

CLEARING THE WATERS

Newsletter

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www.nmenv.state.nm.us/swqb/wps

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New Mexico Riparian Council Announces Annual Awards

The New Mexico Riparian Council recently honored several New Mexicans for work done to enhance and protect riparian areas, and to educate the public on benefits of riparian habitat. The non-profit Council recognized awards in six categories:

The John P. Taylor Lifetime Achievement award was given to Tom Morris. Tom is currently employed with the Navajo Nation Environmental Protection Agency as the Senior Environmental Specialist. Working on watershed restoration and regulatory compliance as part of CWA §401 permitting activities, Tom has pioneered watershed restoration on range management units spread



Tom Morris

John P. Taylor Lifetime Achievement awardee

across the Navajo Nation using funding available through Section 319 of the Clean Water Act. He has also trained others through workshops and field visits in the proper location and construction of stream crossings, bridges, and culverts to minimize road impacts on streams and wet meadows.

The Research award was given to Jack Triepke, US Forest Service Southwest Region. Jack is the Regional Ecologist working out of Albuquerque. He was awarded for his foresight and leadership of the Regional Riparian Mapping Project, a collaboration recently completed to facilitate the research, assessment, and management of natural resources. Riparian communities were mapped on National Forests across the Southwest Region (New Mexico and Arizona) at a scale of 1:12,000, with a map legend of 24 map units and four subclasses.

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

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Public Awareness category was awarded to the City of Santa Fe and the Santa Fe River Commission. The City of Santa Fe and the Santa Fe River Commission were commended for the ongoing work during Mayor David Coss's administration to bring the Santa Fe River back to life. This effort brought together the citizens of Santa Fe, civic leaders and City staff, particularly Brian Drypolcher and Claudia Borchert, who attended public meetings and worked with City Council to explain how it would be possible to put water back in the Santa Fe River to improve the river ecosystem and the aesthetics of this community and still provide customers with a reliable supply of water. In April 2012, the City of Santa Fe initiated flows to pass through the City's reservoirs into town, to support the river's green corridor and wildlife habitat.



From left to right: Dr. Jerry Jacobi, Mayor David Coss, Brian Drypolcher



Barbara Johnson with collaborators at Valles Caldera

The Partnership award was given to Barbara Johnson, Executive Director of the Rio Puerco Alliance and Board Member of the Los Amigos del Valles Caldera, two non-profit organizations whose goals include the restoration and protection of stream, wetland and riparian areas in New Mexico. Barbara fosters and maintains partnerships on various levels including agencies (e.g. Valles Caldera Natural Preserve, Bureau of Land Management, Environmental Protection Agency, and New Mexico Environment Department), tribal communities of Acoma, Laguna, and the Navajo Nation, and ranchers. She also writes articles about the ongoing restoration work and promotes innovative restoration and monitoring processes.

The Habitat Enhancement award to a group was given to the Lincoln National Forest Wildlife Biologists: Rhonda Stewart, Brian Davis, April Banks, Larry Cordova, Jack Williams, Andrew Passarelli, Rueben Gay, Todd Rawlinson, John Montoya, Sam Fragua, Larry Paul and Jennifer Hill. Over the past few years, the Lincoln National Forest wildlife program has been shifting their focus from artificial water structures to the restoration of streams and high elevation wetlands to a functioning condition. These wetland habitat types were either historically drained, or are present but in a degraded condition. The wetland restoration efforts have proved especially rewarding by providing important habitat to many species of bats, amphibians, invertebrates, birds, and mammals.



Lincoln NF Wetland Project



Mike Reardon at Bonito Creek

The Habitat Enhancement for an individual went to Mike Reardon, a rancher managing the family owned Cañon Bonito Ranch near Wagon Mound. Since 1997, Mike has planned and implemented a multi-faceted and highly integrated approach to rangeland recovery and riparian restoration. This effort included piñon-juniper removal, prescribed burning, prescribed grazing with only dormant season use of riparian areas, relocation of ranch roads to improve water quality, and natural channel design restoration to restore creek function, improve riparian condition and increase meadow saturation. Riparian habitat response is apparent in the widespread expansion of cottonwood/willow stands along the 2.5 mile of Bonito Creek and an increase in the diversity and abundance of wet-soil grasses. Increased use of wildlife has been documented, while supporting his current livestock numbers in spite of drought conditions.

