

San Juan Plan Revision P.O. Box 162909 Sacramento, CA 95816-2909

Subject: San Juan PLC Plan

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# Gentlemen:

The Trails Preservation Alliance (TPA) and the Colorado Off Highway Vehicle Coalition are writing to request that five revisions be made to this DLRMP Plan and analysis.

We want the SJPLC Plan to eliminate the proposed suitable v. not suitable summertime motorized use designations, because they are arbitrary.

We want the Plan to revise the definition of the "Management Areas," to remove the constraints on motor access, again, because they are arbitrary.

We want the ROS boundaries revised such that motor access on primitive motorized trails and single-lane, low maintenance dirt roads are retained at least at the current level.

We want any reduction in this access to be supported by factual scientific information or genuine legal constraints.

We also want the Plan to remove the mandate to reduce, minimize or otherwise attempt to resolve "user conflict." User conflict is not a land use allocation decision.

All of these changes can be accomplished within the scope of the present analysis, and will not impede a timely Decision.

The reason we want these changes is because we have uncovered serious flaws in the analysis. These flaws have resulted in SJPLC staff inappropriately designating enormous amounts of acreage as closed to summertime motor access. Because the burden is upon us to show beyond doubt that there is no rational connection between the data presented (the analysis) and the proposal (close @ 533,000 acres to motor access) this comment is quite long. However, the draft document is quite lengthy, and the flaw flows through the entire document.

For clarity, we will number the lines, and we will divide the comment into seven areas:

- 1. Authorities and Congressionally mandated agency objectives.
- 2. Air quality.
- 3. Soils, roads, watershed, and water quality.
- 4. Trails.



- 5. Wildlife, habitat fragmentation, and vegetation.
- 6. Recreation opportunities desired by TPA, demographics, and user conflicts.
- 7. Conclusions and list of revisions.

In this comment, we will search for the basis of this "unsuitable" allocation. After we have made the corrections to the analysis, we will provide a partial list of specific changes that will resolve this comment. We have tried to keep the changes within the scope of the present analysis.

In this comment when we use the term "suitable" we always mean "suitable for summer motorized access."

# 1. AUTHORITIES AND CONGRESSIONALLY MANDATED AGENCY OBJECTIVES<sup>1</sup>

Please refer to page 3.372 Vol 1 DEIS Ch 3 Access & Travel management:

"Motorized route designations are developed through a public travel management planning process. This process is conducted in accordance with the USFS 2005 Travel Management Rule (36 CFR 212.50 through 212.81). This rule requires that motor vehicle use on National Forest System (NFS) roads, on NFS trails, and on any USFS-administered areas allowing cross-country motorized travel, shall be designated according to vehicle class and, if appropriate, to time of year by the responsible official on administrative units or Ranger Districts. The BLM has a similar regulation (43 CFR Subparts 8340 through 8342). The regulation requires that all public lands be assigned an OHV management area designation of "open" or "limited" or "closed" to motorized travel. It prohibits motor vehicle operation that is not in accordance with those designations."

It is not accurate to say that the BLM has "similar" regulations in 43 CFR 8340. BLM 8340 regulations require compliance with E.O. 11644, to classify lands as open limited or closed. The Forest Service has extended its authority with the 2005 Travel Management Rule all motor access must stay on designated routes. The 2005 Rule has no statutory support. It is a rule promulgated by the FS using its own administrative authority; however, the FS did complete the legal process including federal register notice to put the new rule in place. The BLM has not done this. BLM can only identify lands as open, limited or closed to OHV per 11644 but not in conflict with FLPMA. In other words, BLM has not given itself the authority (by using the correct legal process to promulgate a new CFR regulation) to do anything except classify lands as open, limited, or closed. It may be that the SJPLC staff is confusing the BLM 1600 Handbook requirement to develop a Comprehensive Trail and Travel Management Plan during or shortly after the DRMP is completed, and BLM WO recommends designated routes for all Field Offices. This is not a regulation set forth in the CFR; it is policy. The route designations for the BLM travel plans are also subject to different administrative remedies than the RMP and different than the Forest Service remedies.

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<sup>&</sup>lt;sup>1</sup> The Hermosa Wilderness proposal is addressed in a separate TPA comment.



In the RMP, BLM must inform the public of these differences if it chooses to pursue changes to the road and trail system in the RMP. Both agencies are required to conduct site specific analyses for all route designation.

# Please correct this omission in the final.

# RECREATION OPPORTUNITY SPECTRUM AND MANAGEMENT AREAS

The 1982 Title 36 regulations provide for the application of the Recreation Opportunity Spectrum and management areas.

In the selection of Management Areas outside of Wilderness as unsuitable for summer motor access, no objectives are provided in either Volume One or Volume Two that are supported by the legal authority of the agencies. Retaining "Core Undeveloped Lands" is a phrase that appears in numerous iterations. Page 2.11, Page 2.29 Page 2.23, Page 2.28, Page 2.34, Page 2.37, Page 2.39 (just to name the ones we found and noted), all declare one or another variation of that idea, i.e. in addition to the above phrase, staff wants to retain the "Undeveloped character of the planning area;" and/or "maintain most of the large, contiguous blocks of undeveloped lands."

Unfortunately, we do not find any reference to retaining "core undeveloped lands" or to "maintaining large contiguous blocks of undeveloped land" in the NFMA. No do we find any such reference in the FLPMA. Nor do we find it in the 1982 regulations that the Forest Service is using. Nor do we find it in the 1601 planning regulations for the BLM.

So, early in this comment, we want to remind BLM and Forest Service that FLPMA and NFMA do not give the agencies a "private right to act" in matters of land use allocation. The agencies must ground the plan allocations in law or science. This causes the "preservation of core undeveloped lands" to be inappropriate for land allocation decisions. It is especially not appropriate for the withdrawal of an entire activity (in this case motor access).

To repeat: Management Areas: Page 75, Vol 2 DLMP Vision, Geographic Area and Management Area (MA) Desired Conditions: "to maintain the undeveloped natural character of the landscape" and to allow "natural processes to dominate" The objectives for MA's 1, 2 and 3 have no authority in law or regulation. These objectives are only supported by law and regulation for Wilderness. Thus, prohibiting existing motorized travel in these areas outside Wilderness does not appear to be legally supportable unless there is a compelling resource protection issue to be resolved...

In the following pages we will review the research provided by the DLRMP writers, and demonstrate that motor access on primitive roads and trails will not interfere with natural processes.



And, we receive the following direction from Vol 2 Part 2, page 130:

"Lands are typically suitable for uses and activities unless one of the following conditions applies:

- Use is prohibited by law, regulation, Executive Order, and/or agency resource management directives:
- Use would result in substantial and permanent impairment of the productivity of the land or renewable resource; and
- use is incompatible with the desired conditions for the relevant portion of the planning area."

Bullet item one is consistent with the rule of law, that is, we know in advance the law and regulation that we and the BLM and the USFS must adhere to. Bullet item two can be verified or predicted using field research, literature, and site specific monitoring. Bullet item three is not defined, it is not reliably set forth in law or regulation, and in fact, it is totally reliant on SJPLC staff decisions about the "desired conditions."

In this comment we will seek two things: 1) the rational connection between SJPLC staff's "suitable for summer motor access" designations and bullet items one and two; and, 2) the rational connection between the "desired conditions" and bullet items one and two. If there are no discernable or reasonable connections, then most, if not all of those designations may be considered arbitrary.

Page 140 part 2 Vol 2 "Suitability Strategy" states that Motorized *suitability has been generally defined see figure 11 and 12*." Fig 11 & 12 are not definitions. Fig 11 & 12 are maps of where SJPLC staff has decided motor access is "not suitable."

Refer to page 140 Volume 2 part 2 Suitability Strategy:

"Over-ground motorized suitability is divided into three classes: 1) unsuitable, 2) suitable, and 3) suitable opportunity areas. Unsuitable areas are IRAs and/or areas that are not conducive to road system development for resource, wildlife habitat, and/or constructability reasons. Suitable areas are those that have an existing developed road and/or motorized trail system that adequately serves the recreation and resource access needs of the particular area. Suitable areas would not generally be considered for expansion of the transportation system. Suitable opportunity areas are those that may have an existing road and/or motorized trail system; however, there is a potential that this system may be improved by connecting existing roads or trails in order to create loop opportunities using existing unauthorized roads or trails, or by adding relatively short road or trail segments."

This appears to say that wherever the SJPLC staff says there are no motor routes, there will not be any, and that entire area will be allocated to nonmotorized access. Where SJPLC staff says there are already routes, there can be more. **There is no basis in law or regulation to support this method of allocating access**.

The correction that would resolve this conflict (within the scope of the existing DEIS and DRLMP): abandon the entire "summertime motorized suitability" designations altogether, and do not use the MA classifications as the basis for limiting travel and access decisions



Ref to page 53 Volume 2 DLMP Part 1 "Desired Condition-Access and Travel Management." As we do not find any standards here to reveal the connection between law or regulation, and the selection of 533,000 acres of nonWilderness land as unsuitable for summer motor travel, we will not cite any of it here.

Page 55: Volume 2 DLMP 15.4 "Recreation management is guided by recreation "setting" prescriptions established on Recreation Opportunity Spectrum (ROS) maps by geographic area, as well as by other resource goals and objectives. Although recreation opportunities are extensive throughout the planning area, there may be some areas where no recreation is appropriate."

No law or regulation presently provides for complete exclusion of all human recreation activity. No version of the ROS designations provide for areas with no recreation. No regulations in the 1982 Title 36 or any regulation since then provide for this designation. **Please remove this proposal from the Plan.** 

Page 56: 15.15 *Primitive ROS settings are retained at their current level of naturalness or restored, as needed.* Those areas needing restoration would have to be the Primitive and the S-P-N-M expansions proposed by this Plan. This appears to be SJPLC giving itself the authority to manufacture Wilderness under color of land-use planning. We say this because, if an area is not presently "Primitive," this document has no legally supportable authority to exclude lawful activities presently occurring, without providing a rational connection between the data in the analysis and the conclusion that this is a needed change.

When the acreages for the MA's are put together, this Plan proposes an exceedingly lopsided land-use allocation. 70% of the planning area is in the most restrictive management: Wilderness, primitive nonmotorized, 'preserving core undeveloped areas' or, as p 2.12 says, "Free from human influences." The other 30% of the planning area will bear the brunt of all activities, including resource extraction, dispersed motor recreation, developed recreation, water development, and so forth.

Both the Plan and the Analysis are silent on the "cumulative impacts" of this particular.

Both the Plan and the Analysis are silent on the "cumulative impacts" of this particular style of lopsided allocation. They are not examined, nor even mentioned. Realize what the effects of expanding the primitive and the S-P-N-M settings will be.

In compliance with 36CFR 219.5 (f) (2) (i) Please fully disclose the effects of the expansion of primitive and S-P-N-M areas to read as follows: "These management proposals, when conducted over the life of this Plan, will result in areas that can be identified as roadless and/or recommended for Wilderness. 1) There will be fewer "semi-primitive motorized" opportunities. 2) The areas will not be suitable for multiple uses. 3) It will make the "restored" areas roadless. 4) It will crowd the non-primitive activities into smaller portions of the planning area."



Searching for evidence that more primitive and semi primitive nonmotorized settings are needed, and access should be further restricted, we find none. For example, data such as the Colorado SCORP, cited elsewhere in this document, report that in 2003, 690,000 people went backpacking and 830,000 people went off-road driving. The SJPLC DRMP does not use factual information like that for the analysis. Instead staff offers the following:

# Refer to p. 3.398 Vol 1 Ch 3 Recreation:

### "Recreation Issues and Need for Changes

Historically, use of the planning area has emphasized commodities; however, current social, economic, and demographic changes have significantly increased recreational uses, and have changed the nature of recreation demand. Recreation is now the most extensive, and economically valuable, resource associated with the planning area. Every recreation and leisure trend associated with public lands exists within the planning area (including amenity migration, Baby-Boomer demands, Wilderness Area crowding, motorized recreation, wildland-urban interface (WUI) demands, and resort development). In contrast with the past, current management must accommodate, and protect, recreation values if it is to be successful and sustainable. The recreation tourism market is expected to grow. Recent trends, as well as future projections, point toward increases in the number of participants, trips, and activity days for outdoor recreation across most activities. For many activities, participant growth will be faster than population growth. This growth offers challenge, as well as opportunity."

The point here is not that more people did one activity or the other. The point is, the factual numbers provide actual data about the need to expand the restrictive recreation settings, while the statement in the DEIS about need for change contributes nothing to that decision.

Page 60; Consistent with MA direction, recreation management in SRMAs must co-exist with a wide variety of resource management activities while, at the same time, marketing to recreation niches and resolving recreation user conflicts. Generally, SRMAs occur within MA 4s (High-Use Recreation Emphasis), MA 5s (Active Management), and MA 7s (Public and Private Lands Intermix). This requires integrating recreation management with..."

Please delete "marketing." Please delete "resolving recreation user conflict." Neither of these missions has any basis in the legal authority for either agency.

Page 76 Vol 2 DLMP Vision, Geographic Area and management Area Desired Conditions.

Please revise the allowed activities in most MA-3's to include motor access on trails and primitive roads. The reason we want this change is, the presence or absence of "activities are allowed, but limited, on MA 3s. They occur mostly for restoration purposes needed because of natural disturbance events or past management actions. Management activities may include restoration of ecological conditions or habitat components; prescribed burns; wildland fire use; salvage logging following fire, insect epidemics, and/or wind events; hazardous fuels reduction; and invasive species reduction..." has no connection to the presence or absence of motor recreation on trails and primitive roads.



In Volume Two, Part 2, page 130 "Suitability Strategy" states that "suitability" relies on the compatibility with desired conditions for the MA; page 130 states that the definition of the MA has been mapped and chosen by SJPLC staff according to definitions they have created in Part 1 Volume 2 and Part 3 Volume 2. The objectives for the "desired conditions" as derived from the MA definitions are to preserve/restore core undeveloped lands. Not FLPMA and not NFMA.

So we now go to Vol 2 Part 1.

On page 14 we find:

#### **Unroaded Lands**

Within the planning area, there are large unroaded and undeveloped lands where natural ecological processes proceed with minimal human interference. These lands provide habitat for wide-ranging species, as well as linkages that facilitate species movements and gene flow. They act as reserves that protect the ecosystems and the full range of biological diversity within them. The planning area includes over 420,000 acres designated as Wilderness, including the Weminuche (which is the largest Wilderness Area in Colorado). An additional 600,000 acres within the planning area are currently roadless.

This is incorrect. These additional 600,000 acres are not roadless. They are 2006 IRA's. Roads and trails exist within these areas, they are open to motor travel, and new roads and trails may be constructed in most of these areas. **Please correct this statement so that the Deciding officer receives an accurate description of the planning area.** 

The authority to to declare large tracts of land as "unsuitable" for summer motor travel on roads and trails as set forth in the 1982 36CFR regulations or in the 2007 36CFR regulations, or in the Travel Management Rule, is not sufficiently expansive to set aside 533,000 acres as "unsuitable" for motor access on trails.

The 1982 regulations (219.21) specifically state that "Forest planning shall evaluate the potential effects of vehicle use <u>off roads</u> and, on the basis of the requirements of 36 CFR part 295 of this chapter, classify areas and trails of National Forest System lands as to whether or not <u>off-road</u> vehicle use may be permitted."

Off-road vehicle use, in the context of the "open" designation as 219.21 above was written, is a "use" of the land. Motor access on designated roads and trails is quite different. It remains to be argued whether it is a "use" of the land. We will contend that it is not.

No alternative in the DEIS/DRMP will allow any vehicle use <u>off roads</u> (or trails). 219.21 does provide authority to declare certain trails as unsuitable. **However**, we, the public that will be adversely affected by any "unsuitable" designations, are entitled to a clear, rational, and science-based reason for every area so designated.



Part 295 sets forth "adverse impacts" as the sole justification for closure, with no definition. Absent any regulatory or legal definition, we will seek a clear, rational connection, visible to a reasonable observer, between the data presented and the designation of @533,000 acres of non-Wilderness lands as "unsuitable" for summertime motor access. We do not think that this is an unreasonable standard to set in the matter of such an unusually large amount of NFS and BLM acreage and the diversity of publics it will affect.

Because there is no legal authority for either "maintaining core undeveloped lands" OR for withdrawing huge tracts of land in excess of 100,000 acres from a presently occurring lawful activity, the method of defining whether motor access will be allowed on MA-1, MA-2, and MA-3 Lands as defined on page 2.20, "MA 1 lands would be considered unsuitable for over-ground motorized travel. Most MA 3 lands that do not currently have motorized routes would also be considered unsuitable. The "suitable" category identifies areas with existing motorized roads, and trails where the desire is to maintain the current motorized route density. Suitable areas would be generally represented by MA 2s, 3s, 4s, and 7s where motorized routes currently exist" is completely arbitrary.

Each alternative has an issue called" • Issue Two - Providing Recreation and Travel

Management within a Sustainable Ecological Framework: and opens with this statement:

Alternative \_\_\_\_ would aim to find a balance between motorized and non-motorized opportunities.

In this comment we will seek to identify the rational connection between trail-based motor access and the absence or presence of a "sustainable ecological framework."

#### Ref to page 2.32:

"The Hermosa area under Alternative B would mostly be identified as "unsuitable" to motorized travel, with the exception of the Hermosa trail and existing motorized routes on the east side. Motorized routes on the west side would not be compatible with Alternative B, and would be closed, pending future NEPA analysis."

So we are not even going follow the arbitrary allocation methods set forth in Vol 1 Ch 2.20, nor are we going to follow the arbitrary allocations set forth in Vol 2 Part 2 p. 140 Strategy.

In fact, comparing Alt A over ground and Alt B over ground reveals an enormous change, from almost all non-Wilderness as suitable motor access on trails and primitive roads, to mostly unsuitable. The change depicted is different than the ROS maps. According to the over ground suitability maps, Primitive and S-P-N-M areas are all perfectly suitable.

We are entitled to know what has changed such that the present, existing levels of motorized recreation occurring, "a sustainable ecological framework" is so severely (or even moderately) compromised that 533,000 acres of non-Wilderness areas must now be closed to motor access.



# DLRMP STATED BENEFITS OF REDUCING MOTORIZED ACCESS

Ref. To Table 3.19.7, which lists the benefits of reducing motor access:

Zero acres open to summer cross-country motorized travel. Route Density = 1.21 miles/sq. mile. Reduced user conflicts, reduced habitat and wildlife impacts, reduced erosion and sedimentation, and improved health of aquatic systems would occur.<sup>2</sup>

And on page 3.381 the list is repeated: "Reduced road densities would benefit water resources and aquatic species (by reducing run-off and sedimentation) and wildlife species (by reducing habitat segmentation)."

In this comment we are seeking the rational connection between the presence or absence of motor access on roads and trails and, none, all, or some of these impacts.

To maintain continuity in this long and complex comment, we will frequently remind the reader of our mission.

# 2) AIR QUALITY

From the DEIS: Air Quality-Program Emphasis

"Several air pollutants have become major concerns on the SJPL. These include mercury, nitrogen, sulfur, carbon dioxide, and ozone. Most of these pollutants originate from outside of the planning area. SJPL managers will actively pursue actions designed to reduce the impacts of pollutants from sources both within and outside of the public lands. These measures will include active membership in the Four Corners Air Quality Task Force Prevention of Serious Deterioration (PSD) Permit Review, and monitoring commitments".

