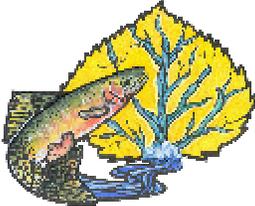


**Santa Fe National Forest
Fisheries Program
Annual Report
2003**



This year could have been considered the year of adversity. With substantial budget cuts and the outlook of a depleted staff, our partners helped immensely to make this year extremely successful.

New Mexico Trout and their President, Norm Siegel, were gracious in funding a portion of the education program by upgrading our very popular Rio Grande Cutthroat Life Cycle Game and creating a native fish display at the Walatowa Visitor Center.

New Mexico Game and Fish through the Habitat Stamp Program funded a majority of our on-going marquee restoration work, the Vacas Project. Trout Unlimited, with great help from Joe McGurrian, has been providing financial support for this work and continues to participate in aiding us in developing future restoration and education plans (with huge contributions from Jan Crawford and Bill Shudlich).

In a twisted turn of events, I was asked to participate on a Regional emergency consultation team, which took me from the Forest for four months. But the hidden gift in my absence was that this opened up an opportunity to finance a small summer program under the guidance of detailers, Gretchen Sausen and Chris Gatton.

With Sarah Eddy at the helm of our field data collection, we were able finish two stream surveys and collect much needed stream temperature data from across the Forest.

New Mexico Environment Department is the primary funding source for Respect the Rio, an education and watershed restoration program, which had its biggest year yet. This program inventoried dispersed campsites, contacted the visiting public, gathered social information, participated in community events, offered snorkeling seminars, found its way on TV and in regional and national journals, replaced culverts, closed roads, changed vehicle traffic patterns, and built fence – all for the sake of improving floodplain, riparian and stream conditions. And we're just getting warmed up.

Despite our small budget, I am proud of our accomplishments and grateful for our partners. Because of everyone's strong support, I am certain the transition into a busy 2004 will be a smooth one. The future is an exciting one and I am hopeful you will be part of it.

-Sean Ferrell
Forest Fish Biologist
26 November 2003

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The Field Crew

Respect the Rio Contact Ranger Team

*Tara Anderson, SCA Intern
Kavita Krishna, SCA Intern
Bridget Borg, SCA Intern*



L to R: Kavita, Tara, Bridget.

Cañones Creek Team I

*Serina Adams, Team Leader
Chris Glenney*



L to R: Serina, Damon, Chris on Rio de las Vacas

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Eddie Moore
Marti Niman
Adam Rankin*

*Bob Kipp
Angela Burnham
Alex Glock
Derek Davis*



Volunteer Snorkeling Day. Rio de las Vacas.

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Seasports, Inc.
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Environmental Education Assoc. New Mexico
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City of Albuquerque Open Space Division
Albuquerque Water Festival
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Conservation Education, Washington Office
Okanogan/Wenatchee National Forests
Umatilla National Forest
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Environmental Protection Agency
Pioneer West
Bandelier National Monument
Bureau of Land Management
Greg Gustina
New Mexico State Forestry
Cuba Soil & Water Conservation District
Edgewood Soil & Water Conservation District
Jemez Pueblo - Resource Protection Division
Army Corps of Engineers
Public Lands Interpretive Association
Sante Fe New Mexican
Albuquerque Journal
KOAT-TV
Natural Resource Conservation Service
U.S. Fish and Wildlife Service

Stream Inventory

Despite a lack of funding, Santa Fe National Forest implemented its third season of successful stream inventory, utilizing the regional protocol for cold-water streams. The Santa Fe National Forest co-sponsored this year's training session that was hosted by the Gila National Forest and was attended by the Gila, Tonto and Apache-Sitgreaves National Forests, New Mexico Environment Department, Bureau of Land Management, Fort Apache Indian Reservation, and Western New Mexico University.



Cañones and Chihuahueros Creeks. Chris Glenney.

The inventory gathers hard numbers on habitat components related to stream condition and it's repeatable as a monitoring tool. The Santa Fe National Forest Fisheries Program completed nearly **10 miles** of stream inventory.

