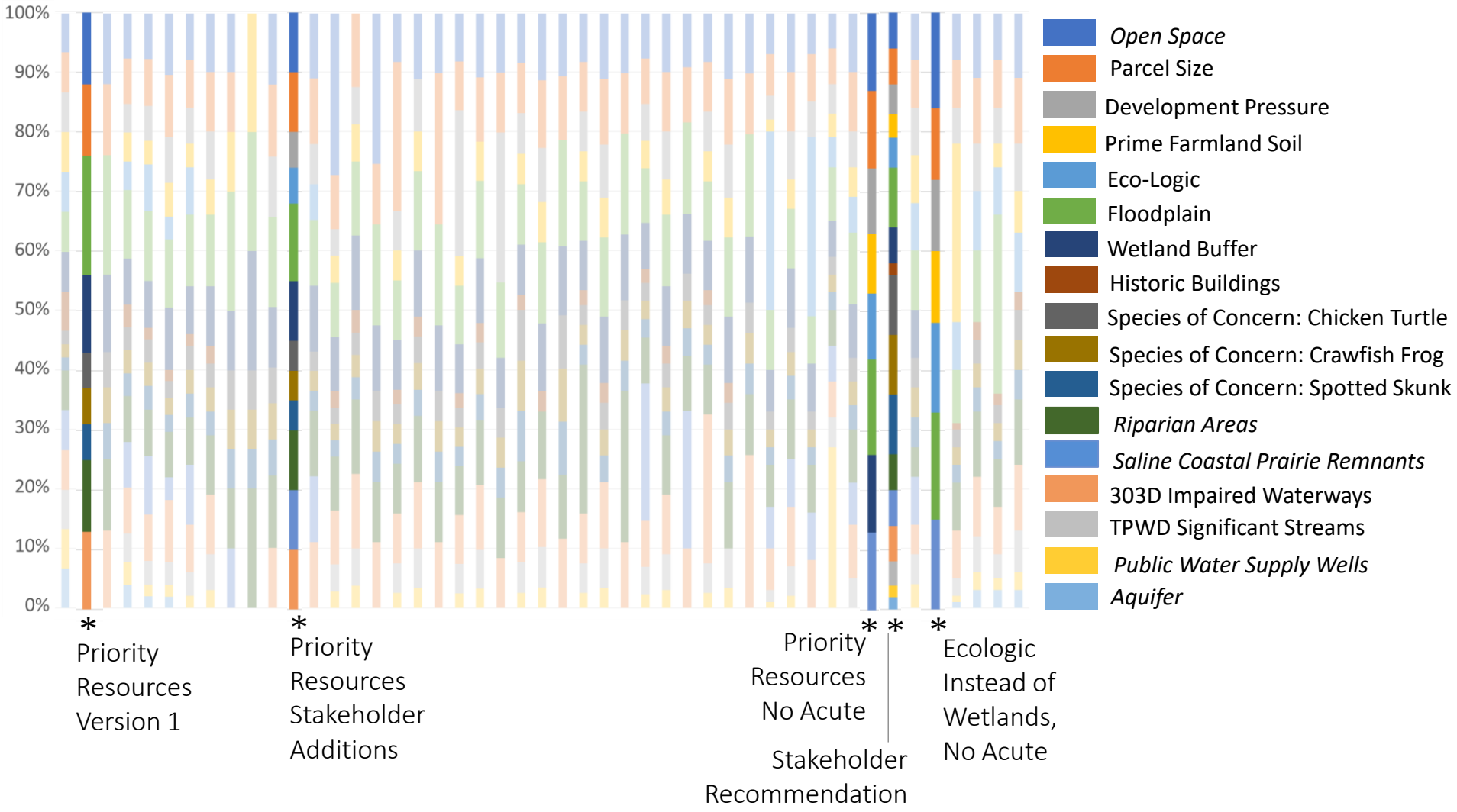
2



EXAMPLE CONSERVATION SCENARIO ITERATIONS



Model Iterations: Feasible Weightings



Gaps in conservation

PLANNING GAP

Where to effectively/efficiently implement action considering:

- Evaluation of multiple landscape resources
- Inter/intra-jurisdictional decision making
- Evaluating both the conservation resource and the land use trends impacting the resource.

IMPLEMENTATION GAP

Knowing-Doing Gap: With ISSUES, how do we ACT?

- Mechanisms?
- Partners?
- How to facilitate?

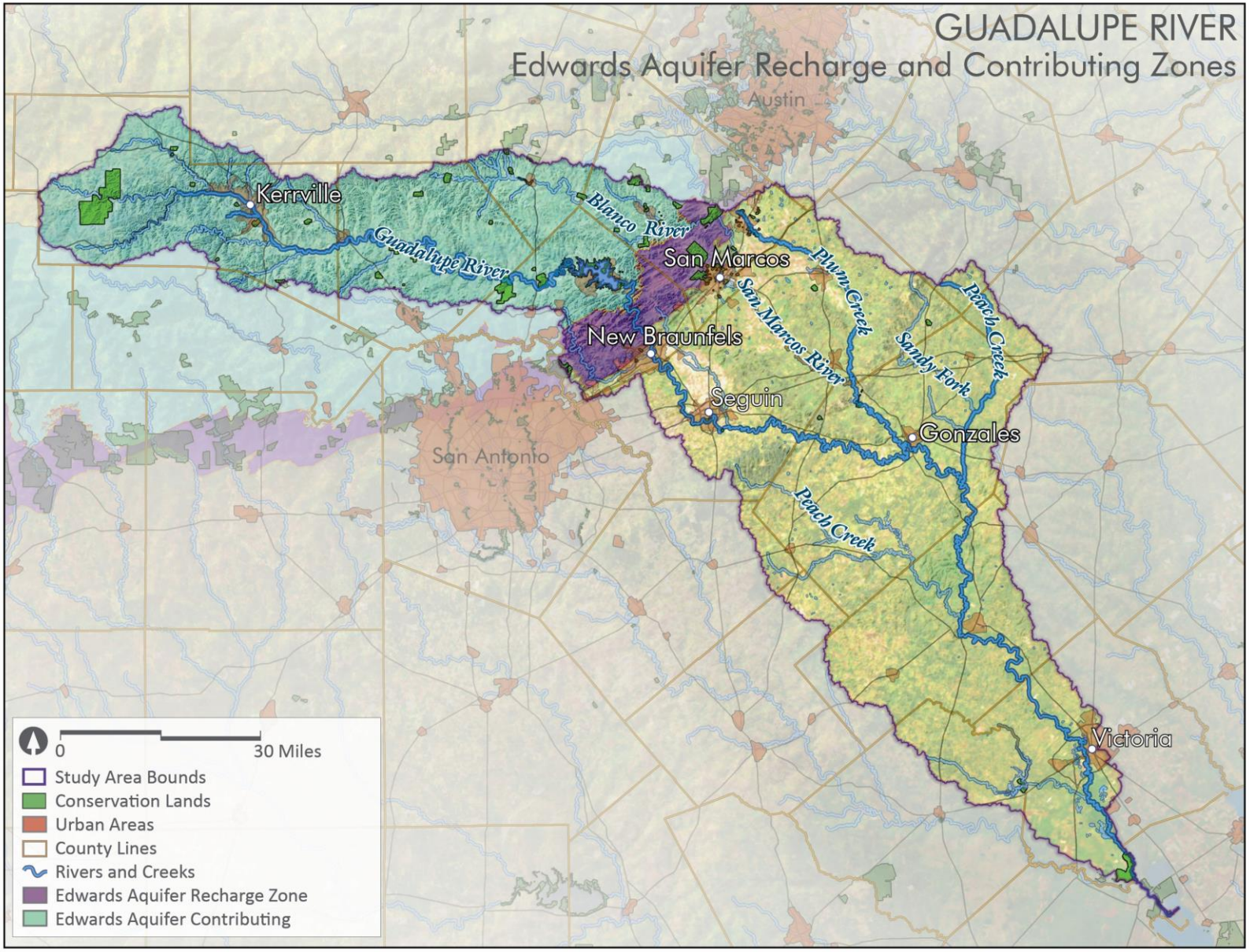
Conservation Resources

Water Resources
Minor Springs
Major Springs
Aquifer Contributing Areas
Aquifer Recharge Area
Karst Areas
Public Water Supply Wells
Public Water Supply Surface Intakes
Floodplain
Water Quality Buffers
303D Impaired Waterway Buffers