This appears to be a complex way of saying that there are no non-attainment areas within the study area, and even counting pollutants from outside the study area, there are still no non-attainment areas in the planning area. So it is not air quality that makes this acreage unsuitable for summer motor travel.

Nonetheless, our DEIS writers are compelled to say more about this. In the DEIS, Affected Environment:

Page 3.12 Air pollutants of specific concern are sulfur dioxide, oxides of nitrogen, mercury, ozone, and particulate matter. Although many of the documented air quality impacts are associated with external sources (those outside public land boundaries and jurisdictions), some management activities within the planning area have the potential to impact air quality. These activities include prescribed burns, oil and gas development, mining, developed recreation, and use of travelways.

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<sup>&</sup>lt;sup>2</sup> We will discuss "user conflicts" later in this comment.



Page 3.13 Ground-level ozone has been an increasing concern in the Four Corners region. Mesa Verde National Park, located adjacent to the planning area, has been monitoring ozone since 1993. A significant trend of increasing ozone has been observed within the Park. (National Park Service 2004). Ozone levels approaching the new EPA 8-hour standard have also been measured near the Colorado/New Mexico border. The high ozone levels in the Four Corners region are similar to those found in large metropolitan areas, and are considered unusual for a rural area (New Mexico Environment Department 2007). In 2005, in response to local concerns about ozone, the SJPLC began monitoring ozone near Bayfield, Colorado. The highest 1-hour ozone averages for this site were 99, 89 and 85 ppb in 2006. The Colorado Ambient Air Quality Standard for ozone (1-hour averaging time) is 80 ppb, although limited exceedances are allowed.

# Here is the U.S. EPA short course on ozone:

"Ozone is not emitted directly but is formed in the atmosphere through a complex Set of chemical reactions involving hydrocarbons, oxides of nitrogen, and sunlight. The rate at which the reactions proceed is related to both temperature and Intensity of the sunlight. Because of this, problematic ozone levels *occur most Frequently on hot summer afternoons*." (Emphasis added)

So, whatever is causing the ozone increase in the Four Corners area, it has no relation the NFS travelways in the area we are examining. Using the data supplied in the analysis, we have arrived at this conclusion based on three reasons: 1) SJPLC staff claims some 1.9 million VUD's in this 2.6 million acres land base (page 3.36) including the intensely developed and "populated" water recreation sites and ski areas. Thus, it is safe to state that a) our SJPL planning area travelways sustain an absolutely minute number of vehicle trips compared to Bayfield or Four Corners or areas identified as MA 5, 7, and 8, and b); our area lies at a much higher elevation, meaning the average summer daytime temperatures are lower, and c) temperatures drop significantly at night. In the lower-elevation desert parts of the planning area, a "hot summer afternoon" is so hot that no one is there. Hence there is no time when all the elements necessary for ozone to form are present in the area we are discussing.

In spite of absolutely no evidence that air pollution (non-attainment) is a planning issue that is either present or potentially present, the DEIS writers still won't quit: Please delete from the DEIS the subsection named "Global Climate Change" beginning on page 3.16 and 3.17, and the subsection under cumulative impacts "Global Climate Change" on page 3.26. It should suffice to say that this is outside the scope of the EIS, but we have more to say too. In the matter of global climate change (formerly called global warming), this document has no authority to set desired conditions for global temperatures; the science offered in this document does not support any rational selection of any theoretical desired condition, and, this document has presented no method to measure whether any proposal will contribute anything toward achieving a selected desired condition. The notion that the Forest Service might consider setting "desired conditions" for global climate opens the door to arbitrary and capricious decisions. In other words, if "global climate change" is considered within the scope of this document, the Forest Service would be entitled to require anything that the individuals writing this



document want, by inserting proposals into an alternative that these individuals perceive might make some sort of difference.

Returning to our search for the rational connection between the data and the selection of nearly half the non-Wilderness areas in the planning area as unsuitable for summertime motor access:

What we have determined from the discussion presented is that it is not air quality that has moved staff to declare @533,000 acres unsuitable for motor travel.

# 3) SOILS, ROADS, WATERSHED, AND WATER QUALITY.

To avoid confusion, we will state that we do not want new, ML-3 road construction. We do not want ML-3 or ML-2 road reconstruction unless it is necessary for safety or natural resource management activities. We do not want new recreation development such as campgrounds or boat launches.

This comment is aimed at supplying the SJPLC staff with scientific information that supports the preservation of recreational trails for access via trail bike. By that we mean very low-maintenance one-lane dirt roads; unmaintained two-track; and singletrack (less than two feet wide) trails. From this point on, when we say "trails," these three types of routes are what we mean.

This analysis addresses only the effects of graded, insloped, ditched and drained roads. It is a large part of the flaw.

#### Page 3.36 Soils- Affected Environment

In summary, there have been minor short-term and long-term adverse impacts to soils from past management activities within the planning area. However, those that have occurred were relatively small, considering the almost 2.6 million acres within the planning area. Foreseeable future management activities may impact soils, as described above. However, these activities are not expected to result in detrimental short and long-term adverse impacts to soils due to project designs and the implementation of the design criteria. Overall, there has not been, nor are there likely to be anticipated detrimental short-term or long-term adverse cumulative impacts to the soils and soil productivity within the planning related to management activities.

There is nothing written here to support the claim that reducing motor access on trails will reduce erosion.

#### Vol 2, Program Objectives - Soils

This section provides no references to follow, in order to identify areas or concerns specific to summertime motor travel.

We will move to the next subject area, Riparian Areas and Wetland Ecosystems, to find the insight into the objectives for creating large areas in which recreational trails are unsuitable.



Volume I Ch 3 Page 3.82. Although the DEIS writer opens with a description of historic development that has permanently changed the landscape, there is nothing we can do about that. In fact, all of the detail in this document about the history of the planning area is for the most part not relevant to the future plans, and adds to the difficulty of navigating this already difficult document. All the past actions that were initiated and implemented by the USFS and BLM within their jurisdiction were done so under the authority of the 1983 and 1885 plans according to the NFMA, FLPMA, and the NEPA. There is no need to explain the past. It is a matter of record.

So, no insight at this point.

However, we do find the following about roads—which we are very interested in, because that is where the summertime motor travel occurs. Refer to Vol 1 Ch 3 Page 3.82: "Historic timber harvesting has impacted riparian areas and wetland ecosystems throughout the planning area. These impacts are primarily the result of new roads being built and maintained for logging activities. Roads are the dominant cause of soil erosion and stream sediment in forest environments (Swank and Crossley 1988, Reid 1981). Logging, and the associated road building, have taken place extensively throughout the planning areas, as well as on adjacent private lands. (emphasis added)

The DEIS writer is stating that roads are the dominant cause of sedimentation in forest environments. Perhaps this is the justification for selecting so much acreage as unsuitable for summertime motor travel.

However, as stated in the "Affected Environment" chapter, none of the alternatives would make very much difference to the present "affected environment" because the roads occupy a very tiny proportion of the land base. Removing 90 miles of road over the course of fifteen years (as set forth for the program in Vol 2) would affect only 10.9 acres, an absolutely minute portion --0 .00005 percent ---of the land base.

But, continuing with roads anyway, we refer to Page 3.37: ".....Factors such as high road densities, poor road locations, and inadequate road design/maintenance have caused water quality, floodplain, and channel morphology changes in some watersheds."

We find no citations, no reports, no monitoring or field research, no factual evidence that shows that these changes must be undone. Considering the multitude of statements later in this analysis that confirm good water quality, there is not sufficient (or any) evidence here to say water quality is the reason, or any part of the reason, to close 533,000 acres of non-Wilderness to motor travel on roads and trails.

From page 3.43, we go to the discussion of road densities "Road densities across the planning area vary from undeveloped Wilderness Areas (such as Middle Vallecito Creek, with no roads) to road densities of more than 7 miles per square mile (such as in the Naturita Creek and McElmo/Crow Canyon watersheds). The average road density across the planning area is 2 miles per square mile. Watersheds with very high authorized and unauthorized road densities



often show the greatest road-related impacts. Watersheds with the highest overall road densities within the planning area are summarized in Table 3.3.3."

Referring to Table 3.3.3, "Watersheds With The Highest Road Densities Within SJPL (Data Includes Authorized And Unauthorized Roads)" we see 25 watersheds listed. Compare to Table I-1, Watersheds On NF Lands With Highest Levels Of Anthropogenic Disturbance. Of the 14 watersheds listed in high road density areas, only three of them are on the anthropogenic ally disturbed watershed list, and one of those three (East Fork Mud Creek) is on private land. Only two watersheds in high road densities have a high level of anthropogenic disturbance. Two.

In other words, using the data supplied in this analysis, there is a very weak causal relationship between anthropogenically disturbed watersheds and road density, because from a scientific standpoint, if the roads are the cause of the anthropogenic disturbance, the two tables would list identical or nearly identical watersheds. They do not.

Perhaps the answer to our question lies in the references cited to support the statement that "Roads are the dominant cause of soil erosion and stream sediment in forest environments."

From the DEIS "references chapter, as cited above re roads:

Swank, W.T. and D.A. Crossley Jr. 1988. Forest Hydrology and Ecology at Coweeta. Ecological Studies (66):313-324.

We regret to report that this article has nothing to say that supports the statement "Roads are the predominant cause of soil erosion and stream sediment in forest environments" The article describes no details about the results of the experiments on the watershed. This particular article, which appeared in Ecological Studies Volume 66, pages 313 to 324, is only Chapter One of an entire book. The experiments were quite radical, including total clear cutting, defoliation with herbicides, complete mechanical defoliation, complete vegetation conversions, and defoliation to bare ground by fire --- far different than any forestry practice proposed in the last 25 years on any federal land in the U.S. However, the results of these experiments appear in Chapters 22 through Chapter 27, which do not appear in volume 66 of the journal *Ecological Studies*.

Reid, L.M. 1981. Sediment Production from Gravel-Surfaced Forest Roads, Clearwater Basin, Washington. Final Report No. FRI-8108. Washington State Department of Natural Resources. Olympia, Washington.

Our search for this item produced the following results:
Washington State Department of Natural Resources: Not found
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University of Washington Library: available for review.
Alaska Resources Library & Info Services: available at Anchorage Public Library.



We would have to contend that this material is not in compliance with CEQ Title 40 1502.21, specifically, "no material may be incorporated by reference unless it is reasonably available within the time frame available for inspection by potentially interested parties within the time allowed for comment." Having said that, the title of the work, "Sediment Production from Gravel-Surfaced Forest Roads," does not appear to be particularly supportive of the statement above from the DEIS, that roads are the predominant cause sedimentation in forest environments. One reason is that graveled roads have been shown to reduce sedimentation from ditched and drained roads when compared to native surface roads (Coe 2006), and two, fewer than half the roads in the planning area are graveled (2005 published Forest map), and none of the trails TPA is concerned about are graveled.

However, the SJPLC staff has cited Leslie Reid and chosen the time period of the early 1980's for their supporting research; so we will find another work by Reid from the early eighties in order to relieve any concerns that we may be "cherry-picking" for research. The next published work by Reid we find that is generally available within the time allotted for comment on this DEIS is "Sediment Production on Forest Roads" done in 1984. Citing the opening statement: "Logging accelerates sediment production in the Pacific Northwest...."

...indicates that we know Reid is studying logging roads built under FS contract, averaging 16 feet wide, graded, ditched, drained and culverted; designed with an average grade of 10%, which indicates the presence of a considerable amount of large cutbanks. This is very similar to the 1981 work, except that it does not focus exclusively on graveled roads. Thus, it is actually more appropriate for our SJPL DEIS.

Citing the principal question Reid hopes to answer with this 1984 work: "How much sediment is mobilized by road surface erosion and how important is this source in relation to other sources of sediment? This paper addresses the first of these questions, and a companion [Reid et al., 1981] addressed the second." Page 1753 Water Resources Research Vol 20 No. 11.

"Cutbanks were not observed to generate overland flow, and the ditches carried no base flow between storms, suggesting that subsurface flow was generally not present. Sediment yields measured at the mouths of culverts contain contributions both from road surfaces and from cutbanks and roadside ditches. As discussed later, these components may be evaluated using data from the monitored paved roads."



TABLE 4. Calculated Sediment Yield per Kilometer of Road for Various Road Types and Use Levels

| Road Type        | Sediment Yield,<br>1977–1978<br>tonnes/km/yr | Average<br>Sediment Yield,<br>tonnes/km/yr |
|------------------|--|--|
| Heavy use        | 440  | 500  |
| Temporary nonuse | 58   | 66   |
| Moderate use     | 36   | 42   |
| Light use        | 3.4  | 3.8  |
| Paved            | 1.9  | 2.0  |
| Abandoned        | 0.43   | 0.51                                       |

Roads are 4 m wide, have an average gradient of 10%, and are drained to an average of six culverts per kilometer. The 16% of the road surface that does not contribute runoff to the inboard ditch is not included in this tabulation.

"Seventeen erosion pins located in eroding faces indicate an average loss of 16 mm over a year, with a standard error of 4 mm; this is equivalent to an annual sediment yield of 15 tons/road km. A second estimate of the rate of cut face erosion results from measuring the depth of root exposure on datable vegetation growing on the faces. Sixteen measurements on 5- to 16-year-old plants indicate an average bank retreat rate of 15 ñ 2 mm/yr, agreeing well with the erosion pin data. Data from 4 additional erosion pins located in the coarsely armored debris mantles indicate that these are currently areas of net aggradations, and the data, though widely Scattered, suggest that aggradations is of the same order as the erosion rate. The ditches, too, appear to undergo net aggradations. Most of the 58 erosion pins located in ditches were first buried by coarse debris from the cutbank and then removed by grading of the ditches during road maintenance. The measurements thus suggest that only a small proportion of the sediment produced from the actively eroding part of the roadcut is transported beyond the accumulating debris mantle, which itself protects the lower part of the cut from erosion. Of the sediment that is transported as far as the base of the slope, most appears to be trapped in the ditch.

#### SIGNIFICANCE OF TRAFFIC INTENSITY

The calculated sediment yields from the road surfaces and cutbanks demonstrate that road surface erosion is extremely sensitive to traffic levels (Table 4). For example, on weekdays The typical heavily used segment loses sediment at 7.5 times the rate measured on weekends and other days on which it is temporarily not being used. If the period without heavy use is Extended beyond 2 days (i.e., if the road is classified as "light use" average sediment production eventually decreases to 0.8% of that from the heavily used road) and if use and maintenance are completely discontinued, the contribution drops by an additional factor of 10. Sediment production on the heavily used road is undoubtedly influenced by the frequency of road maintenance and grading, but this factor was not isolated during this study. Because maintenance activities were carried out during the field season their effects show up as an

Increase in variance on the sediment rating curves. The extent to which maintenance operations influence sediment production rates could be determined using the methods employed by this study, and this represents a useful area for future work.



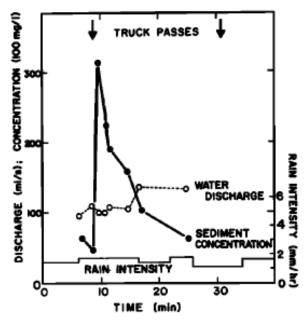


Fig. 8. Short-term effect of truck traffic on sediment concentration for road surface flow.

#### From Reid's Conclusion:

"The monitoring program described above provided data of sufficient precision not only to demonstrate that the rate of erosion from the surfaces of gravel roads is extremely sensitive to the traffic intensity but also to quantify the magnitude of the effect in the Clearwater basin. During a period of heavy traffic, here considered to be a traffic load of more than four loaded trucks per day, monitored roads in the study area contribute sediment at 7.5 times the rate of the same roads on days when they are not being used. If traffic on the roads is restricted to occasional light vehicles, the sediment loss from the road surface decreases to 0.8% of the value for heavily Used roads."

So, like many researchers, Reid discovered something more in the process of quantifying the sediment yield from logging roads: the importance of traffic levels, vehicle types, and road maintenance.

For the purposes of this analysis –e.g. trying to make the rational connection between designating large blocks of contiguous acreage as not suitable for summer motor access on trails, and the data that is available, we can observe several key points:

- 1) Reading and re-reading the research we can find nothing that supports the statement (or even considers, implies, or projects) that roads are the "predominant source of erosion and stream sediment in forested environments."
- 2) Road obliteration is not necessary to virtually eliminate sediment delivery. Abandonment suffices; abandoned roads apparently produce 99% less sediment than heavily used and regularly maintained roads.



- 3) Sediment delivery from roads and sediment from roads that actually gets into the waterways are two separate issues.
- 4) Sediment delivery is increased by frequent maintenance, i.e. ditch and culvert cleaning and grading. The increase is significant. Reid calculates that sediment delivery from maintained roads is about seven times greater than from unmaintained roads.
- 5) If road traffic is restricted to a few light vehicles per day, sediment loss from the surface is reduced to 0.8% of the heavily used roads. In Reid's formulations, this would amount to a 99.4 percent reduction in sediment yield.
- 6) Sediment from the road surface does not inevitably wind up in waterways. That outcome is highly dependent upon the location and condition of the road drainage.
- 7) In a forested environment, the accumulation of forest debris and vegetation protects the ditch from cutbank erosion, and in Reid's study, cutbanks contributed far less to sediment movement than expected.
- 8) Subsurface flow, as manifested by water emerging directly from the cutbank during rain events, or water running in the ditches when it was not raining, was not observed during the field study.

Summertime motor access by off highway vehicles which weigh between 250 pounds and 1,000 pounds with rider are inarguably light when compared with loaded trucks weighing in at about 80,000 pounds loaded, which is what Reid was studying in both the 1981 and the 1984 research. TPA does **not** want those kinds of roads in the forest. The trails that TPA want access to are **not** ditched, not insloped, not graded, are not 16 feet wide, and have no cutbanks or fillslopes and if they do, they are mostly or completely revegetated because they were abandoned years ago. As such, they do not contribute to the sediment load of the stream network

#### From page 3.43: Roads

"The construction and maintenance of roads has long been recognized as a potential and major source of sediment in forested watersheds (Megahan and Kidd 1972; Reid and Dunne 1984). Roads can change natural run-off patterns by increasing the amount of impervious surface in a watershed, and/or by intercepting overland flow or shallow subsurface run-off. The network of road drainages often routes this water, and the associated sediment, directly into streams (MacDonald and Stednick 2003)."

While this is certainly a possibility, a) the DLRMP writer does not provide any evidence that it is bad if the runoff pattern is not natural, and b) it is for the most part speculative. Sloan and Moss (abstract cited below) in 1984 developed a mathematical model to estimate this effect---not based on any actual field sampling. The research they cite as the need for this model is based on many studies in different climates and widely varying locales, however, one common thread is apparent: for subsurface flow to make a significant contribution to water body sedimentation, the soil matrix and the hydraulic characteristics must combine in particular ways to be conducive to channeling flow within the soil matrix (subsurface) AND these must be present in proximity to severe road cutbanks. Hence, the discussion on page 3.43 about subsurface flow is speculative,



since the soil type, organic cover, and the soil matrix are far from uniform throughout the planning area and it is not revealed where, if at all, these characteristics combine in proximity to severe road cutbanks to cause subsurface flow that a road interrupts to the detriment of the watershed.

