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HR 2720

Thank you for the opportunity to testify before your committee on behalf of the soil and water conservation districts in New Mexico.

New Mexico Riparian Restoration Program

Summary:

The New Mexico State Legislature has been providing funding to Soil and Water Conservation Districts for control of phreatophytes (Salt Cedar and Russian Olive) for the last 4 years. These funds total over \$10.1 million dollars. To date over 34,000 acres have been treated. The funds are also used to monitor and rehabilitate the treated areas. The Rio Grande and Pecos Watersheds were the first to be authorized for funding. In 2005, this has been expanded to all watersheds in New Mexico. Funding for 2005 is available, contingent on completion of the statewide strategic plan.

Background:

The New Mexico State Legislature has provided funding in the last four years for the control of phreatophytes (Salt Cedar and Russian Olive) in New Mexico. The funds have been provided to Soil and Water Conservation Districts, through the New Mexico Department of Agriculture.

In Legislative Year 2002-2003, \$5 million were provided for the control of salt cedar and Russian olive in the Pecos and Rio Grande Watersheds. An additional \$1.5 million were provided in Legislative Year 2003-2004.

For Legislative Year 2004-2005, the Pecos, the Rio Grande and the Canadian River Watershed were made eligible to receive \$2.4 million. These funds were made available for not only control of phreatophytes, but also for monitoring, revegetation, rehabilitation, and long-term strategic planning. An interagency work group comprising the Department of Agriculture; Energy, Minerals and Natural Resources Department; State Engineer; Department of Environment; and Office of Indian Affairs, in consultation with the Soil and Water Conservation Districts was established. The work group was charged to develop a statewide policy and plan to guide future treatment and to provide templates and protocols for monitoring, revegetation, rehabilitation and long-term watershed management.

This current Legislative Year, 2005-2006 funds have been made available for all watersheds in the state. \$1.2 million are available for control, revegetation, rehabilitation, and monitoring. The funds are being held, pending the completion of a statewide phreatophyte/watershed strategic plan developed by the Departments of Agriculture, Energy, Minerals and Natural Resources, State Engineer, Environment and Indian Affairs.

Progress to Date:

Soil and Water Conservation Districts have jointly established four project areas.

- **Pecos Riparian Restoration Project**
Eight Districts are members of the Pecos Riparian Restoration Project Steering Committee. The Project has treated over 18,000 acres in the last three years. The Carlsbad District serves as the fiscal agent for the project, with Bill See and Aaron Curbello as project managers.
- **Upper Rio Grande Riparian Restoration Project**
Five Districts comprise the Upper Rio Grande Riparian Restoration Project Steering Committee. The project has treated over 3,000 acres in the last three years. NMACD serves as the fiscal agent, with Brent Bason as the project manager.
- **Lower Rio Grande Riparian Restoration Project**
Four Districts make up the Lower Rio Grande Riparian Restoration Project Steering Committee. The project has treated over 10,300 acres in the last three years. The Socorro District serves as the fiscal agent, with Nyleen Troxel-Stowe as project managers
- **Canadian River Riparian Restoration Project.**
Eight Districts are members of the Canadian River Riparian Restoration Project Steering Committee. The project has treated 4,000 acres in 2004. The Mesa District serves as the fiscal agent, with Jack Chatfield as the project manager.

Tribal Participation

Tribal participation has been excellent. There are seven (7) Pueblos that have participated in our state program with either aerial or mechanical restoration. The Pueblos to date are Santo Domingo, Laguna, Isleta, Pojoaque, Nambe, Santa Clara, and San Juan Pueblos. We have a tremendous amount of interest to expand each of the their projects.

Federal Partnerships

USDA-NRCS has been a core partner with technical support as well as congressional earmarks from Senator Bingaman for Riparian Restoration.

USDOI agencies have participated with some matching dollars, but primarily with partnerships on monitoring, research, and restoration. Soil and water conservation districts have been able to flow federal dollars from BLM and US Fish & Wildlife through the local districts to carry out treatment on their federal lands. BOR and BLM have benefited from soil and water conservation districts contributing state dollars to treat federally owned land.

Leveraging & Matching Funds

Districts have also used the state dollars for private, state trust lands and as well as municipal owned lands. Additional dollars for the treatment, restoration and monitoring have been leveraged from private landowners, private foundations, other state agencies as well as other federal agencies such as the USDA Forest Service. Federal funding that has been appropriated for decreasing the fuel loading near urban areas has been very affectively matched with our state funds in NM.

