September 2, 2008

Ms. Julie Bain
Santa Fe Travel Management Planning
1474 Rodeo Road
Santa Fe, NM 87505

Re: Santa Fe National Forest Travel Management Proposed Action
   NMGF Doc. No. 12188

Dear Ms. Bain:

The Department of Game and Fish (Department) has reviewed the Santa Fe National Forest’s (SFNF) July 2008 Proposed Action for Managing Motorized Travel (PA), and associated maps and data provided by SFNF. The Department has commented multiple times on the Travel Management Rule at the national level and for individual National Forests in New Mexico, including the Santa Fe National Forest (12 January, 26 January, 7 September, and 21 December 2007). As stated in our previous comments, the Department strongly supports the ongoing efforts of the Santa Fe and other National Forests in New Mexico to implement the Travel Management Rule, which will limit the number of roads and trails on national forests open to motorized vehicle access.

The purpose of the Travel Management Rule is to determine the minimum road system necessary to provide safe and efficient travel, and for administration, utilization and protection of National Forest System lands. As stated on page 1 of the PA, the Travel Management Rule implements Executive Orders 11644 and 11989 regarding off-road use of motor vehicles on Federal lands. Executive Order 11644 states that its purpose is to “…ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands.” This Executive Order states that areas and trails shall be located to 1) minimize damage to soil, watershed, vegetation, or other resources of the public lands; and 2) minimize harassment of wildlife or significant disruption of wildlife habitats.

The PA states that many of the roads on the SFNF are poorly located and infrequently maintained, causing damage to soils, water quality, wildlife and wildlife habitats, and heritage resources. More roads exist than are needed to provide access for recreational use and forest management. Parts of the existing road system are not well maintained, which increases hazards to motorized and non-motorized users alike. The existing number and density of roads open for motorized use does not adequately provide for a non-motorized recreational experience in parts of the SFNF.
General Comments

The Department continues to be concerned with the Forest Service’s ability to enforce a “closed unless signed open” status for the Santa Fe and other New Mexico National Forests. We urge the SFNF to install open motorized road and trail signs as a result of this process, and to continue to seek additional funding to maintain signage, add additional law enforcement personnel (which will likely need to include ATV- or motorcycle-mounted patrols to apprehend violators), increase funding for educational outreach to the public, and seek additional funding to begin implementing physical road and trail closures for those roads and trails that do not become part of the system. Construction of physical barriers and enforcement of closures implemented through the Travel Management process will facilitate natural restoration of ecologically damaged roads and trails caused by excessive motorized use. Throughout your planning process we strongly encourage SFNF staff to be advised by the conservation guidance provided by the 2006 Comprehensive Wildlife Conservation Strategy for New Mexico (CWCS) (available on the web at http://wildlife.state.nm.us/conservation/comp_wildlife_cons_strategy/index.htm).

Table 2 on page 11 of the PA identifies 708 miles of existing roads causing harassment of wildlife and significant disruption of wildlife habitats, 551 miles damaging to soils, 76 miles damaging to riparian areas, and 1,247 miles of existing roads damaging watersheds and/or water quality. The Department requests that the Draft Environmental Impact Statement (DEIS) discuss what the proposed disposition of these roads are relative to the Proposed Action and DEIS alternatives yet to be developed. For example, are all of these roads being permanently removed from further consideration? We also request that the analyses of the potential for wildlife disturbance and wildlife habitat degradation be split out between the East and West sides of the SFNF, to be able to determine where the majority of these adverse effects are occurring. Because of the ecological damage that is occurring from these roads, the Department recommends that they be closed to public motorized use without further consideration of reopening in any of the DEIS alternatives, unless they are required for administrative purposes (e.g., Pipeline Road on West Side) or as the only access route to private lands.

The PA discussion of motorized trails does not attempt to quantify miles of unauthorized or user-created motorized trails and states that the SFNF does not have a complete inventory of these trails, although user groups provided digital data on 291 miles of trails that they ride that are not already a part of SFNF system. Because apparently a similar analysis of trails that are causing wildlife harassment and significant disruption of and damage to wildlife habitats has not been conducted, the Department requests that the DEIS analyze impacts of motorized trails in the same manner as done for roads as stated above. We also request that a separate analysis be conducted for motorized trails for the East and West sides of the SFNF, to enable us to determine where significant adverse effects to wildlife and wildlife habitats may be occurring.

