

# CLEARING THE WATERS

## Newsletter

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Editor:

Matt Schultz

matthew.schultz@state.nm.us

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## EPA Recognizes Rio Cebolla Project as Clean Water Act Success Story

By Dan Guevara, Watershed Protection Section

The U.S. Environmental Protection Agency has recognized the Rio Cebolla as a Success Story for the Clean Water Act (CWA) Section 319 Nonpoint Source Pollution Prevention Program. The New Mexico Environment Department nominated the Rio Cebolla because of river improvements realized through the Respect the Rio program conducted by the U.S. Forest Service.

The Rio Cebolla originates in the Santa Fe National Forest in the Jemez Mountains. A 9.1-mile segment of the river between Fenton Lake and Rio de las Vacas was added to the 1998 CWA Section 303(d) list of impaired waters because of excessive sediment and siltation. The excess sediment and silt comes from erosion associated with recreational use, road drainage, and grazing, which can clog fish and aquatic habitats. The Respect the Rio program used EPA 319 funding to reduce sedimentation by addressing recreation, grazing, and road issues.

To reduce the impacts from recreation, the Forest Service conducted an aggressive public outreach campaign urging people to "Respect the Rio." The



*A number of implemented best management practices under the Respect the Rio initiative on display at the Rio Cebolla, a popular recreation area 12 miles east of Cuba, NM.*

***Continued on page 2***

**NMED Surface Water Quality Bureau's  
Watershed Protection Section**

[www.nmenv.state.nm.us/swqb/wps](http://www.nmenv.state.nm.us/swqb/wps)

## **SUCCESS STORY continued from page 1**

campaign included advertisements in local movie theaters, informational signs, pamphlets, stickers and even temporary tattoos. Furthermore, an initiative forest ranger visited people at campsites and recreational areas to encourage resource protection and cite those not in compliance.

In addition to outreach, the Forest Service built buck-and-pole fences and closed user-created roads to prevent vehicles from eroding the stream banks and hillslopes, which had been a reoccurring problem in the past. They also replaced two undersized culverts with new open-bottom culverts, which allow the stream flow to pass through without constriction and erosion problems. This also resulted in better fish passage and fish habitat.

Grazing management was improved by rotating cattle in pastures and limiting access to riparian areas to two weeks a year. Also, there was an increase in the use of vehicles with trailers to transport cattle instead of driving them on horseback through sensitive areas. Additionally, old fences were replaced as needed, and upland stock tanks were constructed to relieve concentrated grazing in the riparian areas.

**"We are gratified that this collaborative effort reduced sediment in the river and restored one of New Mexico's precious water resources."  
- Environment Department Secretary Ron Curry**

NMED conducted follow up water quality surveys on the Rio Cebolla in 2005, which indicated sufficient improvements to meet standards for sedimentation. Therefore, NMED removed the segment from the 2008 CWA Section 303(d) list of impaired waters.

The Santa Fe National Forest received funds from NMED for several CWA Section 319 projects for the initiative. Numerous partners helped restore the Rio, including New Mexico Trout, Habitat Stamp Program, New Mexico Game and Fish, Trout Unlimited, Backcountry Horsemen, New Mexico Wilderness Alliance, individual permittees and landowners, Jemez Valley and Cuba schools, Boy and Girl Scouts of America, Student Conservation Association, Forest Trust, and Youth Conservation Corps.



*Before (above) and after (below) photos showing the restoration of denuded areas caused by off-road vehicles. The lack of vegetation combined with moderate slopes causes excessive sediment to enter the river in this popular fishing area.*

## **EPA recognizes success stories to highlight restoration efforts that result in water quality improvements in nonpoint source pollution impaired waterbodies.**

For more information on the EPA Success Story, visit [www.epa.gov/nps/success](http://www.epa.gov/nps/success).

For information on the Respect the Rio program, visit [www.fs.fed.us/rtr](http://www.fs.fed.us/rtr).





**Section 319 Nonpoint Source Success Stories**

Controlled by: Search: ☐ All EPA ☒ This Area

You are here: [EPA Home](#) > [Water](#) > [Wetlands, Coasts & Watersheds](#) > [Polluted Runoff \(Nonpoint Source Pollution\)](#) > Section 319 Success Stories

This **Section 319 Nonpoint Source Success Stories** Web site features stories about primarily nonpoint source-impaired waterbodies where restoration efforts have led to documented water quality improvements. **Waterbodies are separated into three categories of stories**, depending on the type of water quality improvement achieved:

- Stories about partially or fully restored waterbodies
- Stories that show progress toward achieving water quality goals
- Stories about ecological restoration

To find stories, either follow the story category links above or choose a state from the map.