- Cañones Creek (8.3 miles)
- Rio de las Vacas, *wilderness portion* (1.5 miles)

In addition, the Forest has finished **five stream inventory reports**. Damon Goodman completed three stream inventory reports from last year's data collection: San Antonio Creek, Rio de las Vacas, and Pecos River. Damon did an exemplary job in producing these reports, which have been used to assist in several NEPA documents as well as for planning watershed restoration and Rio Grande cutthroat trout re-introduction. Chris Gatton wrapped up an additional report for Cow Creek, which will assist the district in future management of the watershed, especially related to the Viveash Fire. Sarah Eddy updated the Rio de las Vacas report and has completed a draft of the Cañones Creek report.



Rio de las Vacas. Sarah.

High Lakes Inventory

The Santa Fe National Forest Fisheries Program returned to the Pecos Wilderness for the second year to conduct a high lakes inventory. This protocol measures water quality in high mountain lakes to monitor the effects of air pollution. In addition, we map the lakes for human use and impacts as well as determine the success of lakes for survivability of an introduced fisheries.



Lake Katherine.



Stewart Lake.

This year's trip was a success despite daily hailstorms and torrential downpours (and float tube and dry suits that leaked). Much success was due to horse support from the folks at the Pecos Ranger District and financial support from the Forest Watershed program. To date, we have now surveyed over **26 acres** across **8 lakes**:

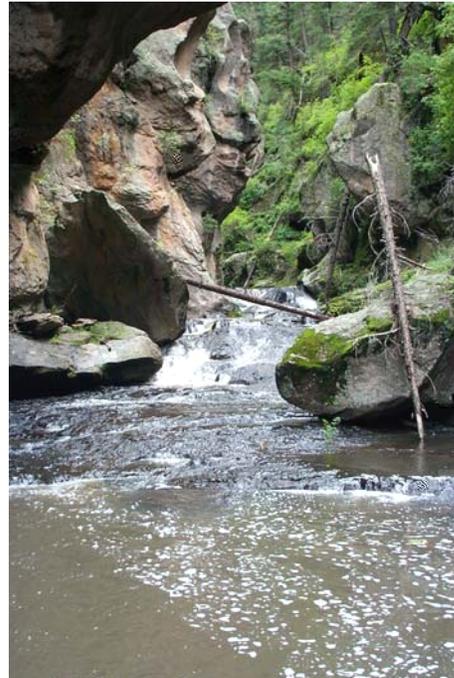
- Upper Truchas Lake
- Truchas Lake
- Truchas Pothole Southeast
- Stewart Lake
- Stewart Pothole
- Lake Katherine
- Spirit Lake
- Lake Johnson



Stewart Lake. L to R: Chris Gatton and Sarah.

Rio Grande Cutthroat Trout Re-introduction

With completion of the State of New Mexico Long-Range Management Plan for Rio Grande cutthroat trout, Santa Fe National Forest signed on to a State-wide Conservation Agreement that will help guide future restoration efforts. The Forest in partnership with New Mexico Game & Fish, Valles Caldera National Preserve, Bureau of Land Management, Trout Unlimited and New Mexico Trout is developing a strategy to create large metapopulations of the native fish assemblage. What this means is that several watersheds across the Forest will be re-invented. Native fish, such as Rio Grande cutthroat trout, sucker, chub and longnose dace, will be returned to their native waters and non-native fish will be removed.



East Fork Jemez River.

While this will not happen everywhere, certain watersheds are under consideration, such as the Upper Jemez, Pecos Headwaters, Guadalupe and Santa Cruz Watersheds. This is a long-term effort that will involve detailed planning and agreements as well as a full-scale education campaign that began in 2003.

Stream Temperature Monitoring

As the drought continued to persist across New Mexico, the fish program looked at how this was affecting stream temperatures across the Forest. Temperature monitoring equipment, called a Stowaway Tidbit, is the size of a quarter and can stay in the stream year-round. 25 Tidbits were deployed in **13 streams** across the Forest, measuring temperature for **110 miles** of stream every four hours from the beginning of June until October.

Early analysis indicated a wide variation of effects related to localized conditions from stream drying to maintaining tolerable temperature for trout survival. In several cases, we learned about heavy sediment loading as tidbits became buried in sand, silt or, in one case, ash.



Rito Perro. Sean

The Vacas Project

After the completion of a stream inventory in Rio de las Vacas in 2001, it was apparent that the stream needed a little love. Thus the grand Rio de las Vacas Stream and Riparian Restoration Plan and Recommendations was born in 2002, evolving into what is better known as the Vacas Project.