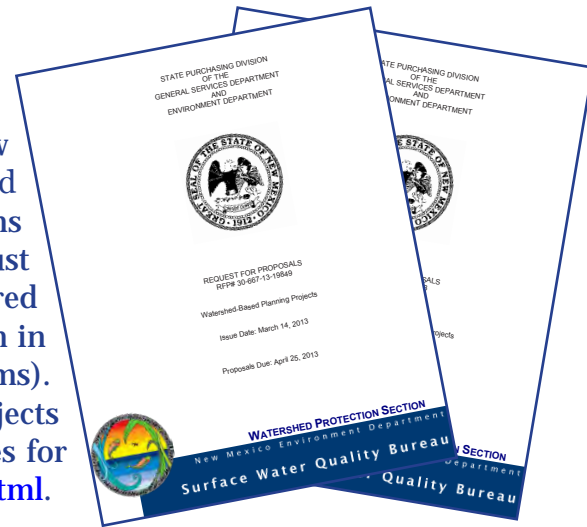
Nominations are usually solicited in December. Please see www.ripariancouncil.org for further information.

Watershed Protection Section Update

Two Requests for Proposals released

By Abe Franklin, WPS Program Manager

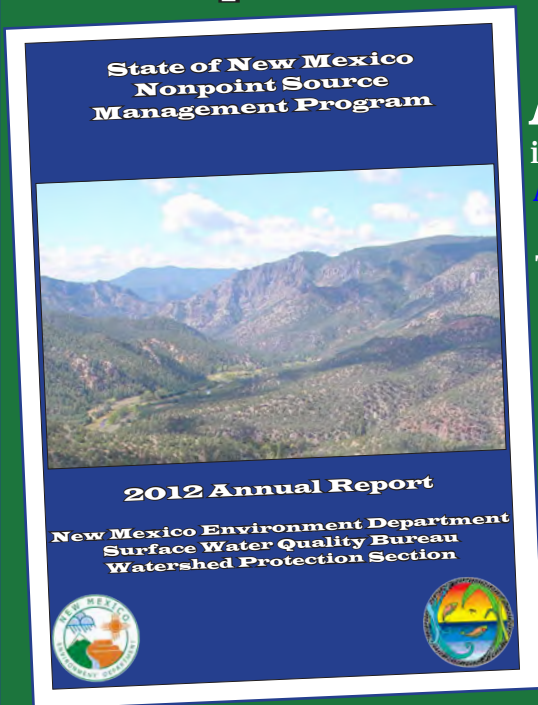
The Watershed Protection Section released two requests for proposals (RFPs) on March 14, 2013. One RFP solicits proposals to develop new watershed-based plans or update existing plans to identify and build the methods, programs, and partnerships required for eligible streams to meet their water quality standards. Each new planning project must address at least one total maximum daily load (TMDL) for an impaired stream, or develop a hydrologic solution to a water quality problem in a limited category of streams without TMDLs (Category 4C streams). More information on the planning elements required for these projects is provided in the Nonpoint Source Program and Grants Guidelines for States and Territories available at www.epa.gov/owow/nps/cwact.html.



The second RFP solicits proposals for on-the-ground projects that implement watershed-based plans, focusing on meeting the goals of TMDLs, or on meeting hydrologic goals for Category 4C streams. 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, or move towards that goal.

The RFPs will be open until April 25, 2013. 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, and materials. Both RFPs include opportunities for potential applicants to ask questions. Public meetings are planned around the state (See calendar on back page), and a deadline for submitting written questions is provided in the RFPs. For more information, see www.nmenv.state.nm.us/NMED/RFP, or contact Abe Franklin at 505-827-2793 or abraham.franklin@state.nm.us.

2012 Nonpoint Source Program Annual Report published



A report of activities undertaken by NMED and other agencies and organizations to address nonpoint source pollution in New Mexico in 2012 is available online at www.nmenv.state.nm.us/swqb/wps/AnnualReports.