**First-time visitors:**  
Do you need more information about Success Stories?  
Do you need more guidance for using this site?  
[Visit our Basic Information page for answers.](#)

**Featured Stories**







## Western Hardrock Watershed Team brings volunteers to New Mexico watershed groups

By Jhon Arbelaez – OSM/VISTA WHWT New Mexico Coordinator

The Western Hardrock Watershed Team (WHWT) is a partnership between the Office of Surface Mining (OSM) and AmeriCorps\*VISTA that places college-educated volunteers in rural communities with a simple mission: “to fight poverty and provide rural communities with the assistance they need to make their communities cleaner, healthier, and safer places to live and work.” OSM/VISTA Volunteers working alongside local watershed groups have been able to revitalize watersheds and communities, and have helped clean up pollution left from years of environmental degradation.

The WHWT expanded into New Mexico in September 2009. With the help of the New Mexico Abandoned Mine Lands Program and the Environment Department, the WHWT has placed Rachel Folk with the Upper Pecos Watershed Association (UPWA) as the first WHWT OSM/VISTA Volunteer in New Mexico. In a few short months, she has been able to raise thousands of dollars in funds, increase awareness of Upper Pecos watershed issues, help coordinate and expand a program to monitor water quality in the Pecos River with local students and volunteers, and is currently working on starting a Community Firewood Program to provide low-income families with firewood to be able to heat their homes during the cold winter months. In addition to the Volunteer serving at the UPWA, a new partnership with the Gila Resources Information Project has allowed the placement of a new OSM/VISTA Volunteer, Regina Willis, to work on legacy mining issues in Silver City and the surrounding areas.



*The UPWA prepares to clean up the Pecos River during 2009's Dia Del Río*

**“There’s no fulfillment like knowing we’re helping our communities and connecting on personal levels that we wouldn’t make without living like those we are here to serve.”**

**-OSM/VISTA Rachel Folk**

With 29 volunteers serving throughout Colorado and New Mexico, the WHWT has been invited to spread its program across the Rocky Mountain region. With our continued expansion, we look forward to bringing the success our Volunteers have had to additional groups in New Mexico to assist local watershed groups and make local communities a better place to live and work.

***More local watershed groups are needed to host year-long volunteers and 10-week interns.***

If you are a watershed group that is ready to implement a project and can pursue the core goals of the WHWT: capacity building, environmental monitoring, outreach and education, community revitalization, and professional development, please contact Jhon Arbelaez at [nm@hardrockteam.org](mailto:nm@hardrockteam.org), or by phone at (786)543-4213. Also visit us on our website at [www.hardrockteam.org](http://www.hardrockteam.org).

We are also looking for dedicated volunteers and interns to join our team. If you have a passion for volunteering, fighting poverty, and helping the environment, we would love to hear from you!

# Watershed Protection Section Update

By Abe Franklin, Program Manager

## EPA Approves NPS Management Plan

An updated plan for the Nonpoint Source Management Program was approved by the Water Quality Control Commission in May 2009, and by the EPA in October 2009. The plan describes six objectives with an overall goal of meeting and maintaining water quality standards and uses of surface and groundwater resources in New Mexico. The plan describes long term management activities along with shorter-term milestones to be accomplished over the next five years. The objectives are related to planning, restoring water quality, protecting water quality, education, protecting groundwater quality, and interagency cooperation. The plan is available at [www.nmenv.state.nm.us/SWQB/WPS](http://www.nmenv.state.nm.us/SWQB/WPS).



## RFPs for Watershed Funding

The Watershed Protection Section released two requests for proposals (RFPs) in February following the priorities outlined in the NPS Management Plan. The two RFPs are very similar to last year's. There are some new eligible stream reaches in the Dry Cimarron watershed where total maximum daily loads (TMDLs) were completed, and some of the specific parameters in the Jemez watershed have been added or changed (with a small number of new eligible streams). These RFPs also include Category 4C streams, which don't require a TMDL because the impairment is thought to be due to insufficient flow.

One RFP solicits proposals that will develop new watershed plans or update existing watershed plans to include information specified in the Nonpoint Source Program and Grants Guidelines for States and Territories available at [www.epa.gov/owow/nps/cwact.html](http://www.epa.gov/owow/nps/cwact.html). Each new planning project must address at least one TMDL for an impaired water, but may also identify other actions required to protect water quality in areas already meeting standards.