(WATER RESOURCES RESEARCH, VOL. 20, NO. 12, PAGES 1815-1822, DECEMBER 1984 Modeling Subsurface Stormflow on Steeply Sloping Forested Watersheds PATRICK G. SLOAN

Water Research Office, Kentucky Fair Tax Coalition, Lovely, Kentucky IAN D. MOORE

Division of Water and Land Resources, CSIRO, Canberra, Australia

(Abstract) "Five mathematical models for predicting subsurface flow were compared to discharge measurements made by Hewlett and Hibbert (1963) on a uniform sloping soil trough at the Coweeta Hydrologic Laboratory. The models included one- and two-dimensional finite element models based on the Richards equation, a kinematic wave model, and two simple storage-discharge models based on the kinematic wave and Business assumptions. The simple models simulated the subsurface response and water table positions as well as the more complex models based on the Richards equation and were much more economical to use from the point of view of computational costs. Such models have features that would allow them to be incorporated into more complex watershed models, thus placing hydrologic prediction on a more physically correct and less empirical footing."

Having cited all of this, we remind the SJPLC that the presence or absence of these soil characteristics is not reliant upon the presence or absence of motorized recreational trail access.

Road-stream connectivity is a more widely observable problem, and we wish to turn to research in that area. We are every bit as interested in protecting the resource as the SJPLC staff, however, we expect a science-based review before we will permit ourselves to be locked out

From page 3.43: "The construction and maintenance of roads has long been recognized as a potential and major source of sediment in forested watersheds (Megahan and Kidd 1972; Reid and Dunne 1984). Roads can change natural run-off patterns by increasing the amount of impervious surface in a watershed, and/or by intercepting overland flow or shallow subsurface run-off. The network of road drainages often routes this water, and the associated sediment, directly into streams (MacDonald and Stednick 2003)."

Without sounding too skeptical, these are *old* citations. We will attempt to find them, to see what was said in this discipline one generation ago:

We have discovered that Reid 1984 and Reid and Dunn 1984 are the same work. So the statements made on page 3.43 "The lack of funding for adequate road maintenance continues to be a serious problem on much of the 3,000 miles of authorized roads within the planning area. The thousands of miles of unauthorized or unmanaged roads are also problematic. Unauthorized roads have few plans in place or funds authorized to correct erosion/drainage/public use problems that are causing chronic impacts to some watersheds. It is anticipated that degraded watershed conditions will persist until funds and/or priorities address road problems on a watershed-wide basis" is in direct conflict with Reid's findings, which were that



maintenance is the **greatest** cause of sediment delivery. It's also in conflict with frequent statements elsewhere in this analysis in which our SJPLC staff has already told us the planning area has "generally good" water quality.

Perhaps the Megahan & Kidd work will support the statement quoted from page 343. We have acquired a copy of the work. It is a study of erosion differences between two logging systems, "skyline" and "jammer." It is not a study of roads. The study only isolated the erosion effects of the roads in the jammer portion of the study, not the skyline portion. Skyline logging lifts the logs away from the stump, while jammer logging requires dragging the log from the stump, and also requires the roads be very close to the cutting—none in the Mehagan & Kidd study were further apart than 400 feet.

The study area was very steep terrain, and was stripped of 25% of its cover by the intense road density required by the jammer logging systems. Hence, the roads contributed far more than the logging itself to the erosion (750% more).

However, in the SJPL planning area, the "thousands of miles" of unmanaged roads and/or unauthorized roads are not occupying 25% of the landbase anyplace in the planning area, and are not in rows 400 feet apart. So, in fact the Mehagan & Kidd work does nothing to confirm that the "thousands of miles" of unmanaged roads are a chronic problem in the planning area, which our SJPLC staff has already told us has "generally good" water quality.

We are not mathematicians, but to illustrate the inappropriate nature of this citation, a 16-foot wide road (actually occupying 18 feet) spaced every 400 feet across one square mile would occupy 40% of the surface area and produce a road density which we calculate to be more than 14 miles per square mile. We know this is not the present state of the planning area because the analysis says there are only an "estimated" 7,000 miles of routes in a 2.3 million acre landbase. The actually inventoried routes is about half of that mileage.

A second reason this research does **not** help us confirm that the present road system in the planning area is actually a "chronic problem" is because of the mass destruction that jammer logging and its associated roads caused. This study was done in 1972, 35 years ago. The purpose of the study was to improve logging systems so that the type of erosion caused by then-conventional jammer logging, requiring extremely high road density (recall, the roads themselves stripped or disturbed 25 percent of the surface in the study area), could be compared with a new method, called skyline logging. In fact skyline logging allowed roads to be as far apart as 1,400 feet.

Please remove the statements that this citation is supposed to support. It only applies to timber harvest, and it does not apply to the recreational roads TPA is concerned about, and it especially does not apply when the SJPLC has stated that the highest average road density in the planning area is 1.44 (page 3.381).



MacDonald and Stednick (2003) are not listed in the references chapter, so at risk of finding the wrong one, we will find it as best we can. The reason is, the above two citations have not met the standard of 40 CFR part 1502.24, Methodology and Scientific Accuracy.

We have obtained a copy of the MacDonald & Stednick work. In the executive summary 12 conclusions were summarized. Not a single one speaks to roads. The study is primarily aimed at the effects of canopy loss via logging and fire on the rate of water delivery, and changes in canopy are clearly the most significant events influencing water delivery (runoff). Turning to the section on roads, we find that the statement made on page 3.43 of the DEIS is only one minor aspect of the entire study. The other part of the story is as follows (from MacDonald & Stednick 2003):

"Most of the research on road runoff has been conducted in rain-dominated areas, but roads should have similar effects in snowmelt-dominated areas. However, there are several reasons why the hydrologic effects of roads in snowmelt-dominated areas may be less than in rain dominated areas. First, snowmelt rates are much less than peak rainfall rates, so proportionally more of the snowmelt on unpaved road surfaces will infiltrate. Second, The lag between peak snowmelt and peak runoff for small to moderate-sized basins is typically around 5-12 hours, so the more rapid delivery of water from roads to the stream network will not necessarily coincide with peak snowmelt runoff from the rest of the basin.

Data from paired-basin experiments in snowmelt-dominated areas have failed to demonstrate a change in the size of peak flows due to roads. In both the Fool Creek and Coon Creek experiments the roads were built a couple of years before the timber was harvested, and in each Case there was no detectable change in runoff. Since the road network occupied less than 2% of the total watershed in each case, it should not be surprising that road construction caused no detectable change in runoff in the short monitoring period prior to forest harvest (Troendle et al., 2001).

In addition to roads, surface runoff can be generated from roofs, hiking or off-road vehicle trails, and compacted areas such as skid trails and landings. Runoff from these areas is more likely to be routed onto forested slopes rather than into ditches, in which case it has a greater likelihood of infiltrating into the soil. To the extent that this runoff can infiltrate into the soil and is not Routed to the stream, one generally would expect these other sources of overland flow to have less of an effect on watershed-scale runoff rates than forest roads."

Further, in Chapter three of the Stednick paper, we find a way to estimate sediment production per year. In the chart (attached to this comment) we calculate some examples. If one kilogram per sq meter = 4.5 tons per acre (page 25 of the Stednick paper) then, 10 miles of 16 ft wide abandoned road, is 19.4 acres. By Reid & Dunne's calculation, it may produce two pounds of sediment per ten miles per year. The same 10 miles, heavily trafficked and maintained, produces 1,940 pounds of sediment per year per ten miles of distance. The same ten miles with "moderate" traffic may produce 165 pounds per ten miles per year. The same ten miles with light traffic may produce 14.9 pounds per ten miles per year. If the trail is ½ as wide (8 feet), with the accompanying reduction of bare soil, the light traffic route may produce only 7-1/2 pounds of sediment per ten



miles per year. If it is a singletrack motorcycle trail, which may average four feet wide over a ten mile length, the sediment yield may be 3.75 pounds per ten miles per year.

The SEIS has presented no factual information or evidence to show that this is even as much as the natural sediment yields of a forested environment without the route, or that it any significant percentage of it actually gets into the stream network.

And, the significant jump in sediment delivery from light to moderate levels of traffic is an important factor in this analysis, because the preferred alternative would shift more and more vehicle traffic onto fewer roads and trails. The DLRMP not only fails to disclose these differences, it apparently does not even examine them.

The answer to our question (are the "thousands of miles of unmanaged roads a chronic problem?), based on the very citations provided by SJPLC staff in this analysis is more like the following: Sediment delivery from unmaintained routes, undisturbed by mechanical maintenance, no canopy removal, and travelled by lightweight vehicles with low number of vehicle trips per year, whose runoff is routed onto forested slopes and not accelerated into the stream network by ditching and insloping, very likely contribute virtually nothing to downstream sedimentation.

Further based on Reid's work, the type of traffic is an enormous factor for accelerated loss. As the size and load of the vehicles increase, so also does the damage to the road. If we can reduce the sediment delivery from roads by 99 percent by mostly abandoning maintenance and restricting traffic to light recreational vehicles, then the vehicles themselves (when restricted to roads and trails as all action alternatives propose), do not appear to be the problem. Prohibiting all traffic on the roads will only produce a 0.5 percent further improvement. We contend that this is not enough more to justify closing off so much acreage to public motor access.

Remember, in the NEPA, we are looking for the balance between the benefits to the human environment and the effects to the natural environment. We are not looking for that place where there is no human effect at all.

Furthermore, it's hard to claim we need to do more than reduce the effects by 99 percent when the SJPLC staff has already told us that water quality in the planning area is generally good. Refer to Ch 3 page 3.4 "Within the planning area, water quality varies across the landscape. In general, the water quality of most forested watersheds is good." And, Ch 3 page 3.37 "Water quality within the planning area is typically good (CDPHE 2006a). "

Page 3.40 "Some rangelands in the western portions of the planning area have large areas of exposed marine-derived Lewis and Mancos shale. Over the past decade, the BLM has focused a great deal of effort on inventorying, monitoring, and designing erosion-control measures that reduce the salt transport to the Colorado River. Figure 3.3.1 shows the surface locations of the Lewis and Mancos shale formations. The highest priorities for future salinity reduction Work would occur in the watersheds where these formations are present over large areas."



The presence or absence of these soil types is not reliant upon the presence or absence of motorized recreational motor access. And, SJPLC staff has indicated that OHV travel is not relevant to the erosion rates of these soil types, because in comparing Figure 3.31, Lewis and Mancos shale in HUC4 watersheds, with Figure 2.7 Over ground Motorized Suitability, we find that the entire area identified as Lewis and Mancos shale is considered suitable for over land motorized travel. Clearly, SJPLC staff perceives the effects of OHV as insignificant in these areas.

So, this clearly is not the reason so much of the planning area is proposed to be closed to motorized travel.

We would like to submit for use in this analysis a more modern research work that directly addressed the issues surround road-stream connectivity.

Coe, D.B. 2006. Sediment Production and Delivery from Forest Roads in the Sierra Nevada California. Masters Thesis, Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University, Fort Collins CO 80253.

Location is not critical, this DEIS admits material from the Pacific Northwest (Clearwater Basin) and Master's Theses are acceptable, as the first Reid citation from 1981 was a thesis, which likely contributed to the difficulty in locating it. However, Coe's work is thorough and it is in a similar environment, and it is considered quite credible by other USFS ID Teams as it was cited multiple times in the 2007 Eldorado NF "Wheeled Recreation Travel Management EIS."

What we learn from Coe is that way back in 1984 Leslie Reid was right. Smooth, wide, graded roads that carry heavy traffic (weight and volume) and which receive regular maintenance (ditch clearing, culvert cleaning, and grading) do produce large amounts of sediment. However, Coe also found that

(Page 68-69 of the Coe 2006 paper), "Sixteen percent of the road segments were connected to the stream network (Table 3.4), but these represented 25% of the total road length. Forty-nine percent of the road segments, or 38% of the total length, were categorized as CC1, meaning that there was no indication of gullying or sediment transport below the drainage outlet. Another 28% of the road segments were classified as CC2, indicating that sediment plumes and gullies extended for less than 20 m. Only 7% of the road segments had rills or sediment plumes extending more than 20 m (CC3)."

Further examination of Coe's 2006 paper, reveals that "The lengths of the sediment plumes increased with traffic class (Figure 3.6). The mean sediment plume length below segments with low levels of traffic was only 3.7 m, or 28% of the mean sediment plume length for roads with high or moderate levels of traffic. (From page 69-70). And, "An



increase in traffic on unpaved roads increases the supply of erodable sediment that can be transported below the drainage outlet (Ziegler et al., 2001a; Ziegler et al., 2001b) (page 75)."

"On average, recently-graded roads produced twice as much sediment per unit of storm erosive as roads that had not been recently-graded (page iii)"

Did Coe ever state that the "sediment load" was anywhere near the EPA regulations for non-point source pollution? Let's delve further into the question. He uses the phrase "low potential, medium potential, and high potential" to describe the possibility of sediment reaching a stream channel. He rarely uses the terms "actually reached, and drained into" the stream network.

From Coe, page 65-67

"Each drainage outlet was assessed for signs of sediment delivery to the channel network using four connectivity classes (CC) (Wemple et al., 1996; Croke and Mockler, 2001) (Table 3.1). Road segments classified as CC1 had no signs of gullying or sediment transport below the drainage outlet, and have a very low potential for sediment delivery. Road segments classified as CC2 had gullies or sediment plumes that extended for no more than 20 m from the drainage outlet, and are considered to have a low to moderate potential for sediment delivery. Road segments identified as CC3 had gullies or sediment plumes that were at least 20 m in length, but ended more than 10 m away from the bankfall width of the nearest stream channel; these were considered to have a moderate to high potential for sediment delivery. Segments classified as CC4 intersected stream channels at stream crossings or had gullies or sediment plumes that extended to within 10 m of the bankfall edge of a stream channel. CC4 segments were classified as connected and have the highest potential for delivering sediment to the channel network."

So in fact, all gullies from road drainage did NOT inevitably reach any waterbody, in fact, in his study, most did not and even the CC4 gullies "extended to within 10 meters of the bankfall" and not actually to the stream itself. This is a significant caveat and it is attentive to the difference between sediment production and sediment delivery into streams.

Still no report of what the sediment load actually is—in fact Coe is saying that road segments do not inevitably connect to waterbodies (\*refuting the assumption in the quote from page 80 above). Yes, there is some soil movement around roads, but where is the actual problem of sedimentation in the stream network?

Looking further for actual sediment load numbers, we find on page 78: "The connectivity data and the predictive equations can be used to calculate the amount of sediment being delivered from road-induced gullying versus the amount of sediment being delivered from road surfaces. The total volume of sediment delivered to the



channel network by gully erosion was 355 m<sup>3</sup>, or 18 m<sup>3</sup> per km of road. If a bulk density of 1.6 Mg m is assumed, the sediment delivery rate from road-induced gullies is 29 Mg per kilometer of road length. If gullies are assumed to form in response to storms with a recurrence interval of 50 years, the mean annual sediment delivery rate from gullies would be <u>0.6 Mg km yr ."</u>

This is something on the order of 600 grams per meter per 8/10<sup>th</sup> of a year. This is sediment production, not delivery to any stream channel. Delivery is highly dependent on a long list of variables (Coe's research paper is 117 pages long. He accounts for an enormous variety of variables).

Our point is, 600 grams of solids per storm event, which in most sites does not enter a stream channel, is the reason there are no downstream concerns about sedimentation in any except one single watershed in the planning area.

Now, as to what happens when there is no grading: Page 26 & 27 Coe 2006: "The data from four recently-graded road segments show that sediment production rates per unit precipitation were much higher in the early portion of the wet season (Figure 2.11). The high initial sediment pulse can be attributed to the rapid removal of the thick, fine dust layer that had formed on the road surface as a result of grading and timber hauling activities. The subsequent decline in sediment production per unit rainfall suggests that the recently-graded roads rapidly become supply limited as the **road surface becomes armored and more resistant to sediment detachment and transport processes."** (Emphasis added).

And a review of USDA General Technical Report 193 (2004) confirms Coe's work: ungraded native surface roads consistently produced significantly lower sediment loads than graded roads in every year that was studied.

A review of USFS timber sale contracting protocols reveals that low tire pressures reduce road damage. Reducing tire pressures to 35 psi and traveling at speed of less than 35 mph will significantly reduce road damage by loaded log trucks (weighing in at around 80,000 pounds). Recreational vehicles on high clearance roads weigh as little as 250 pounds (with rider) and run tire pressures between 10 and 15 psi (an off-highway motorcycle). ATV's average 600 pounds (with rider) and run tire pressures of 4 to 6 pounds. A high-clearance "Jeep" could weigh up to 7,000 pounds and they run tire pressures as low as 10 psi and as high as 35 psi, and, these vehicles carry on-board compressors in order to change tire pressures as needed (recommended by the FS for heavy equipment & timber hauls on forest roads).

This research tells us that increased sediment delivery because of off-highway vehicles driving on forest roads is not a credible claim. When these differences in vehicle weight and tire pressure are placed in the context of unmaintained ML-2 and ML-1 roads and



"unauthorized" routes, and singletrack trails, there does not appear to be a connection between the data (above) and closing these roads and trails to lightweight recreational vehicles—OHV's, if you will.

So, after a review of the material cited by the SJPLC staff and a review of modern roadstream connectivity research, we present here an accurate description of the type of route least likely to produce any measurable sediment delivery to stream networks: it is rarely if ever disturbed by maintenance, therefore the surface armor is intact. It is protected from rain splash, rapid transpiration and desiccation by partial canopy because it is narrowed and revegetated via the absence of maintenance. It has no ditches to accelerate runoff. The tread is littered with irregularities such as rocks, roots, fallen forest litter, and, yes, gullies and puddles (in other words, it does **not** drain well). The poor drainage eliminates runoff velocities that create gullies and headcuts which could route the runoff into the stream network. The vegetation and undisturbed forest duff and litter adjacent to the trail allow the water to infiltrate and not run off. All of these factors combine to a) limit the size and weight of the vehicles that can use it, and b) inhibit rapid, erosive drainage (paraphrased from Coe 2006 and from Reid and Dunn 1984 and MacDonald and Stednick 2003). If the formula is applied to recreational routes such as singletrack motorcycle trail, it reveals that motorcycle singletrack is the least likely of all motorized routes---by several orders of magnitude---to transport any sediment into the stream network.

To make sure this is clear: The singletrack motorcycle trail is so narrow it is often completely protected from rainsplash by canopy; it is never mechanically maintained and so the "armor" on the tread surface is not broken; it has no cutbanks or ditches to accelerate water runoff, and the tread surface is always irregular due to rock, root, changes in slope and grade, forest debris lying in the tread, puddles and short gullies caused by the rutting, which causes poor drainage, which is what we want---assuming that we are relying on some 30 years of research in the field.

The SJPLC staff perception that all routes must be maintained so that they drain well is exactly backwards.

No factual evidence from the planning area has been presented to refute the research. It cannot be claimed, based on any source, that the present inventory of recreational routes are a "chronic watershed problem" or the cause of any measurable degradation of downstream aquatic habitat.

Still, how does that compare with the Colorado State or the EPA standards for nonpoint pollution?

No one wants to say. We consider this a significant omission in this analysis. Why? Because the likelihood that 600 grams of sediment entering a stream, some of the time in a few but not all cases where roads are near streams, does not weigh in well with the



destruction to the social structure of a large segment of lawful Forest visitors. This is especially true because no waterbody in the entire planning area is on the 303d impaired list for sediment loading.

