

Building Resilience... One Acre at a Time

The Quivira Coalition's New Program - Conservation and Ranching Leadership and Youth (CARLY)

In an article to be published in this winter's University of New Mexico's *Natural Resources Journal*, Courtney White, Executive Director of the Quivira Coalition, writes: "My twins, Sterling and Olivia, are nine. When I was their age, the Wilderness Act was four years old. The cement on the national Interstate Highway system had barely dried. We had not reached the moon yet... When I was their age, the gradient of progress still sloped upward without discernable consequence. The world was our oyster. Gas was cheap... Anything seemed possible."

Though Courtney doesn't look it, this mystical age when "anything seemed possible" was nearly forty years ago, and in those forty years a lot has happened. Conservation has moved past the Wilderness Act, gas is NOT cheap, and the gradient of progress is being dragged down by the consequences of our consumer-driven mindset. In his article Courtney terms this era the "Age of Consequences," but pleads with the reader to not point fingers and assign blame. Instead, he calls for a movement defined by *resilience*, saying: "We can get started by restoring land to health, by producing food locally, by sharing information and resources... We do not know all the answers - I'm not even sure that we know all the questions yet - but we know enough with certainty to begin building a path so others may follow."

Quivira's newest endeavor in building resilience is a leadership development program. "CARLY" (Conservation and Ranch Leadership and Youth) aims to arm the next generation of conservation and ranching leaders with the skill set necessary for building resilient communities. The Age of Consequences has produced a double-bind: just when we need to confront a crescendo of global challenges, including climate change, energy depletion, and food and water shortages, we face the additional challenge of decreased interest in nature and agriculture among the next generation of leaders. Recognizing this issue, The Quivira

Coalition has responded by creating a program that answers the looming question: *Who's going to pick up this vital work when the current generation of farmers, ranchers and conservationists retires?*

It is not simply a matter of increased education for young people, in our opinion. Without a doubt, programs aimed at youth are critically important, as are opportunities to simply play in nature. But just as critical is career mentoring in the form of **apprenticeship and internship opportunities**. We believe there is no substitute for side-by-side learning with on-the-land practitioners, especially with those who have pioneered sustainable methods of food production

and environmental stewardship. Furthermore, there is a strong sense of urgency to do this type of mentoring **now**, for fear that we are losing important local knowledge accumulated over many generations.

CARLY will be implemented through year-long apprenticeships, short-term internships, and youth programs, in a variety of areas relating to conservation, ecosystem restoration, and agriculture/ranching. The apprentices and interns will have the opportunity to work side-by-side with

on-the-ground practitioners, learning how to create resilient systems and communities.

There are few challenges more important at this moment in time than encouraging and nurturing the next generation of leaders in conservation and ranching, and few are more daunting than creating the opportunities they need to learn from mentors. In 11 years of work, Quivira has become intertwined in a network of strong relationships with ranchers, farmers, conservationists, consultants, and others across the West. This network, combined with Quivira's organizational strengths, and our conservation focus, makes us uniquely positioned to implement a conservation and ranch apprentice/internship program.

We hope you can join us on our newest endeavor for building resilience! --- Avery C. Anderson



CARLY Program Coordinator, Avery Anderson learning to milk a goat during a "Fresh from the Land" workshop on Rainbow Ranch, May 2008.

Land and Water Program

A PERMIT IS NOT A FOUR-LETTER WORD... IT'S A REQUIREMENT!

The Quivira Coalition is currently implementing two riparian restoration projects through an EPA 319 (h) grant and a NM River Ecosystem Restoration Initiative (RERI) grant. Before we start working in a creek, we comply with Clean Water Act 404 permitting and State certification. This is an important step in the project process and we'd like to share this 'need to know' information with land owners wanting to start a project in their own creek.

We thank Neal Schaeffer from New Mexico Environment Department ~ Surface Water Quality Bureau (NMED-SWQB) and Jim Wood from the US Army Corps of Engineers (USACE) for their help with this article. --- Mike Bain, The Quivira Coalition, Land & Water Program Coordinator.

BEFORE YOU START WORK IN A STREAM, LAKE OR WETLAND...