Page 30 of the Travel Analysis Process Report identifies 198 perennial and 1,726 intermittent or ephemeral stream crossings by roads. On the SFNF and elsewhere in New Mexico, the Department is concerned about degradation of aquatic and riparian habitats because they are essential for the survival of a majority of wildlife species of New Mexico. The quantity and quality of these habitats state-wide have been significantly diminished. Of the 867 species of vertebrates known to occur in the state, approximately 479 (55%) rely wholly, or in part, on aquatic, wetland or riparian habitat for their survival (Biota Information System of New Mexico (BISON-M) database Version 2.5, 1994). A majority of the 96 species that are imperiled (i.e., listed by the state as endangered or threatened), are associated with these habitats (51 species, or 53% of the total). Almost half of the native fishes of New Mexico are either extinct or endangered. Therefore, the Department requests that the DEIS identify how many proposed motorized road and trail crossings occur and where they are located by alternative, so that we may better estimate possible effects to important riparian and aquatic habitats and Species of Greatest Conservation Need, as identified in our CWCS.
Proposed Forest Plan Amendment
Appendix 3 outlines proposed amendment language to the SFNF Forest Plan, which will be needed as a result of implementation of the Travel Management action. With regard to Management Areas with wildlife as an emphasis, automatically defaulting to the upper end of the range of road density allowed in the current SFNF Forest Plan will generally not fall within the Department’s minimum road density recommendations for big game of less than 1.0 miles per square mile for elk calving and mule deer fawning habitat, and less than 1.25 miles for elk and mule deer summer and winter range. Areas of particular concern relative to this PA include elk calving and summer range 1) around the rim of the Valles Caldera outside of the Valles Caldera National Preserve; 2) to the south and east of the San Pedro Parks Wilderness Area; 3) habitats between the Valles Caldera and San Pedro Parks Wilderness; and 4) on the northwest and southwest sides of the Chama River Canyon Wilderness.

Because of the potential adverse effects to wildlife from loss of effective habitat and habitat degradation from motorized use of trails as well as roads, the Department requests that motorized trails be factored into the calculations for road density standards as identified in the SFNF Forest Plan (see further discussion of loss of effective habitat in West Side comments below). We believe not doing so fundamentally underestimates adverse effect to wildlife, and precludes the ability to estimate effects of off-road motorized use on elk, mule deer, black bears, turkey, and other wildlife.

We further request that motorized road and trail density standards replace road (only) density standards in the upcoming SFNF Forest Plan rewrite.

East Side General Comments
The Department appreciates the SFNF’s consideration of our 26 January, 7 September and 21 December 2007 comments recommending reductions of road densities in certain areas and several specific road closures. In general, the Department is pleased with the proposed minimum motorized system for the East Side, and believes that the PA, if implemented, will minimize adverse effects to wildlife and important wildlife habitats from motorized vehicle use.

East Side Specific Recommendations
- Within the Osha Creek drainage south of Elk Mountain, FR 92, 92P and associated spurs are parallel travel routes that appear to be redundant. Multiple loops are formed by these routes as proposed. Loop roads are particularly difficult for conducting effective wildlife law enforcement activities. We therefore request that this network of roads be reduced.
- FR 635, which is mostly on private lands northeast of Morphy Lake, appears to cross Santiago Creek numerous times. Santiago Creek is occupied by Rio Grande cutthroat trout (Oncorynchus clarki virginalis)(RGCT), and approximately 4.8 kilometers of the creek have been identified in the Long Range Plan for the Management of Rio Grande Cutthroat Trout in New Mexico (NMDGF 2002) as a Reserve Conservation Population. This population should be protected from habitat disturbance and degradation. Current use of this travel route appears to be primarily by private land owners. Increased motorized use and sedimentation may lead to a decline in RGCT habitat. The Department recommends that this route be designated for administrative use only, with motorized access provided to private landowners as needed. Additionally, it is our understanding that the SFNF purchased a parcel of land east of Gascon Point to be used as an access point for non-motorized recreation. A trailhead was to be developed in the Rito Garcia drainage in conjunction with this purchase. Currently, motorized vehicles (primarily ATV’s) are illegally accessing land near or within the boundaries of the Pecos Wilderness in this area. Identifying FR 635 and associated spurs as open to public motorized vehicle access will likely increase illegal use in this area, creating increased cumulative effects to the Rio Grande cutthroat trout population in Santiago Creek.
- FR 79 to Canada de los Alamos and many roads on the west end of Glorieta Mesa are proposed to be open only to vehicles legal on paved roads. These are mostly unimproved dirt roads. If the intent is to close these roads to
ORVs under 50 inches in width ("dirt" bike motorcycles and ATVs), it is not clear that the state will be able to assist with enforcement. By state law, an OHV, if registered properly and operated by persons either over 18 years of age or supervised by an adult, can travel on public non-paved roads and trails open to other motorized vehicles. Please discuss the intent of this designation in the DEIS.