Well, maybe there is a large scale geomorphic or hydro orphic issue here. Page 3.43 of this DEIS note that subsurface waterflow "may be" interrupted by roads. Is that the same as changing the morphology of the drainage?

The SJPLC staff provides no citation to support this, so we will return to Mr. Coe's work:

Coe reported in 2005, "The ability to detect watershed scale hydrologic change due to roads has been unsuccessful in paired-watershed studies..."

Please correct the statements in the "Affected Environment" on page 3.82 so that this analysis provides an accurate application of the research it is citing. You are free to use the narrative above, and the Coe work. It is available on the internet and Dr. Coe is easy to locate.

The change to this plan that would resolve our comment: abandon the over ground motor suitability designations altogether, including the Management Area definitions that constrain and/or eliminate motor access.

We realize that many people do not like motorcycles, and will refuse to accept that the research tells us that singletrack motorcycle trails and unmaintained one-lane dirt roads have virtually no effect on sediment delivery. However, that is not the subject of the analysis. The analysis is expected to provide an accurate assessment of recreational vehicle trail effects on the natural environment, whether we like the answers or not. The research shows that the known and the predictable effects of recreational motor trails do not support closing 533,000 acres of nonWilderness in the planning area as unsuitable for summer motor travel.

# Riparian Areas and Wetland Ecosystems

Just like the Air Quality Objectives, none of the descriptions in the Affected Environment provide references to specific issues presently occurring; and, in none of the Program Objectives are there any references to presently occurring problems or issues except the "watershed" section:

Maintain or Improve Watershed Condition and the Function of Streams and Floodplains As a result of the cumulative impacts of management activities, many watersheds throughout the planning area exhibit poor watershed conditions (USFS 2006) (see Appendix I, Volume 3). Watersheds with the most impaired watershed conditions, or those possessing the highest sensitivity to land management actions, will be given priority consideration for rehabilitation. This will be especially true if a watershed contains a water body on the State 303(d) List or a Total Maximum Daily Load (TMDL) has been



developed (see Appendix J, Volume 3, Watersheds on USFS Lands Most Sensitive to Disturbance; Watersheds on USFS Lands with the Highest Levels of Anthropogenic Disturbance; see also Appendix K, Volume 3, Watersheds on the San Juan Public Lands with Salinity Concerns).

Following the references, we go to Appendix J. Volume 3, and Appendix I Volume 3, to examine the extent of anthropogenic disturbance. Table I-1 lists the watersheds with the most anthropogenic disturbance.

Doing a GIS analysis on the areas staff has selected as unsuitable for summer motor travel in Alternative B reveals only one watershed within the areas proposed as unsuitable, Lower Cascade Creek, that appears on Table I-1 (Watersheds on National Forest Lands with the Highest Levels of Anthropogenic Disturbance) and it does not appear on Table J-1 (Watersheds on National Forest Lands Most Sensitive to Anthropogenic Disturbance) nor does it appear on Table 3.3.3 Watersheds with the highest road densities. In other words, the GIS analysis results clearly indicate that the existing roads and trails in the area we are being excluded from do not contribute anything to watershed problems. So, we wonder, what makes these acres unsuitable?

Referenced in Appendix I is "Winters et al 2006b" (which was not listed in the References Chapter and is not written by "Winters et al" but it is rather a SJNF Forest-Scale Roads Analysis and this confusion was straightened out verbally in a phone conversation with Shannon Manfredi, Plan Revision Team Leader, at approx 1:00 MST on March 24 2008). This is where we find out whether any waterbodies in the planning area are on the state 303(d) list and we find on page 31 that:

"c) As discussed in AQ (5) above, few if any chemical threats are road-derived on the National Forest. Sediment would be the major road-derived physical pollutant on the National Forest. Sediment is a pollutant that can result in an Impaired Waterbody designation on the State of Colorado as required by section 303(d) of the Clean Water Act. (Colorado Department of Public Health and Environment, 1999). The beneficial uses most at risk to sediment pollution would be: Aquatic Life Cold 1, Aquatic Life Cold 2, Aquatic Life Warm 1, Aquatic Life Warm 2

No streams within the SJNF are currently (2006) on the 303(d) list for sediment. Two streams have a plan in place to reduce sediment. Box Canyon, a tributary to the West Mancos River has a plan in place to reduce road-contributed sediment (Total Maximum Daily Load Plan) approved by the State of Colorado. The Rio Blanco River has a TMDL for sediment, and some portion of the sediment may be from roads."

It is very important to note here that if we follow the citation on page I-1 that is called "Winters et al" we learn that that the material in the Forest Roads Analysis uses one of the same research works we examined above:

AQ(3): How and where does the road system affect mass wasting? Landslide frequency is greater in areas disturbed by logging and road construction activities in Comparison to undisturbed sites (Cacek 1989, LaHusen 1984, Gray and Megahan 1981, Megahan et al. 1978, Swanson and Dyrness 1975, and **Megahan and Kidd 1972).** Some lands



are more prone to mass wasting than others. Criteria used to identify lands on the SJNF which have high potential for mass wasting (landslides and erosion) include geologic formation, landform, percent slope (units with slopes greater than 40%), climate zone, vegetation type, soil texture, bedrock dip, rock fragment content, and evidence of past or present landslide activity (R2 Interpretation Guide). In some cases, lands with high potential for mass wasting which contain roads are lands where mass wasting has occurred and are also lands where mass wasting is likely to occur in the future.

If time permits we will follow the other cites. We will for the moment assume that 2006b has correctly interpreted the research in terms of major disturbances by logging and logging road construction, since that is what the 1972 Megehan & Kidd research was studying. But those are not anything like the trails that TPA wants to keep, and increase where possible, access to.

However. From USFS 2006b: page 28-29 AQ(2): How and where does the road system generate surface erosion?

This Forest-level roads analysis primarily addresses high maintenance level roads (levels 3-5) that are surfaced with gravel or pavement. High maintenance level roads are not the roads that generate the majority of surface erosion on the SJNF for three reasons:

- 1. There are over twice as many miles of maintenance level 1 and 2 roads compared to high Maintenance level roads on the Forest. There are an undetermined number of miles of Unauthorized roads (two-track roads) that receive no maintenance.
- 2. The majority of low maintenance level roads has native dirt surfaces and is more susceptible to surface erosion because they are not armored with gravel or pavement. Native-surface roads built across erosive or sensitive landforms tend to be large sources of surface erosion.
- 3. High maintenance level roads are maintained every year. Low maintenance level roads tend to Be evaluated every 3-5 years. Rutting, plugged culverts, blocked ditches etc. may go long periods of time before the problems are discovered and fixed, which increases the likelihood of Erosion.

TPA Commenter: This is an astonishing assertion, given that it is not what the research we examined in the above discussion says (Reid & Dunne, Megahan & Kidd, MacDonald & Stednick). Perhaps there is more on this below.

AQ(6): How and where is the road system "hydrologically connected" to the stream system? How do the connections affect water quality and quantity (such as, the delivery of sediments and chemicals, thermal increases, elevated peak flows)?

Stream and road connectivity has been defined as "the number of stream crossings and areas where roads and streams are near enough to strongly interact" (Gucinski et al., 2000). It has been Suggested that watersheds with high road densities and high stream densities are likely to have high stream and road connectivity. A GIS analysis was conducted on large-scale watersheds (5th level HUC) across the SJNF. Watersheds with the highest road and stream densities (connectivity) are as follows:

Table 4-AQ(6)-1

Watersheds with Highest Road/Stream Connectivity Density Lost Canyon Creek House Creek Upper Disappointment Creek Upper Animas Valley Lower Florida River Upper La Plata River



Headwaters Mancos River Upper Dolores Canyon Beaver Creek near McPhee

"...The most common hydrologic connection between streams and roads occurs when water Intercepted by roads is concentrated and subsequently diverted into streams. Roads with ditches Can function as artificial streams on the landscape, increasing watershed drainage densities (the total length of streams per watershed area). Because roads collect flow primarily during storm and snowmelt events, increased drainage densities can change the timing and volume of water carried by natural streams (King and Tennyson, 1984). As discussed in AQ (1, 2) sediment is the primary pollutant derived from roads on the SJNF. The higher the drainage density attributable to roads, the more easily sediment is delivered into streams and floodplains.

Now let's look at Gusinski et all 2000, and King & Tennyson 1984.

Gucinski et al: This is a synthesis of the current available information on roads in general. Much of the research is from highways, paved roads, and improved Forest roads (ML-3). Gucinski himself has nothing to say about road-stream connectivity. The author he cites in the matter of road-stream connectivity wrote a speculative essay based on observations and a list of suggested research. The suggested research, a study based on overlaying road and stream networks, was published by Coe in 2006, with the results as reported earlier in this comment.

No material in the Gucinski synthesis studies trails—that is, recreational routes less than two feet wide. No material in the Gucinski synthesis studies "two-tracks," routes that receive no maintenance, and require high clearance vehicles and some degree of operator skill.

So it comes as no surprise that that Table AQ (6)-1 describes no road-stream connectivity in the 533,000 acres that the SJPLC wants to close to motor access because most of the routes are either trails, two tracks, or "unmanaged" roads.

From Vol 2 Objectives/strategy page 107: Item C.6 annually, decommissions 6 linear miles of unneeded routes that may consist of roads and trail. Watersheds listed in the following appendices could be considered priority for decommissioning efforts: Appendix I, Watersheds on USFS Lands with the Highest Levels of Anthropogenic Disturbance on the SJPL (authorized and unauthorized road/trail densities); Appendix J, Watersheds on National Forest Lands Most Sensitive to Anthropogenic Disturbances; Appendix K, Watersheds on the San Juan Public Lands with Potential Salinity Issues.

While decommissioning a road will reduce sediment delivery, limiting the GVW of the vehicles allowed to use it, and reducing maintenance to the minimum needed to ensure those vehicles can stay on the road will have almost exactly the same effect (see Reid & Dunn 1984, and Coe 2006). Of greater concern to the integrity of this analysis, in the "impacts" discussion, the SJPLC staff is not fully disclosing the real effects. We want the SJPLC staff to disclose the single most certain and undeniable, real effect of



decommissioning six linear miles of road annually, which, over the life of this plan (15 years) means that 90 miles of road will be removed. The real, known and reliably predictable effect of this objective, the "cumulative impact" if you will, is to make the SJPL planning area more "roadless."

If the roads are physically obliterated, SJPLC staff intends to expend significant staff and financial resources, and cause UN unavoidable spike in sediment load (due to the amount of soil that must be moved to recontour the cutbanks) to carry out actions based on speculation. Conversely, "decommissioning" the roads but taking no action other than to stop traffic on them will have no measurable effect on that speculative effect—that being the subsurface water movement that the cutbanks interfere.

**Please remove this Program Objective.** It announces that the SJPLC believes one of its primary missions is closing roads and trails, and will result in making the planning area more roadless.

We want this impact fully disclosed, in plain language, in the "Cumulative Effects" sections of the soils section and in the watershed & riparian section of chapter three.

We are also searching for "objectives" from Volume 2 for this Plan that the presence of summer motorized travel would severely or even noticeably inhibit. Time prohibits the evaluation of every objective, so we will pick a landscape scale objective to examine.

# From page 110 & 11, Volume 2 DLMP strategy objectives:

# "Program Objectives - Terrestrial Ecosystems and Plant Species

F.1 within 20 years, increase the amount of young spruce-fir forests and young cool-moist mixed-conifer forests from 1.5% to 15% primarily by allowing wildland fire use (including stand replacement fires) and, to a much lesser extent, timber harvesting in mature spruce-fir and mature cool-moist mixed conifer

Forests.

F.2 Within 20 years, increase the amount of young aspen forests throughout the planning area from their current status of 1% to 25% by clear-cutting mature aspen forests, and by allowing wildland fire use to occur in the mature development stage of aspen, spruce-fir, and cool-moist mixed-conifer forests.

In order to increase the patch size of young aspen forests and to better mimic the large aspen patches that were common during the reference period (HRV conditions), timber harvesting occurs primarily adjacent to aspen clear-cuts that were conducted within the last 20 years. F.3 Within 20 years, increase the amount of ponderosa pine forests that have open canopies by changing 20,000 to 40,000 acres of ponderosa pine forests (excluding old-growth forests) from development stage mature-closed to development stage mature-open using timber harvesting treatments (including

thinning and restoration), and by allowing wildland fire use to occur. An additional outcome from this objective is to increase the canopy cover of Arizona fescue by 10% in the treated ponderosa pine stands within 10 years of the implementation of the LMP.

F.4 Within 20 years, increase the amount of warm-dry mixed-conifer forests that have open canopies by changing 10,000 acres of warm-dry mixed-conifer forests (excluding old-growth forests) from development stage mature-closed to development stage mature-open by using



restoration improvement harvesting treatments that target white fir for removal, and by allowing wildland fire

use to occur. An additional outcome from this objective is to decrease the amount of white fir in the treated warm-dry mixed-conifer forest stands by 20% within 20 years.

F.5 Within 15 years, use low-intensity prescribed burns or wildland fire use on 30,000 acres of ponderosa pine or warm-dry mixed-conifer forests that have been without fire for decades in order to improve the composition, structure, and function of those forests.

F.6 Over the next 15 years, use timber harvesting or low-intensity prescribed burns in order to improve the stand structure in some mature ponderosa pine and warm-dry mixed-conifer forests and to enhance

old-growth attributes.

F.7 Increase the amount of old-growth ponderosa pine and old-growth warm-dry mixed-conifer forests by 400% and 100%, respectively. This is a long-range objective that can only occur over decades, as current ponderosa pine and old-growth warm-dry mixed-conifer forests need time in order to succeed

from their current condition to the old-growth condition.

F.8 Within 5 years, initiate restoration in 2 middle-elevation Kentucky bluegrass-dominated mountain grasslands by increasing the amount of Arizona fescue and other desirable native plant species, by decreasing the amount of exotic and undesirable native plant species, and by decreasing the amount of

bare soil, erosion, and soil compaction.

F.9 Within 15 years, increase the abundance and distribution of perennial native warm- and coolseason bunchgrasses and biological soil crusts on 3,000 acres of semi-desert scrublands or semi-desert grasslands within the Dolores geographical area.

F.10 Within 15 years, increase the abundance and distribution of perennial native warm- and cool-season bunchgrasses and biological soil crusts on 2,000 acres of sagebrush scrublands within the Dolores geographic area.

F.11 Within 5 years, collect seeds from R2 Regional Forester's Sensitive Plant Species and BLM Sensitive Plant Species in order to provide local genetic material for reintroduction efforts in the event existing occurrences of these species have declined or are extirpated.

F.12 Within 5 years, collect seeds from native graminoid species in order to provide local genetic material for revegetation efforts."

The Program Objectives cited above provide no evidence that the presence or absence of the above named "terrestrial ecosystems and plant species" is in any way reliant upon the presence or absence of a recreational trail system for summertime motor access.

Continuing our search for the rational connection between closing 533,000 acres to motor access on trails, we will examine 3.4 AQUATIC ECOSYSTEMS AND FISH SPECIES, Existing Conditions and Trends, and, Environmental Consequences.

Between page 3.59 and 3.76, "off road vehicle" use is mentioned one time. In spite of being placed in the same category as landscape-scale activities such as livestock grazing, fire, water-development projects, timber harvest, and mine reclamation, the subject of "off road vehicle use" does not even merit its own discussion. Further, a thorough reading of the chapter provides no indication of any supporting data or information, either site-specific or in any of the literature cited, that off road vehicle use on forest roads and trails belongs in this category.



As this analysis was conducted under the present travel regulations, and presents no factual discussion that recreational vehicle use has caused any measurable effects to aquatic ecosystems, it appears that any such previous "effects," (which this analysis conspicuously does not document), are apparently not noticeable or measurable. If they were, we are confident that this analysis would document them very emphatically.

Alternative B would place all vehicles on designated routes, so it is reasonable to predict that any such undocumented and unmeasured effects would be even less measurable. Therefore, please remove "OHV" from the list of multiple-use activities that have the potential to "impact" aquatic ecosystems in any of the action alternatives.

We find "personal communications" used in the narrative on page 3.63., and supporting the charts on page 3.62. The DEIS writers have not made it clear what the personal communication is intended to support, and we do not doubt the intentions of the people involved, however, personal communications used as a citation do not meet the requirements of 40 CFR 1502.21: "Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action. The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference." (Emphasis added). Since the public can not be "party" to personal communications, or review or inspect a record of such communication, it does not meet the requirements and must be removed from the DEIS and its referenced documents.

The use of personal communication as the basis of science-based decision making is also not in compliance with 40 CFR 1502.24: "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix." (Emphasis added). Again, based on the overarching CEQ regulations, personal communications do not meet the threshold for making "...explicit reference by footnote to the scientific and other sources relied upon for conclusions..."). So, to repeat: since the public can not be "party" to personal communications, or review or inspect a record of such communication, it does not meet the standard and must be removed, or supported some other way.

Table 3.4.4 Management Indicator Species and "Plan Issues for Selection" clearly show that the presence or absence of people riding their motorcycles on trails and roads have no connection to the listed items: water depletion due to reservoirs, diversions, oil and



gas development, soil erosion and sedimentation associated with ground-disturbing activities (including fuels treatments, oil and gas development, timber harvesting, livestock grazing, road construction, and recreation). Recall, please that in Alternative B all vehicle traffic will be restricted to trails and roads that already exist. If the writers meant to say that trail-based motor recreation would be an issue for selection, we are entitled to expect it to be called out by its own name, trail-based motor recreation. It is not.

The downward trends this analysis does credibly document are...." Much of this monitoring information has been collected in drainages subject to water depletions (including streams with water developments or water diversions, and/or streams that area strongly influenced by drought-related impacts over the last 8 to 10 years)." (Page 3.65)

"Water depletion" is not reliant upon and in fact is totally unrelated to, the presence or absence of trail-based vehicle use, including motorcycle trail riding.

Page 3.69 "Road maintenance may result in short-term increases in soil erosion." This is incorrect. Road maintenance will increase sediment run-off from roads. Please correct in the Final.

Page 3.69 "Conversely, risks of impacts to aquatic and riparian ecosystems tend to decrease with road obliterations."

This assertion is not supported by any research or site-specific information. It appears to be entirely speculative. In the Gucinski synthesis, he states "... Few studies have evaluated long-term and watershed-scale changes to sediment yields as roads are abandoned, obliterated, or restored. Personnel at Redwood National Park are undisputed experts in road restoration at a watershed scale: they have developed, tested, and applied road-restoration techniques at a scale virtually unprecedented throughout the world (Ziemer 1997). Since Redwood National Park was expanded in 1978, 134 miles of the 300 miles of road within park boundaries have been restored or obliterated. This work has removed about 1.300.000 cubic vards of material from stream crossings, landings, and unstable road benches. The volume of material is about equal To the long-term average annual sediment discharge near the mouth of Redwood Creek (Ringgold, n.d.). To evaluate the success of removing this volume of material, the Delivery mechanism, timing, and proportion of the removed material that actually would Have found its way to the channel without the restoration activity, the quantity of new Material introduced by erosion caused by the restoration work itself, and the relative Proportion of the treated areas compared to untreated areas at comparable risk in the Basin must be known. Such evaluations are uncommon."

