Respect the Rio

Annual Report

2006

Dispersed Recreation & Education Component

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Figure 1. Map of Guadalupe Watershed.

Summary

The Contact Ranger program is a small yet very important tool of the Respect the Rio program. Without it, we lose a critical component – public understanding and support. The public can make or break efforts put forth by the Forest Service to improve riparian habitats and water quality. When the public is informed about what is happening and why, there is usually support for the projects at hand. This support can be seen in public compliance with new regulations, respect for restoration sites, and efforts to promote the program's overall goal. On the other hand, when the public sees changes in regulations and sites without knowing what is being done or why, they have a tendency to "rebel" against the changes. The public can undo restoration efforts, costing the Forest Service more time, money, and effort to reach our goal.

During the first four years of the Contact Ranger program, (2003-2006) the education crew has directly contacted 7,546 dispersed campers and recreationists. An additional 1,816 visitors were reached at developed campsites through interpretive programs conducted by the education crew. Thousands more have been reached through movie theater ads, Respect the Rio website (www.fs.fed.us/rtr), newspaper articles, interpretive signs, and other multi-media.

The 2006 Contact Ranger crew continued to asked dispersed campers and recreationists if they have heard of the Respect the Rio program and what they thought about it. While many had not heard of the program, the number who have continues to grow each year and only a few were unsupportive. It was not always clear if those groups were opposed to the program or just opposed to the changes. What was clear was the majority (89.3%) of support or indifference for the program versus the minority of non-support (2.5%). As the Contact Ranger program continues in the summer of 2007, we should continue to expect an increase in the number of groups familiar with the Respect the Rio program.

A highlight of the 2006 Contact Ranger survey findings:

- 407 groups, totaling 1,890 individuals were contacted May 27 through September 3;
- 93% of the visitors were from the Albuquerque area;
- An average of 4.6 people per site was noted with a maximum of 60 and minimum of 1;
- Overall, 473 tents and 241 RV's (motor homes/trailers/pop-up campers/pick-up campers) were counted during the 2006 survey period;
- There were 778 vehicles (cars, vans, pick-ups, SUV's, jeeps, motorcycles, and motor homes), 245 trailers (camp trailers, pop-up trailers, and flatbed trailers), 92 ATVs, and 108 others (dirt bikes/motorcycles, bicycles, etc.) transporting visitors;
- The average number of vehicles per site was 1.9 (includes "vehicles" only, does not include trailers, ATVs, dirt bikes, bicycles, etc.);
- There were 20 groups confirmed as day users with 218 groups confirmed as overnight campers;
- Average number of nights stayed when a group was confirmed as camping overnight was 2.1. Longest stay was 5 nights; shortest was 1;
- Popular activities included camping (43%), fishing (15%), relaxing (12%), hiking (10%), OHV use (9%), bicycling (4%), horseshoeing (4%), swimming (1%), volleyball (1%), and social (1%);
- Rio Guadalupe had more groups fishing, and Rio Cebolla and Rio de las Vacas had more groups camping;

- There were 71 bicycles, 92 ATVs, and 28 dirt bikes.
- A small percentage (16.0%, 65 groups) of the 407 groups within the watershed had heard of Respect the Rio.

Between fall 2003 and summer 2005, the Respect the Rio program focused on modifying several dispersed campsites within the Guadalupe Watershed. The Rio Guadalupe corridor was the first to see changes in great part due to the Motorized Vehicle Use Closure (see Appendix D), followed by the Rio Cebolla corridor (see Appendix E). In 2006, several sites along Rio Cebolla had further modifications, buck-n-pole fence moved, or additional fence built.

Compliance with the Guadalupe and Cebolla Motorized Vehicle Use Closure is tied directly to education of the public through Contact Rangers and interpretive signage. While there is some non-compliance, this behavior should be reduced over time as more individuals learn about the Respect the Rio program and its goals.

While there was no official closure signed for the Rio de las Vacas corridor, the Cuba Ranger District decided to modify access roads to several dispersed campsites. Many of these campsites had access roads that ford the stream in multiple locations.

The 2006 field season marked the first for the Respect the Rio Forest Protection Officer program. Amanda Webb was hired as the Forest Protection Officer (FPO) for the Respect the Rio program on the Jemez and Cuba Ranger Districts.

Webb patrolled and made visitor contacts by vehicle and also along trails and at trailheads within the Jemez Watershed. Typically vehicle patrols focused on the areas adjacent to the Rio Cebolla, Rio Guadalupe, Rio de las Vacas and Jemez River while hiking patrols focused on the East Fork Jemez River and the Rio San Antonio. Webb kept in close contact with the Contact Rangers in the areas they were patrolling, often following up on reports she received from them regarding violations they had observed. Many of the contacts she made were groups or individuals that the Contact Rangers had already visited. Webb was able to round out the public education program with a means of requiring visitors to comply with regulations. She received positive feedback from the public regarding the FPO Program. Visitors who tended to follow the regulations seem relieved and reassured that those who cause resource damage were being held accountable.

Highlights from the 2006 Forest Protection Officer program:

- 972 contacts were made May 14 through October 14;
- 31 Warning Notices were issued;
- 25 Incident Reports were written;
- 3 Violation Notices carrying fines of $75 to $125 were issued;
- 20 visitors or groups complied with regulations and volunteered their time to correct the situation.

In addition to patrolling and making visitor contacts in the Jemez Watershed, Webb began addressing dispersed camping impacts to the East Fork Jemez Wild and Scenic River. In addition to increasing the Forest Service presence in this area, Webb began working with volunteers to pack out trash and fire ring debris and dismantle fire rings that were too close to the streambank. The Cuba Ranger District's Howard Cordova also assisted Webb with his pack stock in a major effort to remove fire ring debris from the Wild and Scenic River Corridor in the fall of 2006.

Webb began coordinating with the New Mexico Department of Transportation to address concerns associated with an unofficial parking pullout near the East Fork River. The pullout has no facilities and leads to eser-created trails that are contributing to erosion. By working with NMDOT, the Jemez

Ranger District hopes to eliminate this pullout and instead direct forest visitors to the established East Fork Trailhead nearby where there are trash and restroom facilities and a maintained trail.

Photo 1. New Mexico Trout volunteer add buck-and-pole fence along a fishing pull out off of FR 376 near Rio Cebolla.

Chapter 1 – Introduction

What is Respect the Rio?

The Respect the Rio program links environmental education, on-the-ground projects, and public involvement to empower local communities and forest users to participate in watershed restoration. By identifying and implementing specific projects and initiatives needed for restoration of the Jemez Watershed, the program more effectively manages land-use activities, protects and restores riparian zones and improves water quality. Respect the Rio initiatives
address impacts to riparian habitat through three approaches:

- Education
- Empowerment
- Restoration

Education - Education of forest visitors and other users is a vital component in the long-term success of Respect the Rio program. Only through education and enforcement will recreationists understand the importance of protecting riparian habitats and take ownership in conserving and restoring these areas within the Jemez Watershed. Through the Contact Ranger program, campers in both dispersed and developed sites are educated about Respect the Rio initiatives and how to be "River Friendly Campers".

Empowerment - An essential component to the success of the Respect the Rio program are the numerous partnerships created between the Forest Service and volunteers who are passionate about the conditions and health of the Jemez Watershed. The match in labor and effort of our partners is crucial to the success of each individual project. Combined, our volunteers' dedication lends greatly to the success of the entire Respect the Rio program. Without the excitement and dedication of many organizations and individuals to the program, many of the completed projects and initiatives would not have been possible.

Restoration - The Respect the Rio program emphasizes overall watershed health by incorporating multiple disciplines in the protection and enhancement of riparian areas, treatment of dense forest stands, maintenance of meadow sustainability, improvement of stream health, range management, roads administration, recreation management, and enforcement of federal regulations that emphasize water quality.

Respect the Rio projects and initiatives are successful through the development of long-term education and stewardship while implementing restoration measures. Due to extremely high use and impacts from multiple land uses, it is critical to utilize a holistic management strategy when addressing the water quality impacts in the Jemez Watershed. By incorporating education, public empowerment, and restoration activities the Respect the Rio program continues to improve water quality and riparian conditions while still allowing for positive recreation experiences.

Where did Respect the Rio come from and where is it going?

Respect the River originated in the USDA Forest Service Pacific Northwest Region on the Methow Valley Ranger District, Okanogan National Forest in 1993. On the Methow Valley Ranger

District, over one hundred degraded and "unofficial" or dispersed campsites were scattered near prime salmon spawning habitat in the headwaters of the Columbia River. Many had been used by generations of locals and visitors. Recognizing that closing well-loved areas would be both unpopular and unfortunate, the USDA Forest Service searched for an alternative. The result was Respect the River, a program created to improve fish habitat and protect endangered fish species while reducing the impacts of recreation in riparian areas but still providing recreational experiences.

Friendly to both fish and people, Respect the River works on two fronts: education and restoration. It uses Contact Rangers, newspaper and radio ads, brochures, interpretive signs, and other outreach means in combination with restoration treatments such as fence and boulder barriers, scarification, and re-vegetation. Only through education will recreationists understand the importance of protecting riparian and riverine habitats and take ownership in conserving and restoring those areas across the region. New illegal roads, user trails, or dispersed campsites have declined in Pacific Northwest Respect the River focus areas since the program's inception. Quality of camping has improved; sites are better defined, smaller and more vegetated. Less trash and human waste is found. Soil and vegetation damage caused by illegal motorized vehicle use has dramatically decreased. Bank erosion and illegal firewood cutting have decreased. Recreationists are parking their vehicles and RVs away from stream banks. Most importantly, campsites have remained open and recreationists are receiving a consistent message.

Today, the program has expanded to include Okanogan-Wenatchee National Forest, Umatilla National Forest, Mount Baker-Snoqualmie National Forest, Lewis and Clark National Forest, Gifford Pinchot National Forest, Mt. Hood National Forest, Willamette National Forest, and Columbia River Gorge National Scenic Area. The Santa Fe National Forest in the Southwestern Region puts a Hispanic spin on the program by calling it Respect the Rio. Other agencies such as the National Park Service (in Glen Canyon National Recreation Area) and the Washington Department of Fish and Wildlife are starting Respect the River programs, and interest in this award-winning program continues to increase internationally (Mexico and Canada).

Santa Fe National Forest and Rio Guadalupe Watershed

The Santa Fe National Forest includes 1.6 million acres in the heart of north-central New Mexico. Within the forest's borders are lush meadows, miles of mixed conifer and aspen trees, and remnants of a 15-mile collapsed crater rim that surrounds a once active volcano (Valles Caldera National Preserve). Visitors enjoy camping, fishing, hiking, and many other outdoor recreation activities while residents maintain their traditional and cultural uses of the national forest and forest products. The Santa Fe National Forest varies in altitude from 6,000 feet above sea level to the summit of Truchas Peak, located in Pecos Wilderness, at 13,103 feet. The Forest includes 291,669 acres of designated wilderness and approximately 1,000 miles of perennial streams and rivers, waters responsible for the abundant wildlife and human habitation to be found in the area.

According to the National Visitor Use Monitoring project conducted in 2003, there were 1,356,154 forest visitors. In addition, there were 1,522,307 site visits to day use and overnight developed areas and 64,956 visits to wilderness areas. Visitors were 58% male and 42% female. The top five activities visitors participated in were viewing natural features, hiking/walking, relaxing, viewing wildlife, and driving for pleasure.

Table 1. Percentage of Santa Fe National Forest visitors by age class.

