

Coconino Trail Riders Proposed Alternative for Single Track Motorized Trail Management on the Peaks and Mormon Lake Ranger District of the Coconino National Forest

Introduction:

This document proposes to designate approximately 100 miles of existing single track trails in the Coconino National Forest for multiple-use. It is presented in a form that can easily be adapted to fit any NEPA "Alternative" format.

Assuming that the Purpose and Need will be limited to complying with the U.S.D.A Forest Service's Travel Management Rule (TMR), this alternative examines only the impacts and values associated with motorized recreation on Forest roads and trails.

If staff chooses to identify alternatives by "theme," or "emphasis," this Alternative would be the one which attempts to address the motorized recreational opportunities on the Coconino National Forest.

"Multiple-use" as defined in this alternative, includes motorcycles, equestrians, hikers, and bicyclists. "Single track" is defined as a trail of three feet or narrower in width.

This Alternative was prepared by the Coconino Trail Riders (CTR). CTR is a 501(c)(3) incorporated organization of motorcycle single track enthusiasts. CTR currently works with the Peaks and Mormon Lake District of the Coconino National Forest to build and maintain motorized trail, and occasionally non-motorized trail. CTR promotes responsible recreational uses of federally managed lands and promotes family events and fun rides.

We are formally requesting that proposals contained herein be adopted into one of the alternatives in the Coconino National Travel Management Planning Process.

The agency's TMR points out that OHV recreation is a legally protected use of USFS lands. The TMR neither mandates nor implies that any trails be closed. Therefore we urge Forest staff to examine the research cited, and seriously consider incorporating the substance of this alternative as it stands.

Brief Description of the Trails Proposed for Designation

The trails addressed in this Alternative are generally located in the Peaks District of the Coconino National Forest. The Trail Descriptions section below contains maps and a complete description of most of the loops and trails we are requesting be included in the Transportation Rule. Many of these trails have been used and enjoyed for over 30 years.

The three trail systems proposed are the Around the Peaks Loop, Airport Loops and the Wing Mountain Loop. Sections of the Around the Peaks Loop have been in existence for more than thirty years and were used as part of a Forest Service permitted enduro race, (a type of competitive motorcycle event), in the early 1980s. As part of that event, new routes were suggested along the east side of the San Francisco Peaks by Forest Service Personnel in order to remove the event from the Waterline Road: this section is commonly referred to as the Challenger Trail. This system ranges in difficulty from

moderate to challenging. The Wing Mountain Loop and Airport Loops arose out of the need for shorter loop options adjacent to neighborhoods surrounding Flagstaff, as riders do not always have the time to commit to an all-day ride such as the Around the Peaks Loop. Wing Mountain is at least 20 years old, and the Airport Loops have been around for at least 10 years, but probably longer. It is important to note that the users who created these trails chose to ride the same routes time and again partially out of a sense of responsible use of the resource ("Tread Lightly"), but also because these trails have met the demand for motorized single track riding opportunities to date qualitatively and nominally quantitatively.

Travel Management Rule

Off-Highway Vehicle (OHV) usage has grown by over 100% in the last two decades. In the past unrestricted cross-country OHV use was allowed on U.S. Forest Service lands unless specifically restricted for a particular defined area. On November 9, 2005 the U.S. Forest Service (USFS) amended 36 CFR Parts 212, 251, 261, and 295 "Travel Management; Designated Routes and Areas for Motor Vehicle Use." This rule requires the Forest Service to designate which roads and trails are open to motor vehicle use.

The Rule points out that OHV recreation is a legally protected use of USFS lands. Specifically the Rule states that "For many visitors motor vehicles represent an integral part of their recreational experience. People come to National Forests to ride on roads and trails in pickup trucks, ATVs, motorcycles, and a variety of other conveyances. Motor vehicles are a legitimate and appropriate way for people to enjoy the National Forests – in the right places and with proper management." The rule also states that National Forests are managed by law for multiple use. They are managed not only for the protection of vegetation and wildlife, but also for timber, grazing, mining, and outdoor recreation. Those uses must be balanced, rather than giving one activity preference over others.