The report describes efforts undertaken or completed in 2012 by several natural resource agencies, and provides many valuable links to more detailed information. This annual report is a requirement of the Clean Water Act, that enables EPA and the public to track the State's progress towards implementing the Nonpoint Source Management Program. Important milestones are described such as the completion of three watershed-based plans covering 37 priority watersheds, four on-the-ground 319 projects completed, fifteen River Ecosystem Restoration Initiative projects completed, and a four percent reduction in stream miles designated as impaired.

319 Program Update

New Projects beginning in 2013

By Abe Franklin, WPS Program Manager

The Watershed Protection Section and cooperators are beginning six new projects to be funded under Section 319 of the Clean Water Act. These projects were identified through two Requests for Proposals (RFPs) conducted in 2012. Here is a summary of each project:

An Updated Watershed-Based Plan for the Lower Embudo Watershed, New Mexico

This project will revise an existing Watershed Restoration Action Strategy to address the nine planning elements in EPA's Nonpoint Source (NPS) Program and Grants Guidelines for States and Territories, for Embudo Creek in Rio Arriba and Taos Counties. The coldwater aquatic life use in Embudo Creek from the Rio Grande to the Cañada Ojo Sarco is impaired by sedimentation (excessive sediment on the stream bed) and turbidity (fine sediment suspended in the water column). Total Maximum Daily Loads (TMDLs) were approved by the New Mexico Water Quality Control Commission and EPA in 2005, which set overall goals for these parameters. This project will characterize the problem in greater detail and identify solutions with quantitative estimates of sediment load reductions that can be achieved with different management measures. Arid Lands Institute (a research center housed at Woodbury University in California) and local subcontractors will implement the project for a combined cost of \$407,113.



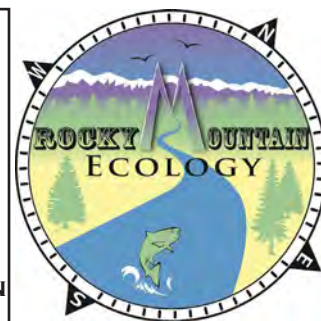
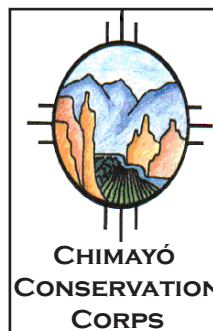
Aguas Norteñas

Nutrias Watershed Based Plan

This project will develop a watershed-based plan to address the nine planning elements in EPA's NPS Guidelines for the Rio Nutrias, a tributary of the Rio Chama in Rio Arriba County. The high quality coldwater aquatic life use of the Rio Nutrias is impaired by turbidity. A TMDL was approved by the New Mexico Water Quality Control Commission and EPA in 2004, which set an overall goal for reducing the fine sediment load in the Rio Nutrias. This project will characterize the problem in greater detail and identify solutions with quantitative estimates of sediment load reductions that may be achieved with different management measures. Aguas Norteñas will implement the project for a combined cost of \$145,188.

Watershed-Based Planning Within the Upper Rio San Antonio Drainage Basin

This project will develop a watershed-based plan for the Rio San Antonio, near San Antonio Mountain in Rio Arriba County. The high quality coldwater aquatic life use of the Rio San Antonio is impaired by high temperatures. A TMDL document estimates temperature reductions expected with increases in shade from riparian vegetation. This project will expand on that modeling, and supplement it with more field data to identify priority stream reaches where changes in grazing management and other actions will achieve temperature goals. The project will be conducted in cooperation with grazing permittees, private land owners, and the Carson National Forest, to produce a plan which addresses the nine planning elements in EPA's NPS Guidelines, and that meets National Environmental Policy Act (NEPA) requirements. The Chimayo Conservation Corps and technical subcontractor Rocky Mountain Ecology will implement the project for a combined cost of \$259,143.



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Urban Green Infrastructure Retrofit Pilot Project in Albuquerque, NM

This project will reduce *E. coli* loading to the middle Rio Grande in Albuquerque by retaining and infiltrating runoff from a one-acre parking lot. The project will also demonstrate and clarify procedures for navigating water compact compliance and ground water discharge permitting considerations. The New Mexico Water Collaborative will implement the project in cooperation with the Ciudad Soil and Water Conservation District and a private land owner, for a combined cost of \$147,038.