Age Class	Percent
Under 16	18.7%
16 to 19	2.7%
20 to 29	11.9%
30 to 39	16.7%
40 to 49	20.8%
50 to 59	18.3%
60 to 69	6.8%
70+	4.1%

The Walatowa Visitor Center is owned by the Jemez Pueblo and jointly staffed by Forest Service personnel. The visitor center is considered the "gateway" to the Guadalupe Watershed – the Respect the Rio corridor. There were 25,797 people who stopped in at the visitor center in 2003 and 35,536 people in 2004, an increase of 37.8%.

The Rio Guadalupe Watershed (hence forth called Guadalupe Watershed) drains the south Jemez Mountains and is part of the larger Jemez Watershed. The Guadalupe Watershed is a 5th code watershed within the 4th code Jemez Watershed (see Figure 1). The Guadalupe Watershed is contained within the Cuba and Jemez Ranger Districts, and includes Rio de las Vacas, Rio Cebolla, and Rio Guadalupe. Of the 171,195 acres within the Guadalupe Watershed, the Santa Fe National Forest manages 99.4% (170,241 acres). Over 50 miles of perennial streams in the Guadalupe Watershed eventually flow into the Jemez River and then into the Rio Grande. Rio de las Vacas begins as a tiny channel high in San Pedro Parks Wilderness Area, within the Cuba Ranger District, and flows south until it meets the narrow Rio Cebolla at the Porter area to form the larger Rio Guadalupe, within the Jemez Ranger District. The Guadalupe Watershed starts as high mountain meadow habitat draining snow and rain off the Jemez Mountains to flow south through mixed conifer and aspen forests. This river system slowly drops into ponderosa pine, and then is channeled into piñon-juniper habitat through a semi-arid canyon environment before its confluence with Jemez River. A portion of the watershed, the Forest Road 376 corridor, falls within the boundaries of the Jemez National Recreational Area. While the Contact Ranger program currently focuses on the Guadalupe Watershed, Respect the Rio and its projects span across the larger Jemez Watershed.

Impairments to Guadalupe Watershed

The Guadalupe Watershed is designated as an impaired watershed by New Mexico Environment Department, Surface Water Quality Bureau (NMED-SWQB) through regulations established by the Clean Water Act (Section 303), 1977. The Clean Water Act makes states responsible for testing and monitoring watersheds using a Total Maximum Daily Load (TMDL) system. According to the Environmental Protection Agency (EPA), the entity responsible for enforcing the Clean Water Act, "A TMDL…is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources."[1] In short, a TMDL is a kind of water-safety budget in which only a certain number of pollutants can be deemed acceptable in a certain stream, lake, or bay, and if some pollutant exceeds the budgeted amount, action must be taken to improve it.

Under New Mexico's TMDL system, Guadalupe Watershed has shown the following impairments within Respect the Rio's project area:

- Rio Guadalupe has exceeded state standards for turbidity, aluminum, and sedimentation/siltation;
- Rio Cebolla has exceeded state standards for sedimentation/siltation;
- Rio de las Vacas has exceeded state standards for temperature.

[1] http://www.epa.gov/owow/tmdl/intro.html

The Santa Fe National Forest manages over 99% of Guadalupe Watershed and must respond to these water quality impairments. Two NMED-SWQB/EPA grants were procured for this watershed to begin addressing impairments and ended December 2003 and December 2004. A third grant was awarded and began in fall 2005 and will continue to December 2008. Since all but chronic aluminum impairments can be linked to dispersed recreational use along this watershed, Respect the Rio began laying the groundwork for watershed restoration and education that began in 2003 and will continue in future years.

Overview of Methods

In 2003, Santa Fe National Forest's Respect the Rio crew conducted a Dispersed Campsite Inventory within the Guadalupe Watershed. Collected Dispersed Campsite Inventory data helped identify dispersed campsites, which were the focus of the Contact Ranger Program (see Appendix B for a definition of terms).

The Contact Ranger Program began in the summer of 2003 and was the first of its kind on the Santa Fe National Forest. A social survey form was created for social data collection and as a guide to educate Forest campers, anglers, OHV users, and other recreationists about river-friendly camping methods. Social survey questions were developed by Jemez Ranger District Recreation Staff in order to plan visitor-friendly riparian restoration projects within the Guadalupe Watershed. These questions led to discussions of how the Forest may be changing management in the area, pulling vehicles off rivers, getting trash out of the corridor, keeping human waste out of river systems, minimizing campfire impacts, and other watershed health issues. A river-friendly camping flier was passed out to most groups contacted throughout the summer. In Fall 2004, the flier was translated into Spanish.

Continuing in 2004, the Contact Ranger Program modified its approach of gathering data to disseminating information. Instead of asking campers what changes they have noticed and what changes they would like to see, Contact Rangers informed campers of restoration projects and changes happening in the area. Campers still received a "Be a River-Friendly Camper" flyer, and children received a Respect the Rio temporary tattoo.

Photo 2. Motor vehicle closure sign located just north of the Gilman Tunnels on FR 376 (26 May 2006).

The 2004 social survey form was tailored to gather basic data such as the number of people camping, how long they were staying, where they live (i.e. zip code), and if they had camped in the area before (see Appendix C). Some items such as camping type (i.e. tent, motor home, pop-up trailer, etc.), vehicles (anything with wheels that can be driven, pulled, or ridden in), and recreational activity (i.e. fishing, bicycling, off-road vehicle use, hiking, etc.) had been subdivided to make data user-friendly.

Contact Rangers were conducting social surveys and disseminating information Saturdays and Sundays between Memorial Day weekend to Labor Day weekend.

Chapter 2 – Contact Ranger Program

Social Survey Results

With funding from a 319 grant under the Clean Water Act administered by EPA through SWQB-NMED, the Respect the Rio's Contact Ranger program continued its focus on educating visitors about river-friendly camping methods and informed visitors of current restoration projects. Many dispersed campsites along Rio Guadalupe, Rio Cebolla, and Rio de las Vacas had been modified between fall 2003 and fall 2004. The remaining campsites along Rio Cebolla were modified by the end of June 2005. Several sites along Rio Cebolla had to be repaired or had to have additional buck-n-pole fencing installed during spring 2006.

The 2006 Respect the Rio Contact Ranger crew consisted of a Student Conservation Association intern (Christina Stang), a volunteer (Carla Rothenbuecher), an Assistant Education Coordinator (Daisy Morgan), and an Education Coordinator (Kimberly DeVall). Contact Rangers talked with visitors almost every Saturday and Sunday from Memorial Day to Labor Day in order to educate visitors about river-friendly camping and restoration projects and to gather social data. Contact Rangers were trained not only in how to gather social data, but also in how to approach people and make them comfortable enough to discuss openly their opinions of the Guadalupe Watershed's future.

Photo 3. Contact Rangers Morgan and Stang talk with dispersed campers (9 July 2006).

Visitor Statistics

Social surveys were done for each campsite group (not each individual), which usually had one or two unofficial "spokespersons." Data gathered was not weighted by number of people in each group. Numbers in this report are based on information visitors provided or on observations made by Contact Rangers. When sites were occupied but visitors were absent, Contact Rangers had to rely solely on observation.

Also, Rio Cebolla was a predetermined area of concern for Respect the Rio this year, and received more attention. However, early fire restrictions and a heavy monsoon season greatly reduced overall visitor use. There were a few weekends when the Contact Rangers were able to visit all three corridors in one weekend. In any case, if the Contact Rangers finished one corridor, they moved on to the another corridor, which usually was Rio Cebolla since more people visit it than Rio Guadalupe or Rio de las Vacas.

Some general use statistics help paint a picture of visitors to Guadalupe Watershed.

- Total number of individuals contacted during the 2006 Respect the Rio Contact Ranger program was 1,890.
- Total number of groups contacted during the 2006 Respect the Rio Contact Ranger program was 407.

- An average of 4.6 people per site was noted with a maximum of 60 and a minimum of 1.
- Average number of nights stayed when a group was confirmed as camping overnight was 2.1 nights. Longest stay was 5 nights; shortest was 1.
- There were 20 groups confirmed as day users with 218 groups confirmed as overnight campers.

Visitors to Guadalupe Watershed were asked where they were from in order to determine target audiences for future Respect the Rio education outreach. Contact Rangers asked for zip codes to further define where visitors were from (i.e. zip codes allow for more geographical detail than just

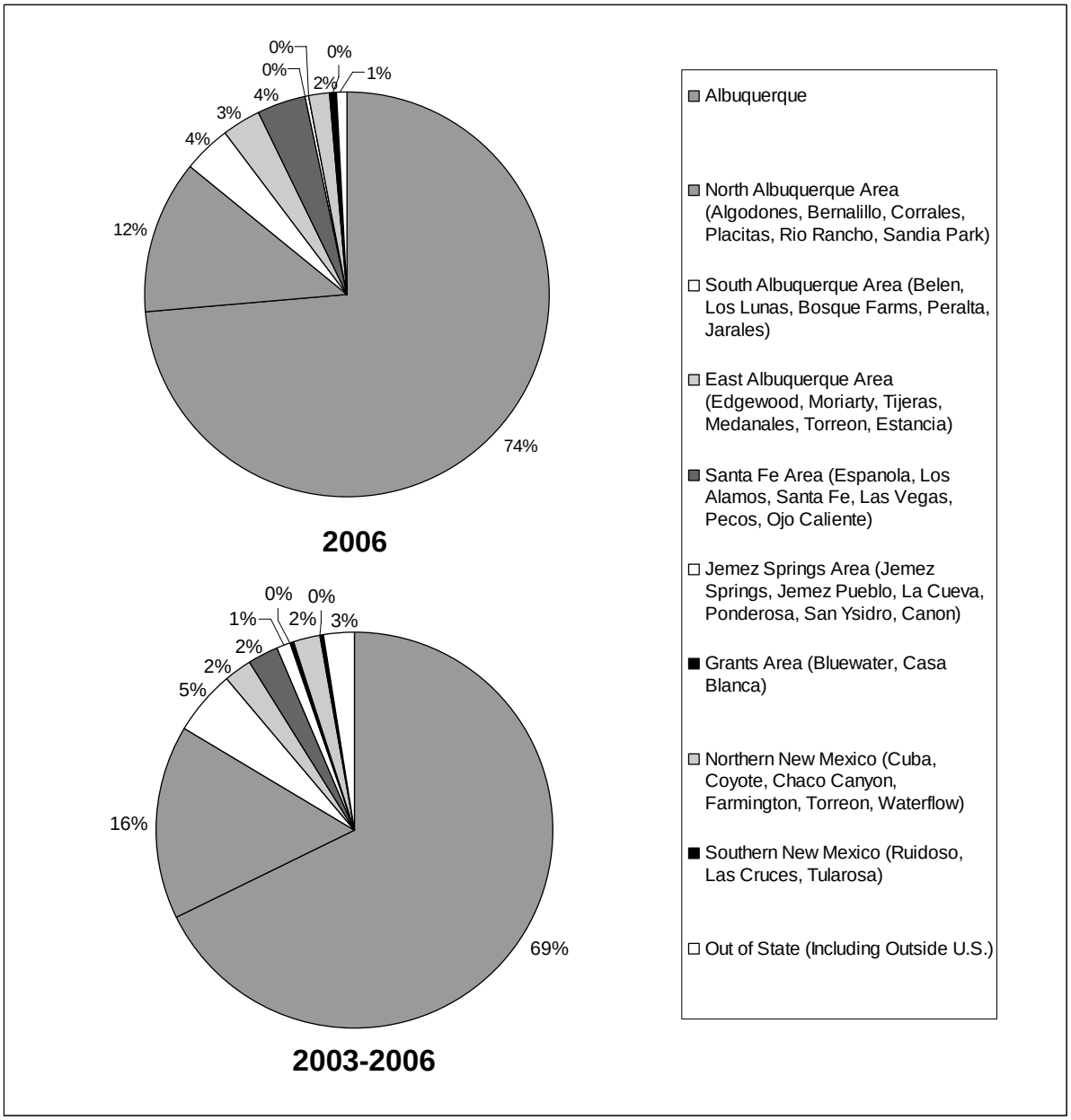

Figure 2. Residential demographics of visitors to Guadalupe Watershed for the years 2006 and 2003-2006.