- FR's 417, 417B and 417BA north of Pacheco Canyon in the Pecos Ranger District is proposed to be open to vehicles <50" (ATV's) from April 15 to May 15 only, to allow spring turkey hunters motorized access for this period. In the Department’s 12 January 2007 comments to the SFNF, the Department requested that the SFNF consider hunting-related OHV activities similar to any other recreational OHV activity that occurs on USFS lands and apply appropriate restrictions equally. Because of the dense road/trail network that would be opened for this activity in Section 11 between Pacheco Canyon and Rio del Medio, and the intent of the Travel Management Rule to limit motorized road and trail densities, the Department recommends that this dense trail network not be opened to motorized use for the spring turkey hunt. Opening one main stem road should be considered, but we again reiterate our recommendation that no special motorized concessions be made for non-disabled hunters. Opening this dense road/trail network to motorized vehicle would likely decrease opportunities for a high quality hunting experience in this area.

West Side Comments

Inventoried Roadless Areas
The Department has stated in our previous comments to the SFNF on Travel Management that we do not support further road building, and by inference, no motorized access within Inventoried Roadless Areas (IRAs). The Department appreciates the SFNF excluding most motorized trails from IRAs on the West Side. IRAs offer the highest quality hunting opportunities outside of designated Wilderness Areas, as discussed in our report Wildlife, Habitat and Hunting: New Mexico’s Roadless Areas (see web link above), which was submitted in support of the May 2006 Petition of Governor Bill Richardson for State Specific Rulemaking to Protect Roadless Areas In New Mexico (Petition). As stated in the Petition (p. 1, footnote 1) “The submittal of this petition…underscores New Mexico’s determination to use all available means to conserve existing inventoried roadless areas…for their watershed, hunting and fishing, recreation, and other roadless values.” Because of the similar adverse effects of less than 50 inch width ORV use on motorized trails (as compared to roads) that can cause wildlife disturbance and habitat degradation, it is the Department’s position that authorizing motorized trails within IRAs undermines the spirit and intent of the initial U.S. Forest Service Roadless Area Conservation Rule of 2000, and the desires of Governor Richardson and the State of New Mexico to protect these areas as identified in the Petition. Therefore, we strongly request that Trail 105 through the Polvadera IRA not be authorized for motorized use. Precluding this trail from motorized use will greatly increase the potential for quality hunting, maintaining intact wildlife habitat, and solitude experiences within this IRA.

Elk and Mule Deer Loss of Effective Habitat from Motorized Use
Page 25 of the PA states that to provide opportunities for managed motorized recreation, the SFNF proposes to designate 247 miles of trails for motorized use. One hundred and five miles would be for ATVs and motorcycles, 142 miles would be for motorcycles only. Additionally, approximately 2,040 miles of roads, some of which are coincident with trails, would also be available for use by ATVs and motorcycles, for a total of 2,287 miles available for use by ATVs and motorcycles. The PA would designate approximately 71 miles of unauthorized trails, and convert 49 miles of closed forest roads, 13 miles of previously decommissioned roads, and 7 miles of non-system roads to authorized motorized trails. The other 103 miles proposed for designation are existing forest trails. Most of the motorized trail designations appear to be for the West Side.

The PA acknowledges the potential adverse effects of motorized vehicles relative to wildlife disturbance and harassment, and the adverse ecological effects of roads and trails to both aquatic and terrestrial wildlife habitats from
erosion, sedimentation, pollution, and other impacts. Page 31 of the Travel Analysis Process Report (TAP) recognizes that elk and other large mammals avoid roads, with avoidance distances up to 200 meters.

In our past comments, we have referenced two Department reports that document this loss of “effective” habitat from motorized routes on large game animals such as mule deer and elk:
1. Habitat Fragmentation and the Effects of Roads on Wildlife and Habitats on the web at http://wildlife.state.nm.us/conservation/habitat_handbook/EffectsofRoads.htm; and

Both of these reports identify multiple studies that have documented mule deer and elk avoidance of roads. This reduced utilization of habitat represents a loss of effective habitat for feeding, reproduction and resting activities, and causes landscape-level habitat fragmentation, depending on the distribution of motorized routes across the landscape and traffic volume. We believe that motorized trails, depending on the volume of motorized use, also create loss of effective habitat to large game animals such as mule deer, elk and black bears.

