

**Pecos River Non-Native Phreatophyte Management Program
September 2002 through September 2008**

This report addresses activities of the Non-Native Phreatophyte Management Program on the Pecos River administered by the Carlsbad Soil and Water Conservation District (SWCD) for the time period of September 2002 through September 2008. The following is a summary of the total acreage treated and/or restored to date along the Pecos River and the tributaries. The acreage information is broken down by county. Following the total acreage treated and/or restored the acreage of State Trust Land by county is presented.

Aerial Spraying by Helicopter or Ground Application

The aerial application of herbicide treatment was completed by North Star Helicopters, Inc. during the month of September in the years 2002, 2003, 2004, and 2006. The following table reflects the acreage treated by year and county. The last column reflects the acreage of State Trust Land treated during those years.

<u>County</u>	<u>Acres 2002</u>	<u>Acres 2003</u>	<u>Acres 2004</u>	<u>Acres 2006</u>	<u>Total Acres</u>	<u>SLO Acres</u>
Eddy	2,520	2,551	700	1,105	6,876	142
Chaves	2,835	883	-0-	-0-	3,718	299
DeBaca	2,599	1,548	1,968	-0-	6,115	393
Guadalupe	1,146	91	-0-	-0-	1,237	56
Totals	9,100	5,073	2,668	1,105	17,946	890

Several types of ground treatment (i.e., cut and stump paint, ground spraying, and extraction of live saltcedar) were also completed over the past five years. Although there was no treatment on State Trust Lands, the acreage is presented with breakdowns by soil and water conservation district boundaries for you information.

Cut and Stump paint acreage:

- Carlsbad SWCD - 141.8 acres (including 87 acres on Black River in BLM collaboration)
- Upper Hondo SWCD - 37.1 acres
- Guadalupe SWCD - 29.8 acres

A joint collaboration was but together with the Carlsbad BLM for the cut/stump removal of Russian olive and salt cedar along the Black River.

Ground spray acreage:

- Peñasco River (Peñasco SWCD) – 292.95 acres

Extracted live saltcedar acreage:

- Dark Canyon (Carlsbad SWCD) - 115.5 acres
- Delaware River (Carlsbad SWCD/BLM) - 134 acres
- Bosque Redondo Park (DeBaca SWCD) – 32 acres

Total acreage of restoration (extraction of treated saltcedar) work of 1,806.73 acres has been completed in the following counties (with approximately 182 acres on State Trust Lands):

- Eddy County 1,282 acres
- Chaves County 398.5 acres
- Guadalupe County 126.23 acres

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Aerial Treatment of Brush Control

In June 2008, through a collaborative effort between the Carlsbad SWCD, the Bureau of Land Management, the Natural Resources Conservation Service, and local land owners 99,442 acres of brush was treated. The following is a breakdown of the acres by land status and type of brush treated:

	Land Status			Total Acres
	BLM	State	Private	
Mesquite	32,778	6,435	52,826	92,039
Creosote	2,003	3,939	461	6,403
Total	34,781	10,374	53,287	98,442

Monitoring and Evaluating

The Carlsbad Environmental Monitoring and Research Center was hired to monitor the soils for changes in alkalinity and stability. They were to also monitor water quality (sediment loads); and collect and evaluate water quantity changes, using existing gauging stations on the river.

After the first nine months of monitoring work, the Center had a reduction in staff and was unable to continue providing the monitoring service. A contract was then made with Dr. Mark Walthall, Walthall Environmental, LLC, to complete the monitoring work and transect inventories. To date, Dr. Walthall has completed the inventory transects, collected water quality data, and developed baseline data from several of the Pecos River USGS stream gauges. He has completed all of the soil sampling in the four counties and has documented the natural revegetation with photographs. This work has been compiled into several reports, with the last report dated January 2008 entitled Pecos River Non-Native Phreatophyte Management Program: Monitoring, which is enclosed to provide an understanding of the monitoring activities being performed.

Dr. Walthall continues to provide monitoring activities of streambank stability, dissipation, natural regeneration of vegetation, and ground water monitoring wells along the Pecos River.

Threatened & Endangered Species Concerns

The Carlsbad SWCD has worked with the U.S. Fish and Wildlife Service and the Bureau of Land Management to address concerns of threatened and endangered species, as well as those areas included in sensitive designations such as wildlife refuges and Areas of Critical Environmental Concern (ACEC's). Two plant species (the Pecos Sunflower and Gypsum Buckwheat) and one fish (Pecos Bluntnose Shiner) have been identified as existing along the Pecos River. We have identified areas where these exist and have avoided those areas during spraying operations. Copies of reports and inventories of plants and animals found in areas that would be impacted by the activities of the non-native phreatophyte program in the Pecos River watershed are on file at the Carlsbad SWCD office.