The Federal Clean Water Act (CWA), passed in 1972, recognizes public "environmental" values and protects the "chemical, physical, and biological integrity" of "Waters of the United States," while segregating point-source and nonpoint-source pollution (i.e., *pollution which cannot be traced back to a single origin or source such as stormwater runoff, water runoff from urban areas and failed septic systems*). One of the innovations of the CWA was Section 404 permitting, which insures that our nation's waters are protected from irresponsible and unregulated discharges of dredged or fill material that could alter or destroy these valuable systems. (www.epa.gov/regulations/laws/cwa.html and http://www.spa.usace.army.mil/reg/intro_404.asp).

One way the federal government regulates nonpoint-source pollution is through Section 404 permits (the subject of this article) and Section 319 which includes a popular funding source from the Environmental Protection Agency (EPA) - 319 (h) Water Quality grants for the voluntary implementation of Best Management Practices (BMPs).

404 Permitting: Section 404 of the CWA requires approval prior to discharging dredged or fill material into waters of the United States. Unlike most other provisions



The Quivira Coalition's Comanche Creek Rio Grande Cutthroat trout habitat restoration project on federal lands has required two 404/401 permits for hand built structures. Project design and implementation outline was submitted to the US Forest Service - Questa Ranger District who then submitted the application to the USACE for authorization.

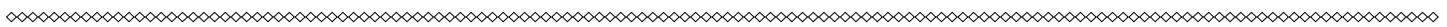
of the CWA, which are administered by the EPA, Section 404 is administered by the US Army Corps of Engineers (USACE). So, before starting work in a stream, lake or wetland, landowners are encouraged to consult with the USACE who will issue written verification that the proposed work falls within permit coverage.

Typical activities requiring Section 404 permits include:

- Depositing of fill or dredged material in waters of the U.S. or adjacent wetlands.
- Site development fill for residential, commercial or recreational developments.
- Construction of revetments, groins, breakwaters, levees, dams, dikes, and weirs.
- Placement of riprap and road fills.

Do I need a Section 404 permit for my project? In general, Section 404 permitting would be required for projects that involve placing fill within an active stream channel or adjacent wetlands within the protected Waters of the United States. Before proceeding with a project you should ask yourself:

- 1) **Is the project located within a "Water of the United States"?** Due in part to recent US Supreme Court decisions, this jurisdictional determination has become complex, essentially requiring consultation with the USACE.
- 2) **Is the proposed activity regulated under Section 404?** Section 404 regulates certain activities associated with placing fill within Waters of the United States. It generally does not regulate other activities such as trash dumping or driving equipment through a stream. It also does not specifically regulate excavation,



however this is getting into a gray area that essentially requires consultation with the USACE to avoid possible violations of federal law.

3) **What type of Section 404 permit will I need?** The USACE has created ‘general permits’ to cover similar kinds of work that commonly do not result in significant impacts. The most common of these are the Nationwide Permits (for example, Nationwide Permit #27 covers Aquatic Habitat Restoration, Establishment, and Enhancement Activities). These permits include conditions such as (in some cases) a “pre-construction notification” to the USACE. Again, applicants are encouraged to consult with USACE.

Section 401 State Certification: The federal CWA has several sections that address the obligations of the States to maintain water quality. Title 3 of the CWA describes state programs, including state water quality standards. Title 4 of the Act begins with Section 401 certification, which provides States and Tribes the privilege to certify federal permits that may affect water quality. **Thus, all Section 404 permits require State certification, and the certification effectively becomes part of the permit.** These certifications may be waived, granted, conditionally granted, or denied. Under federal law, this certification is

to ensure compliance with State water quality statutes and regulations.

Information for New Mexico Residents: Section 404 permitting and 401 certification serves several purposes in New Mexico. First, they provide a means for the New Mexico Environment Department (NMED) staff to simply become aware of projects that might affect water quality, thus allowing them the opportunity to monitor for water quality standards exceedances. This permitting system is also an excellent outreach opportunity, allowing NMED staff to interact with applicants regarding design, construction methods, and methods to prevent or mitigate impacts to the State’s waters. Finally, Section 404 permits and 401 certification allow NMED to mandate conditions for the project, thus creating a legal framework to enforce protection of federal and state waters. *On Tribal lands, the tribes or EPA issue the 401 certification, NMED only issues certifications for Waters of the State.*

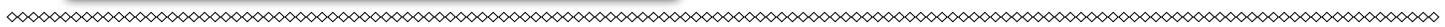
Contacts and Further Information for New Mexico State Residents: In New Mexico, Section 404 permits are verified, authorized, or issued by the Regulatory Branch of the Albuquerque District of the USACE. For questions, consultation, or to report a potential violation, contact Don Borda, (505) 342-3282. For information about the permits and related matters, go to www.spa.usace.army.mil/reg. For questions, consultation, or 401 certification associated with projects within New Mexico, contact NMED~SWQB (www.nmenv.state.nm.us/swqb). You’re also welcome to contact Neal Schaeffer at NMED (505) 476-3017.