In support of this assumption, Wisdom et al. (2004; in Heffelfinger et al. 2006) observed that on trails, ATV use has a greater impact on elk avoidance behavior than does hiking or horseback riding. Preisler et al. (2005) observed that elk appeared to respond at relatively long distances (>1000m) to ATVs, and that the estimated probability of flight appeared to be higher when elk were closer to the ATV routes, even when the distance to an ATV was large. Because “dirt bike” motorcycles are louder and generally more abundant on motorized trails on the West Side, we believe motorcycle disturbance to elk and possibly mule deer are likely causing similar or greater adverse effects. Therefore, because of the extensive network of motorized trails that are proposed for authorization in the PA, and the potential for wildlife disturbance and wildlife habitat degradation from ATV and motorcycle use of trails, the Department requests that the DEIS analyze the potential for disturbance to wildlife and wildlife habitats from OHV use of trails as well as roads.

The Department requests that the selection of motorized trails focus on trails that closely parallel existing Forest roads authorized for use by OHVs over 50 inches (cars and trucks) to concentrate noise and visual disturbance impacts across the landscape. We further request that the SFNF deemphasize selection of motorized trails that occur in more isolated, higher quality habitats, to minimize disturbance to wildlife.

The Department also requests that a traffic volume analysis be conducted within the DEIS to estimate the quantity and distribution of motorcycles, ATVs and full-sized OHVs that use the SFNF on both roads, trails and in areas, including analysis of user trends, with separate analyses for the East and West sides. We believe that this level of quantitative analysis will be necessary to determine the magnitude of direct, indirect and cumulative effects of implementing the Travel Management action for both sides of the SFNF, particularly relative to the concentration of traffic on fewer motorized roads and trails as compared with current conditions.

Perry and Overly (1977; in Heffelfinger et al. 2006) found motorized vehicle use through meadow habitats reduced deer use, whereas motorized use through forested habitat had less effects on deer use. On the West Side, apparently many meadows habitats such as at the Evans-Griffin Place are proposed to continue to have motorized access through them. The meadow at Evans-Griffin likely would support elk caving in the absence of motorized use. We are concerned that the authorization of motorized trails through meadow habitats outside of the Valles Caldera National Preserve not restrict the capacity of these meadows to support ungulate reproduction. Therefore, the Department requests that the DEIS contain an analysis of the cumulative effects of motorized access for each alternative to meadow habitats. The alternatives could consider extended seasonal closures for certain motorized trails and roads to protect the elk calving period of 15 May to 15 June.
To estimate lost effective habitat to elk and mule deer from motorized use of roads and trails, we conducted a buffering exercise using GIS. Using SFNF data from Map 9 Proposed Open and Closed Routes West Side, we buffered 200 meters outward from centerline of each road and trail proposed for motorized use in the PA. An area analysis was also conducted using GIS. Assuming a 200 meter avoidance zone around each motorized road and trail, we estimate a loss of 264,317 acres of effective habitat for the West Side. This analysis and an assumption of the associated volume of motorized use occurring on these motorized routes indicates that a high degree of habitat fragmentation and loss of effective habitat is occurring outside of the Valles Caldera National Preserve (VCNP), and San Pedro Parks and Chama River Canyon Wildernesses. The density of motorized roads and trails proposed in the PA creates small island patches of habitat between motorized routes that are likely not suitable for maintaining resident large game animals such as elk, mule deer and black bears. The Department seeks to increase quality big game hunting opportunities outside of VCNP and both Wilderness areas, to meet local landowner, stakeholder and sportsmen desires. Therefore, we believe that additional motorized road and trail reductions are necessary for the West Side to meet this goal. We submit this map for your review, and request that a similar analysis be conducted in the DEIS for each alternative. Please compare your alternatives analyses with our recommended motorized road and trail densities within big game habitat of less than 1.0 miles per square mile for elk calving and mule deer fawning habitat, and less than 1.25 miles for elk and mule deer summer and winter range.

Because of the higher density of motorized roads and trails proposed in the PA for the West Side as compared with the East Side, and based on NEPA case law requiring consideration of a range of alternatives, we request that the DEIS contain alternatives that propose motorized road and trail densities less than what is proposed in the PA, to meet wildlife and habitat needs. These alternatives could be considered “wildlife-friendly” alternatives.