Albuquerque). If a site was occupied, but no one was present, the Contact Rangers recorded the state from license plates if a vehicle was present. Figure 2 shows the breakdown of visitors' home areas.

The smallest percentages of visitors to Guadalupe Watershed in 2006 (each less than 5%) were from Santa Fe area (9 groups of visitors), south Albuquerque (9 groups), east Albuquerque (7 groups), northern New Mexico (4 groups), out of state (2 groups), Jemez Springs area (1 group), and southern New Mexico (1 group). In 2006, there were no groups from the Grants area.

About 3% of the visitors came from the east Albuquerque area (7 groups), 4% of the visitors came from the south Albuquerque area (9 groups), and 12% came from the north Albuquerque area (29 groups). The largest percentage (74%) of visitors came from Albuquerque (179 groups). In all, the Albuquerque area (including Albuquerque proper) represented 93% of all Guadalupe Watershed visitors, which appears to be the highest proportion to date.

Albuquerque residents are broken down further into zip codes representing northeast, northwest, southeast, and southwest areas of the city (see Figure 3). These geographic divisions are roughly defined by north-south running I-25 and east west I-40.

Figure 3. U.S. Postal Service Albuquerque zip code map (taken from City of Albuquerque phonebook) with general northeast, northwest, southeast, and southwest subdivisions.

Zip codes representing northeast Albuquerque include 87109, 87110, 87111, 87112, 87122; northwest include 87107, 87113, 87114, 87120; southeast include 87106, 87108, 87115, 87116, 87117, 87118,

and 87123; southwest include 87102, 87104, 87105, and 87121. Several zip codes were from unknown regions of Albuquerque since they are for postal boxes only or assigned to companies/organizations including 87101, 87131, 87154, 87193, 87195, and 87199.

When the zip codes for Albuquerque residents were known, most Albuquerque residents visiting Guadalupe Watershed in 2006 hail from the west side. Southwest and northwest Albuquerque accounts for 44% of visitors to the Guadalupe Watershed (Figure 4). In contrast, east Albuquerque accounts for only 25% of this urban Guadalupe Watershed visitation. Future education outreach should consider these visitor demographics.

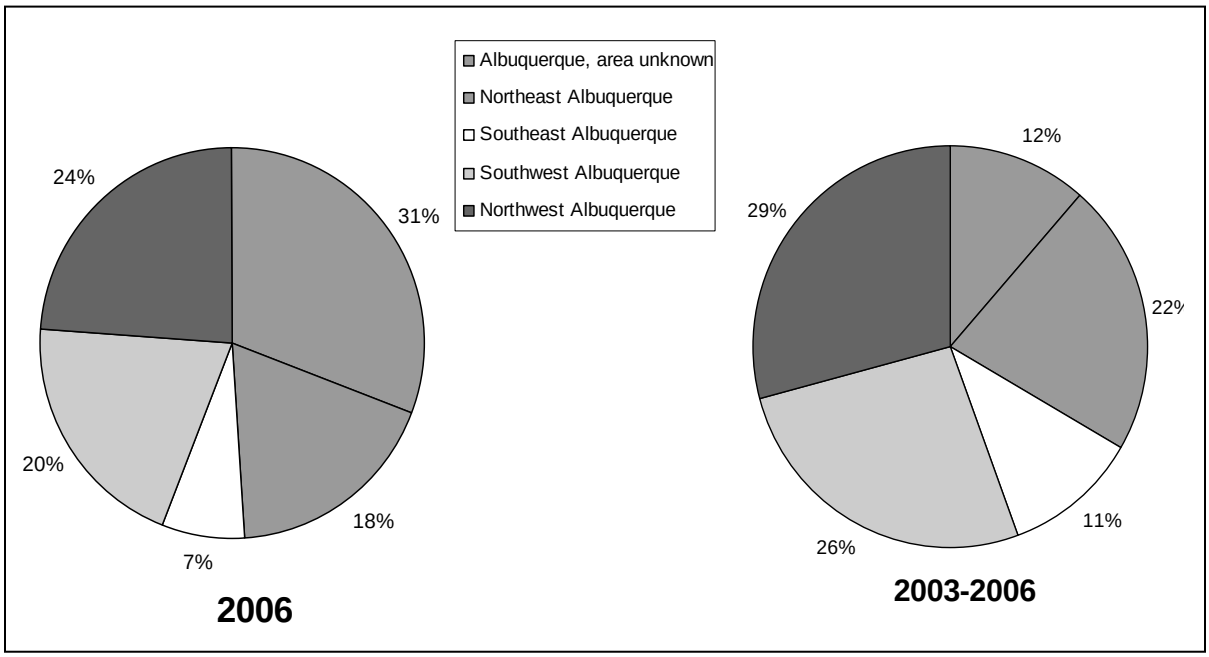

Figure 4. Visitor demographics of Albuquerque residents for the years 2006 and 2003-2006.

Group Size

The overall average group size for the Guadalupe Watershed was 4.6 people per group (see Table 2). This was less than last year's 4.9 people per group and less than 2004's 6.8 people per group. The drop from 2004 to 2005 could have been related to the modification of dispersed campsites. However, the drop from 2005 to 2006 was due to a severe drought that placed the forest into early fire restrictions. We began Stage I fire restrictions in early May and began Stage II fire restrictions (propane stoves only in developed campgrounds only) on June 16th. We were about to enter partial forest closures when the monsoon season began. The monsoon season was wetter that usual, and it is suspected that the heavy monsoon season also kept many visitors away from the forest.

Rio Cebolla had the highest average group size (5.0 people per group), and Rio Guadalupe had the lowest (1.4 people per group). These averages are reflective of the amount and size of camping areas available within each corridor.

Table 2. Total number of people and groups for each river corridor.

Stream Corridor	# of People	Maximum # of People	# of Groups	Average # of People/Group
Rio Cebolla	1619	60	325	5.0
Rio Guadalupe	29	13	21	1.4
Rio de las Vacas	242	17	61	4.0
Total	**1890**	**60**	**407**	**4.6**

Camping Type

Contact Rangers noted visitors' camping type as tent, motor home, camp trailer, pop-up trailer, pick-up camper, or other. All types of camping were recorded with the number of each type. Many camping complexes accommodated multiple types of camping throughout the summer.

Type of camping seen in the corridor is important since tents and RV's (motor homes, camp trailers, and pop-up trailers) affect campsites differently. For instance, RV campers need a large, flat space for entering with large vehicles and for turning around. Many dispersed campsites have a U-shaped drive with one way in and another way out, often to allow RV access. Thus, parking and sedimentation impacts may be higher for RV-popular complexes.

RV's often contain a toilet that can be flushed clean at a proper sanitation site while tent campers rarely use portable toilets for camping. Tent camping may impact fecal coliform counts in rivers. However, we do not assume that RV's are not illegally dumping their septic or gray water into the river.

Camp trailers and pop-up trailers are distinguished from motor homes in that a vehicle (generally a large one) is needed to pull both types of trailers. Often times, the trailer is detached so visitors can explore the forest with their vehicle. Motor homes do not allow for such use, unless a vehicle (generally a small one) or OHV is towed behind the motor home.

Overall, Contact Rangers counted 473 tents and 241 RV's (motor homes/trailers/campers) along the three streams during the 2006 survey (see Table 3).

Table 3. Total number of each camp housing type seen in each of the river systems.

Stream Corridor	Tents	Motor Homes	Camp Trailers	Pop-up Trailers	Pick-up Campers	Others*
Rio Cebolla	410	21	125	46	11	4
Rio Guadalupe	3	2	0	0	0	0
Rio de las Vacas	60	2	25	6	3	0
Total	**473**	**25**	**150**	**52**	**14**	**4**

* Others include modified vans, sleeping in the back of a pick-up, or sleeping in a car.

In all, 119 groups were camping in RV's, 170 were camping in tents, and 59 groups were using a combination of tents and RV's (see Figure 5). Overall, tents were far more numerous than any other type of camping shelter found within the Guadalupe Watershed (see Table 3). Camp trailers and pop-up trailers were the most popular types of RV's. This could be because the vehicle pulling the trailer

can be detached and used as a means of transportation through the forest. Other camp housing types included converted vans and people camping inside their vehicle.

According to Figure 5, Rio Guadalupe appears to have taken a major reversal in camp housing. The low visitation during 2006 has skewed the results. In 2006, the data collected for Rio Guadalupe showed one group tent-only camping and two groups RV and tent camping. The key point here is to look at the overall (2003-2006) chart in Figure 5.

In 2006, we started recording other camping elements (such as canopies/tarps, hammocks, portable toilets/showers, and generators) that have an impact on the forest environment. Even though we are still perfecting the counting and recording method, the overall numbers that were recorded will be listed. There were 136 canopies/tarps used, 8 hammocks, 18 portable toilets/showers, and 4 generators. We will continue to perfect our counting and recording process of these items for future use.

Photo 4. Morgan, Rothenbuecher, and Stang talk with fishermen along the Rio Guadalupe corridor as part of the Contact Ranger program (29 July 2006).