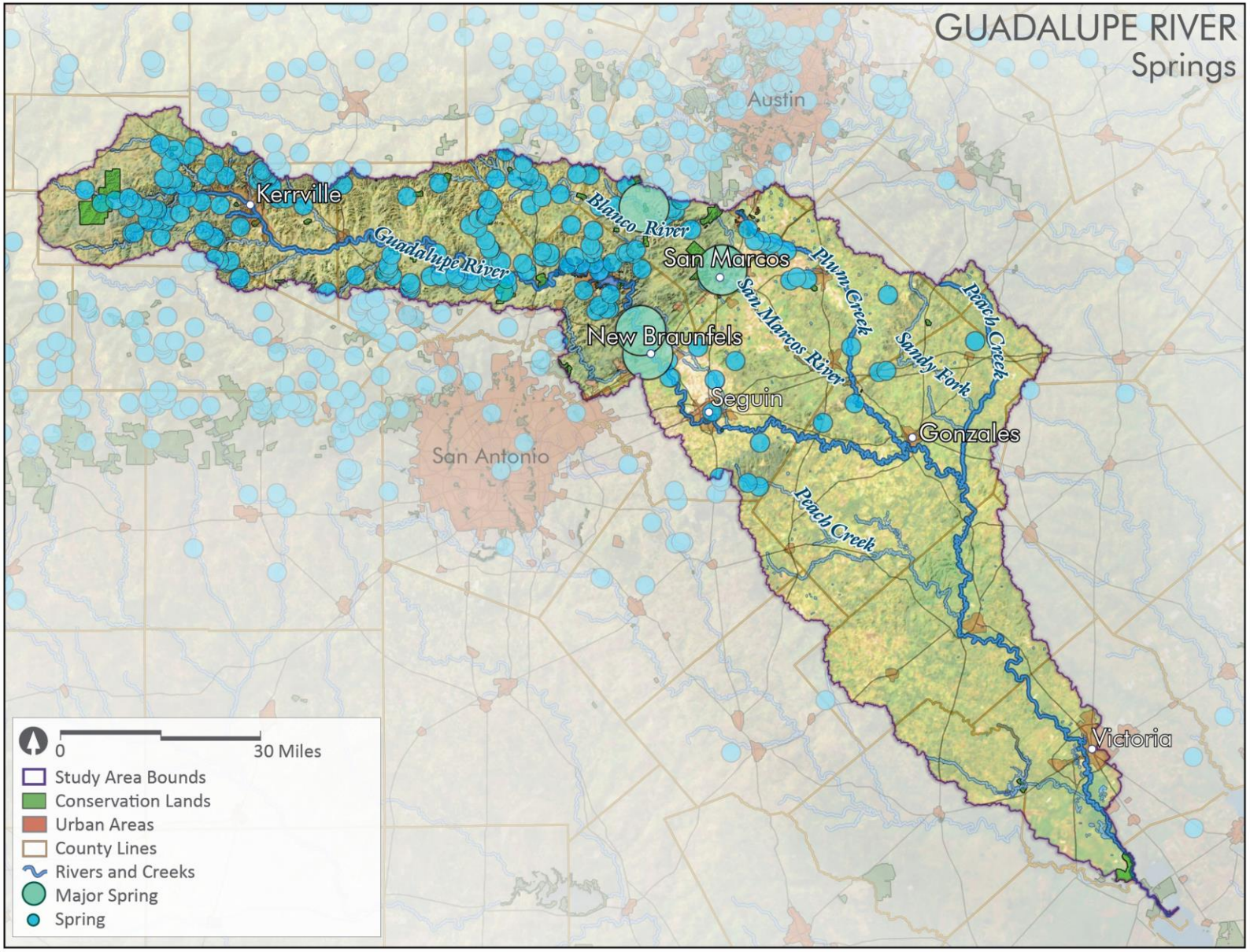
Cultural Resources
Parcel Size
Adjacency to Open Space
Development Corridors
Prime Farmland Soils
Trail and Proposed Trail Buffers

Ecological Resources
Native Fish Conservation Areas
Native Fish Conservation Priority Areas
Select Fish Priority Areas - Guadalupe Bass or Other
Mussel Priority Areas
Riparian Corridors
Golden Cheeked Warbler Habitat
Plant Communities
Steep Slopes

