

US EPA ARCHIVE DOCUMENT

Río Puerco

WHY IS THIS WATERSHED SPECIAL?

The Río Puerco Watershed, located in West Central New Mexico, is the largest tributary to the middle Rio Grande basin. Covering nearly 7,350 square miles, it includes nine sub-watersheds that drain into portions of seven counties west of the greater Rio Grande Basin. Formerly lined with traditional villages, as well as extensive farm fields, the Río Puerco was once the “breadbasket of New Mexico.” It now receives worldwide notoriety as a severely impacted and degraded watershed due to the harmful impact of accelerated erosion. The river transports one of the world’s highest average annual sediment concentrations, resulting in decreased water quality and agricultural yield.

ENVIRONMENTAL CHALLENGES

The Targeted Watersheds Grant will focus on the following key challenges:

- Excessive soil erosion that surpasses that of any other watershed in the country, yielding 1.36 acre-feet per square mile per year.
- Historically poor land management practices, combined with dry weather that have led to significant alteration of stream formations and stream flow stability.



“We can often work with simple tools and natural materials and still have a profound effect on stabilizing the local landscape. This land and its resources are sacred to all of us – tribal members and ‘city folk’ alike.”

– Michael Coleman,
Geoscientist for the
State of New Mexico
Environment
Department – Surface
Water Quality Bureau

RESTORATION ACTIVITIES

Funding from the EPA’s Targeted Watersheds Grant Program will enable the Río Puerco Management Committee (RPMC) to implement its Watershed Restoration Action Strategy. RPMC is targeting restoration areas in the watershed that include the Upper Main Stem and Torreon Wash sub-basins. Their approach entails:

- In-channel stream restoration by increasing plant life and by adding sediment-filtering, log flow-management structures.
- Implementation of new water harvesting methods and erosion control practices, including innovative road maintenance techniques such as spreading water flow to promote vegetation growth.
- Utilization of pre-project aerial photography of the watershed to create a baseline for evaluating the progress made by the restoration projects.
- An extensive monitoring plan headed by a compliance review team to overview and document restoration efforts underway.
- Watershed educational programs to increase public awareness, including demonstration and monitoring projects with youth from Jemez and the Navajo Nation, along with students from area schools and colleges.



New Mexico rancher standing in well grassed valley bottom.

A STRONG PARTNERSHIP FOR CHANGE

RPMC has implemented the Rio Puerco Watershed Management Plan (2003), which they established with the involvement of a diverse group of leaders, including:

- Nine federal agencies, such as the Bureau of Land Management and the Bureau of Indian Affairs
- Six tribes, including the Pueblo Jemez and the Navajo Nation
- Eleven state agencies, including the New Mexico Environment Department and the State Land Office
- Eight private and non-profit organizations, such as the Quivira Coalition and Tree New Mexico, Inc.
- Private landowners and Indian allottees along the Rio Puerco Main Stem and Torreon Wash
- Many volunteers



Vertical bank instability on the Rio Puerco.



Jemez Pueblo ranchers constructed a series of post and wicker weirs using locally available juniper branches and sagebrush.

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EPA'S TARGETED WATERSHEDS GRANT PROGRAM

EPA's Targeted Watersheds Grant Program is a new, competitive grant program designed to encourage collaborative, community-driven approaches to meet clean water goals.

For more information about the selected watersheds, please visit:
<http://www.epa.gov/owow/watershed/initiative/>



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