The second RFP solicits proposals for on-the-ground projects that implement watershed plans, focusing primarily on meeting the goals of nonpoint source TMDLs. The RFP asks for citations of either a watershed plan or equivalent documents to support the proposed work. The ultimate goal of this approach is to delist impaired streams. Projects funded under either RFP will require a minimum forty percent non-federal match, which may consist of cash expenditures or in-kind contributions of labor, equipment, or materials. Both RFPs also include a March 15th deadline for questions that potential applicants may submit during the RFPs. For more information, see <http://www.nmenv.state.nm.us/NMED/RFP/>, or contact any Section staff, or Abe Franklin at 505-827-2793 or [abraham.franklin@state.nm.us](mailto:abraham.franklin@state.nm.us). The deadline for proposals is April 15, 2010.

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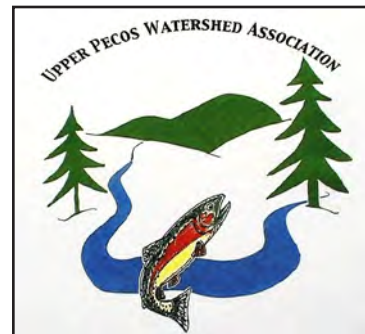
## **Additional New Projects to begin in 2010**

In the last issue, we reported that the Watershed Protection Section and cooperators completed workplans for six new projects to be funded under Section 319 of the Clean Water Act, which were submitted to EPA. EPA approved five, and declined one on the grounds that the implemented BMPs would not produce a significant pollutant load reduction compared with other BMPs that could be implemented within the same watershed. WPS is presently encouraging stakeholders to develop a more specific plan for the watershed where the project in question was proposed.

The following is a summary of three additional projects that were identified for funding from the same RFPs conducted in 2009. EPA has approved two of the three workplans for these projects, and is still reviewing the third.

### **Upper Pecos WRAS Improvement, Expansion, and Restoration Planning**

This project will revise an existing watershed plan for the Pecos Headwaters Watershed to address the nine planning elements in EPA's Nonpoint Source Program and Grants Guidelines for States and Territories. The main focus of the planning effort will be to determine how best to implement temperature and turbidity TMDLs in 89 stream miles which do not fully support their aquatic life uses. The watershed plan will help agencies and residents focus resources on improving the trout waters of the Upper Pecos. The Upper Pecos Watershed Association will implement this project for a combined cost (Section 319 and non-federal match) of \$87,840.



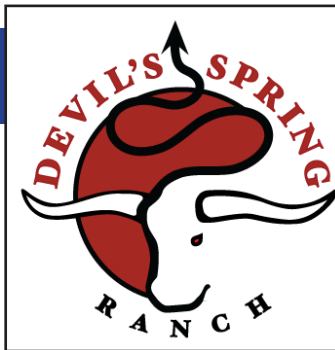
### **Respect the Rio: Managing Recreation to Improve Water Quality**

This project includes a mix of enforcement, education and restoration activities aimed at managing recreation along impaired streams in two high-use watersheds: Pecos Headwaters and Jemez. The project will build on past work in the Jemez watershed, and expand the Respect the Rio Program to the Pecos watershed. The Santa Fe National Forest will implement the project in cooperation with several schools, national volunteer organizations, and local organizations for a combined cost of \$670,271.

### **Río Pueblo de Taos Watershed Comprehensive Planning**

This project will revise an existing watershed plan to address the nine planning elements in EPA's Nonpoint Source Program and Grants Guidelines for States and Territories, with emphasis on impaired reaches of the Río Pueblo de Taos and Río Grande del Rancho. The revision will focus on identifying point and nonpoint sources of impairment in the watershed, estimating loading for each source, estimating load reductions for potential projects identified in the plan, and establishing a monitoring and evaluation protocol. Amigos Bravos will implement the project for a combined cost of \$104,422.





## The Open Space Pilot Project: A World of Water

By Don Schreiber, Devil's Spring Ranch

Remember that old traveling folk song? All together now...“I’m goin’ down that road feelin’ bad, I’m goin’ down that road feelin’ bad...” Woody Guthrie’s Okies sang it along the 1,327 miles from Boise City, Oklahoma, heart of the Dustbowl, to Salinas, California, heart of the Promised Land back in the 1930’s. Today, if we turned Tom Joad loose in the San Juan Basin gas field, his rattletrap Model T could travel 20,000+ miles of bad roads, enough for 15 trips from Oklahoma to California and never get out of San Juan or Rio Arriba county. That’s a lot of bad road. And on just one mile of that bad road more than a half-million gallons of water falls in an average year. Much of that water is either impounded in the road, or set loose as an erosive force on its way to the San Juan River.