**Jemez Mountain Salamander**

Climate change and associated increasing fire frequency and intensity are likely the greatest threats to the persistence of the State Endangered Jemez Mountains Salamander (Plethodon neomexicanus) (JMS). The PA (p. 21) acknowledges that larger systems of motorized roads and trails increase the risk of human-caused fires. Motorcycles, ATVs and full size OHVs have been known to unintentionally start wildfires. **Because of the potential for wildfire starts by OHVs within and near JMS Essential Habitat, the Department requests that the DEIS contain an analysis of how many wildfires have been started on the SFNF, within Region 3, and nationwide on National Forests by “dirt bike” motorcycles, ATVs and full size OHVs.** To put into context, this analysis could compare OHV fire starts against other man-made sources of fire starts such as chainsaws, and natural wildfire starts by lightning.

We conducted a GIS analysis of motorized road and trail lengths within JMS Essential Habitat polygons. Using SFNF existing condition data, our analysis identified approximately 124.5 miles of motorized roads and trails in Essential Habitat. We estimate that the PA proposes to authorize 57.3 miles, representing a removal of approximately 46% of motorized roads and trails in Essential Habitat open to motorized use. With the physical closure of closed motorized routes and sufficient enforcement, we believe this will benefit JMS conservation by allowing previously motorized roads and trails to naturally revegetate. We believe this action may reduce habitat fragmentation significantly for JMS, and request that no DEIS alternatives consider opening additional routes within Essential Habitat.

The following recommendations reference the Cooperative Management Plan for the Jemez Mountains Salamander (Plethodon neomexicanus) On Lands Administered by the Forest Service (Plan), which was developed by the multi-agency (NMGF, USFS, USFWS, and USGS) Endemic Salamander Team in 2000 to preclude the need for federal listing of the endemic JMS. The Plan is the document used to guide management actions and mitigation for projects on Forest Service lands that could have adverse effects on JMS conservation.
1. “Crosstown Trail”
The “Crosstown” motorcycle trail is apparently an unauthorized, user-created trail that occurs between two JMS Essential Habitat polygons in Priority Survey Area Number 3 (Plan Figure 1). According to the Plan, six priority survey zones were identified within the greater JMS Conservation Area. At least portions of these priority survey areas likely will merit reclassification as Essential once surveys are conducted (Plan p. 14). The Plan states that surveys to determine occupancy are required when habitat altering actions (Category 1 and 2 activities) are proposed (p. 18). The Department considers off-road OHV use to be a Category 1 activity, which is defined in part as: 1) ground disturbance such as excavation, churning, compaction, or any activity that reduces interspaces and subsurface channels; and 2) vegetation modification to the extent that ground surface microclimate is made drier or otherwise altered through increased exposure to sun and wind (p. 15). If surveys determine that JMS occur within and/or near the Crosstown Trail system, the Department believes that the Endemic Salamander Team needs to be consulted for further recommendations.

2. “Ridge Trail”
The Department supports the SFNF decision to remove this motorcycle trail from the PA. This trail is apparently user-created and unauthorized, causing significant damage to slopes from erosion, and occurs within JMS Essential Habitat. Essential Habitat is defined in the Plan as having a management objective of conservation and sustainability of the JMS and its habitat. Actions that adversely impact the JMS will not generally be conducted within the Essential Zone, and no Category 1 or 2 activities will occur in the Essential Zone without timely written review by the Endemic Salamander Team (Plan pp. 16-17). Because of the ecological damage occurring from this trail network, and adverse effects to JMS Essential Habitat, the Department recommends that this trail system not be considered for authorization in any of the DEIS alternatives.

3. Trail paralleling Forest Road 144
The Department supports the exclusion in the PA of the northern half of the motorcycle trail that starts at NM Highway 4 in T19N, R3E, and continues northward, paralleling FR 144 to T20N, R3E, Section 30, where it rejoins FR 144. Earlier maps show this motorcycle trail continuing to parallel FR 144 northward through a Jemez Mountain Salamander Essential Habitat polygon. The Department requests that this northern portion of the trail through the JMS polygon not be reconsidered for opening in any of the DEIS Alternatives.

4. ORV trails on Cochiti Mesa
A network of unauthorized roads and trails occur on Cochiti Mesa within JMS Essential Habitat that are causing ecological damage. The Department requests that the SFNF prioritize developing easements with private landowners in the area to reduce OHV damage to the extent possible.