In other words, no one knows if the statement about road obliterations on page 3.69 is true or not. That makes it speculative by reasonable standards, and wildly speculative by scientific standards. This does not meet the regulatory standards in 40 CEQ 1502.22 b, (1) (2) (3) and (4). **Please remove the statement on p. 3.69 re: road obliterations.** 

In the "impacts" discussion, the SJPLC staff is not disclosing the known effects of obliterating six linear miles of road annually, which, over the life of this plan (15 years)



means that 90 miles of road will be removed. The effect of this objective, the "cumulative impact" if you will, is to make the SJPL planning area more roadless.

Potential impacts noted specifically (page 3.75) "These activities would be mainly related to water use and development projects, or to oil and gas development from current and projected new leases on or off the planning area. ... ground-disturbing activities (including new road construction and mining) in the Dolores River watershed may also adversely impact these endangered species."

This is not supported by the biological opinion in Appendix T. **Please remove this speculation.** 

In fact, in every statement in Chapter 3, the writers say these species "may" be affected, yet the B.E's in App. T say, "NO EFFECT." Thus, the narrative in the "Environmental Consequences is meaningless. When the same possibility exists in every scenario, and that possibility is purely speculative, the document is not credible as an analysis.

More important to this comment, no evidence of any connection between the viability of these species and the presence of trail based motor recreation is presented or even implied.

We are referred to Appendix T. Page T-4 lists the habitat types each species requires, for example, "Tributaries of the Colorado and San Juan rivers" or "Freshwater streams."

App. T, page T-102,. Roundtail chub live in big rivers and tend to occupy slow-moving waters (Woodling 1985). Murky, rather than clear, water is sought (Sigler and Sigler 1996).

Page T-106: Construction and use of the roads exposes soil and may accelerate erosion. If these areas of bare soil are connected to the stream network, sedimentation can occur. Connectivity of disturbed areas can be due to road crossings, rills, gullies, and poorly designed road drainage systems.

We have discussed road—stream connectivity in earlier in this comment, establishing that the most current research in the field has shown that "connectivity" is not an inevitable result of having roads, and the trails TPA is concerned about keeping access to are not a problem. Please revise the analysis in Appendix T to accurately reflect the research.

Page T-109 Flannelmouth Sucker; because these endemic fishes have evolved under natural conditions of high turbidity, it is probable high turbidity is important.

Page T-113 Bluehead Sucker; Although this species sometimes occupies areas of suitable habitat in larger, low elevation, mainstream streams, it is most commonly collected in small or mid-sized tributaries of the Upper Colorado River Basin (Ptacek, Rees, and Miller 2005). Most reaches of this system receive heavy sediment loads and high annual peak flows that contrast with low base flows. Little is known about the specific influence of these annual events, but healthy bluehead sucker populations have persisted in habitats with a wide range of annual flows, sediment transport, and even sediment



deposition, providing that these physical events are associated with a natural flow regime (Ptacek, Rees, and Miller 2005).

Page T-118, cutthroat trout; *Young (1995) found coarse woody debris to be an important factor in determining Colorado River cutthroat trout biomass. He also noted meander habitats were underused, and occupied sites were deeper than average with slower water velocities.* 

Our quick review of Appendix T has uncovered no evidence that trail-based motor recreation is considered a potential threat to any of these aquatic species. In fact, the presence or absence of any of these habitat characteristics does not rely in any way *whatsoever* upon the presence or absence of trail based motor recreation

# WATER RESOURCES

Beginning on page 3.37: In 1891, public concern regarding the issue of having adequate supplies of clean water led to the establishment of federally protected forest reserves in the United States. The importance of water protection was evident in the wording of the Organic Act of 1897, the legislation that founded the USFS, which stated that "no public forest reservation shall be established, except to improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows…"

On page 3-38 The Organic Administration Act of June 4, 1897, as amended: 'This act contains the initial, basic authority of watershed management on USFS lands. The purpose for the establishment of national forests, as stated in this act, includes securing favorable conditions of water-flows."

Perhaps our writers perceive themselves writing a novel. This sort of narration is certainly contributing to the excessive volume of this document, and we could do without it. However, that is a minor complaint compared to the issue of the interpretation: this is not the original intention of the Organic Act, and it is not the original intention of President Harrison when the Forest Service was created in 1891, and "public opinion" in 1897 was not worried about "watershed management" other than to get the water down the mountain and into the dams, ditches, and impoundments. The statement that it is the "original, basic authority to of watershed management" is a transparent conflation of this law into a responsibility for "watershed health" higher in the watersheds, where the SJPLC staff has control, and has different plans for "favorable flow."

Favorable flow had a significantly different meaning in 1897. It is not credible to claim that this act intended for the FS to look after the "watershed" in this chapter, and then recite in other chapters that the actions intended to "secure favorable water flow" in 1897 are the cause of so many negative conditions in the planning area and now must be undone. Examples from the DEIS: plans to obliterate roads; the discussion of antrhopogenically influenced watersheds being a priority for restoration, and especially (on page 3-74), downstream water uses having priority over stream flow higher in the watershed---the exact and desired result of the Organic Act and most other water related legislation. Please remove the statement on page 3.37, and either replaces it with the accurate description of what favorable water flow was in 1897, or leave it out.



As distressing as it is to realize the profound misunderstanding of the FS mission that the current staff seems to labor under, it is not the subject of this comment. We bring it up because it is an indicator, or evidence, if you will, that these writers are out of touch with the multiple-use mission of their agencies, and under the color of land management planning, piece by piece, it is being abandoned.

The subject of this comment is to find the rational connection between closing massive blocks of land to summer motor access on roads and trails, and the data presented in the analysis. Nothing in the Water Resources chapter makes any connection at all.

Therefore, without further ado we will go to page 3.37: *Water quality within the planning area is typically good (CDPHE 2006a)*. This is confirmed by Table 3.3.1, 303d waterbodies. None in the Planning Area are listed. Only four are listed as 305b. The first three pollutants, mercury, cadmium, zinc, copper, have nothing to do with trail-based motor access.

The only pollutant that might be connected to trails and roads is Lower Rio Blanco River, a 305-b listing, meaning a TMDL for Sediment has been established, not that it is impaired at this time.

Two items of fact presented in this analysis clearly separate the named 305b waterbody (sediment) from any rational connection to closing 533,000 acres to motor access: 1) page 3.37: 1) Water quality within the planning area is typically good (CDPHE 2006a). The DEIS writers are telling us that with the existing road network, water quality is not a problem within the planning area. 2) Lower Rio Blanco River originates in the South San Juan Wilderness area. The upper reach of the Rio Blanco runs through private lands.

#### To conclude:

- 1. In this analysis, SJPLC staff states that there are 1,900 inventoried perennial streams in the planning area.
- 2. Only nine watersheds can be classified with high road- stream densities.
- 3. None of the nine have downstream impairment complaints based on sediment loading.
- 4. None of the streams in the high trail density or the high road density have downstream water quality impairments.
- 5. Of the 1,900 perennial streams, only one even has a TMDL established for sediment.
- 6. Of the 25 watersheds listed as most anthropogenically disturbed, 13 are in high road density areas, and most of those roads are ML-3, 4, and higher, such as paved roads and state highways.
- 7. In the maps provided with this analysis, the "suitable for motor access" map for alternative A, the existing situation, shows that the entire planning area outside



- the Wilderness and one small segment along the Delores River is suitable for motor access on roads and trails.
- 8. No data presented so far in this analysis has shown what has changed such that these areas are now not suitable.

#### 4. TRAILS

Finally, under the subject heading of soils, roads, and watershed, we want to make it clear that in terms of soil movement and/or sediment delivery, trails are <u>not</u> the same as roads. Many analyses refer to "roads and trails" together, inseparably, and treat them as the same in their effects. However, the research cited in these analyses do not address trails, it addresses 16-to 20 foot-wide, bladed, ditched roads with large cutbanks and fillslopes. Nonetheless, the results of the research are easy to apply to trails: much narrower than roads, not bladed, not ditched, and generally no cutbanks or fillslopes. Recall our description above of a desirable recreational route: narrow, protected by canopy, no mechanical maintenance, and no ditching, irregular surface, used by lightweight vehicles, and, provided sufficient mileage, low number of vehicle trips per season. Recall what our researchers said about roads with the lowest sediment yields: these trail characteristics fit every one of the researchers' results about which kind of routes have little or no measurable effect on the watershed.

From MacDonald & Stednick 2003 page 16:

"In addition to roads, surface runoff can be generated from roofs, hiking or off-road vehicle trails, and compacted areas such as skid trails and landings. Runoff from these areas is more likely to be routed onto forested slopes rather than into ditches, in which case it has a greater likelihood of infiltrating into the soil. To the extent that this runoff can infiltrate into the soil and is not routed to the stream, one generally would expect these other sources of overland flow to have less of an effect on watershed-scale runoff rates than forest roads." (Emphasis added)

And, there <u>is</u> field data available for the effects of trails interacting with the stream network. The Mendocino National Forest conducted a three-year water quality monitoring program on a an intermittent stream intersected by OHV trail. The site was selected because it is the headwaters of an anadromous fishery, and because it had two crossings in close proximity that could provide data on crossing density effects, and the differences between a trail designed according to BMPs and trail in very steep terrain with no practical way to adhere to BMP's. In three years, no samples ever exceeded the EPA standards for NPS pollution, and in fact every sampling mission produced results showing the downstream control stations to be cleaner than the upstream control stations.

The Eldorado National Forest conducted six water quality monitoring tests during organized OHV events and during organized equestrian events. In no event did the Forest staff find that there would be any significant long-term effects from the activities.



This information is provided to deflect SJPLC staff claims that information on the interaction between trails and the stream network does not exist.

#### 5. WILDLIFE, HABITAT FRAGMENTATION, AND VEGETATION

Refer to Vol 1 DEIS Ch 3 Page 3.108 (Environmental Consequences, Cumulative Impacts, and Terrestrial Ecosystems) "Historic impacts related to recreation, solid minerals development, and utility corridors were localized and relatively small in extent. However, many of these impacts are still present. Foreseeable future impacts to vegetation types resulting from those activities are expected. However, they are expected to be minor in extent, and may result in minor impacts to the vegetation types within the planning area. Past management activities have resulted in negligible impacts to Sensitive Species and Highlight Species."

No connection between past or anticipated impacts of recreation, and the proposal to close 533,000 acres to summer motor access, is discussed. It's important to note here that the DEIS writer states that past impacts have been minor. This makes it difficult to claim elsewhere in this analysis that the presence of the recreational roads and trails anywhere in the planning area are any kind of problem. We say this because this draft EIS and Plan are quite voluminous, and we are not allowed the time required to examine every statement made. We can only sample the most important parts. As the sample parts are not providing us with a rational connection between the data and the proposal, we will have to infer that the parts of the document we cannot examine are probably not making any connection, either.

Ref to Vol DEIS Ch 3 Page 3.110: (Special Biological Diversity Features) "Currently, most fens located within the planning area display relatively unaltered conditions; however, some have been affected (impacted) by management activities, especially in relation to the construction and maintenance of roads. Future impacts to fens from management activities are projected to be minor."

Aside from failing to provide the answer to the key question—were these effects beneficial or not?---this statement implies that the effects were not negative, and future effects will be minor, so there is no connection between this information and closing 533,000 acres of the forest to motor access.

Refer to Vol 1 Ch 3 page 3.111: Please correct a misrepresentative statement: "Unroaded lands within the planning area include Wilderness Areas, WSAs, and RNAs, IRAs, and Semi-Primitive Non-Motorized (ROS) recreation areas."

IRA's do have roads and do have vehicle traffic and do have human activities. Placing IRA's in this particular discussion is a misleading error. Without having yet determined from the research cited that roads really do have a special ability to destroy ecosystems, to say that the IRAs have no roads and belong in the category of lands that have this special value, is incorrect. The areas do have roads, and they have human traffic.



RNAs also can have roads and human traffic. Semi-Primitive Non-motorized recreation areas have roads and have human activity. Please correct in the FEIS.

Refer to Vol 1 Ch 3 page 3.111 Special Biological Diversity Features: "Unroaded Lands. Within the planning area, unroaded lands are places with special biological diversity significance. This is because they contain large acres of relatively unaltered ecosystems where natural disturbance processes are allowed to proceed with minimal human interference. In addition, they provide habitat for wideranging species and linkages that facilitate species movements and gene flow (Dobson et al. 1999). Unroaded lands act as reserves that protect the ecosystems, as well as the full range of biological diversity found within them. They may also provide suitable habitat for restoring missing predator species (including the wolverine and wolf). Unroaded lands within the planning area include Wilderness Areas, WSAs, RNAs, IRAs, and Semi-Primitive Non-Motorized (ROS) recreation areas."

The first issue with this statement is that primitive nonmotorized areas do not provide the natural undisturbed-by-human habitat that the SJPLC staff claims. The following studies reveal that humans on foot, and not on trails or roads, cause a much more profound disturbance to wildlife than humans in a vehicle on any type of forest route:

Cassirer et al 1988 "Elk Responses to Cross country Skiers"; Henson & Grant "Response of Swans to Human Disturbance" 1991; Schultz & Bailey "Responses of National Park Elk to Human Activity" 1975; Ward & Copal, "Telemeter Heart rate of Three Elk Affected by Human Disturbance: 1976; Ferguson & Lloyd "Influence of Nordic Skiing on Distribution Moose & Elk"; Freddy et al "Responses of Mule deer to Persons Afoot and Motor Vehicles" 1986; Gutzwiller et al "Effects of Human Intrusion on Song Occurrence and Singing Consistency in Subalpine Birds": 1994; Klein "Waterbird Responses to Human Disturbances" Wildlife Society Bulletin. 21, Papouchis et al "Response of Desert Bighorn Sheep to Increased Human Recreation": 2001; Swarthout et al "Flush Responses of Mexican Spotted Owls to Recreationists" 2001; and, if staff prefers a USFS Source, a good reference is General Technical Report on the Effects of Linear Recreation on Wildlife (a synthesis of literature).

All of these studies clearly indicate that pedestrian activities have very similar, and sometimes more profound, negative effects on wildlife, as do humans in vehicles, on established routes. A number of the case studies in the above research recommend restricting everyone to designated trails, whether afoot or in a vehicle.

The second issue we have with this statement is that when we follow the reference, we find that Dobson et al do not report that this is what roadless areas are. In fact, the Dobson et al is not original field research or monitoring nor is it a scientific experiment which attempts to prove or disprove a hypothetical. It is a synthesis of citations, interpreted such that the essay can credibly support the idea that biodiversity has been compromised by human development worldwide and continent-wide, which is of course not only true, it is irreversible. The authors of each essay theoretically develop the concept of connecting very distant—but similar-- habitats types to one another, i.e. facilitating the migration of elk between the Canadian Rockies and the Colorado Rockies.



The book was produced by proponents of a special interest, The Wildlands Project. We sympathize with the mission. However, not only does it not apply in this analysis, it is outside the scope of SJPLC's lawful jurisdiction. The Dobson citation is discussing habitat fragmentation caused by highways, paved roads, cities, towns, and agriculture. The Dobson et al essay discusses the difficulties of overcoming human developments that will never occur within this planning area. The essay is based on regional and global connectivity. This citation provides no support for the statement that the "unroaded" areas in this planning area have a critical biological value.

Wildlands Project Mission: (from website) "connect parks, wilderness areas and other large protected lands. In turn, these plans become blueprints for communities and other regional partners to begin prioritizing, identifying and protecting key wildlands areas that will connect North America's protected areas in a system of continental passageways that are necessary for our wild life."

The vision for the Southern Rockies: "The mission of this Vision, facilitated by the Southern Rockies Ecosystem Project, the Denver Zoo and the Wildlands Project, is to protect and rewild the regional landscape. "Rewilding" recognizes the importance of top-down regulation to healthy ecosystems. It emphasizes large core wild areas, functional connectivity across the landscape, and the vital role of keystone species and processes, especially large carnivores (Soule and Terborgh 19991)."

While this sounds like a goal that is hard to refuse, it is not consistent with FLPMA, NFMA, or our expectations for a professional analysis. It is based in large part on a value system, not scientific observation, not research, and not the law that regulates the planning processes for National Forest and BLM lands.

The stated mission of the Wildlands Project can only be successfully accomplished lawfully with informed and willing partners, including Congress, if NFS and BLM lands are to be included. Inserting mis-used literature citations for the purpose of claiming a scientific, professional analysis to satisfy CEQ regulations is not lawful.

Refer to Vol 1 ch 3 Page 3.113 Impacts Related to Unroaded Lands

"If unroaded lands are used for management activities (including oil and gas development, timber harvesting, mechanical fuels treatments, fire management, recreation development, utility corridors, and solid minerals development) then they would be subject to the impacts described in the Terrestrial Ecosystems and Plant Species section. These impacts may include those related to the construction of new roads (which would fragment these lands and provide an avenue for the invasion and establishment of invasive plant species). These impacts may also compromise the ability of unroaded lands to act as reserves, unaltered wildlife habitat, linkages that facilitate species movements and gene flow, and harbors of biological diversity." (Emphasis added)

If we are to rely on the reference cited on page 3.111 above (Dobson et al), this claim of "fragmentation" is not the case. Habitat fragmentation, in every reference we have searched, does not refer to single-lane, low-maintenance dirt roads, unmaintained two-



tracks, or unmaintained singletrack trails in the National Forest. None of these citations claim that lightly-used, rarely maintained recreational access routes cause the above (emphasized) effects. "—compromising linkages that facilitate species movements and gene flow," etc.

Please remove the citation, and please delete the statement that it is cited to support, that roadless areas support a special biological condition. Please rewrite this section using *correctly applied*, *peer-reviewed* research.

Page 3.142 Insects & Disease, Cumulative Impacts: clearly indicate that the recreational trails are not a consideration.

Page 3.146-3.149: Terrestrial Wildlife, Description of Available Habitats: The presence or absence of these landscape-scale systems is not reliant upon the presence or absence of recreational dirt roads and trails used by motorcycles and ATV's.

#### Page 3.151:

"...elk numbers within the planning area have increased substantially since the early 1980s. As of 2004, the estimated post-hunt population exceeded the total long-term objective of 26,600 elk by more than 40%."

"Within the planning area, mule deer numbers have fluctuated during the past 20 years. As of 2004, all of the deer DAUs varied from 1 to 30% below the long-term objective. However, deer numbers have risen lately and currently fluctuate at, or near, the population objective of 83,500."

The existing recreational roads and trails in the planning area clearly do not constrain the elk population, and according to this discussion, no connection is made between the presence or absence of recreational road and trail access and mule deer populations.

Page 1.53: Roadless Areas: Inventoried roadless areas are not roadless. As it is currently written, SJPLC staff appears to want the reader (Deciding Officer) to believe these 604,000 acres are actually without roads. To make the claim that they are special refuges for wildlife because they are roadless is disingenuous.