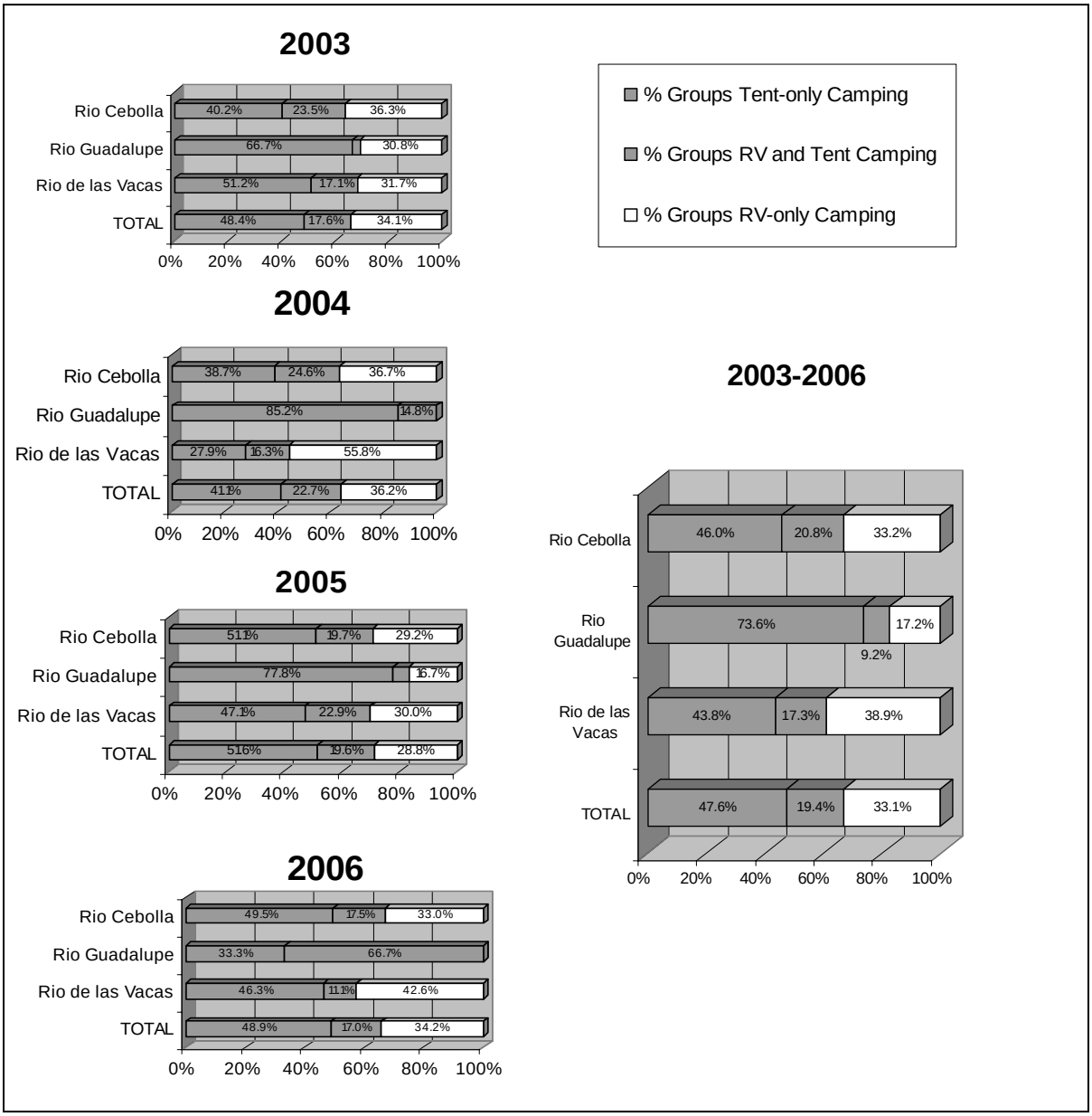

Figure 5. Percentage of groups camping with tents only, both RVs and tents, or RVs only within each river system.

Visitor Usage

Overall, 91.6% of groups contacted were camping overnight (see Figure 6). Rio Guadalupe had a relatively larger proportion of day users (50%). Figure 7 shows the percentage of day users for the years 2003 thru 2006.

Average number of nights stayed when a group was confirmed as camping overnight was 2.1 nights (see Table 4). For confirmed overnight campers, the longest stay was 5 nights; shortest was one night.

(290 groups), fishing (101 groups), relaxing (80 groups), hiking (72 groups), and OHV use (63 groups).

Visitors' activities within each river system shows how each area is more conducive to different types of activities (see Figure 9). By looking at predominant activities along each river corridor, Forest Service resource personnel can better manage each area. For example, the activity of fishing is more prevalent along the Rio Guadalupe.

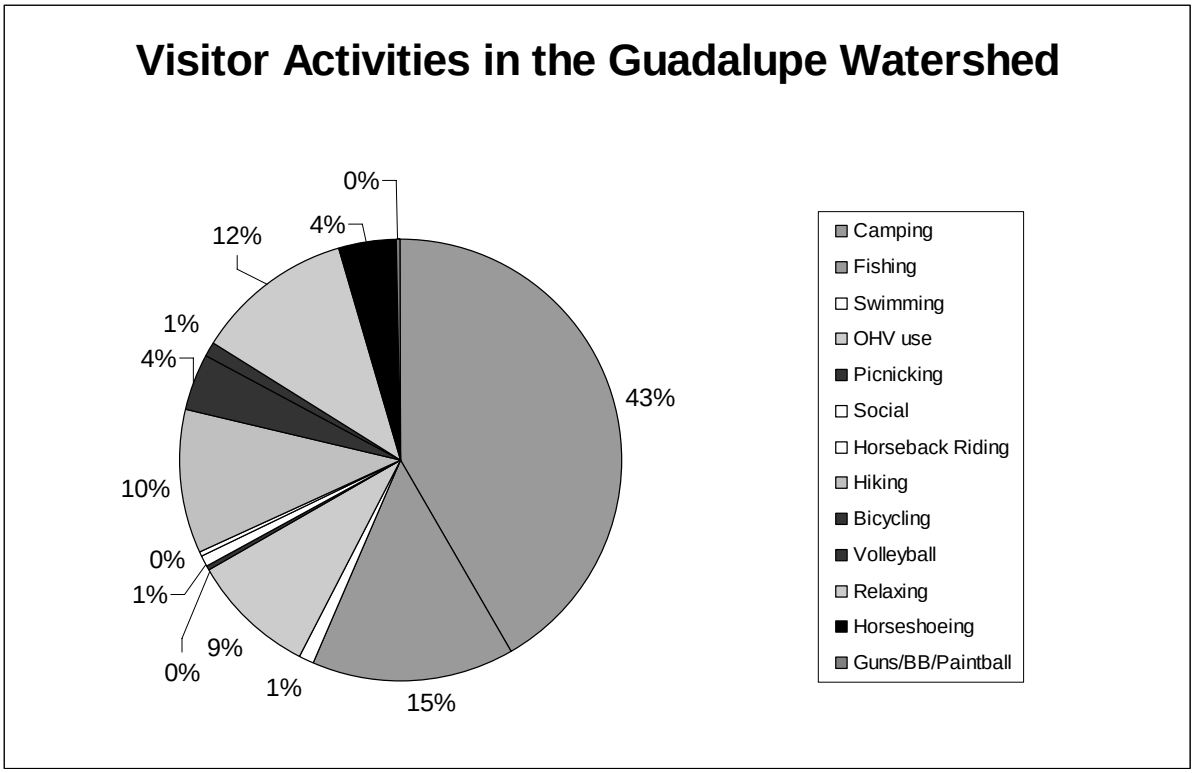

Figure 8. Percentage of groups participating in activities within the Guadalupe Watershed.

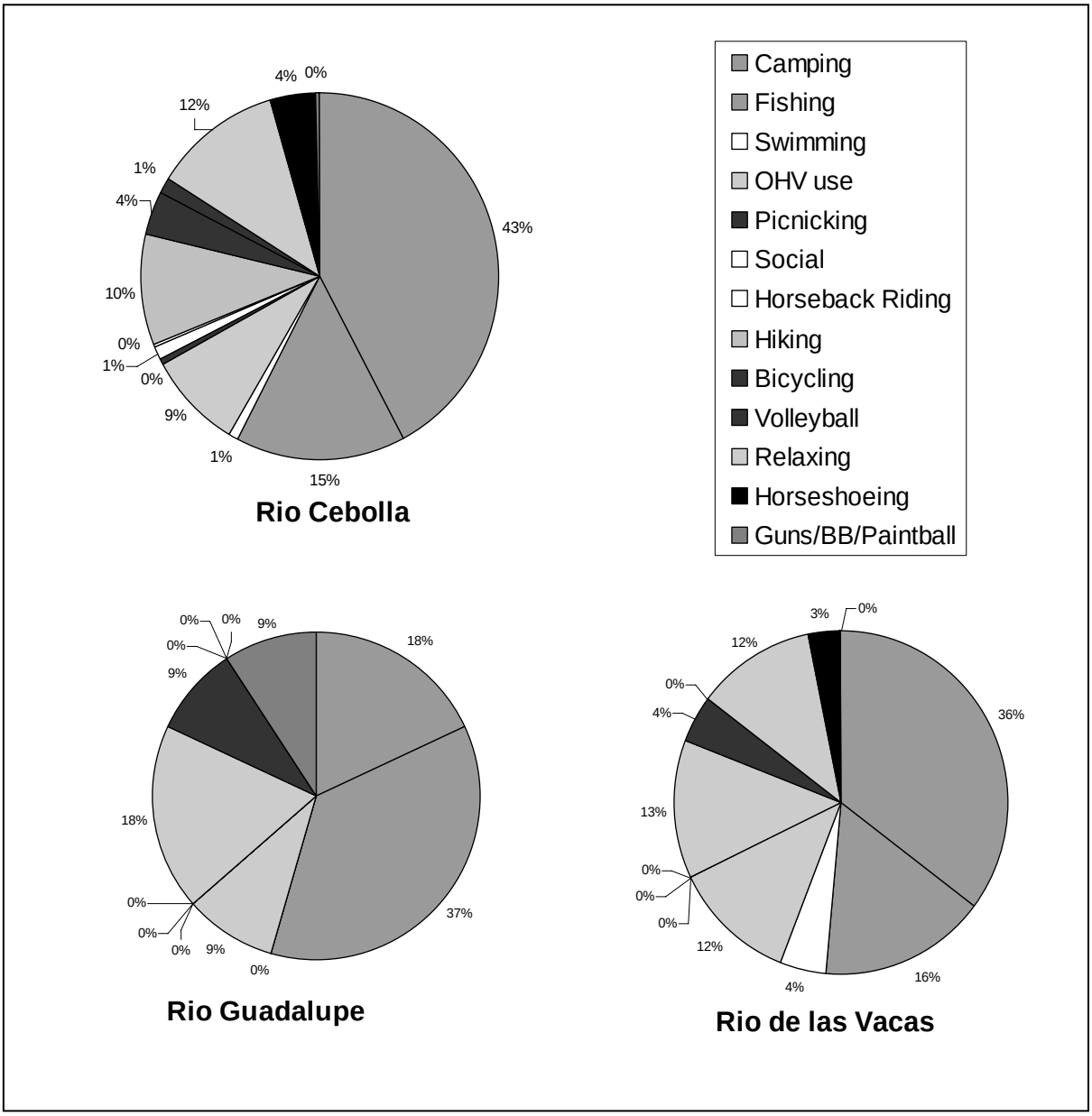

Figure 9. Percentage of each activity occurring within each river system.

Off-road Vehicle Use

Off-highway vehicle (OHV) use is a popular activity within the Guadalupe Watershed. OHV activity causes high impacts to river systems and creates the greatest conflicts between campers. When Contact Rangers contacted a group, they noted the presence of ATVs (3- or 4-wheelers), dirt bikes (note: dirt bikes differ from motorcycles in that dirt bikes were made for off-road use), bicycles, or others (dune buggies, go-carts) (see Table 6).

For 2005-2006, vehicles were separated out to distinguish between pick-ups, SUVs, and jeeps. Each of those vehicle types is capable of off-road travel; therefore, they could be used for OHV usage.

Of the non-vehicle types (dirt bikes, ATVs, and bicycles), ATVs were the most abundant (92), followed by bicycles (71), and then dirt bikes (28). The bicycle category included kid's bikes, ten-speeds, and mountain bikes.

Table 6. Actual numbers of equipment capable of off-road use.

Stream Corridor	**# of Dirt Bikes**	**# of ATVs**	**# of Bicycles**	**# of Pick-ups**	**# of SUVs**	**# of Jeeps**	**# of Others***	**TOTAL**
Rio Cebolla	26	68	55	330	165	13	7	**664**
Rio Guadalupe	0	2	3	12	6	1	0	**24**
Rio de las Vacas	2	22	13	52	13	1	2	**105**
Total	**28**	**92**	**71**	**394**	**184**	**15**	**9**	***793***

When Contact Rangers talked to each group, they explained the goals of the Respect the Rio program and explained what changes (i.e. vehicle closures, dispersed campsite modifications, and wetland restoration) were planned for the Guadalupe Watershed. Figure 11 shows the attitudes each group the Contact Rangers talked to had regarding the Respect the Rio program. Table 7 shows the actual number of individuals that comprised the groups in Figure 11. It was not always clear if the groups were opposed to the program or just opposed to the changes (vehicle closures and campsite modifications). What was clear was the majority (89.3 %) of support or indifference for the program and the general lack of non-support (2.5 %) or no comment (8.3%). In 2005, the majority of support or indifference for the program was 92.8% and the minority of non-support was 1.7%. At its lowest in 2004, the majority of support or indifference for the program was 82.9%, and the general lack of non-support was 5.3%.