Rio Grande Cutthroat Trout
- The Department requests removal of motorized Trail 273 down Canoncito Seco Creek north of the Valles Caldera. There is a relatively recent reliable report of cutthroat trout in this drainage. Although not currently a Conservation Population as defined by the Long Range Plan for the Management of Rio Grande Cutthroat Trout in New Mexico (NMDGF 2002), genetic studies need to be conducted to determine if this population would qualify for special status.
- The Department requests removal of motorized Trail 107 that crosses the South Fork of Polvadera Creek, which contains a Core Conservation Population of RGCT.
- Although not a Conservation Population, cutthroat trout do occur in upper Peralta Creek. The Department requests that no motorized crossings occur on this upper reach of Peralta Creek where cutthroats occur.
- The Department requests the opportunity to maintain access to the Pipeline Road between FR 144 and FR 157J for management purposes.

Additional West Side Recommendations
- We recommend closure of FR 188D and FR 188B, where excessive erosion is occurring to motorized use of side trails accessed by these roads. A trail or 2-track that connects FR 188D and FR 280 is particularly bad,
and is causing habitat degradation within Essential Jemez Mountain Salamander habitat. FR 188D and FR 188B do not appear to be used for access to private land, and closure of these roads would increase the potential for quality hunting opportunities outside of the Valles Caldera National Preserve.

- Proposed motorized road and trail densities are still high throughout the Coyote Ranger District, particularly in Management Area E east of San Pedro Parks Wilderness and Management Area R west of the Valles Caldera. The Department recommends eliminating more motorized roads and trails within Management Area E and R to meet Forest Plan goals.
- The Department requests that the road to the Bluebird Mesa Wildlife Management Area (WMA) off of Forest Road 533 (Cuba Ranger District) be designated an administrative road only. The Department would like for conservation groups such as the Wild Turkey Federation to be allowed to use this road during organized maintenance projects.
- Trail 113 located between Forest Road 89 (Cochiti Canyon Road) and Forest Road 289 (Dome Road) is proposed to be open for motorcycles seasonally. The Department recommends making this a non-motorized trail.
- The Department would like to continue the special use permit with the SFNF to access San Gregorio Reservoir for trout stocking. Please maintain the access road to the lake as an administrative road.
- The Department recommends motorized route closures on Joaquin Mesa including FR 488 at the junction of Forest Road 337G to the SFNF and Jemez Pueblo boundary, and FR 537 at the junction with FR 558. This would eliminate FR 488KA, 488M, 488ND, 488NB, 537, 537G, motorized trails 488J, 488JA, and the loop road created by the joining of FR 558 to FR 488. This area contains good turkey, mule deer and black bear habitat. Populations of these species will benefit with no motorized road or trails in the area.

The Department appreciates the opportunity to comment on the Santa Fe National Forest Travel Management Proposed Action, and we look forward to commenting on the DEIS. Should you have any questions regarding our comments, please contact Mark Watson, Habitat Specialist, at (505) 476-8115, or <mark.watson@state.nm.us>.

Sincerely,

Bruce Thompson
Director

MW/MLW
Attch: (1) Map

cc: Governor Bill Richardson (Attn: Sarah Cottrell)
Joanna Prukop (Cabinet Secretary, Energy, Minerals and Natural Resources Department)
Wally Murphy (Ecological Services Field Supervisor, USFWS)
Bob Jenkins (Deputy Director NMGF)
R.J. Kirkpatrick (Wildlife Management Division Chief, NMGF)
Kirk Patten (Native Cutthroat Trout Biologist, NMGF)
Larry Kamees (Small Game Biologist, NMGF)
Barry Hale (Deer Biologist, NMGF)
Stewart Liley (Elk Biologist, NMGF)
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Phil Howes (Pecos District Conservation Officer, NMGF)
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Mike Martinez (Jemez District Conservation Officer, NMGF)
Brady Griffith (Cuba District Conservation Officer, NMGF)
Eric Chang (Espanola District Conservation Officer, NMGF)
Mark Watson (Conservation Services Habitat Specialist, NMGF)

Literature Cited


New Mexico Department of Game and Fish. 2002. Long Range Plan for the Management of Rio Grande Cutthroat Trout in New Mexico. New Mexico Department of Game and Fish, Fisheries Management Division. Santa Fe, New Mexico. 64 pp. + appendices.