Upper Rio de las Vacas.



Lower Rio de las Vacas. Larry Chinana.

Implementation began in 2003. 225 logs were decked in the project area and will be placed in the stream and floodplain in 2004. 75 trees were cut to enhance hardwood growth and improve stream habitat. Two miles of road was closed. A man-made barrier was enhanced to secure 13 miles of Rio Grande cutthroat trout occupied habitat. And this is just the beginning.

The success of this project is in great part to Ronnie Herrera, Ray Borrego, Gretchen Sausen, James Foley, Larry Chinana and the Youth Conservation Corps. The project is financed by Trout Unlimited, Bring Back the Natives and the Habitat Stamp Program.



Education

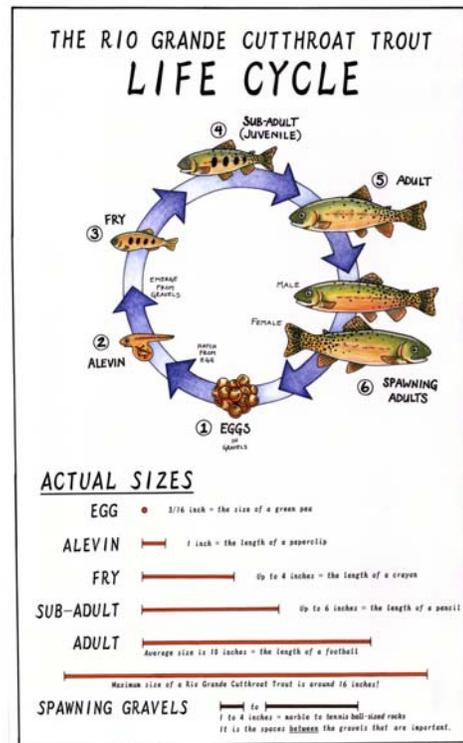


Forestry Camp.

The new education program hit the ground running this year, reaching over **1,044 students** and **854 adults** (which includes **269 teachers**). Students were reached in the classroom and on field trips. Schools included the Menaul and Bosque Schools in Albuquerque, Jemez Valley and Cuba public schools, and McCurdy School in Española. Students learned about native fish, noxious weeds, bears, fire ecology, wilderness, water quality, healthy watersheds, and recreation. The education program also was a key collaborator at New Mexico's Forestry Camp, Albuquerque Water Festival, Santa Fe Water Festival, Abiquiu's National Public Land's Day, Dia del Rio and various Earth Day celebrations.

In addition, teacher workshops at Water Festivals, staff meetings, and the New Mexico Game & Fish sponsored "Trout, Mountains, and Forest Natural History Weekend" offered tools to reach thousands of students beyond the Forest's education program outreach.

Rio Grande cutthroat trout was the primary focus at many events. A proposed native trout restoration project in the Upper Jemez River watershed was presented at three public meetings. In addition, the Rio Grande Cutthroat Trout Life Cycle Game got a face-lift this year with great thanks to New Mexico Trout who paid for the upgrade and production. We colorized the game, created energy tokens, and put together an accompanying life cycle poster. Katrina Lund was the creative gem behind the project. The Life Cycle Game will be available on CD-ROM in 2004 and already has a waiting list of teachers, educators, parents and grandparents from across the United States.



The education program kicked off its first Snorkeling Seminar with native fish as its theme, reaching both participants and those who watched the action on KOAT-TV or read about it in the Albuquerque Journal. Wilderness visitors will learn more about Rio Grande cutthroat trout from educational write-ups that will appear in the new Pecos and San Pedro Parks Wilderness Area maps due out in 2004.

Respect the Río



Respect the Río (RtR) is an educational program that empowers local communities and forest users to participate in watershed restoration. As we continue to build its foundation, accolades are being received. Respect the River/Río, which is located on four national forests, was awarded the Pacific Northwest Region's Caring for the Land Award and the American Fisheries Society's Riparian Challenge Award.

With funding from NMED/EPA, the education component of RtR kicked into full gear in 2003. From students to campground users to dispersed recreators, over **2,000 people** were reached this year regarding the RtR message.