A rough estimate, from paper maps provided by the SJPLC, shows that in the roadless areas we find: Trail # 507. 679, 677, 508, Road 679, trail 505, road 638, 204, road 578 496, trail 510, road 471, trail 639, 648, road 686, 675, trail 624, 739, 625, trail 624, 625, trail 735, 519, road 564, trail 559, 559.2, road 435, road 564, 564 a, road 609, road 436, tr 514, 515, 549, 547, Columbine Rd, Mancos-Delores Rd, rd 875, 686, rd 864, 555, 592, Tr 550, 517, tr 517, 522, Highline Loop Trail, Groundhog stock driveway rd 424, Rd 578, tr 200, 660, Calico Trail, rd 686 Stoner Mesa Trail, tr 534, rd 597 b, c, d, Missionary Ridge, rd 682, 592, rd 076, tr 587, windy pass trail, treasure mountain trail, 580, Navajo Trail, rd 656, 664, 012, and 4 spurs, tr 581, tr 581, 673, 584, rd 636, 638, 673, 584, 524, 624; 537, 756, 123, rd 135, 620, 601, 150, 135a, trail 593, 598.



Many of the trails were at one time roads. Many of the trails are pack trails used by stock and cattlemen. Many are accessible by motor vehicle. Many are currently in use by trail motorcyclists.

Of course many of these named routes are borders for roadless areas; examining the map it is obvious that the roadless areas are "spiderwebbed" into as much acreage as possible, surrounding even the most administratively difficult patches with roads. In other words, to claim actual roaddlessness is misleading. **Please correct**. Many of the trails called out above are used by motorized vehicles. Many roads and two-tracks not on the map, are also present, pending the Ranger District inventory and travel planning.

Recall, we are looking for the rational connection between the data and the selection of 533,000 acres outside the Wilderness as not-suitable for motor access. From page 3.153:

#### Specific Wildlife Issues

Roadless Areas

Roadless areas are recognized for the high amount of biological integrity they provide within a landscape matrix that is increasingly influenced by habitat fragmentation and human disturbances (Pearson et al. 2003). From a wildlife perspective, roadless areas provide large, relatively undisturbed landscapes that are important as refugia, and to the long-term survival of many species-at-risk (USFS 2001). Once these landscapes are roaded, the habitat values often decrease as fragmentation, and associated impacts, occur (Miller et al. 1996). In the southern Rocky Mountains, roads may represent the most substantial long-term impact related to humans, and may potentially affect many of the ecological processes that create and maintain biological diversity (McGarigal et al. 2001)."

Now we will follow the citations provided to support the statements that roadless areas are special habitat.

Pearson et al includes D. Foreman, Miller, Smith and Soule. Full citation: Pearson, M., D. Foreman, B. Miller, J. Smith, T. Hogan, and M. Soule. 2003. Section 9: A Conservation Vision for the Southern Rockies. In: DeMarco, M (Executive Director). Southern Rockies Wildlands Vision: A Science-Based Approach to Rewilding the Southern Rockies. The Colorado Mountain Club Press. Golden, Colorado.

This is not original research, it is not a scientific study attempting to prove or disprove a hypotheses, and it is not peer-reviewed. The vision may be science-based, but no science is presented in this chapter. The objectives of the chapter is to describe the Wild lands Project plan for the "re-wilding" of the continent. The vision of the Wildlands Project is dedicated to ending multiple-use on American, Canadian, and Mexican lands, under the auspices of wildlife diversity protection. A key element of the strategy as reported in this chapter is to remove the roads in the National Forest. The citation called out on page 3.153 is a detailed description of how exactly the Wildlands Project proposes to remove human activity from federal, state, and private lands. At the least, the Wildlands Project would remove all multiple-use from the NFS and BLM lands, and acquire control of as much adjacent and connecting land as possible. One way to acquire control within the



planning area boundary is via USFS and BLM staff, which appears to be in complete agreement with the Wildlands Project. The intent appears to be to develop the Wildlands Project "vision," to the greatest extent possible, via the administrative process, using the active participation of sympathetic Forest Service and BLM employees.

At this point, the evidence that SJPLC staff appears to be entirely complicit in this "vision" is becoming conspicuous: Recall Vol 2 Part 1 Page 15.4 cited above in our MA objectives and definitions discussion: Although recreation opportunities are extensive throughout the planning area, there may be some areas where no recreation is appropriate." Now we realize that SJPLC staff intends to give themselves the authority to create areas in the planning area where they will allow no human entry at all. We say this based on what has been presented as research authorities for this analysis (the Wildlands Project). And most revealing of all, the very foundational themes of the Plan Vision are centered on maintaining and/or restoring "core undeveloped areas." That language come directly from the Wildlands Project literature

Back to following the citations on page 3-153, in search of the rational connection between the data and the proposal:

Miller et al 1996. Rather than expect reviewers of our comment to take our word for it, we will cite the relevant excerpts from this 13- page report:

"Given the wide range of road effects, it is reasonable to think of roads as a source of human caused Disturbance, or as disturbance corridors (Forman and Godron 1986), and to expect that roaded areas deviate from a more natural condition (Noss 1992). With this expectation, it seems reasonable To think that road density may serve as an index for the level of disturbance on the landscape or deviation from natural conditions. Similarly, non-roaded areas or those with low road density Might serve as environmental baselines against which the impact of human activities can be measured.

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In this study, we examine the relationship between roads and the structure of a southern Rocky Mountain (SRM) landscape. First, we examine the correlation between roads and landscape Structure across a gradient of road density. We chose this area because, as the largest contiguous

block of public land on the Roosevelt National Forest, the landscape analyses were not confounded by a lack of data for private inholdings. There were approximately 94 km of 2-lane gravel roads and 171 km of single-lane unimproved roads in the study area. Also, the area contained a mixture of heavily roaded sites and sites with low road densities, including most of an 18,000 ha roadless area (U.S. Forest Service 1979).

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Given the methodological differences between the two studies, it was still somewhat surprising that there were no relationships between road density and either the average stand size for a given Seral stage or the proportion of an analysis unit occupied by a given seral stage. While the harvest Of trees, especially old growth, was probably more widespread in the Klamath region as a result of higher economic value (Pace 1991; Williams and Marcot 1991), it is likely that most of the gravel



and dirt roads on SRM forests were originally associated with timber harvest. Hence, one would Expect a greater proportion of early seral stages in units with higher concentrations of gravel and dirt

Roads. The average size of these SRM stands may be constrained by topography regardless of stand Origin In the current study, there was a stronger relationship between average stand size and topographic complexity than between average stand size and road density. Road density accounted for virtually no additional variation in average stand size when the index of topography was included in the model Although there were differences between the area immediately adjacent to roads and the landscape as a whole, we found no general trends in the structure of landscape mosaics as road density

Increased.

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In summary, the relationship between road density and landscape structure is not easily quantified. Roads may alter the spread, frequency, and intensity of disturbances on the landscape, but their effects on landscape structure in the SRM are modified by the influence of topography and probably a Variety of other factors that affect stand size and shape. Quantifying the departure from naturalness in roaded areas requires an understanding of the factors controlling the structure of unroaded landscapes, particularly in areas of great topographic relief."

This research says nothing in support of the statement on page 3-153, repeated here: Once these landscapes are roaded, the habitat values often decrease as fragmentation, and associated impacts, occur (Miller et al. 1996).

(Note: STAND - An easily defined area of the forest that is relatively uniform in species composition or age and can be managed as a single unit. SRM - Southern Rocky Mountains.)

And finally McGarigal et al 2001: We found on the SJNF website a link to computer modeling software. It is reasonable to think that if this is not the exact citation, it is a computer generated model done by Mcgraigal for the SJNF. Here is the description, and the significant caveat provided on the website

"Simulating the dynamics in landscape structure and wildlife habitat in Rocky Mountain landscapes: The Rocky Mountain Landscape Simulator (RMLANDS) and associated models.

The Rocky Mountain Landscape Simulator (RMLANDS) is a spatially-explicit disturbance succession simulation model linked to a landscape pattern analysis program (FRAGSTATS) and wildlife habitat capability model (HABIT@). These models are being developed as an aid to ecological assessments and resource planning,

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Although RMLANDS and associated models have broad application in the context of Ecological assessment and resource planning, they are not without their limitations. These Limitations largely relate to the abstraction of the landscape in the models and the heavy Dependence on user-specified model parameters that influence outcomes."



It is reasonable and lawful for agencies to undertake some sort of modeling exercises in an attempt to better predict the effects of their long range planning proposals. However, as the second paragraph quoted above notes, it comes with a caveat. It is susceptible to significant error if the data provided by the agency for input into the model is incorrect. As we have amply demonstrated above, in which staff calls out impacts or effects that are in complete conflict, or in serious conflict with, or totally unrelated to the actual research results, the input data was very likely incorrect for this exercise. **Please remove the results of this computer model as a tool for predicting or estimating past landscape patterns in the planning area.** 

#### 6. HABITAT FRAGMENTATION AND ROADLESS/WILDERNESS

As long as we are talking about unfragmented acreages, we will insert these areas proposed to be "unsuitable for summer motor access" into our GIS database to see if the Areas proposed for closure to summertime motor access correspond with any of the roadless areas inventoried in 2006.

Examining the Roadless Area Inventory and Evaluation Appendix C using our GIS layers, might help to determine exactly what has caused these areas to have become unsuitable for summer motor access.

From Appendix C, Roadless Evaluations.

#### Fish Creek:

Conclusions: This area would not add significantly to the National Wilderness Preservation System. Proposed management under all alternatives would protect wilderness characteristics

Maps show a portion—perhaps 1/3-- of Fish Creek 2006 IRA (13,537 acres) is proposed as "unsuitable" for motor access. The remaining "unsuitable" area is not in the 2006 IRA. In other words, the 2006 IRA is not exactly the same as the "unsuitable area." It overlaps it. If it were to become a Wilderness, the "unsuitable area would be much larger.

#### Storm Peak 57.623 acre

This area would not add significantly to the National Wilderness Preservation System. Our maps show that this 2006 IRA completely surrounds and connects five separate "unsuitable" areas totaling 27.989 acres. Only one small portion of "unsuitable" lies outside the 2006 IRA. In other words, if this became Wilderness the area lost to motor access would be much larger.

#### Ryman 8665 acres

This area would not add significantly to the National Wilderness Preservation System. No part of the 2006 Ryman IRA is proposed as "not suitable." The Ryman IRA is placed in the "suitable" with existing routes, no expansion potential.



Lizard Head Adjacent 5,558 acres, not contiguous.

Conclusions: The addition of 2, 632 acres along the south and west side of the Lizard Head Wilderness and the reclaimed road near Cross Mountain Trail 637 would help the manageability of Lizard Head Wilderness. The other areas along the south and east side of the Lizard Head Wilderness would not help wilderness manageability because of the open meadows, an underground telephone line and proximity to highway 145. The boundaries of the "not-suitable" areas correspond almost exactly with the boundaries of the 2006 IRA. No special attributes are reported other than convenience of management.

#### Blackhawk Mtn 17,533 acres

Conclusions: This area would not add significantly to the National Wilderness Preservation System.

The IRA boundaries do not correspond with any unsuitable areas. If it became Wilderness, the acreage lost to access would grow by 17,533 acres.

Hermosa 148,139 acres

After RARE II the USFS disregarded strong public demand and placed the area into semi-primitive nonmotorized ROS anyway. Now it is "roadless."

This area would not add significantly to the National Wilderness Preservation System. The IRA boundaries correspond very closely with the "unsuitable" designation. Note: The "link" and the "corridor" are present with the existing motor access.

Based on the history that is presented in Appendix C, (page 35: "There was a strong public sentiment to keep the area roadless but not stop historic, high-demand recreational activities such as motorcycling and mountain-biking. The Forest Plan allocated the area mainly to semiprimitive non-motorized recreation opportunity"). motorized use can be supported on the existing trails in the presently nonmotorized area, and in fact, the SJPLC staff is disregarding public input for multiple-use in this round of land-use planning just as much as they disregarded public input in 1983.

#### San Miguel 64,162 acres

Conclusions: The San Miguel IRA is a large roadless area that would not add significantly to the National Wilderness Preservation System.

The 2006 IRA boundaries correspond very closely with the areas proposed to be "unsuitable."

#### West Needles 7.049 acres

Conclusions: This area would not add significantly to the National Wilderness Preservation System.

The boundaries of the 2006 IRA correspond exactly with areas to be designated as "unsuitable."



East Animas 16864 acres

Conclusions: This area would not add significantly to the National Wilderness Preservation System.

The boundaries of the 2006 IRA correspond exactly with the areas to be designated as unsuitable.

Baldy 20,032Conclusions: This area would not add significantly to the National Wilderness Preservation System. Proposed management under all alternatives would protect wilderness characteristics

The boundaries of the RA correspond almost exactly with the areas proposed to be designated as "not suitable."

Florida River 5,726 acres Conclusions:. This area would not add significantly to the National Wilderness Preservation System.

The RA boundaries are larger than the area designated to become "unsuitable."

Runlett Park 5,618 Conclusions: This area would not add significantly to the National Wilderness Preservation System.

The boundaries of this 2006 IRA correspond with no areas that would be designated as "unsuitable." In other words, allocating this land to Wilderness or P-N-M recreation increases the acreage lost to access.

#### HD Mountain

Conclusions: HD IRA is not available for wilderness.

The 2006 IRA boundaries correspond closely, but not exactly with the area to be designated as "not suitable." The IRA encroaches into suitable area to the east and leaves an "unsuitable" area out on the west side. This definitively raises a question about the rationality of the areas selected as "unsuitable."

Piedra Area Adjacent 44,789 acres

Conclusions: This area would not add significantly to the National Wilderness Preservation System.

The 2006 IRA boundaries correspond closely, but not exactly, to the areas selected for unsuitable designation in the 2008 Plan. The non-IRA areas that the IRA encroaches into are selected as suitable, "existing motorized with potential." Thus if the area were to become Wilderness or allocated to P-N-M recreation, it would increase the acres lost to access.

#### Graham Park 17,809 acres

Conclusions: This area would not add significantly to the National Wilderness Preservation System"

The 2006 IRA boundaries do not correspond exactly with the areas selected as "unsuitable." It includes two areas selected as suitable for motor access. Thus if the area were to become Wilderness or allocated to P-N-M recreation, it would increase the acres lost to access



Wenimuche Adjacent 38,410 acres "Conclusions: These areas would not add significantly to the National Wilderness Preservation System. However the addition of two tracts, Elk Park and Monk Rock would allow for consistency in management and is recommended"

The boundaries of the 2006 IRA correspond mostly, but not exactly, with the areas selected as "unsuitable."

Turkey Creek 25,326 acres Conclusions: This area would not add significantly to the National Wilderness Preservation System".

The 2006 IRA boundaries correspond exactly with a large area selected for "unsuitable" designation in the 2008 Plan.

Treasure Mountain 22,512 acres Conclusions: The area is available to become wilderness. This area would not add significantly to the National Wilderness Preservation System.

The 2006 IRA do not correspond exactly with areas proposed to be designated as "unsuitable" in the 2008 Plan. The 2005 IRA is 30% larger by including "suitable" acreage.

South San Juan Adjacent 35,077 acres

Conclusions: This area would not add significantly to the National Wilderness Preservation System

The 2006 IRA boundaries correspond mostly, but not exactly with areas designated as "suitable" in the 2008 Plan.

#### To summarize:

- 1. The 2006 IRA boundaries correspond almost exactly with areas proposed as not suitable for motor access. Some very small portions overlap. Only one IRA entirely occupies "suitable" acreage.
- 2. The SJPLC staff does not examine or disclose any specific objectives that would support eliminating motor access.
- 3. It does not appear as though anything mandated by FLPMA or NFMA will be accomplished by closing these areas to motor access.
- 4. Every 2006 IRA includes the plan intentions: "Proposed management under all alternatives would protect wilderness characteristics."
- 5. None of the 2006 IRA's will add anything significant to the Wilderness Preservation System.



- 6. A close reading of Appendix C reveals that characteristics that cause that #4 judgment are rarely the result of the presence of motorized trails in the IRA's.
- 7. Wilderness visitorship will grow by ½ to 1 percent per year. Comparatively speaking, this is not a large demand.

It appears as though the "rational connection" between the data and the conclusion is that SJPLC staff wants to use the administrative process to develop all of the 2006 IRA's into Wilderness.

Add the above summary to the history of the 19 areas examined above. When they were released to multiple use, the FS did not fully engage the acreage; that is, large blocks were not opened to multiple use. For example, Hermosa, East Animas, Turkey Creek, San Miguel, Graham Peak, HD Mountains, Blackhawk Mountain, Ryman, and Treasure Mountain had less than 50% of the acreage released to multiple use (in some cases it was less than 10% released). The allowed uses in the 1983 plan, and as of 92, show very little acreage altered by multiple use (Ryman, only 1,000 acres altered; Turkey Creek only 260 acres). This is strong evidence that the Forest Service withheld these areas in spite of the release from Wilderness consideration. Today, in 2008, the roadless characteristics have literally been maintained and further manufactured by these management constraints. Refer to (page C23—"Livestock operations: No active grazing allotments" TPA commenter—that means there are allotments, but the USFS is not allowing them to be used) and Page C-22 "The 1983 Forest Plan placed approximately 82 percent of the area in the semi-primitive nonmotorized recreation management prescription." In other words, the USFS staff specialists have disregarded the 1982 regulations in 219.12, "... lands reviewed but not designated.....will be managed for uses other than Wilderness."... Not only has SJNF has been managing lands that did not qualify 30 years ago such that the lands do eventually develop Wilderness characteristics, they intend to continue to do so. These lands can be inserted into the current round of land use plan revisions as "roadless," or as "possessing Wilderness characteristics. And they will be inserted in the next round of Plan Revisions. And the next, until piece by piece, all of them qualify.

The proposed plan—to eliminate motor access from over 90% of those 19 areas---confirms that pattern.

We want the SJPLC to refrain from land use allocations that intend to, or tend to, create Wilderness characteristics, at the expense of access and multiple use, and for the ultimate purpose of adding to the Wilderness Preservation System.

Vol 1 DEIS Ch 3 page 3.154: Please remove the section titled "Landscape Connectivity." This is not within the scope of the SJPLC analysis. The planning area consists of contiguous land except where interrupted by other jurisdictional activities or ownership. By inserting this discussion into the land use plan analysis, SJPLC appears to



be attempting to expand its authority, in increments, under the color of land use planning. This is an abuse of authority.

Back to our mission to connect the data with the conclusion: Essentially, the persistence of any species, as discussed in this analysis, is dependant upon habitat. The DEIS lists each kind of habitat needed. These are landscape scale scenarios. No evidence presented in this analysis reveals that any of the habitat types listed in the Terrestrial Wildlife chapter are dependent upon the presence or absence of trail and road-based motor access.

Vol 1 DEIS Ch 3 page 3.169: Impacts Related to Birds: The last paragraph is incorrect. The loss of snags is not dependent upon the presence or absence of recreational travel. This is a regulatory issue. It is a matter of regulating what people are allowed to take for firewood. In the desert environments BLM prohibits cutting or removing wood or trees. Restricting access is a poor way to prevent the reduction of snags, as it causes the area to trend toward primitive, single-use management. This does, however, fulfill the objectives of the Wildlands Project. Unfortunately, **the analysis fails to note that** primitive camping in high elevations requires some way for people to stay warm. They usually do this with fire. If they must hike to their campsite, it is highly likely that they will remove the wood on-site and use it for firewood. But, in the present discussion, every activity **except** hiking and primitive camping is listed as likely to reduce snags Please **disclose the expected effects of primitive camping on the abundance of dead and down snags and woody debris, in the analysis.** 

So, if the analysis discloses that the presence of continued snag habitat may require regulating wood gathering, it appears to us as though the existing road and trail network, as used for recreational purposes, would not hamper the presence of such suitable habitat.