In order to comply with the Rule, the Coconino National Forest initiated a forest-wide travel analysis in 2006. The intent of the travel analysis process was to help the forest determine the minimum transportation system necessary to provide safe and efficient travel and for administration, utilization, and protection of NFS lands (36 CFR 212.5(b)). The forest hosted several open houses in northern and central Arizona during the fall of 2006 and attended additional meetings since then, as requested, in order to collect ideas regarding motorized forest travel from local citizens, forest users, State, county, local, and tribal governments and other Federal agencies.

Proposed Alternative

Actions Proposed in this Alternative:

1. Designate all existing single track shown on the maps provided, as open to motorcycles, bicycles, equestrians, and hikers. Convert sections of unclassified road that mapped routes use to classified multiple-use motorized single track trail.
2. Designate all roads shown on the map, as "mixed use," or open to unlicensed motorized vehicles.

3. In coordination with the state SHPO, and pursuant to any MOU or other agreement, ensure the designation is in compliance with the Antiquities Act.
4. Develop and implement a monitoring program, as detailed in the Monitoring and Maintenance section below.
5. Set the existing trail condition as the baseline for the monitoring program.
6. Develop a uniform procedure to follow in the event that a measured negative impact becomes unacceptable, as detailed in the Monitoring and Maintenance section.
7. Develop a formal agreement with CTR to provide the skills and labor resources to reroute or otherwise mitigate any section of trail where there is a specific natural or cultural conflict (in a timely manner, so as to provide for reroutes that may be needed as a result of the cultural survey).
8. If there are any species of plant, avian, or animal listed as threatened or listed as endangered, the specific steps for protection as set forth in the recovery plan for that species will be followed. Specifically, for the Mexican Spotted Owl and other T&E habitat, this alternative would adopt any protocols developed for the Fort Valley Restoration Project. It should not necessary for the Forest to expend further staff resources on developing their own standards for the recovery of these species.
9. Monitor all trails and areas closed to motorized use for "environmental reasons" exactly as the motorized trail areas, and review the closures on a periodic schedule with public input and communication.

For the purposes of this alternative, "Baseline" does not mean the standard to be followed. It means it is the starting point because these trails have been in place for at least 10 years, and some for up to 30 years. The trails do provide a feasible baseline model for the designated trail system. It is likely that some trail segments will fall below agency standards. This alternative provides direction and funding suggestions to bring the entire system up to standards.

Our objective is to have an environmentally sustainable, enjoyable single track trail system. The USFS Travel Management Rule states that user created trails can be evaluated for inclusion in the transportation plan using objective criteria. Providing OHV recreational opportunities for a steadily increasing population is a stated primary goal of the new Rule. This Alternative attempts to meet this goal.

The sections below provides a brief description of how this Alternative addresses certain of the planning issues and other criteria that will be used to evaluate existing roads and trails that would be included in the transportation system.

Administration

Implementation of this decision will be a large undertaking. CTR understands that there will be much to do when the Travel Plan is final. This alternative suggests formalizing, as much as possible, partnership arrangements into the decision record.

The importance of partnerships with various stakeholders has been well documented by the Forest Service. Partnerships with recreational groups often add a multiplier effect as volunteer hours are leveraged with the various grant and assistance programs that are available.

There are a wide variety of both formal and informal agreements available to the Coconino National Forest enabling such partnerships. And fortunately, there are several clubs and organizations in the Coconino National Forest that have expressed interest in or are already assisting .

CTR believes it is important to formalize, as much as possible, such partnerships into the planning document, Record of Decision and implementation plan.

In addition to formalizing partnership arrangements into the decision, we suggest the CNF Planning Team develop direction to train staff on how to apply for and utilize the various grant programs, assistance agreements and other resource opportunities available. It is appropriate that such direction would be included in the Record of Decision.

