

### The Collaborators

#### A Joint Program of the

- Texas State Soil and Water Conservation Board
- Texas Cooperative Extension
- Texas Agricultural Experiment Station
- Texas Water Resources Institute
- US International Boundary and Water Commission, Clean Rivers Program
- Environmental Protection Agency



# Need for the Project

# Decreased Water Quality Decreased Flow

The Pecos River winds through an arid stretch of eastern New Mexico and West Texas before flowing into the Rio Grande. The river is especially important because it is a major source of surface water in the region and a major contributor of flows to Amistad Reservoir.

Over time, flows of the Pecos River have significantly declined. Today, under low-flow conditions, the river flow is only a trickle at some sites. Lowered water quality has drastically altered the river's aquatic community. No longer does it have a healthy and diverse community of aquatic plants, invertebrates, microorganisms, fish and amphibians.

The exact cause of the decreases in flow and water quality cannot be attributed to any one specific factor. However, some of the problems that are having an effect include increased water use, dams that alter flows, natural variations in rainfall and climate, riparian community destruction and the spread of saltcedar and other invasive species.

### **Contact Us**

#### For More Information

If you have questions or want to know more, please visit the project Web site at http://pecosbasin.tamu.edu

or contact:

Will Hatler
Project Coordinator
Texas Cooperative Extension
254-968-4144 or wlhatler@ag.tamu.edu



## **Project Goals**

Assessment Involvement

The overall goal of this project is to develop a Watershed Management Plan to manage water quality and streamflow for the Pecos River in Texas.

Several studies and education projects will be conducted to better understand processes that affect water quality and streamflow issues in the Pecos River. Four multi-faceted tasks will be completed, and resulting information will be used to identify opportunities for watershed improvement.

- Basin Assessment
- · Educational Programming
- Monitoring
- Watershed Management Plan

## Task Objectives

Researchers, Extension Specialists and Local Stakeholders

#### Task 1: Basin Assessment

- Study historic trends
- · Inventory aquatic life and habitat
- Characterize major water sources that flow into the basin
- Identify sources of saline waters that flow into the Pecos River
- Evaluate the economic benefits that can result from clearing saltcedar
- · Conduct river salinity modeling



### Task 2: Educational Programming

- Conduct stakeholder meetings to gather feedback from the public about issues and concerns in the Basin
- Develop educational materials to inform the public about water issues in the region
- Update the public about activities and accomplishments of this effort

#### Task 3: Monitoring

- Augment and evaluate existing water quality monitoring programs
- Estimate the quantity and fate of water that can be salvaged when saltcedar is controlled

# Task 4: Develop a Watershed Management Plan

 Provide recommendations about strategies that can be taken to manage the water resources of the Pecos River