Vol 1 Ch 3 Page 3.172: "Raptor nesting sites tend to be used regularly and predictably for many years..."

This provides pretty clear evidence that the existing recreational road and trail network—which pre-dates and/or coincides with the present population of raptors, is not likely to further influence the present populations of these species. **Please disclose that evidence in the discussion.** 

We do not have time to review every citation and discussion. To conclude within the time allowed for comment, we will pick at random, to sample if you will, the omissions, inaccuracies and outright conjectural (speculative) information in the Terrestrial Wildlife Chapter, and from the Design Criteria in Volume 2:

Ref to Page 3.178: referring to the Lynx protection: "...recreational activities (including snowmobiling). This may result in additional snow compaction, possibly increasing competition from coyotes" This assertion has been examined by the Rocky Mountain Research Station and found to be false. Refer to Kolbe, Squires, Pletsher and Ruggeirio, The



Effect Of Snowmobile Trails On Coyote Movements Within Lynx Home Ranges, Journal of Wildlife Management. The results showed, among other things, that coyotes did not forage closer to compacted trails than random expectation. So, this assertion must be revised.

Also from page 3-179: "Information regarding the impacts of summer motorized travel on lynx is largely anecdotal."

This would be an area where it is unknown what the impacts might be; according to Title 40 part 1502.22, the agencies "shall provide a statement of the "reasonably foreseeable" impacts....provided that the it is not based on pure conjecture and is within the rule of reason." The likelihood of a lynx being killed by a vehicle on a dirt road where the vehicle speeds are rarely higher than 25 mph is extremely low, and to present it as a real possibility that could threaten the viability of the lynx population is purely conjectural. The negative effects (whether catastrophic or not) of a motor vehicle on a trail passing through lynx habitat are also purely conjectural, and to propose that a catastrophic dieoff of lynx could occur due to motor vehicles use on the trails is not within the rule of reason.

Ref to page 3.183: Mexican Spotted Owl: Certain types of recreation may affect MSO due to disturbance of nesting, roosting, and foraging habitat. Camping, hiking, rock-climbing, and wildlife viewing are examples of activities that may have the highest potential for impacting MSO in the planning area.

Confirmed by the research cited above, *Swarthout et al "Flush Responses of Mexican Spotted Owls to Recreationists"* 2001. The "recreationists" are pedestrians---hiking and climbing in the canyons, not on any trail or road. Swarthourt et al recommend restricting hikers to designated trails, and canyon area closures during breeding season. Yet this analysis and plan do not present even one single guideline to proactively protect the owl from human intrusion by hikers, now or in the future. In fact, the preferred alternative will shift recreation emphasis toward exactly the activities that are known to have negative effects on breeding and roosting owls.

While this is very poor resource protection, it fits the vision of the Wildlands Project. It does not provide any rational connection between eliminating summer motor access on designated trails and spotted owl protection.

Random picks from Volume 2 Part 3 Design Criteria, as may be relevant to summer motor access; from Vol 2, Part 3, page 267,

Landscape and Habitat Connectivity: The Southern Rockies Ecosystem Project (SREP); Linking Colorado's Landscapes, Phase II Reports, 2006;



Full citation: Southern Rockies Ecosystem Project. 2004. The State of the Southern Rockies Ecoregion. A Report by the Southern Rockies Ecosystem Project. Colorado Mountain Club Press. Golden, Colorado.

This organization does not support multiple-use. The solutions that this group recommends are in direct conflict with FLPMA and NFMA. Here is a quote from the website:

"To address the goal of restoring landscape connectivity, as identified in the WIldlands Network Vision, SREP developed the Linking Colorado's Landscapes project. This unique effort is a partnership with the Federal Highway Administration, Colorado Department of Transportation, The Nature Conservancy, and Colorado State University. High priority wildlife linkages were identified utilizing results from expert workshops, computer modeling, and CDOT animal-vehicle collision data. Linkages identified had either a conservation opportunity and ecological significance or safety significance."

This issue is outside the scope and authority of the SJPLC.

And from Vol 2, Part 3, page 270:

#### Elk

R. In order to minimize disturbance and harassment of elk, vegetation screening should be retained or promoted where conditions will support such cover along roads that are kept open for human use and around openings.

\*\*\*\*

- T. To maintain habitat effectiveness for elk, manage for road densities of 1 mile or less per square mile in areas providing critical wildlife needs such as within winter concentration and critical winter range, calving areas, and transition habitat.
- U. Management activities should avoid or minimize disturbance in elk concentration areas and severe winter range between December 1 and April 30, with the exception of through routes. Management activities that occur on concentration areas and severe winter range during the winter period should

Concentrate activities in order to reduce impacts to elk

#### Yet in Vol 1 DEIS Ch 3, page 3.151 we find that:

...elk numbers within the planning area have increased substantially since the early 1980s. As of 2004, the estimated post-hunt population exceeded the total long-term objective of 26,600 elk by more than 40%."

According to the analysis part of this document, the present road densities are not hampering elk herd size or viability. Thus, there appears to be no connection between the data (existing herd sizes in the existing road densities) and the conclusion (road densities must be reduced because of the elk). And, TPA is not even concerned about ML-3 roads, we only want trails. An ML-2 road need not be closed simply due to an arbitrary number (miles per square mile) when the species is thriving in the existing habitat.

Now the question remains, do we have to follow every citation in this analysis? The degree to which the literature has been abused so far is stunning. However, time is



running short, and this comment, with attachments, is excessively long. A speeded-up review of other research in this analysis and plan reveals that despite repeated use of the terms "disturbance to [insert species name here]" and "habitat fragmentation [insert Wildlands Project strategy here]" disturbance and fragmentation are not lawfully specified, scaled or quantified in the Draft analysis or the Draft Plan. It is not possible to come to any rational determination of the significance of 'disturbance' or 'fragmentation' in the absence of any functional definitions for those terms, and even worse, a complete lack of empirical evidence from the planning area.

Further, the DEIS presents no site-specific data or study of interactions between wildlife and road and trail based motor access, and no record of negative conditions of wildlife which have causality in road and trail based motor access. The many statements phrased as 'could', 'may' or 'might' have turned out to be unsubstantiated, and inclined toward conjecture.

Along with disregarding the multiple-use mandate, many years of study, research, and thoughtful inquiry into successful continuance of multiple-use sustained yield management have been discarded.

The SJPLC draft analysis, to this point, does not meet the standards set forth in Title 40, 1502.24, "Agencies shall insure the professional integrity, including scientific integrity, of the discussion and analyses in environmental impact statements." Placing research cites that either does not support, or are the diametric opposite, or are entirely irrelevant to, the discussions presented in the analysis is a betrayal of the public trust. So far, every citation we have followed up on has been misrepresented by the writers of this document.

And, we still have not found any rational connection between the proposed action, closing 533,000 acres to motor access, and the data presented in the analysis.

## 6. RECREATION OPPORTUNITIES DESIRED BY TPA, DEMOGRAPHICS AND USER CONFLICT

TPA wants access to trails. Loops, long distance connectors between areas in the Forest, singletrack trail, and unmaintained two-track. Abandoned roads and railroad grades are also satisfactory. TPA does NOT want access broken up by long trips on ML-3 or even ML-2 roads. The material submitted by the San Juan Trail Riders describes the type of experience we seek. However, TPA also seeks to retain and wherever possible, to expand motor access on primitive roads and singletrack trails. We want to ensure that people, who need motor access due to physical limitations, time constraints, families, and those who cannot afford horses or the cost of outfitters, and future generations of trail riders, will all have access to remote and exciting rides in the Forest.

Refer to page C-8 in Appendix C, regarding Wilderness use:



"The amount of visits has stayed (sic) between 80,000 and 120,000 for the past 10 years. Most of The visitors are white (97%) and are between 40 and 70 years old (70%), with 10% under 16 years old and the other 20% between 20 and 40 years old.

Visitor use of Wilderness Areas on National Forest System lands is forecasted to grow between 0.5 percent and 1.0 percent annually for the next 50 years [Cordell, H.K.; Teasley, J. 1997. Outdoor recreation in the United States: Results from the national survey on recreation and the environment. Athens, GA: U.S. Department of Agriculture, Forest Service, Southern Research Station. 17-206.]" (emphasis added)

Now please, refer to Vol 1, Recreation, DEIS page 3.397: The statement about the fastest growing recreation activities are supported by a citation (Cordell 1999). The statement about the slowest growing recreation activities appears to be unsubstantiated.

Full 1999 Cordell cite from the References Chapter of this DLRMP: Cordell, H. Ken et al. 1999. Outdoor Recreation in American Life. Urbana-Champaign, Illinois, Sagamore Publishing, 449 pages.

The book we found that matches publisher, author, year, but not title: "Integrating Social Sciences With Ecosystem Management Human Dimensions in Assessment, Policy, and Management," Cordell, H. Ken, Bergstrom, John C., Sagamore Pub., Champaign Ill 1999, electronic reproduction (net Library Inc) 346 pp

The 1999 Cordell citation is only available through "e-books" by subscription, or on a participating library computer, so we are unable to paste excerpts or to provide hard copies. Upon review of the 1999 Cordell book, we find it is a collection of essays by outdoor recreation professionals and Forest Service managers about humans and ecosystems. Two of them are written by Dr Cordell; neither of his essays is about recreation use or growth. From memory: One is about the changes in land management from commodity to ecosystem management and educating people in the planning process that humans are very much a part of the ecosystem, and one is about a specific watershed planning effort in southern Appalachia with no references to any specific types or growths in recreation. The other essays are different aspects of the same idea: the changes the Forest Service has undergone, adult education, and ways to evaluate rural towns at risk from changing Forest outputs, ways to interact with the publics and communities during the planning process. None mention anything about specific activities or the rate of growth of any outdoor recreation activity. **Please remove the unsubstantiated statements and the 1999Cordell citation from the discussion.** 

The DEIS writers do cite the Colorado SCORP report, but they misrepresent it. It is not only about people who visit state parks. It is about recreation trends in Colorado in all outdoor settings. Please include this quote from the SCORP in the Final EIS and Plan:



#### OHV Use

Colorado has witnessed an ever-increasing demand for motorized access to Colorado's landscapes. To help meet the demand for motorcycle, ATV and four wheel drive opportunities, trails have been developed by the state, in partnership with local and federal governments and offhighway vehicle enthusiasts to provide continuous access and linkages.

Off-Highway vehicles (OHV) include the following:

- · All-terrain vehicles
- \*Dirt or dual purpose motorcycles (sport bikes)
- \*Snowmobiles
- 4-wheel drive vehicles

OHV registrations have increased 223% from 1995 to 2003, and an average of 18% annually (see Table 13). Growth is anticipated to slow over the next few years due to recent emphasis on encouraging hunters to register their vehicles.

 The economic contribution of OHV use in Colorado is estimated to be between \$204 million and \$231 million, according to the Colorado Off-Highway Vehicle Coalition (COHVCO). These sales created between 3,100 to 3,500 part-time and full-time jobs and between \$68 million and \$76 million in labor income to proprietors and employees.

an average annual increase in registration of 4.4% from 1998 to 2002. An additional increase of approximately 4% is expected by 2004. Figure 18: Motorized Vehicle

Registrations for OHV, boats and mowmobiles are on

the rise (see Figure 18). All three registration programs

In surveys conducted by Ciruli and Associates for

GOCO in 1995 and 1998, respondents reported

participation in 4WD and motorbike trail riding during the last two years at 19% in 1995 and 27% in 1998. In 2002, 31% of people reported participating

in 4WD and motorbike use, demonstrating a

· Snowmobile recreation continues to grow, with

continuing trend in motorized recreation popularity

are overseen by Colorado State Parks.

Motorized Sports

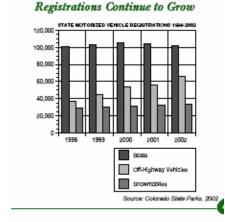


Table 13: OHV Registrations Recorded by Colorado State Parks

| Fiscal Year     | Off-Highway<br>Vehicle<br>Registrations | Percentage<br>Increase or<br>Decrease |
|-----------------|---|---------------------------------------|
| 1995            | 23,233                                  | -                                     |
| 1996            | 25,740                                  | 10.8%                                 |
| 1997            | 30,391                                  | 18.1%                                 |
| 1998            | 36,855                                  | 21.2%                                 |
| 1999            | 45,001                                  | 22.1%                                 |
| 2000            | 53,320                                  | 18.5%                                 |
| 2001            | 55,493                                  | 4.1%                                  |
| 2002            | 66,453                                  | 19.7%                                 |
| 2003 (Estimate) | 75,000                                  | 12.8%                                 |

CHAPTER 2: PARTICIPATION AND TRENDS IN OUTDOOR RECREATION

To conclude: it is not overwhelming public demand that the SJPLC staff is responding to by closing 533,000 acres of nonWilderness acreage to trail based motor access. The SCORP report shows over-ground OHV registrations have growth rates in the double digits. And, as we noted in the Hermosa 2006 IRA evaluation in Appendix C, "to keep the area roadless but not stop historic, high-demand recreational activities such as motorcycling and mountain-biking."

If the SJPLC staff is genuinely concerned about recreation demand, Wilderness is but a tiny piece of the demand equation.

#### **USER CONFLICTS**



Refer to Vol 1 DEIS Ch 3 page 3.387:, Table 3.19.7 "Summary of Direct and Indirect Impacts by Alternative." In the top row, "user conflicts" is presented as one item that this plan is intended to reduce. Since under alternative a conflicts between motorized and nonmotorized users would occur, the SJPLC staff appears to believe the plan will resolve most of the conflicts if any of the action alternatives are selected..

#### Vol 1 DEIS Ch 1 Purpose and need: The purpose of a BLM RMP is to:

• provide an overview of goals, objectives, and needs associated with public land management; and • resolve multiple-use conflicts and/or issues associated with those requirements that drive the preparation of the RMP.

TPA Commenter: This is not a land-use plan decision according to BLM H-1601-1:

Please refer to Section 202(c) of FLPMA (43 U.S.C. 1712) for guidance in developing land use plans:

- 1. Use and observe the principles of multiple use and sustained yield;
- 2. use a systematic interdisciplinary approach to integrate physical, biological, economic, and other sciences;
- 3. give priority to designating and protecting areas of critical environmental concern (ACECs);
- 4. rely, to the extent available, on an inventory of public lands, their resources, and other values;
- 5. consider present and potential uses of public lands;
- 6. consider the relative scarcity of the values involved and the availability of alternative means and sites for realizing those values;
- 7. weigh long-term benefits to the public against short-term benefits;
- 8. provide for compliance with applicable Tribal, Federal, and state pollution control laws, standards, and implementation plans; and
- 9. to the extent consistent with the laws governing the administration of public lands, coordinate the land use inventory, planning, and management activities of public lands with land use planning and management programs of other Federal departments/agencies and state/local governments, as well as the policies of approved Tribal and state land resource management programs. The BLM must, to the extent practical, assure that consideration is given to those Tribal, state, and local plans that are germane in the development of land use plans for public lands. Land use plans must be consistent with state and local plans to the maximum extent consistent with Federal law."

And back to the BLM H 1601: page 11 "Where there are competing resource uses and values in the same area, Section 103(c) of FLPMA (43 U.S.C. 1702(c)) requires that the BLM manage the public lands and their various resource values so that they are utilized in the combination that will best meet multiple use and sustained yield mandates"

And page 12, BLM H-1601-1, the types of LUP decisions are categorized in two ways: "Desired Outcomes," and "Goals and Objectives."

In other words, the RMP is not and never has been the instrument which resolves conflicts and relieves tensions. BLM has no authority to "resolve" values or



philosophical differences between lawful public lands visitors. The phrase "resolve multiple-use conflicts" do not appear in the language of FLPMA nor do they appear in BLM Planning Handbook 1601. As the SJPLC staff read for them above, Section 103 (c) very clearly directs the agency to revert to the "combination that will best meet multiple use and sustained yield mandate."

We will further point out that Section 103 (c) mandates a "a combination of balanced and *diverse* resource uses..." (Emphasis added).

In the 1982 version of 219.12, the Forest Service has taken it upon themselves to consider the impacts of other uses, interactions among recreation opportunities and other multiple uses, and so forth.

And, Travel Management Rule (§ 212.55) directs the FS to consider "conflicts among <u>uses.</u>" Many people, forest staff and public alike, believe this is the same as "conflicts between users", but that is a misconception. The SJPLC staff has confounded the two.

None of the above cited regulation or law instruct or authorize the Forest Serviceable to consider the personal philosophical, cultural, or value systems of any group of users as criteria for its decision-making in the designation of road, trails and areas for motorized use. It does specify the criteria the Forest Service SHALL use to make the decisions, at Section 212.55:

### § 212.55 Criteria for designation of roads, trails and areas.

(a) General criteria for designation of National Forest System roads, National Forest System trails and areas on National Forest System lands. In designating National Forest System roads, National Forest System trails, and areas on National Forest System lands For motor vehicle use, the responsible official shall consider effects on National Forest System natural and cultural resources, public safety, provision of recreational opportunities, Access needs, conflicts among uses of National Forest System lands, the need for maintenance and administration of roads, trails, and areas that would arise if the uses under consideration are Designated; and the availability of resources for that maintenance and administration.

In case this is still not clear, we will spell it out again as it would apply to both agencies: "Values" conflicts, because of the diversity and multiplicity of recreation activities occurring in the planning area, are impossible to regulate and impossible to fairly assign priority to. A person may believe passionately that motorcycles should be prohibited, and is angry and offended by the sight of tire tracks on the trail, but this individual's belief system is <u>not</u> an issue the government is authorized to regulate, influence, support or dispute under <u>any</u> authority. The government's responsibility is clearly spelled out in the law and in regulation, and it is not by accident or coincidence that any regulation in the realm of values, philosophies, or cultural differences between different people engaged in lawful activities on federal land is <u>not</u> within that clearly spelled out authority.

To provide the evidence that this is not by accident, please refer to the following literature:



Moore, 1995, Conflicts on Multiple-Use Trails, U.S. D.O.T. publication. This synthesis and management strategies is considered the standard of the industry.

D.J. Bradsher, North Carolina State University, 2003 "The Relationship Between Past Experience And Multiple-Use Trail Conflict" Unpublished Master's Thesis done under the tutelage of Dr Moore,. The thesis was supported by USDA Forest Service, Bridger-Teton National Forest (Acknowledgements, page iii)

And finally, 1993 USDA Intermountain Research Station Research Paper INT-468: Hikers and Recreational Stock Users: Predicting and Managing Recreation Conflicts in Three Wildernesses.

In all of these works, and the supporting studies, there is absolute agreement that "user conflict" is not represented by physical danger, potential property damage, or any other criminally actionable transaction between people. There is general agreement that it stems from personalities and opinions, and has little or no connection to actual experiences with other users. (Indeed, there is evidence that attitudes against another user group are worse when a person <u>has not</u> encountered the type of user he professes to dislike.)

To help illustrate the impossibility of resolving or even reducing "user conflicts," between lawful public lands visitors pursuing different activities; refer to the USDA Wilderness user study cited above. The "conflict" model is borne out in the Wilderness exactly the same as it is everywhere else.