This alternative would also include direction to formalize a MOU or other similar agreement with CTR that would establish the monitoring and maintenance program outlined in the section below. The program would be for the maintenance of the trails proposed in this alternative. The CNF has maintained only a tiny percentage of the recreational routes on the forest. The recreating public and CTR members have maintained them for years. With the approval of our alternative, these informal maintenance activities will be incorporated into the administrative management of the trail system.

Monitoring and Maintenance

We recommend that the present, existing condition of each trail be used as the baseline (starting) condition for monitoring. Priority site specific actions planned to bring the trails up to FS standard will be determined by the monitoring.

The specific subject areas to monitor and the standards to be met will be determined by the Coconino National Forest. The following recommendations are to be included for the single track trails in this alternative.

- 1) Overall Trail width (keep to 3 feet or less on linear sections. A larger "trail prism" may be necessary for intersections);
- 2) Soil movement (per Forest Service Best Practices standards);
- 3) Stream sedimentation at water crossings (per EPA standards for non-point pollution sources);
- 4) Appropriate user behavior (staying on trail).
- 5) Rate of change from the baseline (tread width and location). The indicators of excessive change would be user-created bypasses, and/or items 1, 2, and 3 exceeding standards.
- 6) If there are any species of plant, avian, or animal listed as threatened or listed as endangered, the specific steps for monitoring are set forth in the recovery plan for that species, and those monitoring actions will be followed.

Actions to address below-standard monitoring data:

1. Identify the exact measurement that is unacceptable.
2. Identify the cause.
3. Identify the exact section of trail that is below standard.

4. Select a solution: Tread repair, structures, or reroute, as appropriate.
5. Implement the solution on-the-ground.
6. Monitor the repair, to ensure the site has been brought up to standard.

Public safety

On shared-use routes such there is a slight possibility of vehicle collision. The safety advantage in having the motorcycles using single track instead of roads is the reduced potential for auto-cycle collisions.

There are inherent dangers to most forms of outdoor recreation. Off-road motorcycling is no different. The most serious danger is due to falls and possibly crashes into trees. There is a minor chance of collisions with other riders, but as noted above, the occurrence of such accidents on remote trails away from populated areas, is rare. Finally there is a low probability but high consequence danger to being struck by lightning. This alternative encourages safety and seeks to mitigate these dangers in several ways:

- Encouraging riders to stay within their riding skill and endurance limits and not pushing weaker riders to take on more difficult trails than they can handle
- Wearing protective gear including helmets, goggles, gloves, special boots, knee guards, elbow guards, padded pants, and often chest and shoulder protectors.
- Designating and maintaining a system of trails ranging from easy to most difficult so riders can gradually improve their skills by practice
- Maintaining trails to remove dangerous obstacles and conditions.

Adding more trails will reduce the chances of collisions, and, multiple trails and routes prevents overuse of the trails.

Socio-economic issues

Recreation research reveals that leisure activities can be rated according to quality, which is defined as an overarching quality-of-life benefit to the participant. Very high quality leisure activities, called “serious leisure” by researchers in the field, require a considerable number of complex factors which, in combination, provide satisfaction, personal growth, and fulfillment to the participant. (Stebbins, R.A. 1982, “Serious Leisure, A Conceptual Statement,” *Pacific Sociological Review*, 25, 251-272).

Since Stebbins’ early conceptual statement, the ideas around “serious leisure,.” and the associated improvements in quality of life and health, has been extensively explored by the leisure academy, resulting in a large body of literature on the sociology of complex hobbies.

Another apt description of serious leisure activities is “...a social and emotional interactive process which deconstructs the social and historical biographical inequalities of lived experience to create *with-equal other social human bond*” (emphasis added). (Podichak W., 1991).