Table 7. Actual numbers of individuals associated with group attitudes toward Respect the Rio.

Attitude	Rio Cebolla		Rio Guadalupe		Rio de las Vacas		Total	
	People	**%**	**People**	**%**	**People**	**%**	**People**	**%**
Not Supportive	39	2.4%	0	0%	8	3.3%	**47**	**2.5%**
No Comment	128	7.9%	4	13.8%	25	10.3%	**157**	**8.3%**
Indifferent	322	19.9%	17	58.6%	91	37.6%	**430**	**22.8%**
Supportive	1130	69.8%	8	27.6%	118	48.8%	**1256**	**66.5%**
Total	**1619**	**- - -**	**29**	**- - -**	**242**	**- - -**	**1890**	**- - -**

Pets

Table 8 shows the numbers and type of each pet recorded. Of the 407 groups surveyed, 126 groups had at least one pet with them. Considering only the groups with pets, the number of dogs averaged 1.9 dogs per group. There was one group of 50 people that had 25 dogs with them. Many of the pets were not on leashes when Contact Rangers approached. While there is no leash law on the Forest, pets do have to be under voice control from the owner. (However, the Contact Rangers can attest that the dogs are not always under voice control. There were numerous times the Contact Rangers had to “freeze” in place while the owners ran to grab their dog or had to bear the overly-friendly dog jumping up on them as the owner yelled repeatedly for the dog to “get down”.)

Table 8. Number and types of each pets brought by groups.

Stream Corridor	# of Dogs	# of Cats	# of Horses
Rio Cebolla	200	1	2
Rio Guadalupe	4	0	0
Rio de las Vacas	31	0	0
Total	**235**	**1**	**2**

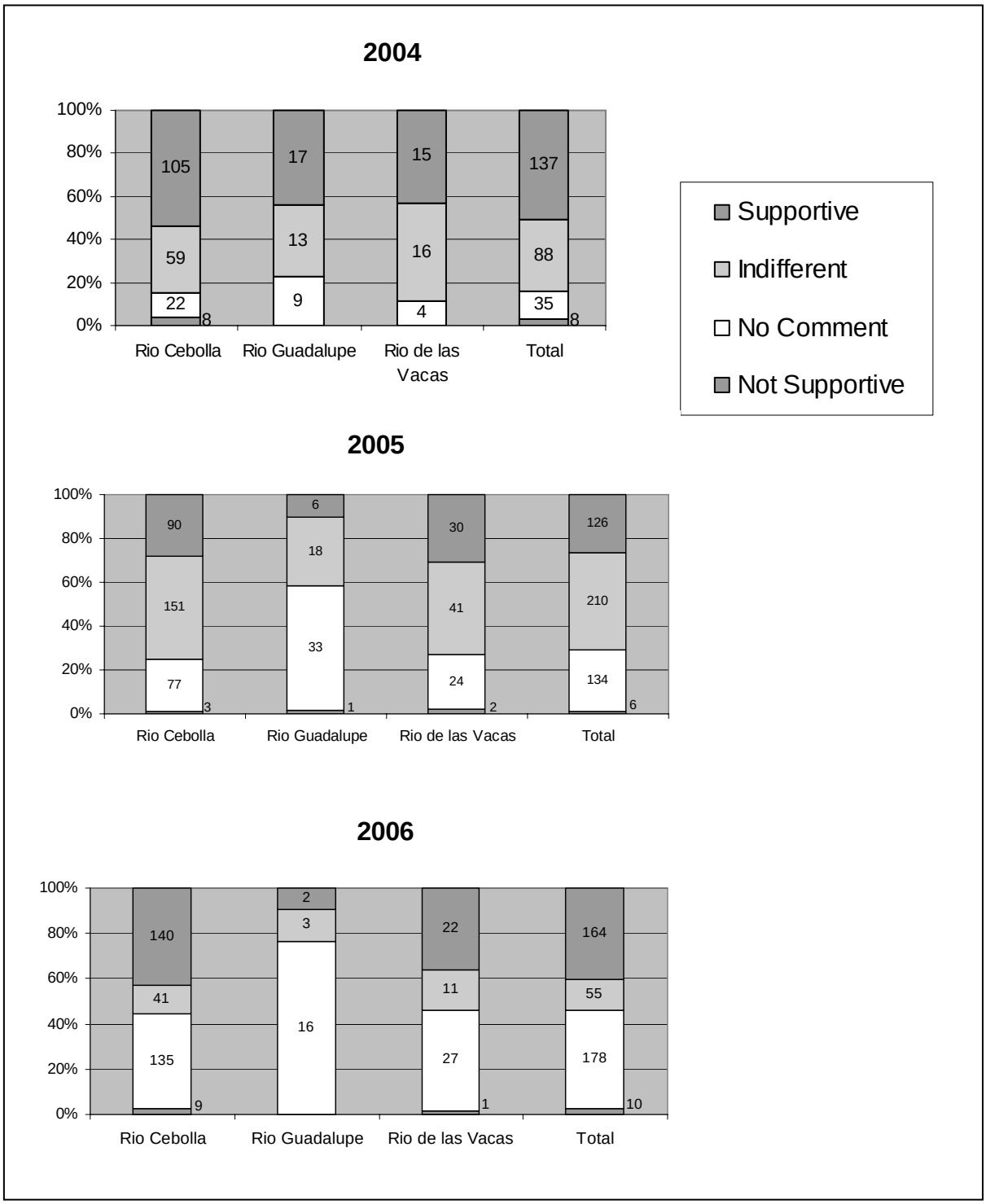

Figure 11. Group attitude toward the Respect the Rio program within each river system. The number of groups for each attitude is noted within each bar. "No Comment" refers to groups who refused to talk or who were not at their campsite.

Remarks Made by Visitors

One asset of the Contact Ranger program is the feedback received from visitors. The visitors appreciate the opportunity to voice their opinion and to be heard. Comments are taken seriously, and in some cases, changes are being made for valid concerns. For example, after concerns about wheelchair access, the openings in the buck-and-pole fences were modified to accommodate wheelchairs. While Contact Rangers don't take an audio recorder out with them, they do their best to accurately record opinions and comments made by visitors. Table 9 categorizes remarks made by visitors. There can be some overlap, for example, a person can be opposed to the closures and be concerned about places to camp. For a full listing of remarks, please see Appendix E.

Table 9. Remarks made by visitors simplified into categories.

# Groups	Remark Category (for complete list of remarks see Appendix E)
13	Liked the buck-n-pole fences.
11	Thanked us for doing a good job.
10	Complaints of trash in the area.
6	Said they could see a difference in the area (since we modified campsites).
6	Picked up other people's trash.
6	Liked our signs.
6	Complained about ATVs and/or motorcycles.
5	Read signs.
4	Asked about fishing spots.
3	Said it's too bad people can't respect area.
3	Complaints of noisy people.
3	Familiar with Contact Rangers patrolling area.
2	It's a shame a few people ruin it for everyone, but understand why it has to be done.
2	Asked about ATV trails or where they could take ATVs.
2	Asked about fish and illegal dumping in Rio de las Vacas (fish kill).
2	Complained about Forest Service personnel being rude.
2	Heard about or saw a bobcat or mountain lion tracks.
2	Mentioned graffiti on trees (FYI, the graffiti is at least one year old).
2	Asked about stocking of fish in the area.
2	Asked if it was ok to eat the fish from the river.
1	Didn't like the fences.
1	Mentioned they would like the fences moved farther back from the river.
1	Wants to park closer to the stream, but realizes it's not a good idea.
1	Liked the lack of ATVs.
1	Wanted to know about OHV regulations because they had received conflicting information.
1	Asked about ATV and gun regulations (didn't like ATVs).
1	Glad we are getting ATVs off because they are tearing it up.
1	Complained about others having illegal campfires.
1	Forest Service needs to patrol at night especially during fire restrictions.
1	Hadn't been in area in the last 4 years, but didn't mind the changes after hearing the reasons for them.
1	Mad at first because he couldn't get to favorite campsite (because of fences), but it's really changes for the better.
1	Didn't like the fences but noticed areas are improving since fences have been put up.
1	Felt like fences restricted big groups of people more than when the fences weren't there.
1	Slightly negative about having to "walk from truck to campsite" (due to fences).

Additional Considerations

Once again the same problem areas pop up. Trash continues to be a major problem at dispersed recreation sites. Some people seem to be more appalled at taking their own trash home than at the sight of trash in their beloved forest. Another problem area is the continual maintenance of the buck-n-pole fencing. Campers and nature seem to be able to tear it down faster than we can repair it. There is still the issue of people driving behind the fencing, but I believe if we can keep up with the fence maintenance that would alleviate most of the problem. Of course, there is our least favorite problem to run into, improper disposal of human waste. There are some who try to dress up their forgetfulness by digging a hole or building a make-shift toilet, but then still leave their mess behind.

Photo 5. Campers use screws on a live tree to post sign to help others locate their camping site. Many times, the campers forget to remove these signs when they leave adding to the trash left behind by campers.

Chapter 3 – Education Accomplishments and Recommendations

Photo 6. Rothenbuecher and Morgan present an interpretive talk on big cats of the southwest (30 June 2007).

Contact Ranger Program

Interns from the Student Conservation Association program continues to be an excellent choice for the Respect the Rio Contact Ranger program. We also learned that stipend volunteers are also an option. The addition of an Assistant Education Coordinator is a benefit as the extra help makes many things easier, such as rotating Contact Ranger duties.

While having SCA interns, stipend volunteers, and an assistant is optional, we should be looking into ways to keep the program going if the funding should ever run out.

Interpretive Programs

Interpretive programs continue to be a popular summer feature on Friday and Saturday evenings. The programs were rotated between the Jemez Falls, Redondo, and Vista Linda Campgrounds. This year, there were 363 people attending 14 programs with topics including beaver adaptations, Rio Grande cutthroat trout, bats of the Santa Fe National Forest, big cats of the southwest, water conservation, Rio Grande ecosystems, pollinators, and being the best camper you can be. The programs were such a big hit that many attendees asked for more and for guided hikes in the area.

Photo 7. DeVall explains the adaptations of a beaver with the help of an assistant (26 May 2007).

Signage

Signs and placards continue to be added or replaced along the Rio Guadalupe, Rio Cebolla, and Rio de las Vacas corridors. Signs are placed on placards located on buck-n-pole fence and treated posts. This year, volunteer David Wilson translated 10 more Respect the Rio signs into Spanish (see Appendix F) bringing the total to 12 Spanish signs.

Public Outreach

During 2006, the Respect the Rio message reached people through a variety of media:

- After four years, Respect the Rio has directly reached over 9,300 people and has potentially reached over 200,000 through its multi-media campaign.

- A Respect the Rio ad was shown on all of the screens in the Century Rio 24 Theaters (Albuquerque, NM) from May 19 to June 15 (see Appendix G). The 15-second ad was shown three times during the 30-minutes prior to the start of the movie, reaching approximately 50,000.
- The Respect the Rio and Respect the River Web site (www.fs.fed.us/rtr).
- A native fish aquarium (180-gallon coldwater tank) and interpretive display housed at the Walatowa Visitor Center receives over 34,000 people a year.
- The Rio Grande Cutthroat Trout Life Cycle Game was presented at two children's water festivals: Santa Fe and Middle Rio Grande (Albuquerque) and the Expanding your Horizon workshop. In all, 440 students and 94 teachers and parents participated in the presentations.
- An information table was staffed at the Fourth of July event in the Village of Jemez Springs reaching about 150 people.
- Amanda Webb, Erica Nevins, & Kimberly DeVall have been giving presentations and staffing information tables at the REI store in Albuquerque to spread the word about Respect the Rio and to encourage people to volunteer for projects.
- A 48-page Rio Grande Cutthroat Trout Curriculum, which contains background information on the cutthroat trout, 4 classroom activities, and a teacher evaluation form, was created and is currently being distributed to teachers and educators across the state along with copies of the game board and life cycle poster. As of February 2007, 131 game sets have been distributed.