The Bradsher Thesis, 2003, examines conflicts felt by participants in non-motorized activities also. From P. 4:

"Jacob and Schreyer (1980) define conflict as "goal interference attributed to Another's behavior" (quoted in Bradsher 2003, at p. 2). (Emphasis added)

If an individual experiences dissatisfaction in attempting to achieve their goals and the source of goal interference is attributed to another's behavior, then conflict results. Conflict is not the same as competition for scarce resources. Nor is conflict an objective state, rather it is an individual's interpretation and evaluation of past and future social contacts."

At Bradsher 2003, page 5 she quotes Jacob and Schreyer 1980 on four major classes of factors contributing to conflict. (emphasis added)

"Jacob and Schreyer (1980, p. 370) hypothesize that there are four major classes of factors which can produce conflict:

Activity Style – the various personal meanings assigned to an activity. Resource Specificity – the significance attached to using a specific recreation Resource for a given recreation experience.



Mode of Experience – the varying expectations of how the natural Environment will be perceived.

Lifestyle Tolerance – the tendency to accept or reject lifestyles different from one's own.

The researchers point out that any one of these factors is sufficient to cause conflict, But that conflict is more likely caused by a combination of factors."

At Bradsher 2003, page 7 she again quotes Jacob and Schreyer 1980, for their discussion of the role played by intolerance and stereotyping: (emphasis added)

"Jacob and Schreyer (1980) considered tolerance for lifestyle diversity (the Tendency to accept or reject lifestyles different from one's own) to be a major factor related to conflict. They said "unwillingness to share resources with members of other lifestyle groups is an important source of conflict in outdoor recreation" (p.376). "If group differences are evaluated as undesirable or a potential threat to recreation goals, conflict results when members of the two groups confront one Another" (p. 377). The concept boils down to evaluating the differences, and seeing Others as different. People often label or stereotype others and make value-laden Judgments about them regarding their assumed threat to one's goals. The results Of the evaluation affect whether someone is tolerant or intolerant of another. Research into lifestyle tolerance has supported this notion. Adelman, et al. (1982) found asymmetric conflict persisted between canoeists and motor boaters, in Part, because motor boaters perceived paddlers as having similar values and Attitudes, while paddlers perceived motor boaters as having different values and Attitudes. Ramthun (1995) examined conflict between hikers and mountain bikers And found that out-group evaluation (hikers' evaluations of bikers and bikers' Evaluations of hikers) had a statistically significant effect on sensitivity to Interference. He concluded that the stereotyping process leads individuals to make Assumptions about the probable behavior of other groups and these assumptions Affect the individuals' sensitivity to interference from those groups."

The discussion continues in Bradsher 2003, p 45 (emphasis added)

"Jacob and Schreyer (1980) considered tolerance for lifestyle diversity (the tendency to accept or reject lifestyles different from one's own) to be a major factor in whether conflict would exist. "If group differences are evaluated as undesirable or a potential threat to recreation goals, conflict results when members of the two groups confront one another" (p. 377)."

In every other endeavor the US Government undertakes, tolerance and diversity are highly valued and intensely pursued goals. No reasonable person believes that the regulations governing the management of public lands should be allowed to conflict with this philosophy.

Yet, on Page 3.393, Ch 3 DEIS Vol 1, in the discussion of the growth of a diversity of recreation pastimes on public lands, the SJPLC staff states that:

"This increase in overall number of users has polarized users, and communities, to the point that segregation of users is being asked for by the non-motorized community."



SJPLC staff has provided no factual evidence that whole communities are polarized, or what it is that is polarizing them, or how a duty for SJPLC to fix this is triggered. The only clue SJPLC staff gives us is that the non-motorized "community" is asking for segregation.

We would like the SJPLC staff to "connect the dots:" in the recreation studies cited above, intolerance of different activities is endemic in the non-motorized user groups, including intense intolerance of other, different non-motorized activities.

Because the research on this subject is so extensive, and so consistently reveals the same patterns, the government is ill-advised to choose any type of land-use allocations based on segregating people according to their cultural differences, value systems, or personal philosophy.

No federal agency has the authority to segregate people based on their values, cultural differences, and personal belief systems. Neither the Forest Service or the BLM has the authority to make land-use allocations based on the intolerance (of some people) of cultural or values differences (of other people). This sort of segregation can not be the basis for any land allocations, and especially not when a presently lawful activity is completely eliminated from half the non-Wilderness acreage.

Page 3.99: Dispersed-use and day-use recreation is becoming a predominant recreation use within the planning area. Visitors and residents want quick access to public lands for short visits that are close to home (within a day's drive) in a natural environment. Recreation facilities and travel infrastructure can better support this dispersed day use.

The flaw in the analysis is revealing itself: SJPLC staff does not seem to be aware of the land allocation conflict between staff's overarching desire to preserve "quiet" use and the growing popularity of making a one-day trip into the Forest (motor vehicles required to satisfy the "quick" aspect). Dispersed day use describes much of what TPA members wish to do: access remote places, view scenery and wildlife, ride challenging trails, be with friends and family, and do a complete ride in one day, whether from home or from a "base camp."

Recall, these are nonWilderness acres we are allocating.

"Quiet" use is a cultural attribute, if you will. What exactly is "quiet" recreation? SJPLC staff does not disclose, but the possibility of user conflicts is nearly infinite. Maybe it means that people must behave quietly when they are in the forest. That means no talking. No singing. No joyful noises. No radios. No music. No guitars. No musical instruments. Or is it the quietness of the environment? Ambient forest wind noise is around 65-68 decibels. A motor vehicle in direct line of sight ¼ mile away is about 50-55 decibels.



Recall, these are nonWilderness acres we are allocating.

To access any place in the planning area, motor vehicles are necessary. And the demand to "reconnect" culturally with rural history and with the natural environment is not precluded by the use of a motor vehicle.

For TPA, the demand is to reconnect using quiet motorcycles on singletrack trails that are open to motor use. If the SJPLC staff took the time to examine the actual "interactions" (1982 219.12) between uses, and to examine number of encounters between a trail motorcycle rider and an intolerant hiker, and the duration of that encounter, staff would realize the impossibility of resolving that particular hiker's distress. A description of the "interaction" belongs in the analysis, assuming that these interactions will influence the land use allocations of the Plan:

The trail encounter lasts two minutes at the longest. Usually the encounter is shorter than 30 seconds. When the trail rider and hiker are separated by vegetation and/or topography, the noise is gone. The hiker has the rest of the hike to be quiet. To claim that this one-minute encounter is so destructive (to only one party's experience) that the lawful motorcycle trail riding must be criminalized, is not a measurable, definable output that could provide any basis for criminalizing one of the activities—the absence of any standard means that we could just as easily criminalize hiking. Further, the government is not authorized to choose one cultural attribute at the expense of another.

The chances of an actual collision are nil, and there is no record of that ever happening. This particular hiker's distress is completely a function of his/her intolerance for a different cultural attribute. According to the research, this particular hiker is probably just as intolerant of equestrians and mountain bicyclists. This particular hiker would very likely be intolerant of a group of bagpipe-players marching in tune to their instruments. Recall from the research that intolerance for differences in lifestyle/culture/values is endemic to the non motorized user group.

Now recall our observation of SJPLC staff's complacent in the Wildlands Project, and some clues begin to reveal the reasons behind the proliferation of non-motorized (quiet) recreation opportunity classifications -- primitive, semi primitive nonmotorized, MA-1, MA-2 and MA-3 nonmotorized, and "not suitable" for summertime motor access." SJPLC staff has placed a value on the only recreation that is compatible with eventually getting all the humans out of the forest. That recreation is hiking. Quietly.

Please refer to page 3.399: Population growth implies added recreational-use conflicts. The SJPLC would do well to invest in management actions that minimize conflicts (including providing better recreation-related information to people so they can make better decisions about the settings they seek; implementing improved signing, in order to encourage stewardship behaviors and the sharing of trails and roads; and separating uses as a last, but necessary, resort).

Now please refer to page 3,406 Vol 1 ch 3:



".... for over-ground travel, Alternatives A and D would result in the greatest potential for user conflicts. This is because they would offer the most overlapping acreage for motorized travel suitability and crosscountry motorized travel (Alternative A), and non-motorized travel. This situation would be conducive to direct user conflicts between groups with differing values, and would result in the highest likelihood of conflicting recreation setting attributes (including motor vehicle noise in an area sought out for the benefits of natural quiet).

In one statement staff claims that segregation of users is a "last, but necessary resort," in another statement staff compares the extent that the proposed alternatives will segregate different activities: A and D would result in the greatest potential for user conflicts. This is because they would offer the most overlapping acreage for motorized travel suitability belies that claim.

Please choose a proposal and continue the analysis of that proposal through the document. It is not possible to analyze or comment upon continually changing proposals.

The preferred alternative B uses segregation as the first resort, just slightly less of it than alternative C. Even though neither the regulations or the law---not FLPMA, not NFMA, not the Travel Management Rule, nowhere is the government tasked with resolving cultural, philosophical, or values differences between people engaged in lawful activities, nor is there any mandate to segregate people of different cultures.

Further, the ROS boundaries as presented in alternative B and C, will not satisfy the modern demands as cited in Vol 1, Ch 3 Recreation. Because all motor access will be limited to designated routes, the ROS boundaries in alternative D are the most likely to satisfy those demands.

Please refer to page 3.400, Vol 1 DEIS Ch 3.

General Impacts

Within the planning are, recreation occurs throughout the year. Recreational opportunities, experiences, and settings would continue under all of the alternatives.

Now please refer to Vol 2 Part 1 Page 15.4 "Although recreation opportunities are extensive throughout the planning area, there may be some areas where no recreation is appropriate."

Please choose a proposal and continue the analysis of that proposal through the document. It is not possible to analyze or comment upon continually changing proposals.

**Please refer to page 3.406, Vol 1 Ch 3:** Alternatives A, B, and D would offer more motorized access opportunities in both summer and winter.



This is incorrect. Alternative A would offer no change from the present. Alternative B would offer less motorized access than the present. Alternative D would offer more motor access than the present. The no-action alternative is the baseline. The above quoted language is disingenuous. We want straightforward language that accurately describes the proposed change from the existing situation.

Now please refer to page 57, Part 1, Vol 2 DLMP:

"15.17 New trail construction in Primitive ROS and semi-Primitive ROS settings protect resources, enhance recreation experience/challenge, mitigate user conflicts, and/or provide loops and/or links to other trail networks"

It is our understanding that the word "mitigate" in NEPA terms means to "repay an irretrievable loss." Thus in 15.17 it is not appropriate. There is no way to judge or measure what has been lost, or who has lost it, whether it is irretrievable, or, even worse, what exactly will mitigate for it—another, different user must lose something? **Please remove.** 

Page 57 again: item 15.21: "Campsites may be closed...... when unacceptable environmental or social impacts occur."

Please delete "unacceptable social impacts" from this desired condition. In the absence of any definition of what an "unacceptable" social impact may be, outside of the already regulated activities or criminal acts, this provides no standard by which the public can guide its actions. Please confine the need for agency action to what is spelled out in regulation and law.

And, 15.21 again "... Dispersed recreation resulting in resource impacts or user conflict is effectively addressed." Please remove user conflict from what needs to be effectively addressed in this desired condition. In light of what we know about "user conflicts," the recreating public has nothing to guide its behavior, and in the absence of any guiding legal definition, this is far too likely to result in arbitrary agency action.

To summarize the user conflicts and demographics search:

- 1. Resolving user conflicts is outside the scope of the agencies.
- 2. The reason is, there's no way to limit the possibilities for conflicts without entering into the realm of values and cultural differences.
- 3. By attempting to divide up the landscape according to values and cultural differences, the government throws open the door to endless complaints of user conflicts regardless of the activity;
- 4. Thus, land use allocations based on cultural differences and personal values are an exercise in futility.
- 5. Flowing from these observations, there is no possible <u>rational</u> connection between cultural differences and personal values, and recreational land-use allocations.



# 7. CONCLUSION AND REQUEST FOR CHANGES IN THE PROPOSED DLRMP:

Based on an accurate reading of the research cited in the draft EIS and Plan, and the strong appearance that the agencies have in the last 25 years, and are presently intentionally using the administrative process to unlawfully expand their authority into the realm of "manufacturing Wilderness" by constraining access and activities in large blocks of acreage in the planning area, we contend that the land use allocation boundaries in Alternative B and C are entirely arbitrary at best, and at worst, complicit with two single-purpose special interest groups called the Wildlands Project and the Colorado Mountain Club. We request that this draft document be revised.

Staff will need to follow each of these corrections through the entire document, all three volumes, in order that the plan and EIS flow correctly. This list may not include every request made in the text of this comment (in bold type). We regret that we do not have time to make sure each one is on this list, however, we will check the Final to see to it that each request is addressed.

THE CHANGES MUST INCLUDE BUT ARE NOT LIMITED TO THIS LIST. THIS IS BECAUSE OF THE SHORT TIMEFRAME THAT WE ARE ALLOWED TO EXAMINE A DOCUMENT THAT IS THREE VOLUMES LONG AND TOOK THE SJPLC STAFF SEVERAL YEARS TO WRITE

- 1. Abandon the proposed suitable v. not suitable motorized use designations in the land use plan altogether. They are arbitrary.
- 2. Abandon the "Management Areas" as defined for motorized recreation. They are arbitrary.
- 3. Re-draw the ROS boundaries such that motor access on primitive motorized trails and single-lane, low maintenance dirt roads is retained at the current level, or such boundaries are supported by factual scientific issues or clear and present legal constraints.
- 4. Provide for expanding primitive motor access by allowing highly maintained roads to revegetate, restricting travel on these roads to lightweight vehicles, and according to the research cited, minimizing sediment delivery from all routes by impeding drainage and allowing vegetation encroachment into the road prism.
- 5. Please remove the mandate to resolve, reduce, minimize or otherwise address "user conflict" from this plan. Resolving philosophical differences between lawful public lands visitors is not a land use allocation decision.
- 6. Make no land-use allocations based on "maintaining core undeveloped lands" or any variation of that philosophy. This will require a number of revisions to the alternatives, the most important and significant revision being the declaration of huge contiguous blocks of acreage as unsuitable for road and trail based motor access.



- 7. Staff will refrain from making land-use allocations based on personal philosophies, value systems or cultural differences between lawful public land users. This will require a number of revisions to the alternatives, the most important and significant revision being refraining from declaring huge, contiguous blocks of acreage as unsuitable for road and trail based motor access.
- 8. Please end the practice of generating "user conflict" with segregated land allocations.
- **9.** Revise all statements, including but not limited to that on page 2.20 referring to the mere designation of certain, newly invented "management areas" as the cause, reason, or justification for making any area "unsuitable" for road and trail-based access, on existing routes or on any potential new routes in the future.
- 10. Please remove the Hermosa Wilderness proposal from any of the alternatives in the Final Plan
- 11. We want the SJPLC to refrain from management constraints that intend to, or tend to, create Wilderness characteristics, at the expense of access and multiple use, and for the ultimate purpose of adding to the Wilderness Preservation System.
- 12. Disclose that more traffic on roads where motor travel is suitable <u>will</u> result in greater road damage.
- 13. Disclose that heavier vehicles cause the greatest road damage of all.
- 14. Disclose that increased road damage will require more maintenance.
- 15. Disclose that road maintenance is the greatest source of road sediment delivery—by far--- of any road-based activity, whether it is recreational or commercial.
- 16. Disclose that wide distribution of lightweight recreational vehicle trips over a large network of unmanaged roads will not result in increased maintenance costs.
- 17. Remove all the discussions about global climate change (warming) from every Volume, Chapter, and Section.
- 18. Disclose that the 6 linear miles of road obliteration will cause 90 miles of road to disappear during the life of this plan, the cumulative effect will be to make the NF more roadless.
- 19. Remove all "personal communications" from the document.
- 20. Revise Issue Two such that the attainment of a "sustainable natural ecosystem" is correctly described, and not presented as somehow reliant on the presence or absence of road and trail based motor access to the forest.
- 21. We want SJPLC staff to disclose that obliteration of any road will cause the "subsurface" water flow to be interrupted again, and the sediment delivery form that interruption and the bulldozer work required to recontour the cutbanks will cause far more erosion and sediment delivery than simple abandonment.
- 22. We want this analysis to disclose that according to the research, light vehicle traffic (250 pounds to 500 pounds) running low tire pressures (6 psi to 20 psi) on undeveloped roads will cause only 0.5% greater sediment delivery than abandonment.
- 23. Please correct page 3.69. Change from "Road maintenance may result in short-term increases in soil erosion." To "Road maintenance <u>will</u> increase erosion and sediment delivery from roads."



- 24. Please disclose that there is considerable amounts of research that reveals that low-maintenance, single lane roads, unmaintained two-track, and unmaintained motor singletrack are not a source of "chronic" watershed problems.
- 25. Please remove the statement on page 3.37, and either replace it with the accurate description of what favorable water flow meant in 1897, or leave it out.
- 26. Please correct the inappropriate application and interpretation of the literature. Remove the citations that are not relevant, remove those that are not readily available, remove the mis-used citations that do not support the discussion. Use modern, independent research (we recommend Coe 2006), and provide a proper reading of the relevant literature.
- 27. Revise the discussion so that the research cited is accurately represented and used in the analysis.
- 28. Do not close any ML-2 roads simply due to an arbitrary number (miles per square mile) when the wildlife is thriving in the existing habitat.
- 29. Refrain from using essays devoted to converting all public lands to Wilderness as a justification or as part of any justification, for any land allocation.
- 30. This will entail a revision of the all of the action alternatives, the largest revision being the abandonment of all land-use plan level selections of "suitable" and "not suitable" areas for summer motor travel and the next largest being the revision of MA-1, MA-2, and MA-3 designations outside of Wilderness.
- 31. Please review all singletrack trails in the planning area for accuracy of designation. This means that we want the SJPLC staff to revisit all earlier closures, which were very likely based on a similar mis-use of the literature and misunderstanding of agency mission.
- 32. Please provide the Ranger Districts full control over the issues surrounding reopening those trails to motorcycle use in their upcoming Travel Management Plans.
- 33. Please reveal in plain language the purpose and objectives for the new philosophy of "retaining core undeveloped lands" in the National Forest and upon the BLM lands in the Planning Area. As set forth in this analysis, it appears to be to "rewild" the southern Rockies. If this is the case, please say so. Covert attempts to produce this result using the land-use plan revision process is an abuse of administrative authority.
- 34. Please reveal the actual, real-world cumulative effects of "rewilding" the planning area.
- 35. Please state in clear language the purpose of "tightening" the boundary of suitable area to existing areas with existing routes in the Stoner and Taylor Mesa area.
- 36. Please correct the impression given by the descriptions of roadless lands and say that these areas do have roads and trails in them, so that the deciding officer receives an accurate description of the planning area.
- 37. Please remove the section titled "Landscape Connectivity," Vol 1 DEIS Ch 3 page 3.154.

Thank you for your attention to our concerns.



Sincerely,

Don Riggle Trails Preservation Alliance

#### Enclosures:

- 1. Excerpted chapter from Southern Rockies Wildland Vision cited in DLRMP
- 2. Excerpted chapter Continental Conservation cited in DLRMP
- 3. Swank & Crossley Forest Hydrology and Ecology at Coweeta
- 4. Megahan & Kidd 1972
- 1. MacDonald & Stednick 2003
- 6. Miller et al Forest Roads & Landscape Structure
- 7. USDA Research Paper INT-468 Hikers & Recreational Stock Users