In reviewing the literature, it can be noted, then, that there are a number of essential qualities which identify serious leisure:

- High levels of emotional commitment,
- complex planning and advance preparation,

- learning new skills,
- self-discipline to practice skills, with the goal of steadily improving performance
- operating within relationships with others (the social reference point),
- success in familiar and in unfamiliar social settings,
- bonding experiences, with family members and companions
- problem-solving, ranging from very simple to highly complex and potentially life-saving,
- goal-oriented challenge, and a moderate degree of personal risk,
- pro-active interest in physical condition, particularly to overcome a disability,
- a sense of accomplishment when the adventure is completed.

To illustrate further, described here are some of the specific recreational experiences associated with single-track trail and logging road motorcycle riding, as described by the participants:

- Riding difficult trails and roads requires a lot of skill. It is exhilarating to negotiate trail sections at speeds that maximize skill usage, much like skiing difficult terrain or rock climbing. It is very satisfying to increase one's skills by riding more difficult trails with fewer mistakes, falls, and engine stalls, etc. These riding skills involve dexterity, balance, hand-eye coordination, throttle control, and mental preparedness.
- We enjoy getting away from cities and jobs to the spectacular scenery, solitude, rugged terrain, volcano features, heavy forest vegetation, cool and moist summertime weather, and wildlife of the mountain environment. Riding trails allows us to experience much more of the environment than possible by other modes of transportation. Off-road motorcycle riding yields a strong sense of accomplishment and relaxation and is an excellent way to refresh ourselves and relieve the tensions of everyday life and work.
- We need a variety of trail types ranging from easy, wide, level, smooth trails through the woods for beginner and intermediate riders to steep narrow off-camber trails with rocks, ledges, roots, ruts, switchbacks, etc for the most advanced riders.
- We enjoy the comradeship with our fellow riders. The trail rides are often the only time we see each other. We usually spend some time during the ride discussing riding techniques and bike setup to help our riding abilities.
- Trail riding is physically demanding. We get a lot of exercise in a days ride.
- Many of us also enjoy combining motorcycle outings with camping and fishing.

Since the quality of a forest recreation experience is measured in hours, and the average speed of a motorcycle on easy single track trail could be as fast as fifteen MPH and on a difficult trail as slow as three MPH, this alternative proposes to provide 100 miles of trail or as much as 33 hours of recreation opportunity.

Our trails were created to provide a good recreational riding experience and generally not to get from Point A to Point B as fast as possible.

Recreation User Conflict

A synthesis of the literature on user conflicts on multiple-use trails, sponsored by the Federal Highway Administration in 1995, tells us that user conflict is not due to any “inherent incompatibility” between different trail activities. It is a perceived “goal interference” on the part of the offended trail user. For example, a hiker who dislikes motorcycles is in no physical danger, but his *expectation* of a quiet time in the forest is thwarted when he meets a motorcycle rider on the trail. Thus, according to the research, the key element for the elimination of genuine, heartfelt conflict for any given individual is to make sure that every person who uses the trail system knows what to expect, and that the resulting experience is consistent with that expectation (Moore, 1995)

Given the long history of motorized vehicle use in the area forest visitors who do not use OHV’s are used to seeing them. In addition, a large percentage of the Coconino National Forest is currently closed to OHV use. Most forest visitors know where to find non-motorized experiences. Recreation User Conflict is expected to be minimal.

The trails under discussion here were created to provide recreation and not access to any particular forest feature. Riders typically access the trail networks via major forest roads. The trails are primarily used by off road motorcycles and mountain bikes. Few other forest visitors use the trails for recreational purposes.

Non-motorized users of the trail system benefit because the OHV grant and funding programs allow for a higher level of maintenance, constructed staging areas, trailhead developments and signage.

There is a potential conflict between hunter and non-hunter use of the trails during hunting days. Motorcyclists and mountain bikers appear to voluntarily refrain from riding on peak hunting times.

Conflicts among uses of USFS lands

There may be some conflicts with commercial logging projects or fuels management projects. Recreational trails are sometimes affected by these projects. These projects should be coordinated with recreational staff to mitigate impacts to the trails.