Current projects include working with art students from the Jemez Valley High School to create artwork for use in interpretive signs at the fishing accesses and possibly along the trail to Spence Hot Springs. In addition, a Respect the Rio promotional sticker with the Web site address is currently at the printers.

Public outreach is still the most effective method of reaching forest visitors. Efforts will continue as long as the need is present.

Photo 8. Stang facilitates a group of participants playing the Rio Grande Cutthroat Trout Life Cycle Game (27 May 2007).

Chapter 4 – Forest Protection Officer Program

A New Respect the Rio Program

The 2006 Field Season marked the first for the Respect the Rio Forest Protection Officer position. Amanda Webb was hired as the Forest Protection Officer (FPO) for the Respect the Rio Program for the Jemez and Cuba Ranger Districts. Webb will be funded through the 2008 season and works a seasonal schedule from mid-April through mid-October.

A Forest Protection Officer is a “Level II” Law Enforcement Officer in the Forest Service, meaning that the officer has the authority and jurisdiction to enforce the Code of Federal Regulations as it applies to National Forest System Lands, but does not carry a law enforcement weapon. As a follow up to resource management and public education, FPO’s can issue Warning Notices and Violation Notices to visitors who disregard forest regulations and cause resource damage. Warning Notices have no associated fine while Violation Notices carry a fine of a predetermined amount or if serious in nature can require a mandatory appearance in court. In addition to the above, FPO’s can also document resource damage or management issues through Incident Reports. Incident Reports are used as a tool for documentation when there is no one present to contact. More often than not, Incident Reports are the only way to document many infractions and resource management issues. All Incident Reports, Warning Notices and Violation Notices are entered into the Law Enforcement Incident Management Accounting System (LEIMARS). Each incident has a GPS location coordinate associated with it allowing resource managers to track violations occurring in their program areas, districts or forests as a whole.

FPO’s are common on all National Forests throughout the nation although the duties are usually collateral to their existing responsibilities. As the Respect the Rio FPO Amanda patrols only in the Jemez Watershed, attempting to gain compliance first through education and issuing Warning and Violation Notices only when further enforce 89.99c 0.000I4.8-(g)4(hmlionnefind(rce da)-4((W)8bb biolaiolve)7682(ay

Enforcement of Federal Regulations in the Jemez Watershed

On all National Forest System Lands there are standard regulations that visitors must be aware of in order to recreate responsibly and appropriately. Such standard regulations are ones that visitors can expect when visiting any public lands; examples are not littering or dumping trash or not causing resource damage. In addition to the standard Forest Service regulations are Special Orders. Special Orders are regulations that are signed by the Forest Supervisor of each individual National Forest and put in place to protect a particular area or resource. Examples are motorized vehicle closure orders or wildlife habitat closure orders. There are numerous Special Orders that apply to lands within the Jemez Watershed. The three directly pertaining to the Respect the Rio program are the Rio Guadalupe Motorized Vehicle Closure Order issued in 2004, the Rio Cebolla Motorized Vehicle Closure Order and the East Fork Jemez River Motorized Vehicle Closure Order, both signed in 2005. In 2005 but prior to accepting the Respect the Rio FPO position Webb worked with the Level I District Law Enforcement Officer to have the Rio Cebolla and the East Fork Jemez River Closure Orders issued.

During the period of May 14 through October 14, 2006 Webb directly issued 31 Warning Notices to individual forest visitors. In addition, she completed 25 Incident Reports for issues related to resource management where no individual was present, such as trash being left behind or campfires left burning. Webb issued 3 Violation Notices carrying fines of $75 to $125. In addition to issuing these Violation Notices, Webb utilized an educational approach with another 20 visitors or groups in lieu of issuing Violation Notices. In order to gain compliance Webb educated these visitors regarding their impacts on water resources and the Respect the Rio program. In lieu of issuing citations, Webb allowed the visitors to remedy the situation that precipitated the contact. Several visitors picked up their trash or brought their campfires under control while others were instructed to buried their human waste appropriately or relocate their latrine area. This approach to compliance is preferable over the issuance of Violation Notices, though issuing citations is sometimes the only way in which some visitors will comply. By encouraging visitors to comply with regulations after they have been given the Respect the Rio message from Webb, they are able to see how their actions can improve versus negatively impact the watershed. The method Webb uses to ensure compliance is one of allowing the visitors to remedy the situation within a few hours or by the next day at which time she follows up with the individual or the group. Obtaining their driver's license and other pertinent information ensures that they comply with the requirements in lieu of receiving a citation.

Photo 9. Trash about to be left by this forest visitor who was given the choice of either being issued a violation notice (in this case a fine of $250) or complying and picking up his trash. (East Fork Jemez River, May 2006).

Ongoing FPO Projects

Webb is currently working with the Jemez District Ranger and District Recreation Staff to address overnight camping impacts within the East Fork Jemez Wild and Scenic River Corridor. Throughout the summer season and into the fall of 2006, she repeatedly encountered trash and human waste issues associated with overnight camping, especially along the “El Puente Blanco” Access and the Las Conchas Trailhead area. Both areas receive overnight use by car-campers who park at the pullout or trailhead and camp very close to the highway adjacent to the trail or parking areas. These random dispersed campsites are often within 50 feet of the East Fork Jemez River. There are two developed campgrounds within a very short distance where car campers can camp instead of using these access points and trailheads where there are no trash or restroom facilities.

The following series of photos illustrates a major ongoing challenge within the Jemez Watershed: trash and other human-caused impacts from overnight camping in dispersed areas. Over several consecutive weekends during the 2006 season, Webb patrolled along the East Fork Jemez River in an area known as the “El Puente Blanco” access. This access area, though not a designated trailhead is within close proximity to the official East Fork Trailhead (where there are restrooms and trash facilities) and is a heavily used dispersed area with several social trails.

Photo 10. Trash was cleaned up and hauled out (“El Puente Blanco,” 29 May 2006).

Photo 11. *Same fire ring with new trash. Trash was hauled out again* (“El Puente Blanco,” 4 June 2006).

Photo 12. Same fire ring, new trash (“El Puente Blanco,” 11 June 2006).

Photo 14. The fire ring shown in previous pictures has been dismantled and the volunteers are working on an adjacent ring. The East Fork Jemez River, obscured by the riparian vegetation is flowing beyond the volunteers ("El Puente Blanco," 24 June 2006).

Photo 13. Volunteers assisted Webb in cleaning up fire rings and debris at the same dispersed campsite location in Photos 10-12 ("El Puente Blanco," 24 June 2006).

On September 19th, 2006 this same location at “El Puente Blanco” was revisited to monitor the use of the area. Expecting to see the area recovering well, the following photos illustrate the trend in this particular location.

Photo 15. New fire ring and trash at the site that had been cleaned upon June 24th (“El Puente Blanco,” 16 September 2006).

Photo 16. Camping trash that was left adjacent to fire ring above (“El Puente Blanco,” 16 September 2006).

Later in September Webb coordinated with the Cuba Ranger District's Howard Cordova to pack out the remaining fire ring debris and large amount of trash that was left at this site. During the 2007 season old fire ring debris and fire rings will be targeted throughout the East Fork corridor, cleaned up by volunteer groups and forest employees and packed out by Howard's stock.

Photo 17. Howard Cordova and pack stock hauling out debris and trash from "El Puente Blanco" access dispersed campsites ("El Puente Blanco," September 2006).

The East Fork Jemez Wild and Scenic River Management Plan allows for the temporary or permanent closing of dispersed campsites that are contributing to riparian corridor impacts. Webb will continue to address these ongoing issues in discussions with the Jemez District Recreation Staff and the Jemez District Ranger. It is possible that a Special Closure Order will need to be implemented within more sensitive areas of the East Fork Jemez Wild and Scenic River Corridor.

During the 2007 and 2008 seasons, Webb will continue to patrol this area and other dispersed campsite locations on the Jemez and Cuba Ranger Districts. Her ongoing focus will be to contact visitors as an FPO, educate them about Respect the Rio and encourage them to follow forest regulations while camping and recreating within the Jemez Watershed.

Chapter 5 – References

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Appendix A – Ecological Repercussions of Guadalupe Watershed Impairments

Temperature Impairment

Rio de las Vacas and Rio Cebolla are both impaired due to water temperature. New Mexico Environment Department, Surface Water Quality Bureau (NMED-SWQB) states that "temperature shall not exceed 20ºC (68ºF)" (NMED 2002) for an extended period of time (3 days). Coldwater salmonids, such as native Rio Grande cutthroat trout, and other river life need cold, well-oxygenated water to survive. If a river exceeds 20ºC (68ºF) for an extended period, 3 consecutive days or more, oxygen decreases dramatically, and fish are in danger of dying. Temperature impairment is often linked to decreased amounts of streamside vegetation, such as overhanging willow, grasses, and other trees, that naturally cools stream waters. In addition, temperature increases are associated with stream widening caused by slumping banks and vehicle crossings.

Sedimentation/Siltation

Rio Cebolla is affected by sedimentation/siltation, defined as "water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom" (NMED 2002). Fine silty sediments, in particular, that build up along a naturally gravelly stream bottom severely reduce available habitat for macroinvertebrate insects and fish during various life stages. Such deposits limit available spawning areas for fish and block gill surfaces of macroinvertebrates such as mayflies and stoneflies, lowering amount of oxygen insects can absorb and limiting their ability to see prey. Fine silt also limits light penetration to the stream bottom, affecting natural aquatic plant growth, and can change healthy hydrological movement of stream deposits in general. Roads, trails, and browned-out stream banks are often sources of fine sediment. Monsoon season often finds southwestern streams running reddish-brown with silty road and campsite runoff.

Metals Impairment

Rio Guadalupe has exceeded state standards for metals (chronic aluminum). NMED-SWQB has described this impairment as "indicative of a landscape source" (NMED 2002), meaning this chronic aluminum is likely a naturally occurring impairment not caused by human impacts. Volcanic rocks of Rio Guadalupe canyon contain over 14% aluminum oxide naturally, nearly twice the normal occurrence of aluminum in non-volcanic geological formations. While human activities are not causing chronic aluminum in Rio Guadalupe, NMED-SWQB needs to continue monitoring this impairment, which is toxic to fish, bottom-dwelling insects, and some plants.

Appendix B – Definitions

In order to easily describe what was learned by Respect the Rio staff this summer, some definitions of terms are necessary.

Dispersed Camping

Throughout National Forests all over the country, campers make their own primitive "dispersed" camping areas. "Dispersed" areas are not developed or managed and do not have such facilities as toilets, picnic tables, water pumps, RV hookups, hosts, and pavement normally associated with a "campground."

Dispersed Campsite

A dispersed "campsite" is a de-vegetated spot off an access road where a single family, or small group, will camp for the night. Usually, a dispersed "campsite" is marked by a fire ring, though heavily used sites may contain multiple fire rings. Dispersed campsites in close proximity may also be connected by a small, user-created road. Surveyors designated each campsite with its own inventory letter.