On-The-Ground Improvement Projects for the Upper Gallinas River and Porvenir Creek

This project will implement portions of the recently updated Watershed Based Plan for the Upper Gallinas River, available at www.nmenv.state.nm.us/swqb/UpperGallinasRiver/WBP. The main purpose of the project is to lower stream temperatures and improve fish habitat in the upper Gallinas River. Planned work includes development and implementation of riparian-sensitive grazing plans, vegetation management for domestic and recreational riparian property, riparian plantings, stream geomorphology enhancements, road crossing modifications, and upland erosion control. The project also provides some local coordination and assistance for other programs that can assist in implementing the watershed-based plan. The project is being implemented by the Hermit's Peak Watershed Alliance, for a combined cost of \$393,600.



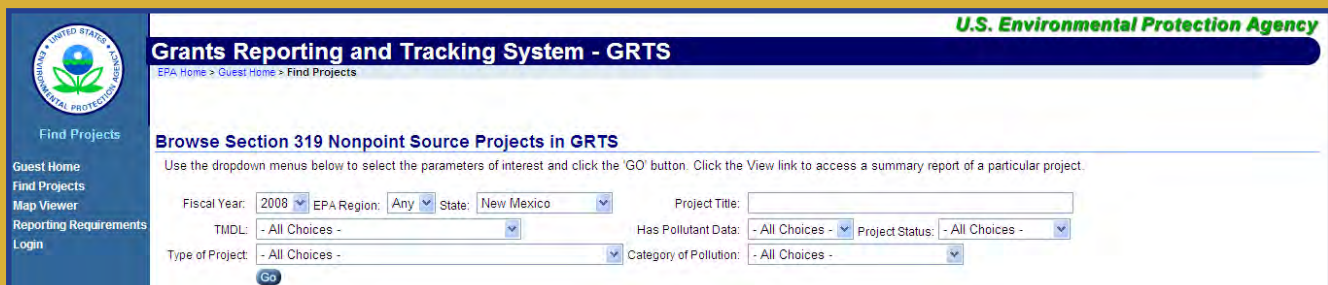
Upper Rito Peñas Negras Woody Riparian, Re-Vegetation, and Temperature Reduction Project

Two earlier projects on the Rito Peñas Negras, one funded under Section 319 and one funded under the state River Ecosystem Restoration Initiative, have focused on excluding elk and cattle from the riparian area, and planting woody riparian vegetation, along the lower and middle Rito Peñas Negras, respectively. This project expands those efforts to the upper Rito Peñas Negras. The three projects together are expected to make significant progress towards implementing TMDLs for temperature, sediment, and nutrients. The project is being implemented in cooperation with the Santa Fe National Forest by the WildEarth Guardians, for a combined cost of \$391,760.



Nonpoint Source Project Information Available on a Public Database

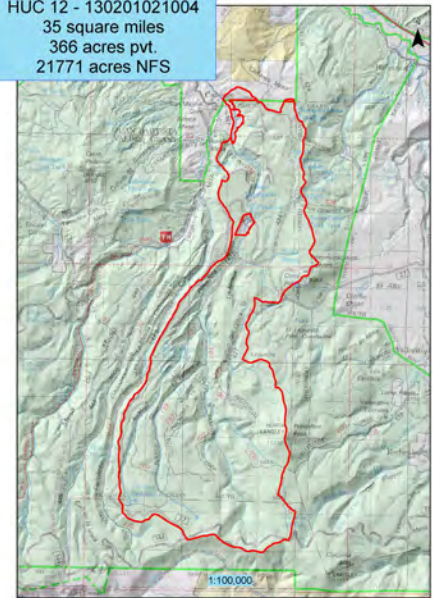
A wealth of data on Section 319 projects is available on the Grants Reporting and Tracking System (GRTS). A new web page intended to introduce our readership to GRTS is available, at www.nmenv.state.nm.us/swqb/wps/GRTS. All of New Mexico's current projects appear under grants awarded in 2008 through 2012.