*Rutted roads trap more than water. This oilfield truck is stuck in the ruts.*

In an effort to address roads and other issues, a pilot project was established in January 2008 covering 5,670 acres in the center of the San Juan Basin. The Open Space Pilot Project (OSPP) is a partnership of the Bureau of Land Management (BLM), ConocoPhillips and Devil’s Spring Ranch. The objectives of the Project vary and overlap from partner to partner, but for the Ranch the objectives are to: 1) Improve existing roads to return water to the landscape in a beneficial way; 2) Preserve open space by drilling new wells from existing well pads (i.e. twinning); and, 3) Establish sustainable vegetative cover and soil structures to repair and stabilize surface damage.

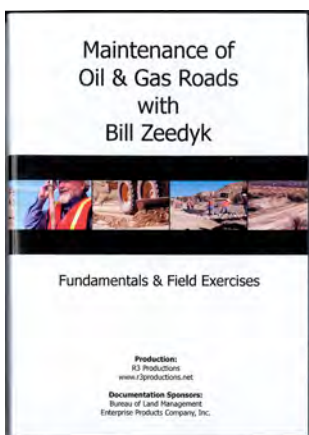
### A Third of the Way There

Objective #1, improve roads, has seen 8.2 miles of existing road improved since the Project started.

These improved roads allow the water to return to the

landscape in a beneficial way using methods and standards set out by Bill Zeedyk in his books and workshops.<sup>1</sup> These 8 miles represent over a third of the existing 23 miles of roadways within OSPP. As each new well is drilled, the existing road is improved back to its first major intersection, in one case, two miles. ConocoPhillips is able to allocate the cost of road improvement to each well as it is drilled and achieve a safer road surface that is longer lasting and easier to maintain. When OSPP is complete, most of the 23 miles of roads will have been upgraded.

Before drilling each new well, ConocoPhillips construction personnel, the dirt work contractor and Devil’s Spring Ranch conduct a walking survey of the existing roadway and lay out the alterations to be made in a collaborative process. In the interest of economy and practicality, a process of prioritization must take place. Like politics, road improvement in OSPP is “the art of the possible.” And those possibilities often fit well with the Zeedyk principle, “fix the easiest things first.”



*2-DVD set on oil and gas road maintenance.*

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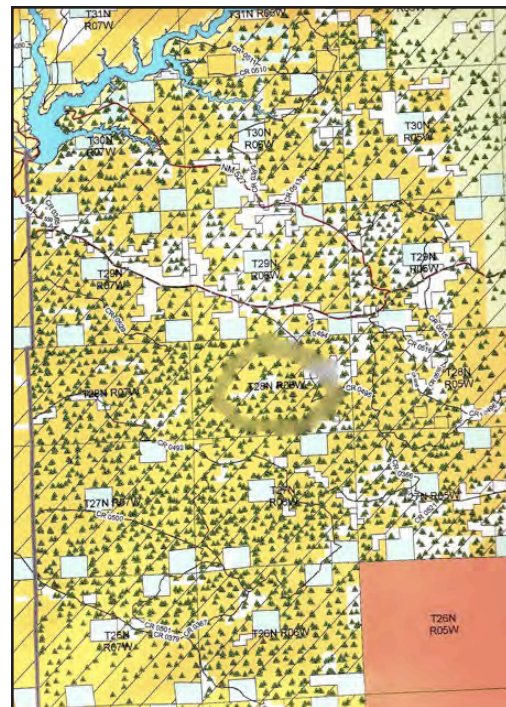


## ***OSPP continued from page 6***

The most significant changes in the roads are the elimination of bar ditches, crowning and in-sloped surfaces, where possible, and the addition of rolling dips, sandstone surfacing and out-sloped surfaces, where possible. Several low-water crossings have been built, some eliminating traditional culverts. These and other subtle changes combine to allow the whole road to drain as quickly as possible with the minimum interruption of normal surface flows. Elimination of the bar ditches has yielded an unintended consequence of widening the roadbed without loss of vegetative cover. The traffic then has a significantly wider roadway by 3'-4', which reduces the serious hazard of vehicle rollover when one or more wheels become trapped in the ditch. Vehicle related incidents account for about half of all oilfield accidents.