Dispersed Complex

A dispersed camping "complex" is a series of campsites accessed by the same access road(s) and connected by a system of social roads and/or wide trails. The term "complex" is used in this report to define distinct areas of dispersed camping, which usually consist of multiple campsites. In rare cases, a "complex" may also refer to a single dispersed campsite with a distinct location and significant size. Surveyors designated each complex with its own inventory number and name.

Appendix C – Social Survey Form and Codes

Figure 6. Form used to enter social survey data collected during the 2006 Contact Ranger season.

Figure 7. Codes used during data entry on the social survey form during the 2006 Contact Ranger season.

Appendix D – Campsite Usage

Watershed	Complex Name	Complex #	Total # People	Total # of Groups
Cebolla	Cebolla Confluence	01	2	1
Cebolla	Fence	02	79	15
Cebolla	Ponderosa Group	03	94	15
Cebolla	Ponderosa Group West	05	90	18
Cebolla	Mixed Conifer	06	76	10
Cebolla	Circle of Trees	07	65	12
Cebolla	Double Horseshoe	08	22	6
Cebolla	Ponderosa Cluster	09	46	9
Cebolla	The Dumbell	10	65	10
Cebolla	The Stairs	11	16	5
Cebolla	Tiny Turnout	12	11	6
Cebolla	Eroded Vista	13	2	1
Cebolla	Party Place	14	128	23
Cebolla	Dirt Dropoff	15	28	9
Cebolla	(new site)	15.5	16	2
Cebolla	Sloping L	16	15	3
Cebolla	(new site)	16.5	5	1
Cebolla	Cebolla Arc	17	60	12
Cebolla	(new site)	17.5	4	1
Cebolla	Birdcage Drive	18	43	8
Cebolla	All-in-One	20	206	32
Cebolla	Off River	21	62	12
Cebolla	(new site)	21.5	4	3
Cebolla	ATV Hill	22	10	3

Watershed	Complex Name	Complex #	Total # People	Total # of Groups
Guadalupe	Powerline	06	5	3
Guadalupe	(new site)	07.5.1	0	1
Guadalupe	(new site)	07.5.2	0	1
Guadalupe	Shady Grove	08	4	2
Guadalupe	The Long Haul	10	4	2
Guadalupe	The Berm Site	12	0	1
Guadalupe	Rocky Road	13	1	2
Guadalupe	Steep Ponderosa	14	0	1
Guadalupe	(new site)	17.5	13	1
Guadalupe	(new site)	18.5	0	1
Guadalupe	Pull Through	20	2	3
Guadalupe	Porter	21	0	1
Vacas	Vacas Tributary	01	7	2
Vacas	Vacas View	03	37	4
Vacas	Oak Arch	04	2	2
Vacas	Boulder Pile	06	13	2
Vacas	Hook	10	2	1
Vacas	Alder	11	14	4
Vacas	Slumping Bank	14	1	1
Vacas	GS North	17	0	2
Vacas	Stumps	18	0	2
Vacas	Stumps North	19	5	4
Vacas	Dogwood	20	30	5
Vacas	Vacas U	21	7	3
Vacas	Anvil	22	9	2
Vacas	Boulder Bench	24	10	3
Vacas	Vacas West	26	26	4
Vacas	Road 20L	27	0	1
Vacas	Road 20L	27	5	3
Vacas	Road 152A Split	28	4	2
Vacas	Open Camp	29	38	6
Vacas	Vacas North	30	9	4
Vacas	Vacas Flats	32	14	2
Vacas	(new site)	32.5	0	1
Vacas	Fenceline	34	9	1

Appendix E – Other Remarks by Visitors

Watershed	Complex #	Complex Name	# People	Other Remarks
Cebolla	02	Fence	5	Complaints of trash in campsite and noisy people.
Cebolla	02	Fence	9	Planning to go to Travel Management meeting.
Cebolla	02	Fence	11	Picked up trash. Really liked the fences and signs. Complained about ATVs.
Cebolla	02	Fence	5	(Talked to them the day before when I was replacing Respect the Rio signs, of which the sign I put up is missing today.)
Cebolla	02	Fence	4	Thanked us for what we're doing and said they can see a difference.
Cebolla	02	Fence	0	(Saw 3 kids riding bikes by fence, couldn't find group they were with.)
Cebolla	02	Fence	7	Camper asked about bears, saw bobcat or mountain lion tracks, and had a toilet.
Cebolla	02	Fence	7	(People moved buck-and-pole fence and had vehicles behind fence. Made them move vehicles back in front of fencing.)
Cebolla	02	Fence	10	Camper asked about fishing spots.
Cebolla	03	Ponderosa Group	0	(OHV obvious because of trailer with lots of gas cans.)
Cebolla	03	Ponderosa Group	0	(Packing up so drove by; packing up propane grill - fire restrictions in place prohibiting gas grills.)
Cebolla	03	Ponderosa Group	1	Other activities = badminton.
Cebolla	03	Ponderosa Group	10	Asked about fishing spots
Cebolla	03	Ponderosa Group	4	Thought fences were really good, noted sedimentation was bad when fishing. "Fences make perfect sense." Signs were good to explain why fences are there, especially for people who don't like the fences.
Cebolla	03	Ponderosa Group	6	Really likes the fences. "It's the best thing for the river."
Cebolla	03	Ponderosa Group	24	Camper asked if it was ok to eat the fish from the river and asked about ATV trails.
Cebolla	05	Ponderosa Group West	4	(We asked them to move their truck from behind the fence -wasn't clearly marked - and they were very compliant.)
Cebolla	05	Ponderosa Group West	3	Enjoys our work and liked our signs. Had 1 toilet more than 200 ft. away from the river. Rode ATV and picked up other's trash. Complained about FS personnel being rude (John in yellow shirt). Had trailer for ATV and dirt bike.
Cebolla	05	Ponderosa Group West	2	Liked fences and appreciated what we're doing. Was glad to see we are taking care of the rivers. Asked about continuing fence maintenance.
Cebolla	05	Ponderosa Group West	8	Said we're doing a good job. Wants to park closer to stream but realizes it's not a good idea.
Cebolla	05	Ponderosa Group West	4	(Asked them to move ATV that was behind buck-n-pole fence.) Camper asked about trout.
Cebolla	05	Ponderosa Group West	6	There was trash here before they came, and they cleaned it up when they got here.

Watershed	Complex #	Complex Name	# People	Other Remarks
Cebolla	05	Ponderosa Group West	4	People were very positive and noticed changes since Respect the Rio started.
Cebolla	05	Ponderosa Group West	5	Campers read signs. Told us to keep up the good work. They said the Travel Management Rule was a good thing, so our kids have something to enjoy.
Cebolla	05	Ponderosa Group West	20	Camper thought area looks greener than expected. (We are currently in a very dry spell and under fire restrictions.)
Cebolla	05	Ponderosa Group West	0	(Possible OHV and dogs - 2 cages in back of a truck.)
Cebolla	05	Ponderosa Group West	15	Picked up other's trash. Seen improvements in the area. Happy with what we are doing.
Cebolla	06	Mixed Conifer	5	(Had charcoal grill, told them about fire restrictions.)
Cebolla	06	Mixed Conifer	8	Thought fences were good especially for ATVers (to keep them from driving through river).
Cebolla	06	Mixed Conifer	2	Liked the fences, thought they looked good, read and liked signs but didn't understand message (Walk-In Camping Permitted sign).
Cebolla	06	Mixed Conifer	15	Familiar with Contact Rangers patrolling area. Very positive and had lots of questions.
Cebolla	06	Mixed Conifer	20	Heard about a mountain lion in the area 2 days ago.
Cebolla	06	Mixed Conifer	9	Complained about ants. Other activities = darts (soft point).
Cebolla	06	Mixed Conifer	12	Other activities = bow and arrow. Very pleasant; liked the Respect the Rio tattoos
Cebolla	07	Circle of Trees	0	(Horse trailer empty, no campsite, possibly just riding horses because saw two people riding horses up the road.)
Cebolla	07	Circle of Trees	15	"It's a shame a few people ruin it for everyone, but I understand why it has to be done."
Cebolla	07	Circle of Trees	4	(Buck-and-pole fences damaged.) Camper liked the fences and was happy with what we're doing.
Cebolla	07	Circle of Trees	4	Mentioned they would like the fences farther back from the river. Said there was a lot of trash dumped near the river and were very unhappy with that.
Cebolla	07	Circle of Trees	11	Other activity = badminton.
Cebolla	07	Circle of Trees	4	(Had propane grill during fire restrictions prohibiting it.)
Cebolla	08	Double Horseshoe	11	Fences look nice, like the lack of ATVs.
Cebolla	08	Double Horseshoe	2	Other = camped in the back of their pick up. (Moved vehicle when asked.)
Cebolla	08	Double Horseshoe	2	Hadn't been in the area in the last 4 years, but didn't mind the changes after hearing the reasons for them.
Cebolla	08	Double Horseshoe	2	When we asked camper to move car from behind buck-n-pole fence, he said he was "just here to respect you guys."
Cebolla	09	Ponderosa Cluster	7	(Had trash all picked up.)
Cebolla	09	Ponderosa Cluster	10	Read signs on fence.

Watershed	Complex #	Complex Name	# People	Other Remarks
Cebolla	10	The Dumbell	4	Other activity = playing frisbee.
Cebolla	10	The Dumbell	3	Heard of us 3 times, thought fences were good.
Cebolla	10	The Dumbell	3	(Parked vehicles behind buck-n-pole fence--asked them to move, wasn't interested in our program.)
Cebolla	11	The Stairs	2	(Very compliant, asked lots of questions, moved ATV and toilet.)
Cebolla	11	The Stairs	4	Asked where they could dump their small port-a-potty.
Cebolla	12	Tiny Turnout	0	(People were sleeping.)
Cebolla	12	Tiny Turnout	2	(Had vehicle behind buck-n-pole fence, asked them to move it. They were not receptive to the Respect the Rio message.)
Cebolla	14	Party Place	3	Familiar with Contact Rangers and/or Forest Service patrolling the area.
Cebolla	14	Party Place	7	Liked what we are doing. Noticed area getting trashed and is glad someone is doing something about it.
Cebolla	14	Party Place	3	Group was having a Birthday Party.
Cebolla	14	Party Place	5	(Saw child going to bathroom near river, told parents to remind children to go at least 200 ft. away from water sources.)
Cebolla	14	Party Place	6	(Linda caught kid chopping on tree.)
Cebolla	14	Party Place	3	They were also motorbiking. "River is overgrown by porter landing." "Mixed bag of people out here." "Colorado Forest Service is much better; it's cleaner up there, less trash, different attitude, we usually go up there instead."
Cebolla	14	Party Place	2	(Complied with moving car.) Liked area, commented on trash left at site.
Cebolla	14	Party Place	3	(People were packing up and leaving, did a drive-by.)
Cebolla	14	Party Place	10	Complained of noise from other campers
Cebolla	14	Party Place	25	Liked the fences and liked the site.
Cebolla	14	Party Place	10	Didn't like the fences, but noticed areas are improving since the fences have been put up. Complained about trash. Talked to Contact Rangers last few years.
Cebolla	14	Party Place	8	Liked the fences.
Cebolla	15	Dirt Dropoff	6	(Asked to move cars up the road - no fence, though.)
Cebolla	15	Dirt Dropoff	4	(Had truck past berm, but said another ranger said it was alright.)
Cebolla	15	Dirt Dropoff	0	(Guy was asleep in back of truck.)
Cebolla	15	Dirt Dropoff	4	Commented on the fences, said they looked great. Very pleased with various rules, didn't like ATV use around the river.
Cebolla	15	Dirt Dropoff	2	Slightly negative about having to "walk from truck" to campsite.
Cebolla	15.5	(new site)	4	Other vehicle = Polaris 6x6. Have a cabin in Jemez area & came over here for day use.
Cebolla	16	Sloping L	0	(Car pulled out, but might have been day use. Trash at site, but not sure whose trash it was.)
Cebolla	16	Sloping L	13	Wanted to comply, said they really respected what we were doing. They had gotten a ticket last night for having a fire during fire restrictions.