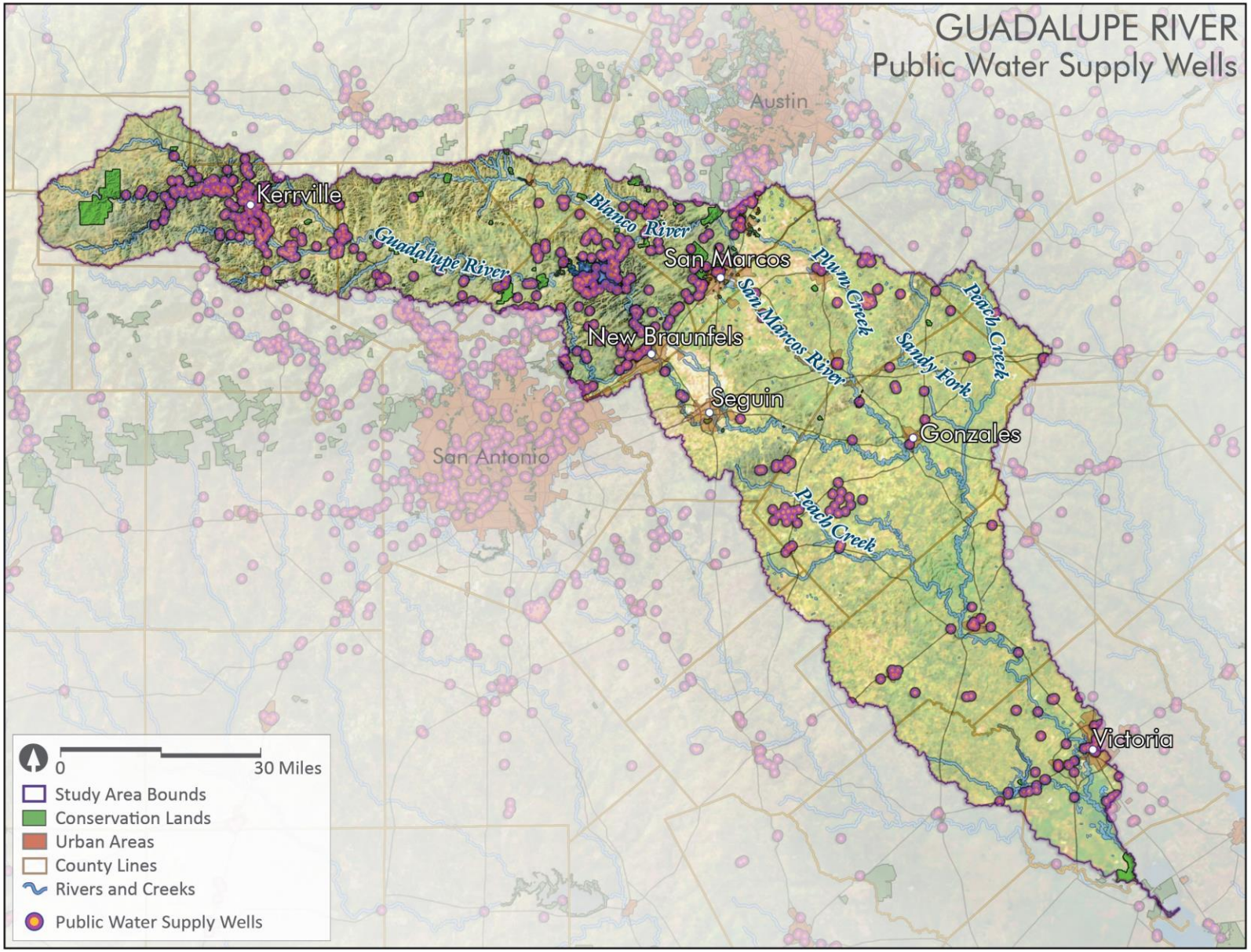
Water Resource: Edwards Aquifer



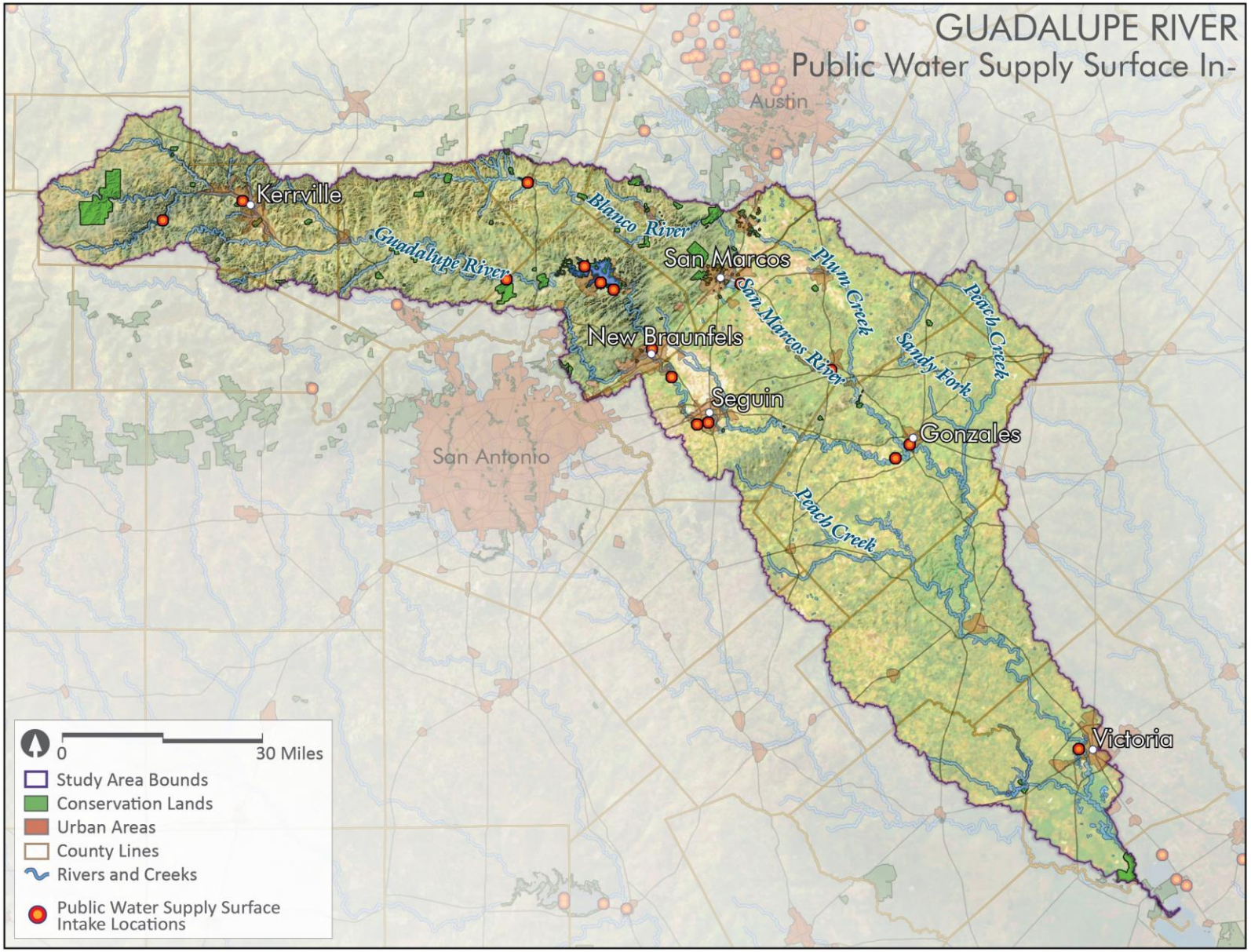
Water Resource: Springs



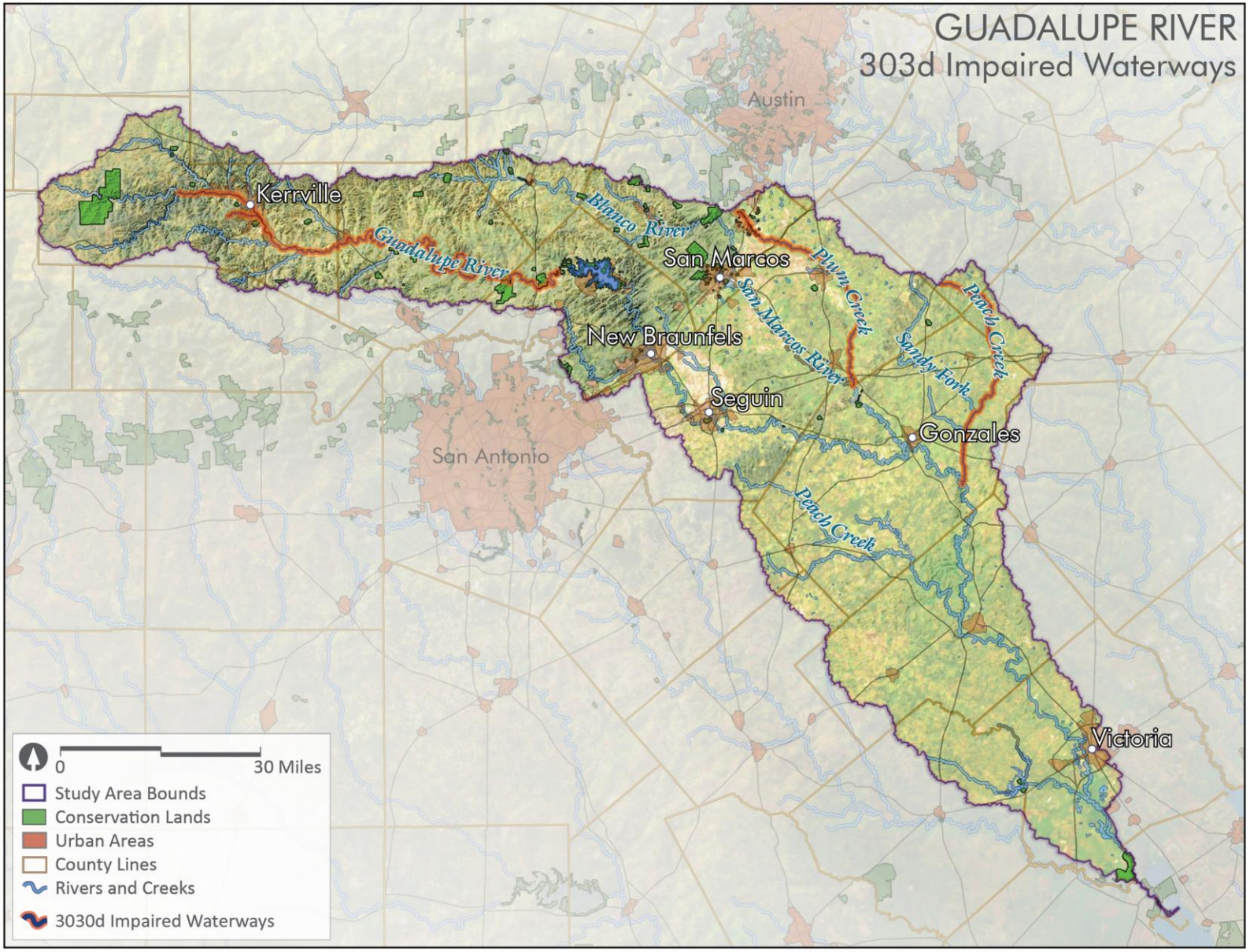
Water Resource: Public Water Supply Wells