Endangered Species

The Ecological Services Division of the US Fish and Wildlife Service worked very well with us to determine management techniques for the project. We have four threatened and endangered species involved on the Rio Grande. The Southwestern Willow Fly Catcher, the Rio Grande Silvery Minnow, the Bald Eagle, and the Least Tern. Also present is the candidate species of concern the Yellow-billed cuckoo.

We have received data from the USF&W for the nesting sites of the Willow Flycatcher and have agreed to not start work until September while leaving a ¼ mile radius around the nesting clusters.

Surveys for Bald Eagles will be conducted each morning prior to the helicopter going into the air. The districts are scheduling work within the Bosque area that are outside the breeding period dates for birds listed by the USF&W.

The Pecos Sunflower is a listed species occurring along the Pecos River, but is found only on Fish & Wildlife Refuge lands. No treatment of those lands is planned.

Future Activities

Funding for 2005-2006 (\$1.2 million) has been made available to all watersheds in the New Mexico. Districts are now authorized to use the funds for all aspects of riparian restoration, including control, revegetation, rehabilitation, and monitoring activities.

Relationship and Support for H.R. 2720

- (1) Accessing the extent of infestation by salt cedar and Russian olive trees in New Mexico is an ongoing process that we need additional resources and support in order to continue our work.
- (2) Demonstrating strategic solutions for the long- term management of salt cedar and Russian Olive trees; and reestablishment of native vegetation is an exactly what NM is currently working on. Soil types and drought conditions complicate the reestablishment of native vegetation task.
- (3) Assessing the economic means of disposing of biomass is a challenge that we are grasping with in our current projects.

The New Mexico Association of Conservation Districts (NMACD) supports the signing of an MOU between the Secretary of Interior and the Secretary of Agriculture because our land ownerships in the Western United States are intermingled and there must be an avenue to work on private land as well as other land ownerships.

New Mexico Cooperative Extension Service and the US F&W Bosque Del Apache have conducted research on methods of control for over twenty (20) years in New Mexico and we are very proud of the research and very willing to share what we have learned. NMACD is currently involved with BOR and NMSU (Dr. A. Slim Bawazir) to do Evapotranspiration (ET) studies on the Rio Grande River. Results after six (6) years of data show that salt cedar transpire about 1/3 more water than native cottonwood trees. Our preliminary data in a controlled comparative study areas shows that salt cedar transpires 39% more water than the areas treated with no salt cedar.

In the consideration of the feasibility of reducing water consumption by salt cedar and Russian olive trees". At this time, the most commonly perceived complication is the non-beneficial use of our most precious resource, water. Many studies have been conducted to quantify water use by these species (attachment 1), although exact outcomes vary, due to weather patterns, stand densities and water availability, under no conditions has non-native vegetation been found to use less water than native vegetation. On average one acre of non-native vegetation uses 4.4 acre-feet of water annually.

New Mexico has started restoration on 34, 555.90 acres with our state appropriations, the estimates for costs of destruction of the salt cedar and Russian olive trees varies from a low of \$187 per acre for aerial treatment to a high of \$3,500 for mechanical and herbicide treatment. The low costs do not include biomass removal, revegetation and maintenance, but in some cases there is no further need for removing the biomass and the natural regeneration is occurring in areas treated both aerially and mechanically. Non-natives infesting areas in NM have been recorded with stem counts of up to 7000 stems per acre. This number of trees increases the available fuel loads from 35 tons to the acre to over 100 tons to the acre increasing the fire the catastrophic fire danger.

Long-term management and funding strategies are critical to the success of restoring our most productive lands, which are our riparian areas.

The Arroyo de la Cejita ran water until the drought of the 1950s, and from then on it has been intermittent depending on the weather. In 2003, the driest year on the ranch since 1956, Harry and Lindit Hopson, the ranch owners, were surprised to see water flowing once again in the creek bed. What made the difference? NRCS's preliminary investigation shows removal of the salt cedar was the reason for the recovery of the creek.



Native Grass naturally regenerated



Canadian River aerielly treated in 2003- Native vegetation unharmed

Before mechanical thinning – Valencia County



After Mechanical thinning- Valencia County





Mechanical Removal with herbicide



Extraction w/o herbicides



Aerial application with herbicides

Bosque del Apache following immediately following aerial treatment
(Note: groves of cottonwood trees avoided during helicopter treatment)



Pecos River in NM following aerial treatment



Pecos River in NM- prior to treatment