Economic issues

While economics is not in the criteria set by the Coconino National Forest, we believe this is a process error which will harm the successful outcome of this plan. The reason we believe this is that the TMR directs managing units to use the NEPA process to implement the Rule, and in both the NEPA statute and in case law, economics is a necessary component in NF decision-making. Therefore, the absence of any economic information could be a significant weakness in the document.

Economic impacts proved to be the most difficult issue to quantify. CTR’s research is ongoing regarding economic impacts of the decision and we hope to supplement this section in the near future.

Assumptions about OHV recreation and recreationists

The OHV community has often received a disproportionate amount of negative press and public criticism due to stereotyping all OHVers with those few individuals that may not fully respect our public lands or abide by the rules and common courtesy required for its use. While every recreational user group includes individuals who are either uneducated or uncaring about the conservation of our public lands, opposition groups have been effective in portraying the image to the general public that all OHVers are indifferent, brutal recreationists intent on tearing up our scenic back country. Or that an OHV as a mode of recreation is uniquely destructive to the back country, is out of sync with experiencing the natural environment and should be banned from off-road use on most public lands.

The truth is that the sustainability of our natural environment is of concern to members of virtually all recreational user groups. From hikers to mountain bikers, horseback riders to OHVers, each group and each individual relies on National Forest lands to provide recreational opportunity and enjoys these public lands for their beauty and solitude and understands the importance of preserving these attributes. After all, the natural beauty, wildlife and solitude are the reasons we all are here.

That concern led CTR to conduct an extensive search for scientific studies of the effects of OHV use on trail conditions, waterways, and wildlife. Paraphrased excerpts are presented below.

Research refuting the assumptions

However, many professional studies refute these generalizations. For example in a 2004 report, "Effects of Off-Road Recreation on Mule Deer and Elk", prepared by the Forest Service Pacific Northwest Research Station, at the Starkey Experimental Forest and Range in northeast Oregon measured flight responses and movement rates for elk and mule deer in relation to ATV, horseback, mountain bike and hiking activity. The report reveals, "movement rates and probabilities of flight response for elk were substantially higher during all activities compared to control periods of no human activity. ... The estimated probability of elk flight from a human disturbance was highly dependant on distance." The data show that at up to 500 meters distance, ATVs, mountain bikers, and hikers have virtually equal impact on the possibility of elk flight, while horseback showed an incrementally lower impact on the probability of elk flight at this distance. Mule deer exhibited a very low rate of flight response during all human activities.

Another relevant report entitled "Mt. Blue Experimental ATV Trail Environmental Research Report (1990)" described a study conducted by Unity College to assess the impact of ATV traffic on the ecosystem of Mt. Blue State Park, a forested region in Weld, Maine. The survey was conducted on an ATV trail as well as a control area of a trail receiving no ATV use. The report states that "Based on monthly measurements, an increase in trail erosion was undetectable." Importantly, the report also states that "Bird surveys showed no discernible changes in relative species composition attributable to ATV use." The researchers on this project admitted to being surprised to report that there were no measurable differences between the conditions in the area with the ATV trail and the control area after one year of monitoring.

A list of references used here is provided in Section 5 to assist staff in evaluating the feasibility of this alternative; since the early seventies, however, field research on animal and avian responses to motor vehicles has been studied. In title after title, the evidence shows that wildlife easily habituates to predictable human activity that does not destroy the habitat.

Water quality has also been earmarked as a potential OHV issue, yet another report refutes the negative perceptions on this front. A 1990 study conducted by the Georgetown Ranger District in northern California monitored water quality (both upstream and downstream) and fish habitat in Rock Creek and the Rock Creek Watershed during the 1990 CERA Fool's Gold Motorcycle Enduro which had 320 participants.

Water quality in Rock Creek was also monitored six weeks later during the Dru Barner Trail Ride, an event with 40 horseback rider participants. The comparisons between the two events are striking.