Water Resource: Public Water Supply Surface Intakes

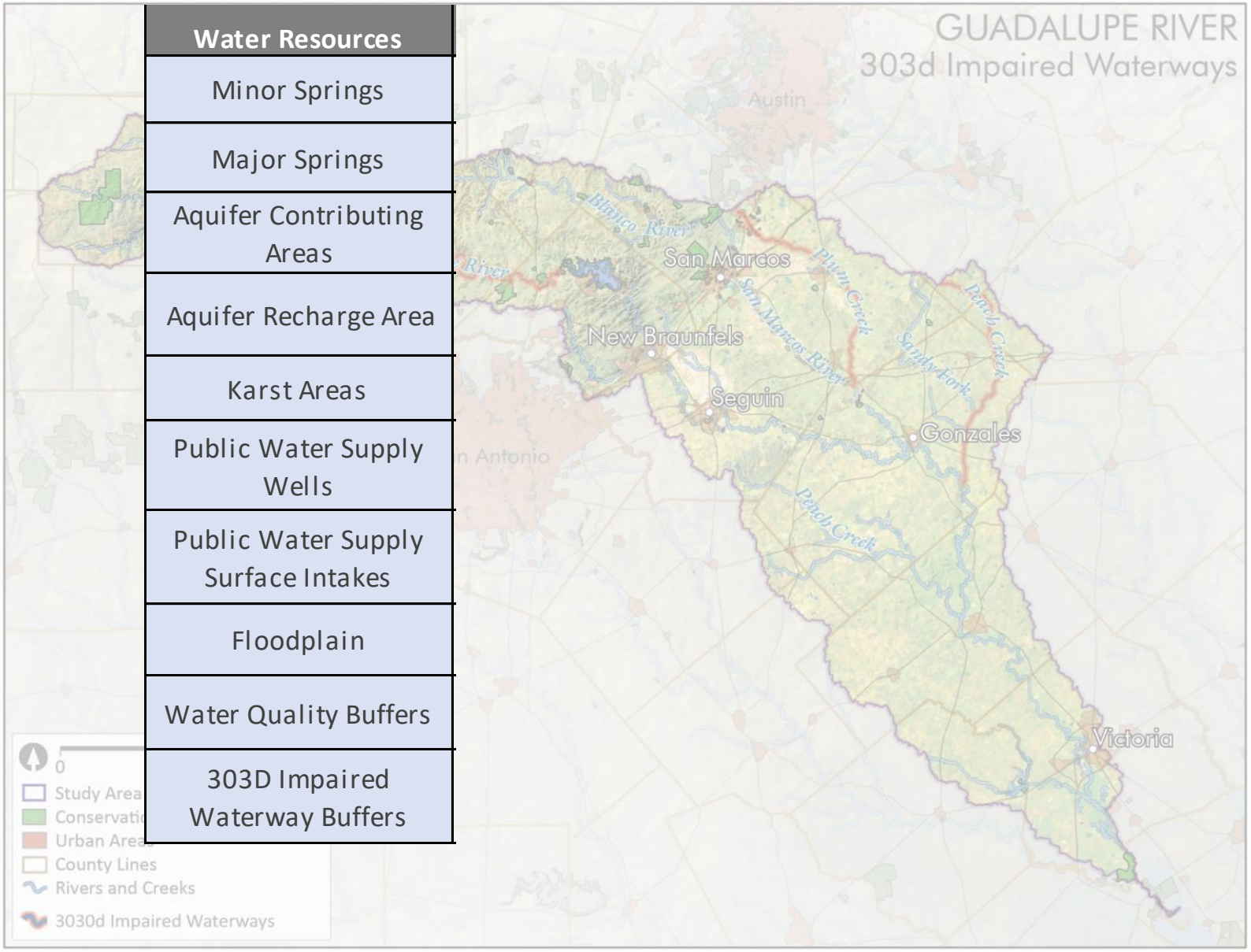


Water Resource: 303D Impaired Waterways

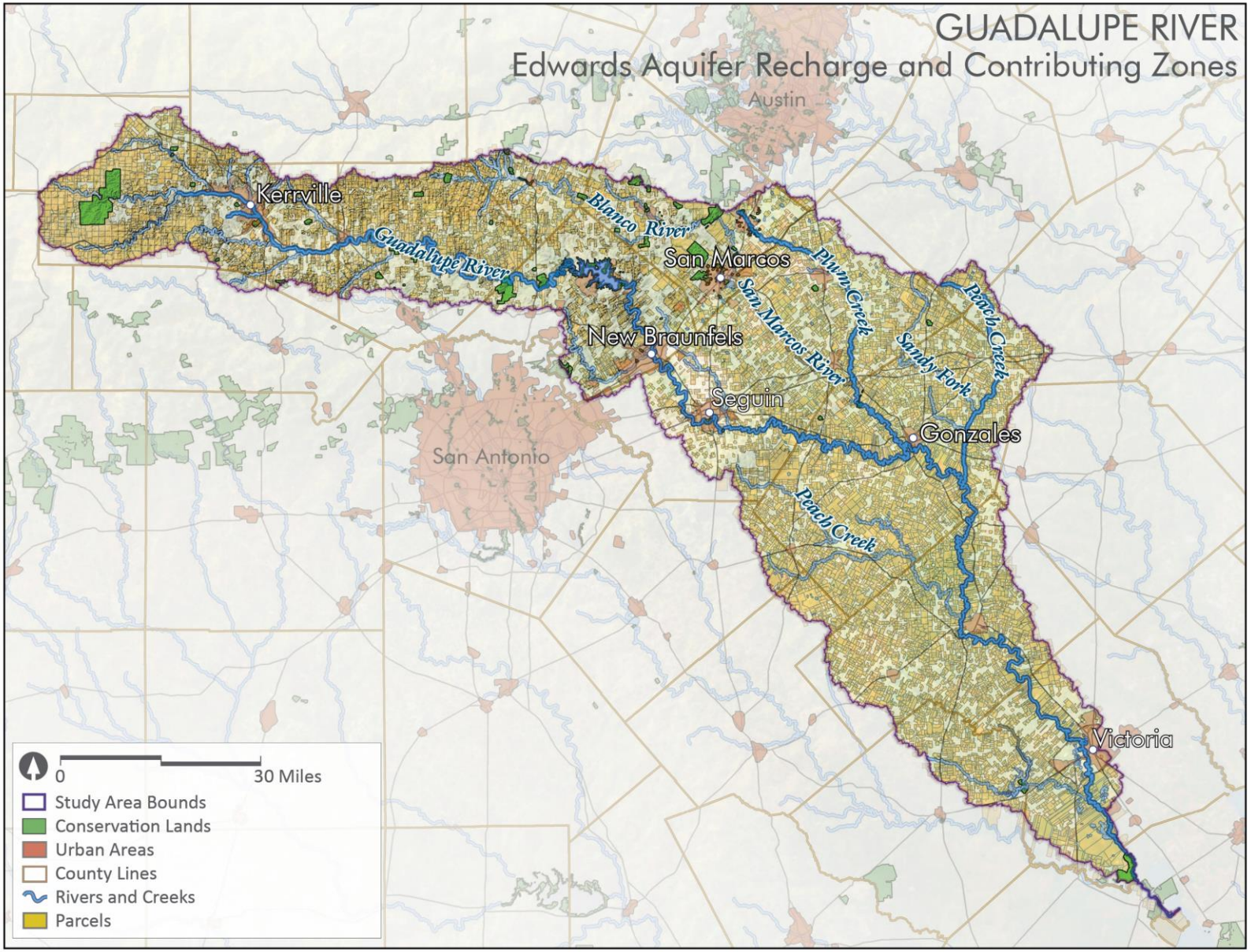


Water Resource

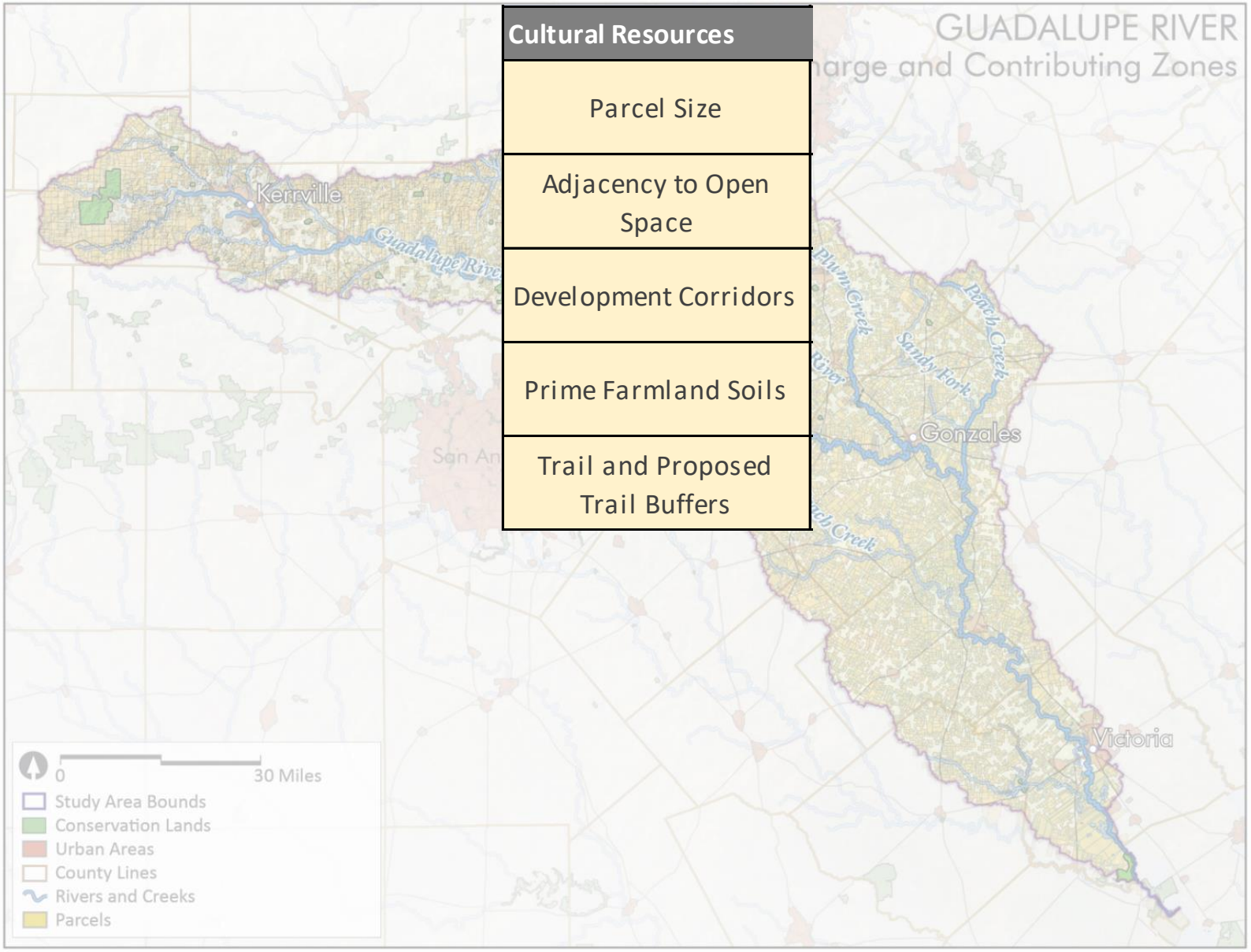
Water Resources
Minor Springs
Major Springs
Aquifer Contributing Areas
Aquifer Recharge Area
Karst Areas
Public Water Supply Wells
Public Water Supply Surface Intakes
Floodplain
Water Quality Buffers
303D Impaired Waterway Buffers