Polvadera Creek Riparian Project

By Delbert Trujillo, Environmental Specialist/Scientist

Polvadera Creek begins as a series of springs in the Jemez Mountains north of Valles Caldera at an elevation of 9,500 feet. Almost 15 miles downstream and dropping nearly 3,000 feet in elevation, Polvadera Creek flows into Cañones Creek in the town of Cañones. This diverse stream system flows through heavily forested areas, wide meadows, and steep canyons of the Española and Coyote Ranger Districts of the Santa Fe National Forest. A pure strain of Rio Grande cutthroat trout (RGCT), listed as a candidate species under the Endangered Species Act, is known to exist in Polvadera Creek, and is designated as a core conservation population by the US Fish and Wildlife Service.



Polvadera Creek is a designated high quality coldwater fishery in the Rio Chama Watershed. However, it is listed by the New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB) as impaired for not fully supporting this designation, with the probable causes of impairment due to sedimentation/siltation and heightened stream temperature. The Rio Chama Watershed Restoration Action Strategy (WRAS) was completed in 2005 to identify water quality goals for the Rio Chama watershed, and Polvadera Creek is one of the first order tributaries. The WRAS focused on how the impairments with established Total Maximum Daily Loads (TMDLs) could be remedied and reduced. On Polvadera Creek, the TMDL for stream temperature identifies an exceedence of 4.1° C (7°F) to the designated standard of 20° C (68°F). The WRAS further discusses methods for decreasing stream temperature by an increase in canopy shade and /or decreasing the width to depth ratio of the creek.

A grant through the NMED/SWQB Clean Water Act §319(h) program was awarded to the Española Ranger District in 2010. The goal of the Polvadera Creek Riparian Project was to reduce water temperature in the creek by implementing on-the-ground Best Management Practices (BMPs). These practices included planting more riparian species and removal and thinning of non-riparian woody plants. Within the project area, approximately 20 acres of Rocky Mountain Juniper were manually cut. In some cases the material was left in place, and in other areas material was placed in strategic areas in and along Polvadera Creek to slow erosion. This also provided temporary stream shading and the protection of willow saplings.



Completed trick tank

To minimize ATV access, physical barriers were constructed of steel pipe and rock barriers in two areas. These closures were located adjacent to the stream corridors to reduce intensive disturbance. Beaver re-introduction was part of the original listed BMPs. However, this part of the program was eliminated due to local controversy. On a positive note, when Forest Service staff conducted an electroshocking survey in 2010, beaver were found to have naturally migrated into the Polvadera Creek. Another practice installed was twenty acres of riparian fencing to foster maximum reproduction, establishment, and growth of the riparian zone along the creek. Alternative water sources for livestock outside of the riparian area were constructed in the form of trick tanks. Trick tanks are containment structures that store rain and/or snow melt and are used effectively for

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wildlife and livestock watering. This was an addition to the revised allotment management plan (AMP), which does not allow grazing in occupied RGCT stretches prior to an annual date of July 15 to protect the fish during spawning and rearing. This decision was also controversial as many of the livestock operators feel that this requirement is not necessary. The New Mexico Range Management Improvement Taskforce was engaged in discussions regarding livestock use within the allotment with field visits to monitor for range readiness, range health and discussions on livestock use. Collaborative engagement with livestock permittees, industry representatives, and resource specialists will continue on an annual basis to balance livestock use with resource needs. So this may change, but for now grazing deferment is a component of the AMP which may result in a more vibrant riparian corridor and should benefit the fishery.

In 2009, the Forest Service teamed up with Santa Fe Youthworks. Youthworks is a non-profit, community-based organization that creates opportunities for youth and families in Northern New Mexico. Programs are aimed at job training and placement, life skills, counseling, education, and leadership development. There were 20 youth that participated on this project during two different work events. The first project involved seven Youthworks volunteers assisting in fence and fish structure construction (photo). Forest Service personnel held a career workshop for Youthwork participants on outdoor careers with talks given on wildlife, fire, recreation and archeology programs.