Watershed	Complex #	Complex Name	# People	Other Remarks
Cebolla	16.5	(new site)	5	Very pleasant, positive response. "Respect what you're doing, we respect the environment."
Cebolla	17	Cebolla Arc	10	Thought fences were a really good idea.
Cebolla	17	Cebolla Arc	6	Asked about fishing spots.
Cebolla	17	Cebolla Arc	13	Other activity = Geocaching
Cebolla	17	Cebolla Arc	0	(Drive-by, were packing gear up.)
Cebolla	17	Cebolla Arc	0	(Had BBQ grill during fire restrictions.)
Cebolla	17	Cebolla Arc	3	Liked our fences, thought it was a good idea. Commented on bags of trash by the river.
Cebolla	17	Cebolla Arc	5	Very friendly. (Flagged down sheriff for hurt ankle.)
Cebolla	17	Cebolla Arc	2	Saw signs and were familiar with them. Mentioned graffiti on trees (graffiti is old and has been here awhile).
Cebolla	18	Birdcage Drive	6	(Had grill but said they were not using it during fire restrictions.)
Cebolla	18	Birdcage Drive	5	Likes the fences, things look good.
Cebolla	18	Birdcage Drive	3	Other activity = archery. Liked the fences and thought they looked "rustic". Note: Fence was down in some areas and trash was left behind.
Cebolla	18	Birdcage Drive	0	(Called Amanda - she stayed to give out ticket for an abandoned campfire and trashy campsite.)
Cebolla	18	Birdcage Drive	20	Other activities = soccer. Fencing has done really well; grass has grown back.
Cebolla	18	Birdcage Drive	2	Asked for trash bags
Cebolla	18	Birdcage Drive	7	Couldn't move vehicles because she didn't have all of the keys, but will move them as soon as the others with the keys return.
Cebolla	20	All-in-One	2	(Cooler and some bottles left on river's edge. SUV was behind the berm, but motor vehicle closure was somewhat unclear in this area since part of the road leading to site lacks fences.)
Cebolla	20	All-in-One	4	Felt like fences restricted big groups of people more than when the fences weren't there.
Cebolla	20	All-in-One	5	They had read the signs on the fences.
Cebolla	20	All-in-One	2	(Horses were grazing by the river; other vehicle = horse trailer.)
Cebolla	20	All-in-One	5	(Had fire, was smoking, had generator on during Stage II fire restrictions.) Didn't know about restrictions, was very compliant.
Cebolla	20	All-in-One	6	Other vehicle = horsetrailer(Had a generator running but turned it off when we asked him to because of fire restrictrions.)
Cebolla	20	All-in-One	3	(Burning citronella (smoke), asked them to put it out and told them about fire restictions.)
Cebolla	20	All-in-One	15	Other activities = badminton.
Cebolla	20	All-in-One	9	(Asked them to move shower.)
Cebolla	20	All-in-One	50	Told us we are doing a good job.
Cebolla	20	All-in-One	2	Picked up others' trash. Heard of Respect the Rio last year.

Watershed	Complex #	Complex Name	# People	Other Remarks
Cebolla	20	All-in-One	2	(Saw guy cutting tree limb when we drove by this morning. Asked him to stop - explained why.)
Cebolla	21	Off River	5	(Saw them get into vehicles to leave just before we arrived at site.)
Cebolla	21	Off River	12	Very friendly and supportive of Repect the Rio.
Cebolla	21	Off River	0	Other = tricycle
Cebolla	21	Off River	20	They picked up other's trash when they first got to site to camp.
Cebolla	21	Off River	6	Abandoned truck up the hill from site.
Cebolla	21.5	(new site)	0	Other vehicle = dune buggy, near archy buck-n-pole.
Cebolla	22	ATV Hill	4	(Saw 4 People fishing.)
Cebolla	22	ATV Hill	0	(Saw 1 guy fishing.)
Cebolla	22	ATV Hill	6	(Saw 6 people fishing.)
Cebolla	23	Private Landing	0	(Camp trailer has been there since Friday, but no pickup. The pullouts have always been in whenever we drive by, and it looks like no one has been there. Possible a hunter dropped it off and waiting to come back when everyone leaves.)
Cebolla	23	Private Landing	0	(Possibly 1 of 4 fishermen.)
Cebolla	23	Private Landing	25	Familiar with Contact Rangers and/or Forest Service patrolling area. (Packing up so don't know about tents. Trash was picked up.) Complained about Forest Service personnel being rude, man with yellow shirt (John).
Cebolla	24	Cebollita Springs East	7	Picked up discarded grill to bring to a dump.
Cebolla	24	Cebollita Springs East	11	Mad at fences at first because he couldn't get to favorite campsite, but it's really changed for the better. He thinks it's working for the best.
Cebolla	24	Cebollita Springs East	11	Asked about fish and illegal dumping in Vacas (fish kill).
Cebolla	24	Cebollita Springs East	3	Had lots of questions about the forest. Said it's too bad people can not respect area.
Cebolla	24	Cebollita Springs East	4	Other activities = slingshots.
Cebolla	24	Cebollita Springs East	3	Helped uncle herd cattle.
Cebolla	24	Cebollita Springs East	15	(Amanda contacted them earlier.) They were here last year - Kelly contacted them then too. (Several were drunk last year as well which is why they remembered Kelly, but not Respect the Rio.) Other = tent in pickup.
Cebolla	24	Cebollita Springs East	9	Area is looking better. Have seen a lot of trash around. Didn't like graffiti. Said "people need to respect their country" and "like that taxpayers' money is going towards programs like these." "Need advertising in Albuquerque."
Cebolla	24	Cebollita Springs East	4	Wanted to know about OHV regulations, got conflicting information. (We handed him OHV infromation we had.)
Cebolla	24	Cebollita Springs East	4	(2 very large trees down, possibly lightning or wind.)

Watershed	Complex #	Complex Name	# People	Other Remarks
Cebolla	24	Cebollita Springs East	0	(Were packing up to leave, did a drive-by.)
Cebolla	24.5	(new site)	1	(Site is in clearing within circle of trees. Access road crosses trib. Site is below Fogon.)
Cebolla	24.5.5	(new site)	4	(Site is above Fogon.)
Cebolla	24.5.8	(new site)	2	(Site is above Fogon.)
Cebolla	26	Lakes Fire	1	Mentioned dead animals (6-8) in the same area in the river at site near prarie dog town. Asked about ATV/gun regulations (didn't like the ATVers).
Cebolla	26	Lakes Fire	0	Other = conversion van.
Cebolla	28	Aspen Meadows	15	

Watershed	Complex #	Complex Name	# People	Other Remarks
Vacas	01	Vacas Tributary	7	Trash complaint, ATV concern.
Vacas	03	Vacas View	8	(Had propane, left restriction notice.)
Vacas	03	Vacas View	16	(Beer cans decorating a tree.)
Vacas	04	Oak Arch	1	Guy was collecting seashells.
Vacas	04	Oak Arch	1	Same guy as 6/3/07, collects seashells and fossils.
Vacas	06	Boulder Pile	9	Asked about Christina's nail polish.
Vacas	06	Boulder Pile	4	Other activities = baseball, soccer. Having a birthday celebration for her boy.
Vacas	10	Hook	2	Other activities = rockclimbing. Works at REI and will pass on travel management information.
Vacas	11	Alder	6	(People were not present, probably out ATVing.)
Vacas	11	Alder	6	Asked about help for jeep that got stuck.
Vacas	14	Slumping Bank	1	Saw us last year, was very positive. Had propane, but said wasn't using it - knew about stage 2 fire restrictions.
Vacas	17	GS North	0	(No one was present. Left smoldering campfire unattended; must have cooked breakfast and left to go fishing.)
Vacas	17	GS North	0	(Left fire restriction notice on windshield.)
Vacas	18	Stumps	0	(No one present, trash left in fire pit.)
Vacas	19	Stumps North	2	Asked about stocking of fish.
Vacas	20	Dogwood	2	(Some trash, had ATV parked 5 ft. from Rio de las Vacas, some toilet paper at site)
Vacas	20	Dogwood	6	Doesn't like the ATV traffic, too much of it.
Vacas	20	Dogwood	11	Other vehicle = golf cart. (Left on ATVs when we showed up. Had propane, we left notice.) People showed up, commented about trash.
Vacas	21	Vacas U	6	Other activity = badminton.
Vacas	22	Anvil	5	Asked about mercury levels in fish and if it's safe to eat them. Inquired about meth lab that was found awhile ago.
Vacas	24	Boulder Bench	0	(People were sleeping in site. Didn't talk to them.)
Vacas	24	Boulder Bench	7	Don't blame you guys, a lot of people don't respect the outdoors. It's sad that the innocent people have to pay. Upset about staff at Fenton Lake (very rude and prejudice). Suggested we stock the river with fish.
Vacas	24	Boulder Bench	3	(People were fishing downstream and one was sleeping. Drive-by.)
Vacas	26	Vacas West	8	Didn't want to camp on Cebolla because of fences, wanted to be "right on river"
Vacas	27	Road 20L	0	(Sleeping in van or hammocks, saw backpacks.)
Vacas	27	Road 20L	5	They liked our program.
Vacas	27	Road 20L	0	Other vehicle = dune buggy
Vacas	28	Road 152A Split	4	Had propane stove outside, campers said that Cuba Ranger District signs only warned about charcoal fire. (We later saw the signs they were referring to and they were right. Cuba had forgotten to change their signs

Watershed	Complex #	Complex Name	# People	Other Remarks
				when we changed fire restrictions.)
Vacas	29	Open Camp	8	In regards to ATVs, take after Colorado on OHV trails and policy - post on trails, be able to have private trails. Don't mind staying on trails, just need to know which ones to be on.
Vacas	29	Open Camp	5	Complained about ATV noise. Asked about fish stocking.
Vacas	29	Open Camp	4	Used to graze cattle, "all for protecting it."
Vacas	29	Open Camp	11	(Had trash in fire pit and around site.)
Vacas	30	Vacas North	9	Asked about fishing. Car died after coming down hill (came down an ATV trail).
Vacas	32	Vacas Flats	2	(Saw 2 people short way down stream fishing.)
Vacas	32	Vacas Flats	12	Camped elsewhere and were just here exploring.
Vacas	32.5	(new site)	0	(Parked at a pullout along the road.)

Appendix F – New Educational Materials

Figure 14. Spanish translation of "Precious Water."

Figure15. Spanish translation of “Alien Attack.”

Figure 16. Spanish translation of “Too Many Trails.”

Figure 17. Spanish translation of “Keep It Clean!”

Figure 18. Spanish translation of “No Motor Vehicles Beyond This Sign.”

Figure 19. Spanish translation of “Use Established Roads, Trails, and Campsites.”

Figure 20. Spanish translation of “Going in the Woods.”

Figure 21. Spanish translation of “Why Is This Fence Here?”

Figure 22. Spanish translation of “Be a Natural Camper.”

Figure 23. Spanish translation of “Tree Torture.”

Appendix G – Movie Ad

Figure 24. Storyboard of ad shown in Century Rio 24 Theaters in Albuquerque, NM.

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