Cultural Resource: Parcel Size

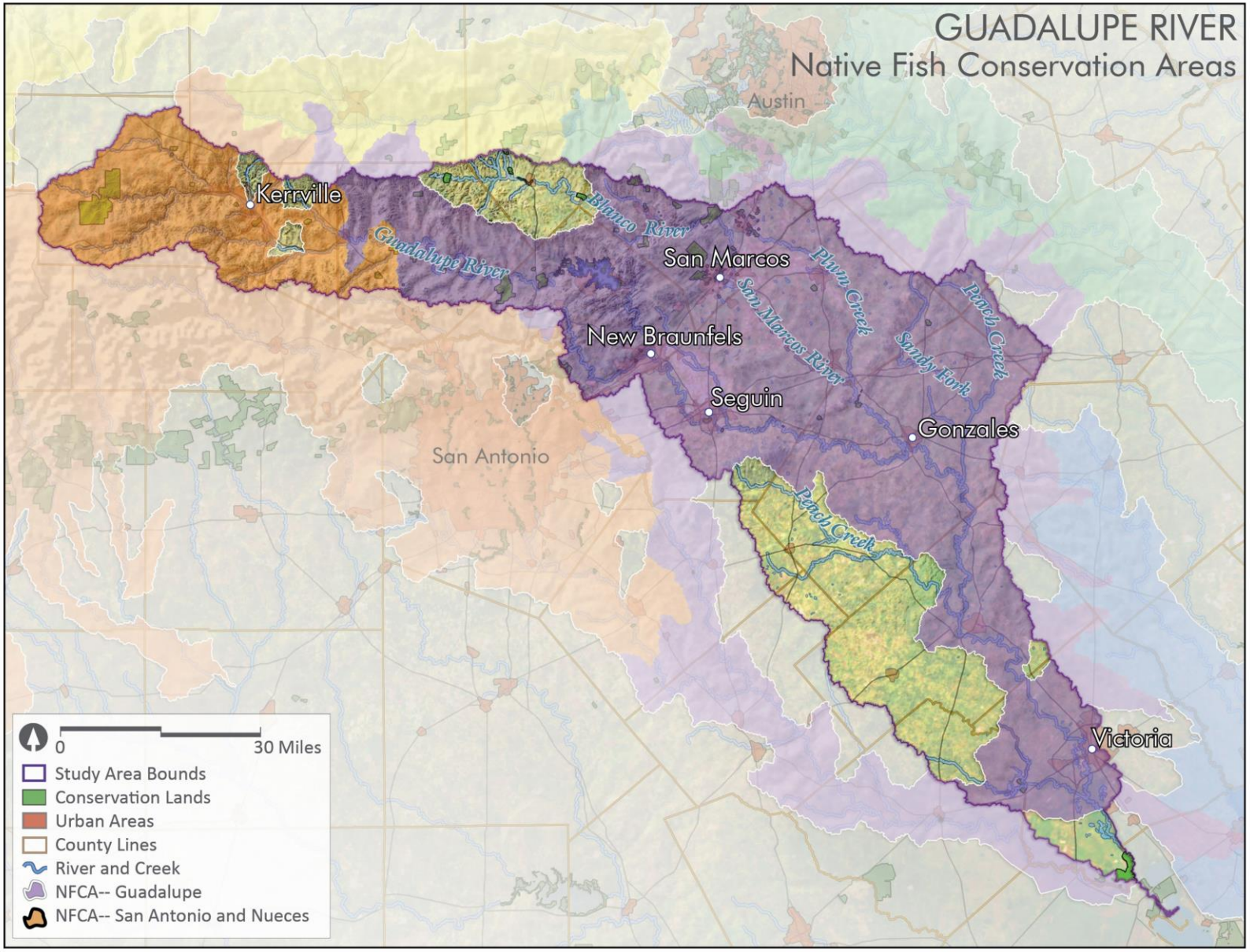


Cultural Resource



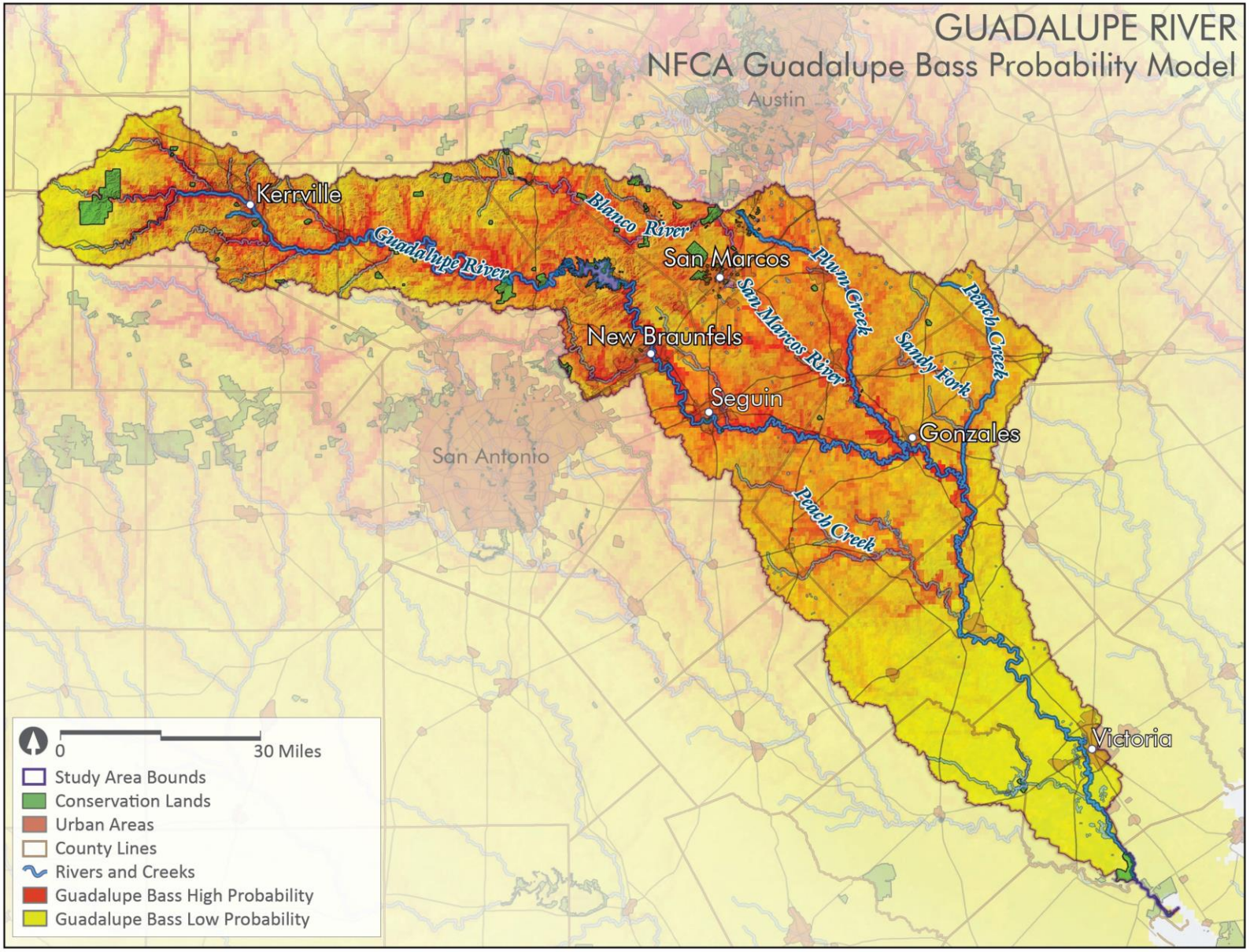
Cultural Resources
Parcel Size
Adjacency to Open Space
Development Corridors
Prime Farmland Soils
Trail and Proposed Trail Buffers

Ecological Resource: Native Fish Conservation Areas

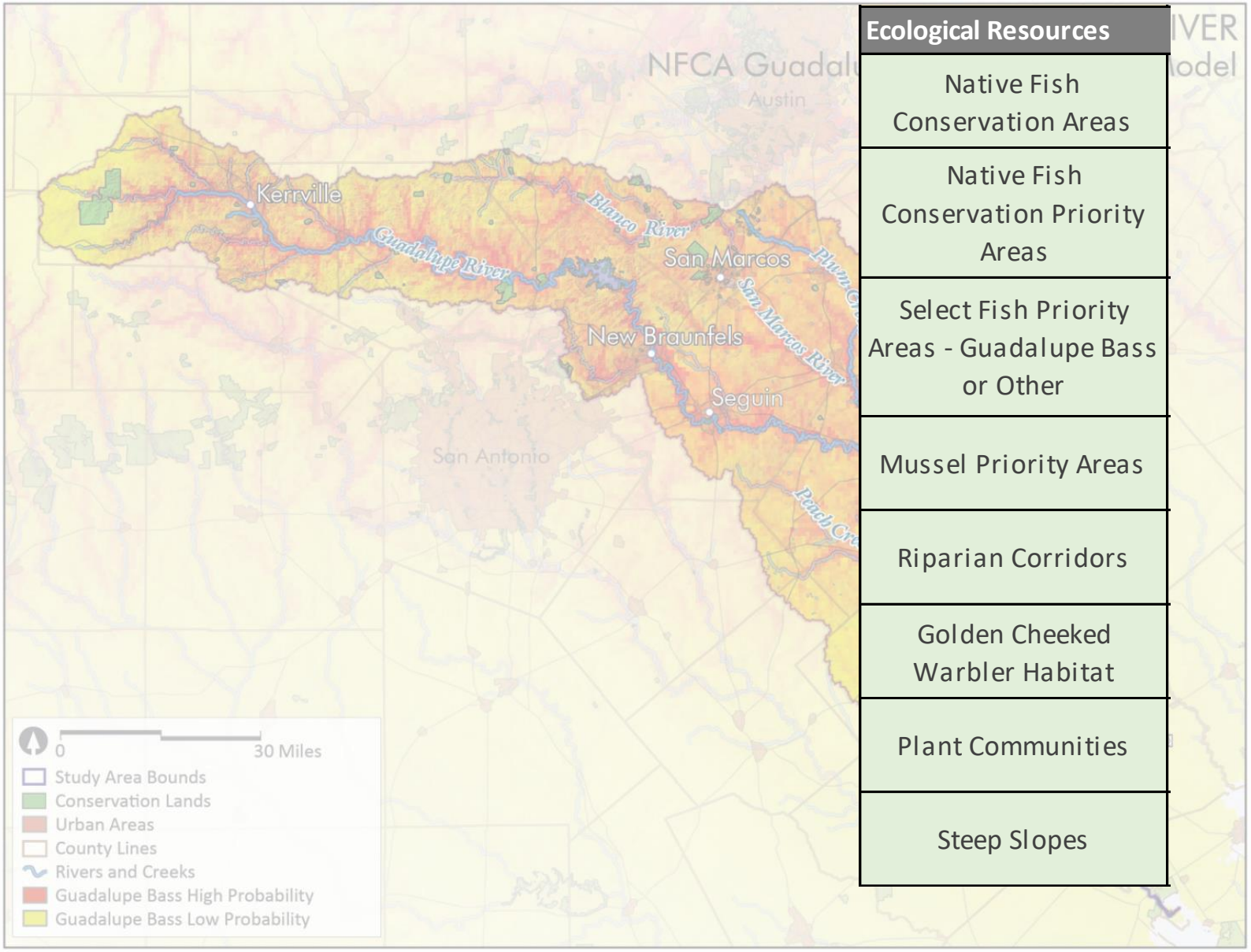


Ecological Resource: Native Fish Conservation Area Species Data

3

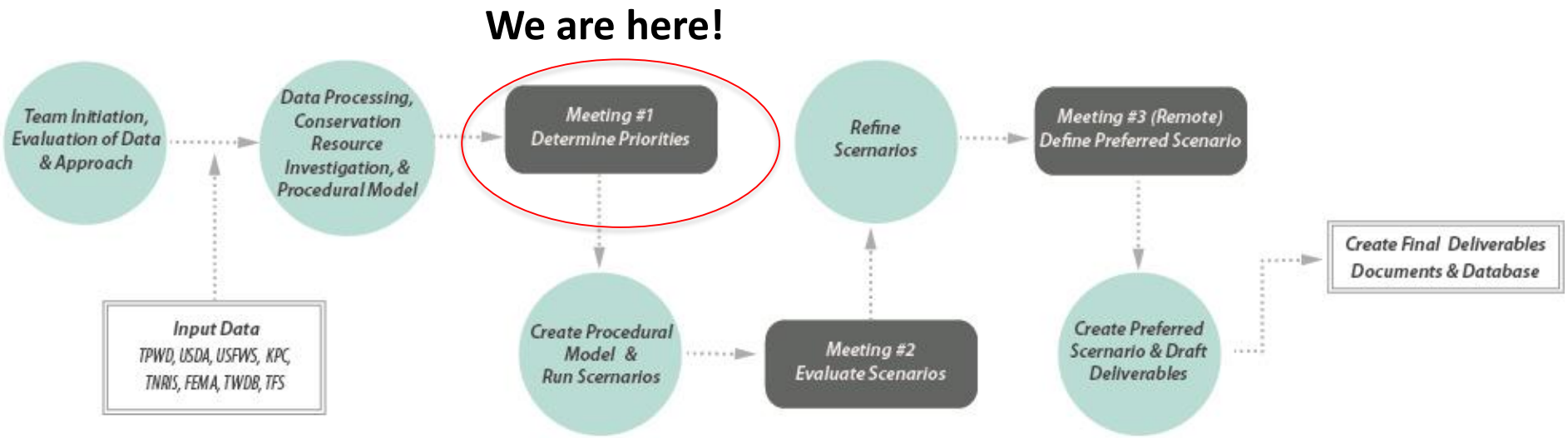


Ecological Resource



Ecological Resources
Native Fish Conservation Areas
Native Fish Conservation Priority Areas
Select Fish Priority Areas - Guadalupe Bass or Other
Mussel Priority Areas
Riparian Corridors
Golden Cheeked Warbler Habitat
Plant Communities
Steep Slopes

Conservation Planning Process



Gaps in conservation

PLANNING GAP

Where to effectively/efficiently implement action considering:

- Evaluation of multiple landscape resources
- Inter/intra-jurisdictional decision making
- Evaluating both the conservation resource and the land use trends impacting the resource.