Santa Fe Youthworks crew

The Polvadera Creek Project experienced challenges due to the South Fork fire of 2010. The stream has, over the life of the project experienced low flows and flash floods, primarily due to the Southfork Wildfire. This wildfire resulted in 4,911 acres of burned area within the watershed. Specifically there were 766 acres of high severity burn, 1,476 acres of moderate burn, and 2,669 acres of low intensity burn within the watershed. Within the Polvadera Creek Riparian Project area, approximately ten acres were directly impacted by the wildfire with at least one/two acre stand of narrow leaf cottonwood severely burned.



Aerial view of areas of Polvadera Creek affected by the South Fork Fire (2010)

Staff from the Santa Fe National Forest and New Mexico Department of Game and Fish removed the Rio Grande cutthroat trout from Polvadera Creek and transplanted them in a fishless stream in the Pecos Wilderness until they can be stocked back into Polvadera Creek. The ash and erosion after the fire decimated the remaining population in Polvadera Creek. It may take longer for the riparian area to regenerate itself due to the wildfire, but the project participants are confident that the BMPs initiated on this project will eventually benefit the conditions and water quality on Polvadera Creek.

GET INVOLVED!

See the events below for opportunities to learn about watersheds and how to restore them.

March 25, 2013 - 319 RFP Public Meeting. Las Cruces: Conference Room 2007 B (second floor, east wing), Las Cruces City Hall, 700 N. Main St., Las Cruces, NM. 4–6pm

March 26 - 319 RFP Public Meeting. Santa Fe: State Records & Archives Center, 2nd Floor Meeting Rooms, 1205 Camino Carlos Rey, Santa Fe, NM. 2:30–4pm

March 27 - 319 RFP Public Meeting. Las Vegas: Las Vegas City Chambers, 1700 N. Grand Ave., Las Vegas, NM. 4–6pm

March 28 - NM Agency Wetlands Roundtable. 9am–4pm at the State Library (Cerrillos Road and Camino Carlos Rey), Piñon Room, in Santa Fe. For more details, contact Shelly Barnes (Michelle.Barnes@state.nm.us).

April 5-8 - Earth Day Celebration at Ghost Ranch: Water's for Cooperating Over. For more details, see <http://ghostranch.org/earth-day-celebration-at-ghost-ranch-waters-for-cooperating-over/>.

April 11 - Talk titled: "Green Infrastructure: How Natural Systems Can Improve Urban Watershed Health" by Aaron Kaufman, Southwest Urban Hydrology. NM Highlands University Campus, Rm. G35, in the basement of Donnelly Library (entrance near the Student Center). 7-8:30pm. The presentation is sponsored by the Hermit's Peak Watershed Alliance and Sustainable Las Vegas.

April 15 - San Juan Watershed Group monthly meeting 6-8pm at the Farmington Civic Center (200 W. Arrington). Questions can be directed to sanjuanwatershedgroup@gmail.com.

April 15-18 - New Mexico Rural Water Association. 35th Annual Conference. Albuquerque. For more details, see www.nmrwa.org/conference.php.

April 18 - New Mexico Wetlands NGO Roundtable. 9 am–4pm at the State Library (Cerrillos Road and Camino Carlos Rey), Piñon Room, in Santa Fe. For more details, contact Karen Menetrey (karen.menetrey@state.nm.us).

April 19-21 - Cebolla Volunteer Restoration Weekend. Albuquerque Wildlife Federation. For more details, see <http://abq.nmwildlife.org/>.

May 4 - Gallinas River Spring Cleaning. 9am-12pm, Riverside Park at National Ave. Bridge over the Gallinas River. A collaborative effort to cleanup the Gallinas River through Las Vegas and up to the National Forest. Call Garrett Hanks for more information (970)-590-9367.

May 9 - Beaver and Wetlands Workshop, NM Wetlands Program, Santa Fe, location TBA. For more details, contact Karen Menetrey (karen.menetrey@state.nm.us).

June 8 - Upper Pecos Watershed Association's annual Spring River Cleanup. Starts at 9:30am at the UPWA office. See www.pecoswatershed.org for more details.

June 14-16 - Red Canyon (on east side of the Manzano Mountains) Volunteer Restoration Weekend. Albuquerque Wildlife Federation. For more details, see <http://abq.nmwildlife.org/>.

If you have an event that you would like posted, please email matthew.schultz@state.nm.us