Water quality was measured as suspended sediment concentration and turbidity analyses. The report indicated the motorcycle use results as follows: "Martin's Crossing on Rock Creek became visibly cloudy as the first few motorcycles crossed. A trace could be followed approximately 25 feet downstream, however the stream cleared rapidly. If sampling had been taken 100 feet further downstream, it is believed the increase in sediment concentrations would not have been evident due to dilution factors and settling velocities of the suspended sediments.

Effects on the fishery was also a concern, but "Visual inspection of both crossing sites by the Forest Fishery biologist before and after the enduro identified no silt accumulation below the crossings resulting from the enduro."

The horseback riding event produced different results. The report stated: "There were approximately five horses crossing every 25 minutes. Many would stay for up to as long as 15 minutes. The water remained cloudy the whole time the horses stood in the creek and the turbidity could be traced all the way down to the 150-foot downstream sampling site. It took approximately five minutes after the horses left for the turbidity to decrease to a level that could no longer be detected by the naked eye."

The general conclusion of the study of both events was that "From this sampling it appears that concentrated use at this motorcycle event did not introduce large amounts of suspended sediment into the stream. The sampling from the equestrian trail ride indicated that there was a substantial disturbance to the creek." However, the hydrologists who conducted the study concluded that in spite of the substantial disturbance caused by the horses, there were no long-term negative impacts from either activity, because in both activities the disturbance was to the sediment that was already present in the stream (occurring naturally) and there was no measurable amount of new sediment introduced from the stream banks.

Another revealing study was conducted by Mountain Research & Development, Vol 14, (1994) entitled "Erosional Impact of Hikers, Horses Motorcycles and Off Road Bicycles on Mountain Trails in Montana" This study concluded that although all of the uses had some affect on trails, primarily with uphill and downhill grades, "Horses caused greater increases in soil compaction, litter, trail width and depth compared to hikers and

motorcycles. Horse traffic applies the greatest force (weight per unit area) among hikers, horseback riders, off road bicyclists and motorcyclists. Overall these studies demonstrate the difficulty in quantifying relationships between natural variability, recreation activities, and trail degradation rates. Several published, peer-reviewed field studies clearly show that trail degradation occurs regardless of specific uses and is more dependent on the geomorphic processes that occur in different landscapes.

At this time, no evidence has been uncovered to justify holding motorized recreation to a higher environmental standard than other activities, be they recreation or non-recreation. Impacts from resource extraction and grazing for example, often far surpasses that which is done by the recreational community as a whole and OHVs in particular. Range cattle travel cross-country throughout their allotments, creating new trails, increasing susceptibility to the invasion of non-native noxious plants and weeds by the soil disturbance caused by trampling, and causing severe damage to riparian areas. Roads, well pads, and pipeline easements to satisfy the burgeoning natural gas industry scar public lands for generations.

We also believe that contemporary science that vilifies OHV recreation in the back country environment often is tainted by preconceptions of what back country experience should be for some. For example PhDs researching the effect of ATVs in the back country also tested sound impact. Their results found that “although the sound of an ATV may be considerably quieter than other ambient sounds (airplanes, car traffic, lawn mowers, wind noise) and in some cases is not even quantitatively detectable, the level of sound that individuals find disturbing in the back country is affected by their attitudes toward the source of those sounds. Hence any detection is considered offensive. This cannot be considered a negative resource impact; this is a social problem.

Clearly there are those individuals who see a tire track on the trail, or hear an OHV motor passing in the distance, and call it a disturbance simply because it doesn't fit with their personal preconceived ideal for a back country experience.

In conclusion, it can be noted that each recreational user group, in fact each individual recreationist, can create quantifiable disturbances to the natural environment. And each may have a different level of tolerance for other groups or individuals using the back country. But according to the above surveys and reports, OHVs cause less discernible physical damage than previously supposed, and widely speculated in print.

Trail Descriptions

Trail descriptions and their location are depicted in the attached maps and GPS files.

Literature Cited And References

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