IMPLEMENTATION GAP

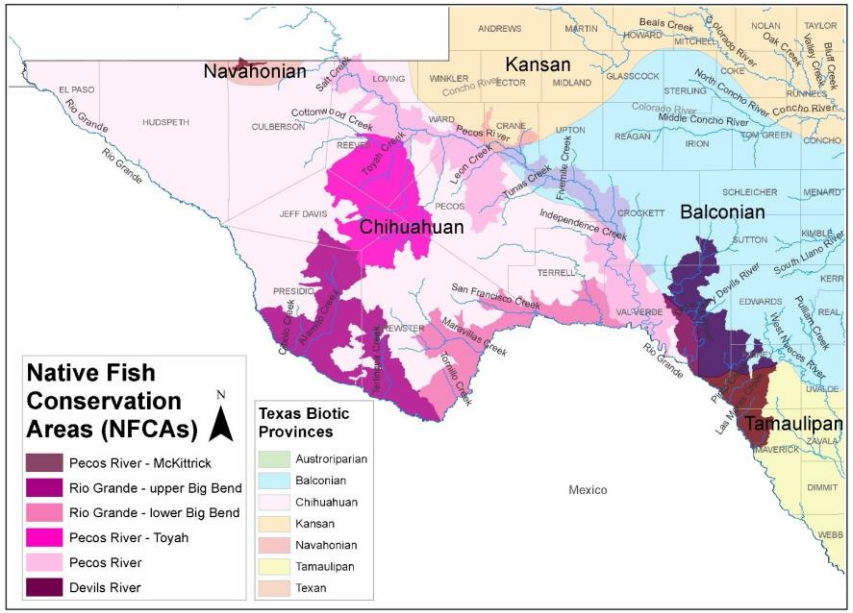
Knowing-Doing Gap: With ISSUES, how do we ACT?

- Mechanisms?
- Partners?
- How to facilitate?

Framework for implementation of funding and research and action

4

SPATIAL FRAMEWORK (WHERE)



THEMATIC FRAMEWORK (WHAT)

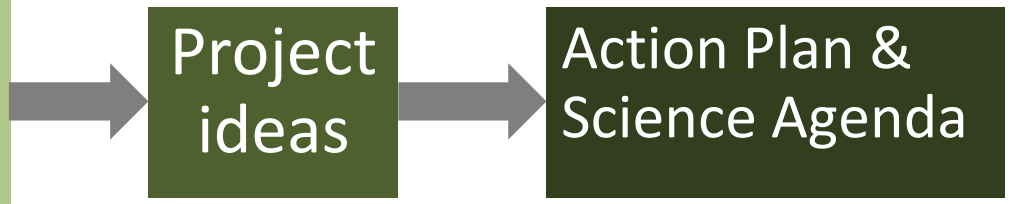
- Protect & Maintain HABITAT
- Restore Impacted HABITAT
- Restore CONNECTIVITY
- Mitigate effects of INVASIVE SPECIES
- Organize networks of LANDOWNERS
- Develop Conservation DEMONSTRATION
- Conduct RESEARCH to Fill Gaps
- Conduct MONITORING to evaluate, adapt, & refine actions
- Adaptive management & reporting

