Identification of Salt Sources Entering the Pecos River

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BACKGROUND

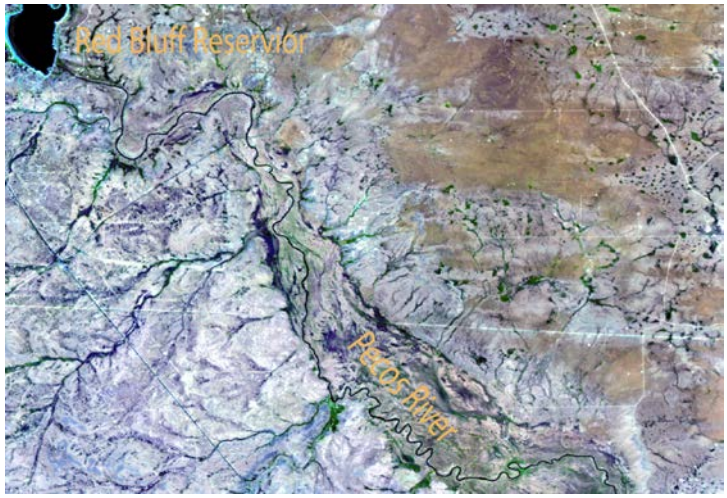
The Pecos River is known for its high salt levels, and a new project is underway to determine the sources of salts. This project is a part of a three-year study by scientists at the District Extension Office at Fort Stockton and El Paso Agriculture Research Center for identifying sources of contaminants which adversely affect water quality of the Pecos River. This research will provide information necessary for developing possible management options for reducing contaminant loading into the river.

The Pecos River Salt Cedar Control Tour

APPROACH

The first phase of research involves water sampling and analysis of the samples for the purpose of identifying locations and nature of salt sources which are entering the Pecos River below the New Mexico-Texas State Border. Water samples collected are being analyzed for cations and anions by the Clean Rivers Program, and isotopes for source identification.

The second phase involves monitoring of flow and salinity at selected locations near the potential salinity entry points or reaches. This data is needed for determining the quantity and quality of the salt sources entering the Pecos River. These activities are conducted in cooperation with the Texas Clean Rivers Program.



Satellite image of the Pecos River

BENEFITS

The research will help in understanding the quantity of and where salts are entering into the Pecos River. This type of information is necessary to develop effective salinity control strategies. Salinity control at the Pecos River would benefit ranchers and land owners, and riparian ecosystems along the River. However, the biggest benefit is likely to be helping to maintain salinity of the Amistad International Reservoir below 1,000 ppm, the upper limit of the Federal Secondary Drinking Water Standard.

USDA United States Department of Agriculture
National Institute of Food and Agriculture

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