

TPWD Watershed Policy & Management Program





Protect, restore and enhance
aquatic, riparian and upland
habitats

Rio Grande - 2002



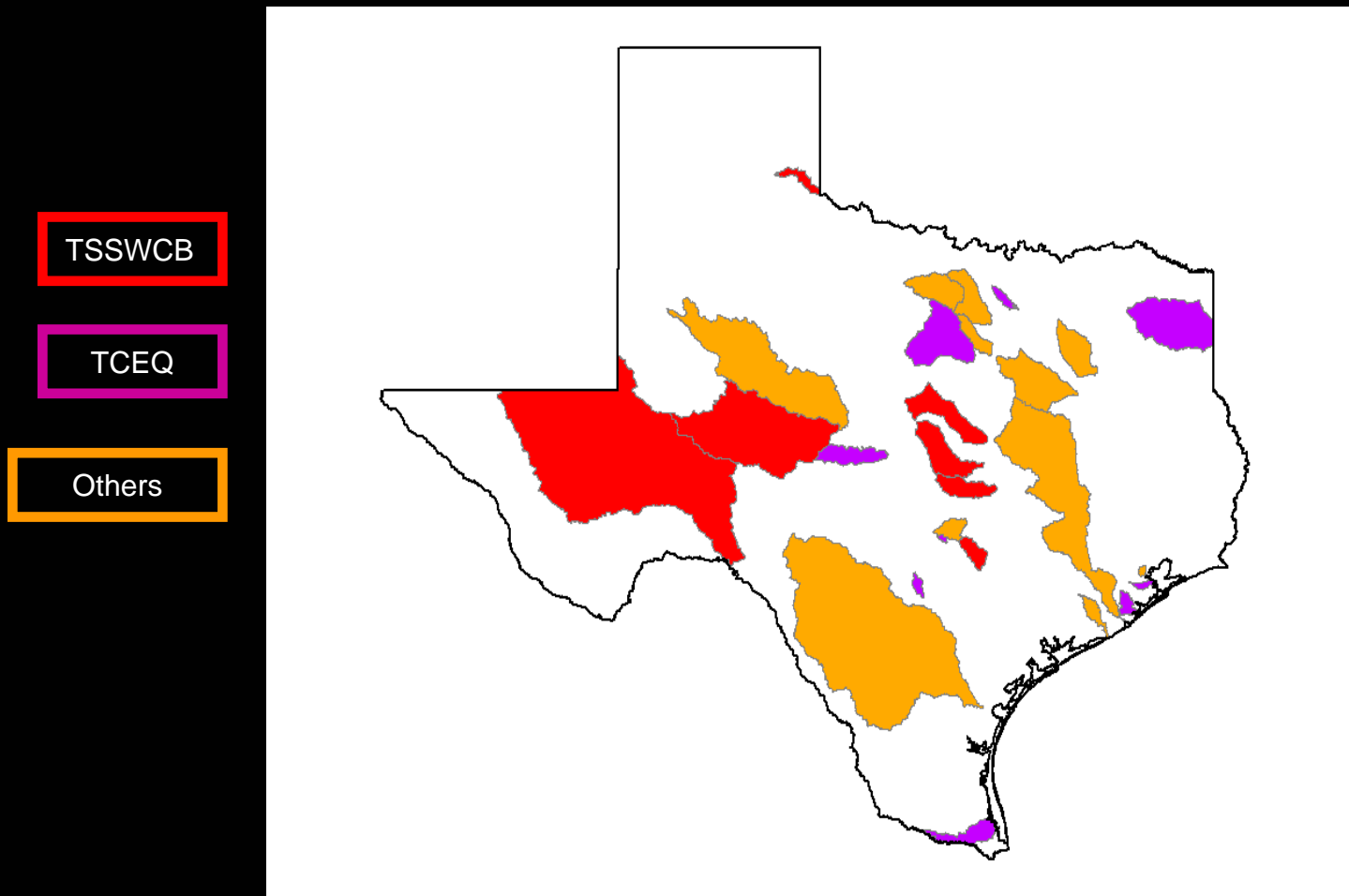
2009

Lake Travis →

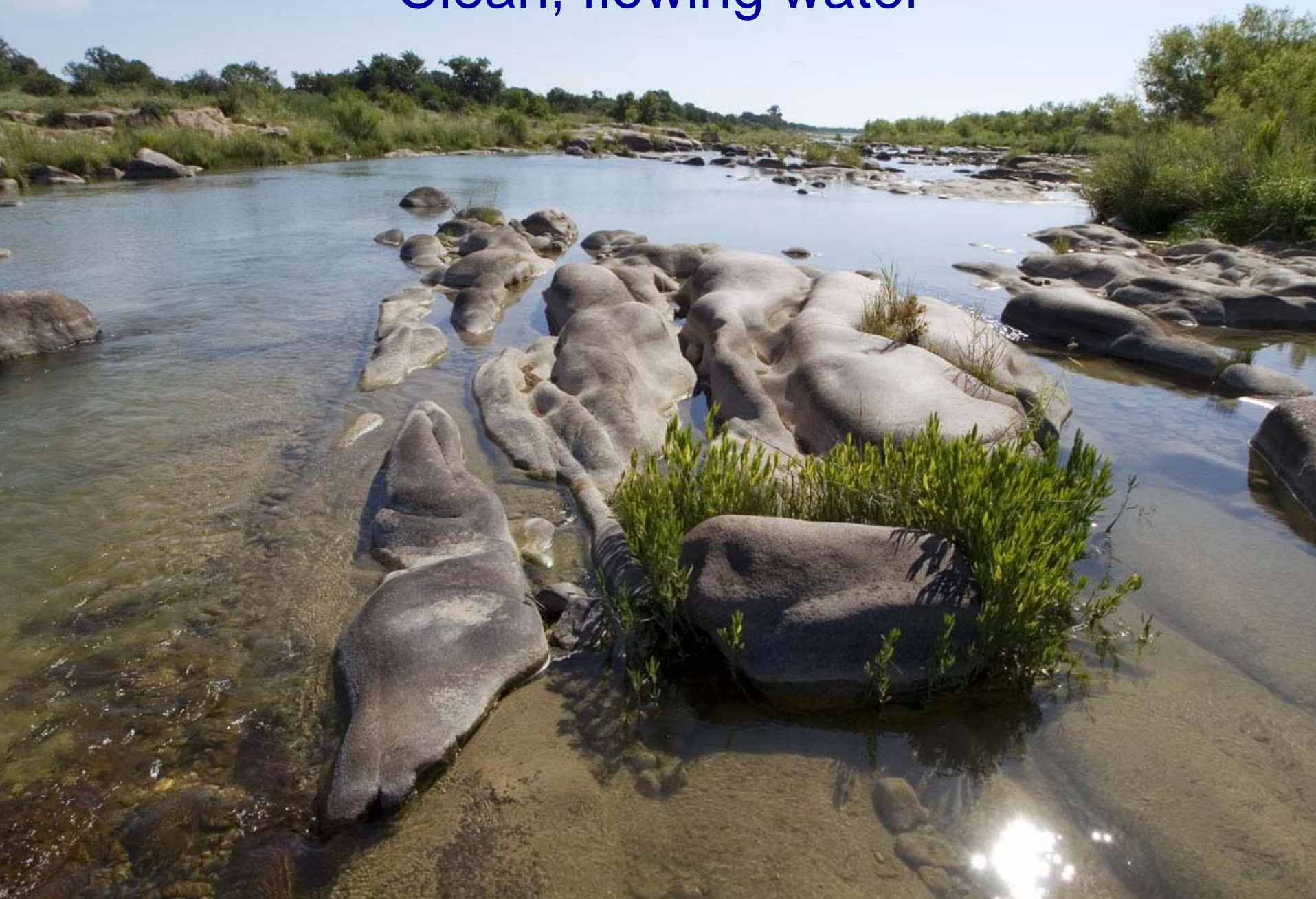
Guadalupe River



Existing watershed programs



Clean, flowing water





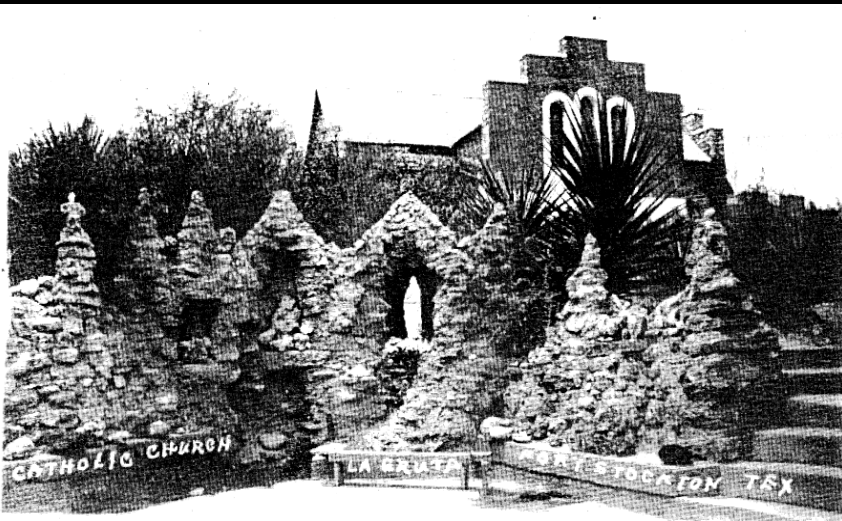
Cyprinodon elegans
Comanche Springs pupfish



Gambusia nobilis
Pecos gambusia







Fort Stockton





*Cyprinodon
pecosensis*
Pecos pupfish



Devils River Minnow Watershed Management Plan





technical
guidance

planning
assistance

project
coordination

- Establish local partnerships to conserve aquatic habitats
- Enable citizens, communities, and private landowners to identify and implement strategies to protect, restore and enhance aquatic habitats
- Create awareness of the environmental, economic and societal benefits of healthy aquatic habitats
- Promote stewardship of natural resources

How will limited water supplies affect fish populations, aquatic habitat, and recreational users?



Research

- 1) Understand the relations between aquatic communities and hydrology, including in-stream flow requirements for Texas rivers
- 2) Project water availability and effects on aquatic resources
- 3) Estimate the economic consequences of such effects

General Approach



- **Identify watershed segment.**
- **Organize a Technical Advisory Team.**
- Gather data, define challenges and develop objectives.
- Develop an action plan
- Engage private landowners and other partners.
- Ensure that people understand benefits.
- Implement and evaluate efforts.



Technical Advisory Team

(TPWD, academia, NGOs, etc.)

- Aquatic ecology
- Upland ecology
- Hydrology
- Water quality
- Regulatory
- Legal

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Partners



- Private landowners
- Local authorities (cities, counties, etc.)
- State agencies (TCEQ, TSSWCB, TDA, Agrilife, etc.)
- Federal agencies (USFWS, EPA, NRCS, etc.)
- Industry and utility companies
- River authorities
- The Nature Conservancy, Texas Farm Bureau, other conservation groups, lake associations, angler clubs, etc.

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Primary Objectives



- upland environments
- riparian zones
- water quality
- watershed connectivity
- hydrologic conditions for biota
- sediment flows
- physical habitat
- ecological balance