Workshops Process

Advisory Council/ Stakeholders

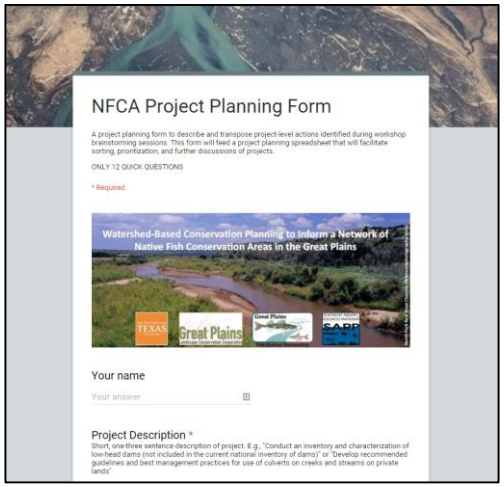
Planning Framework

Implementation Guidelines

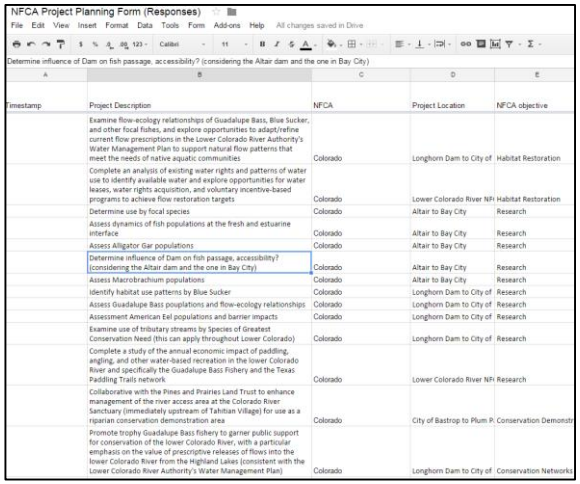


Workshops Process

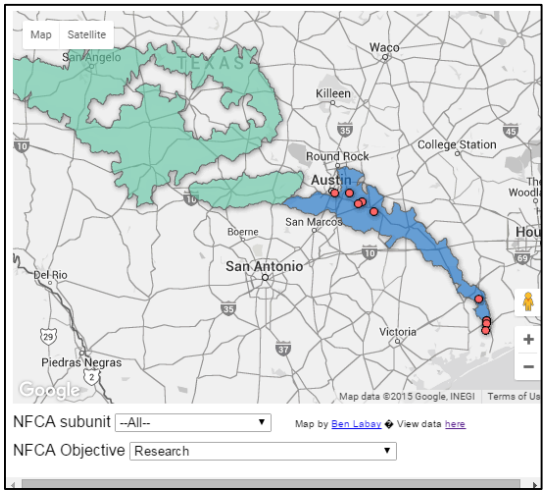
Project idea form

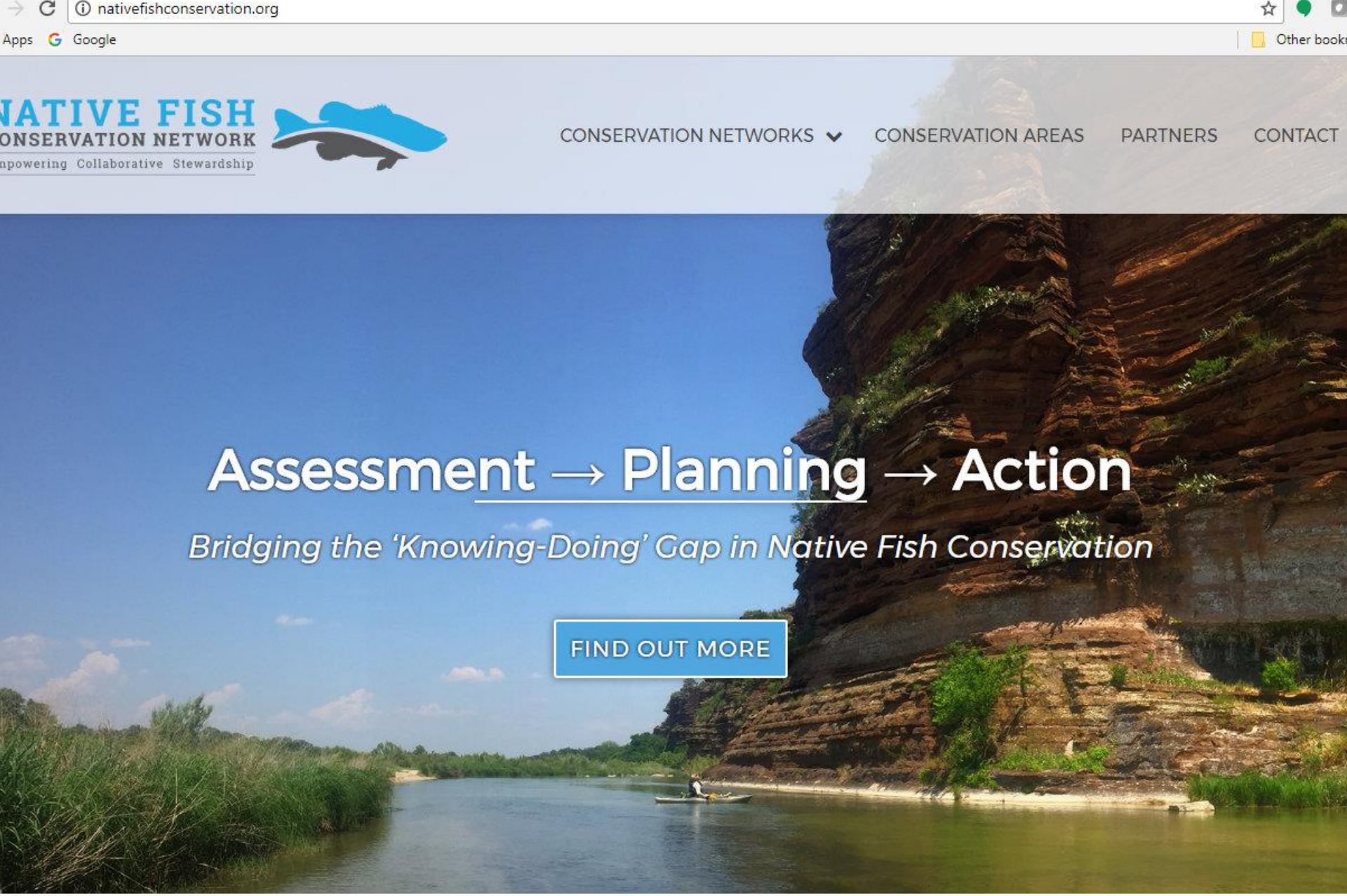


Reviewable spreadsheet

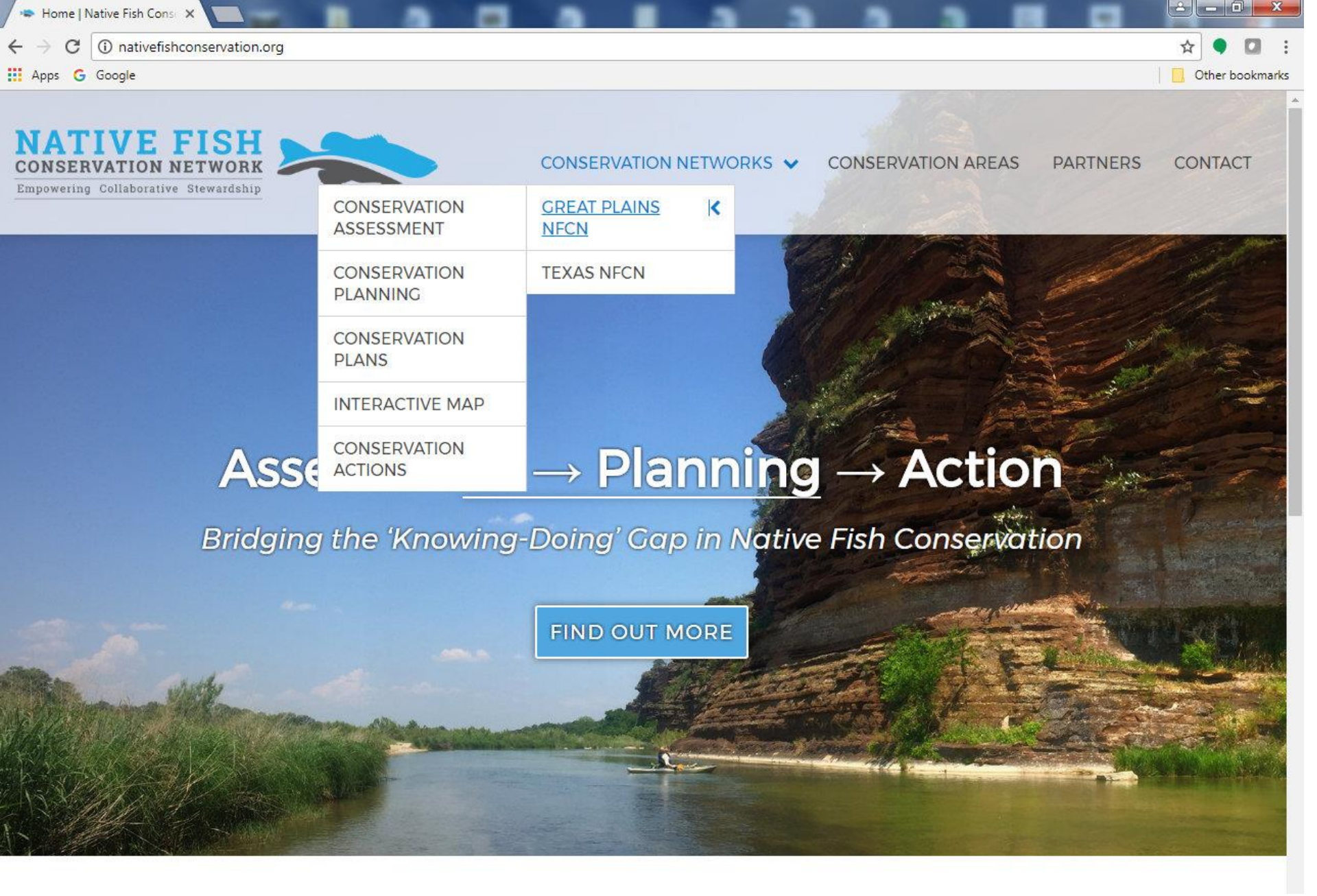


Explore map & Website





Nativefishconservation.org


Home | Native Fish Cons
nativefishconservation.org
Apps
Google
Other bookmarks
NATIVE FISH
CONSERVATION NETWORK
Empowering Collaborative Stewardship
CONSERVATION NETWORKS
CONSERVATION AREAS
PARTNERS
CONTACT
CONSERVATION ASSESSMENT
CONSERVATION PLANNING
CONSERVATION PLANS
INTERACTIVE MAP
CONSERVATION ACTIONS
GREAT PLAINS NFCN
TEXAS NFCN
Asse → Planning → Action
Bridging the 'Knowing-Doing' Gap in Native Fish Conservation
FIND OUT MORE

Interactive NFC Project Map

Outcomes of the Watershed-Based Conservation Planning Workshops – As of April 2016, watershed-based conservation planning workshops have been conducted for the Native Fish Conservation Areas in the Brazos, Canadian, Colorado and Red rivers.

Over 60 subject-matter experts participated in the workshops. Workshop participants recommended more than 150 project-level actions to conserve freshwater biodiversity in these priority watersheds. Top tier projects are presented.

- Adaptive management and reporting
- Conduct monitoring to evaluate conservation action
- Conduct research to fill critical information gaps
- Develop conservation demonstration areas
- Mitigate effects of invasive species
- Organize networks of public and private landowners
- Protect and maintain intact, healthy habitats
- Restore impacted habitats
- Restore stream and habitat connectivity

SHOW 25 ENTRIES

SEARCH

QUESTIONS?
GIVE US YOUR FEEDBACK SHEETS!