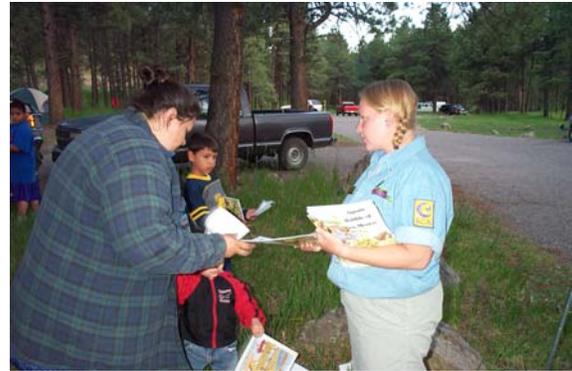


Dispersed Campsite Inventory. Bridget.

Throughout the summer, the RtR crew inventoried all existing dispersed recreational sites in the Guadalupe Watershed and discovered **329 individual campsites** in **84 complexes**. Each site was thoroughly surveyed for various recreational impacts. From May

to September, the Contact Ranger program contacted over **1,488 visitors** camping and fishing in the watershed at the inventoried sites. Social data was gathered, a river-friendly educational message was delivered, and visitors were informed of changes to come.

Twelve storytelling signs were created that will be placed at dispersed sites in 2004. In addition, the artwork can be used for other signs across the Forest and region.



Contact Ranger Program. Tara.

The RtR crew, along with invaluable help from the Forest's Heritage program, launched a campground interpretive program at developed sites on the Jemez Ranger District. Riparian themed programs were delivered to **470 visitors** from Memorial Day to Labor Day.

A native fish aquarium was purchased by New Mexico Trout as part of the RtR program. The 180-gallon aquarium will be housed at the Walatowa Visitor Center and will display the native fish assemblage and have an interpretive display educating the public about the decline of native fish and what we can do to bring them back. We can't thank New Mexico Trout enough for their support.

Rio Cebolla Fish Passage and Wetland Improvement Project



Rio Cebolla 2001.



Rio Cebolla 2003.

As part of the 2001 Rio Cebolla Stream Inventory findings, two culverts were determined to be undersized and upstream migration barriers for our vertically-challenged native fish, Rio Grande chub and Rio Grande sucker. In collaboration with the Forest and Regional Engineering shop, two arch culverts replaced the old round pipes. The design considered allowing for a natural stream bottom and the stream to be able to meander without impediment.

Between the two new culverts, a section of road was damming up a series of seeps and springs, causing a wetland to dry up. As part of this project, the road was redesigned to allow the water to permeate through the roadbed and recharge the meadow in hopes to re-create the wetland.

Program Support

The Forest Fisheries program continues to develop and strengthen relationships with other programs and has provided input into on-going and upcoming projects. The projects are sponsored by recreation, forestry, fire, watershed and range, including:

- Cuba 4 Allotments EA/AMP
- Region-wide Programmatic BA for Forest Plans
- Buckman Water Diversion Project EIS
- Highway 126 Improvement Project
- Jemez Campgrounds Thinning Project
- Noxious Weeds EIS
- Lakes Fire Rehab
- Lakes and BMG Fire Salvage EA
- Borrego Fire Salvage EA
- Santa Fe National Forest Website
- Pecos Wilderness Map update
- San Pedro Parks Wilderness Map update

Kid's Fishing Day

Over **130 kids** and nearly **100 adults** turned out for the Forest's 13th Annual Kid's Fishing Day at Seven Springs State Fish Hatchery in July. This event was jointly sponsored by New Mexico Game & Fish and Jemez/Cuba Resource Area.



This year's theme was "Healthy Riparian Habitat = Homes for Happy Fish." As part of the celebration, the Regional Fish Mascot, Suzie Sucker, made her inaugural appearance along with Respect the Rio's mascots, Carlos Cutthroat and Perl Stonefly. Kids were given a passport and if they participated in all educational booths, they received a T-shirt commemorating the day. The T-shirt design was chosen out of over 100 illustrations by Cuba Elementary, Jemez Day School, and San Diego River School students in Jemez Valley and Cuba.



Booths were managed by the Forest Service and included:

- Rio Grande Cutthroat Trout Life Cycle Game
- Rolling River
- Gyotaku
- Native Fish Anatomy
- Respect the Rio



Suzie Sucker.

For further information about the Santa Fe National Forest Fisheries and Education Program, contact:

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