### **Twinned Wells**

Objective #2, twinning of wells, was accomplished by the fall of 2008 after extensive planning by ConocoPhillips and Devil's Spring Ranch, and approval by the BLM and New Mexico Oil Conservation Division. Of the 44 future wells to be drilled, 40 will be twinned, or about 90%. Of the 99 existing wells within the Project boundaries, only 9 were twinned, or 10%. Each twinned well saves the construction of a new road and pipeline as well as the new well pad. To date, 12 of the 44 twinned wells have been drilled with the remaining wells to be drilled within approximately two years.



*Ranch location in northwestern New Mexico. All the green triangles are gas wells. The body of water in the upper left hand corner is the Navajo Reservoir/San Juan River. BLM map.*



*Erosion resulting from a well pad.*

### **Surface Rehabilitation**

Objective #3, surface rehabilitation, is now in the planning stages with the first activities planned for this spring. Devil's Spring Ranch has established a Fund at Holistic Management International (HMI), and BLM has contributed Mitigation monies to the Fund. HMI has hired Frank Aragona of AgroInnovations as consultant and accepted the OSPP as a focus project for their 2010 calendar calling it, "Holistic Management Remediation on Oil & Gas Drilling Sites."

### **A World of Water**

Returning, or harvesting, the water from just these 8 miles of improved roads, totals over 4 million gallons, which is a "world of water" for anyone interested in conservation. Thinking back to Mr. Joad and his Dustbowl, it was in response to that awful erosion that Big Hugh Bennett started the Soil Conservation Service whose initial emphasis was not on dust, but on water, saying "after so many years of destruction...people wanted to be a part of restoration. It felt good to be trying to heal something."<sup>2</sup>

#### **Footnotes:**

1. A Good Road Lies Easy on the Land: Water Harvesting from Low Standard Rural Roads. Bill Zeedyk (2006) Santa Fe, NM The Quivira Coalition. Construction and Maintenance of Oil Field Roads Bill Zeedyk (2008) seminar and field workshop sponsored by the BLM.

2. The Worst Hard Time. Timothy Egan (2006) Houghton, Mifflin p. 280



*Hugh Bennett talking to farmers in Colorado. Photo courtesy of the Library of Congress.*

# ANNOUNCEMENTS

**February 5th** - NMED issued RFPs for watershed planning and on-the-ground projects.

<http://www.nmenv.state.nm.us/NMED/RFP/>

**February 17-19th** - Western Coalition of Arid States 2010 Annual Winter Conference "Sustainability and Stewardship." Albuquerque. [www.westcas.org](http://www.westcas.org)

**February 18th** - Arizona Water Settlements Act Forum for the general public. 6:30 pm Western New Mexico University Global Resource Center Auditorium, Silver City.

**February 19-21st** - Arizona Botany Meeting "Riparian Areas, Springs and Cienegas." Arizona-Sonora Desert Museum, Tucson, AZ. <http://www.desertmuseum.org/azbotany/>

**February 25-26th** - 15th Annual International Water Conservation & Xeriscape Conference. Albuquerque. <http://www.xeriscapenm.com/>

## **319 Request for Proposals Public Meeting Schedule**

**March 2nd** - Tierra Amarilla, Rio Arriba County Commission Chambers, 149 State Route 162. 6–8pm

**March 4th** - Abiquiu, Rural Event Center, 122 State Route 554. 6–8pm

**March 9th** - Albuquerque, New Mexico Environment Department District 1 Office, 5500 San Antonio Dr. NE. 6–8pm

**March 10th** - Questa, Village of Questa Hall, 2500 Old State Road 3 (behind Police Department). 6–8pm

**March 11th** - Silver City, City Hall Annex (Upstairs Meeting Room), 1203 N. Hudson. 6–8pm

**March 15** - New Mexico Environmental Flows Workshop, University of New Mexico School of Law, Utton Transboundary Resources Center, Albuquerque 9:00 am

**March 23rd-24th** - Green Infrastructure and Low Impact Development Workshop. Rotunda at UNM Science and Technology Park, Albuquerque. <http://www.aridlid.org/>

**April 15th** - Deadline for CWA 319 Grant applications.

**April 17th** - Green Streets for Arid Cities Workshop on urban watershed issues. Watershed Management Group; Tucson, AZ. <http://watershedmg.org/green-streets>