Other Clearances: Depending on land ownership and project funding sources, some projects may also require cultural and/or threatened & endangered species clearances. If you have questions on this, in NM you can contact the State Historical Preservation Division, Department of Cultural Affairs (SHPO) (www.nmhistoricpreservation.org) and for threatened and endangered species consultation contact the US Fish and Wildlife (www.fws.gov/southwest and www.fws.gov/endangered/consultations.)

For information about appropriate Best Management Practices to limit impacts to water resources, visit The Quivira Coalition (www.quivircoalition.org) or the Comanche Creek website (www.comanchecreek.org). *~*



The Quivira Coalition’s private lands Dry Cimarron riparian restoration project also required two 404/401 permits for both hand built and machine built structures. The upper photo (by Steve Carson) shows a cross vane weir after installation (March 2006) and the lower photo shows the same structure in September 2007 (photo by Mike Bain).



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The Quivira Coalition welcomes **Avery C. Anderson as the CARLY Program Coordinator**. She graduated with a B.A. in Geoarchaeology from Hamilton College (2003) in Clinton, NY, and a Master's of Environmental Management (MEM) from the Yale University School of Forestry and Environmental Studies (2008) in New Haven, CT. Avery interned with The Quivira Coalition during the summer of 2007, and returned in April of this year having completed her master's degree. Her previous work and research experience was focused on human-wildlife conflict in the northern Rockies, and the associated policy process. She is happily settling into life here in New Mexico with her two dogs "Red" and Doozer", and is eager to get CARLY up and running. You can contact Avery at 505-820-2544 Ext. 5# or avery@quiviracoalition.org.



*** PLEASE NOTE: Our Eighth Annual Conference will be Wednesday-Friday NOVEMBER 4 - 6th, 2009.**

PLEASE MARK YOUR CALENDARS!!

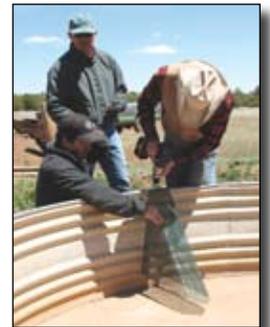
Rowe Mesa 2008 Collaborative Forest Restoration Project Community Outreach (CFRP)

Bats and Forest Health – On May 1, 2008 Dan Taylor from Bat Conservation International (BCI), Craig Conley and Catherine Baca from The Quivira Coalition addressed fifty 5th grade Pecos Elementary School students and teachers. Craig spoke on *Forest Health* and the CFRP project on Rowe Mesa covering topics such as healthy vs. non-healthy forests, soil types, tree encroachment, the importance of snags, the different types of fires (crown fire vs. prescribed burn) and explained how prescribed fire is implemented.

Dan Taylor from BCI spent two days in the Santa Fe area educating the Pecos students, local ranchers and the general public on the importance of bats in our ecosystem. His presentation to the Pecos 5th graders covered a wide range of topics on bats and their importance as primary predators of night-flying insects. He also described their importance as plant pollinators and seed dispersers in the Southwest.

During the evening of May 1, in collaboration with The Quivira Coalition and The Santa Fe Watershed Association, Dan held a bat presentation and night observation at the Audubon Center and Nature Preserve in Santa Fe. The event was attended by 50-60 people of all ages.

On May 2nd, Dan held a water tank "escape ramp" production workshop on the Valle Grande Ranch near Rowe, NM. These ramps provide an escape route for bats, birds and small mammals that can become trapped when they fall in. Thirteen participants, including four local ranchers, helped build and install escape ramps on 13 livestock watering tanks. Many thanks to all those who participated in BCI activities/programs! - Catherine Baca (cbaca@quiviracoalition.org)



Installing an escape ramp in a dry livestock tank (photo by Avery Anderson).