BEFORE THE REGIONAL FORESTER

USDA FOREST SERVICE
ROCKY MOUNTAIN REGION

Appeal of the County Line Vegetation Management Project Record of Decision and Environmental Impact Statement Rio Grande National Forest Conejos Peak Ranger District	)	
	)	**NOTICE OF APPEAL** **APPELLANTS INTERESTS** **STATEMENT OF REASONS** **REQUEST FOR RELIEF**
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Appellants	)	September 19th 2005

Notice of Appeal

USDA Forest Service, Region 2
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Forest Guardians, Colorado Wild, Carson Forest Watch, Center for Native Ecosystems, Rocky Mountain Chapter of the Sierra Club, San Luis Valley Ecosystem Council, San Juan Citizens Alliance, Wolf Creek Wheel Club, Augustine J. and Margaret De Herrera, Randall McKown, Alice and Gilbert Duran, and Jon Sparr hereby give notice pursuant to 36 C.F.R. § 215.7 that we are appealing Conejos Peak District Ranger Roberto R. Martinez's decision of July 18, 2005 to approve the County Line Vegetation Management Project and Final Environmental Impact Statement ("FEIS"). The project area is located on the Conejos Peak Ranger District of the Rio Grande National Forest.

The selected alternative (Alternative B) authorizes salvage logging on 841acres, preventative thinning on 715 acres, 15.6 miles of road reconstruction, 2.3 miles of temporary road construction, 693 acres of artifical regeneration, and 3 miles of fence construction among other activities. The volume to be cut is 24-29 MMBF of sawtimber and 1,000 cords (.5 MMBF) of fuelwood.

Appellants have standing to appeal the County Line Vegetation Management decision because all provided comment or otherwise expressed interest in the project before the end of the 45-day comment period on the draft environmental impact statement ("DEIS"). This notice of appeal is timely, having been filed within the 45-day appeal period, which ends on September 19, 2005.

Appellants Interests

Forest Guardians is a non-profit corporation with approximately 2000 members throughout the United States, including Colorado. Forest Guardians' mission is to protect and restore the natural biological diversity of forests in America's Southwest and Rocky Mountains, including forests in the Rio Grande National Forest. Members of Forest Guardians engage in outdoor recreation, wildlife viewing and other activities in the Rio Grande National Forest and intend to continue to do so.

Carson Forest Watch (CFW) and Joanie Berde (coordinator) as an individual have been involved in monitoring logging projects in the Conejos Ranger District for nearly 15 years. CFW is a volunteer conservation group that works to monitor projects on National Forests in northern New Mexico and southern Colorado, and works for protection of wildlife and forest biodiversity in this bio-region. CFW has written comments, attended field trips, and documented logging effects in this part of the Conejos Peak District since the early 1990s. I have hiked, photographed and documented, and reported resource damage in adjacent timber sales on La Manga and Cumbres Pass (since the early 1990s). In addition, I have documented and reported to the Forest Service

calls of sensitive species such as the Boreal owl in a nearby forest area and have documented watershed damage in these areas as well (and reported these to the Ranger District). Carson Forest Watch and myself as an individual would be directly affected by this logging project as it would impair our enjoyment and scientific study of this part of the Rio Grande National Forest. Because we work to protect wildlife species and habitat in this area, this sale would harm this resource and our hiking, bird-watching, photography, and other uses of this part of the Conejos Peak Ranger District of the Rio Grande National Forest. Carson Forest Watch is based in the Peñasco, New Mexico area and is represented by Joanie Berde, volunteer coordinator.

Colorado Wild! is a non-profit organization founded in 1998 to preserve, protect, and restore the native plants and animals of the southern Rocky Mountains, focusing our efforts on habitat protection of the forested high country.

The San Luis Valley Ecosystem Council (SLVEC) is a non-profit organization whose mission is to protect and restore - through research, education, and advocacy - the biological diversity, ecosystems, and natural resources of the Upper Rio Grande bioregion, balancing ecological values and human needs. Since 1995, SLVEC has served south-central Colorado, a vast area of some 8,100 square miles that includes the Rio Grande National Forest, two National Wildlife Refuges, the Great Sand Dunes National Park, numerous state wildlife areas, 230,000 acres of wetlands, and some of Colorado's most remote wilderness. Originally formed to offer input for the Revised Management Plan of the Rio Grande National Forest, today SLVEC is a voice for citizens concerned about threats to our public lands by increased motorized recreation, mismanaged livestock grazing, destructive timber sales, and unbridled development by the ski industry. SLVEC has established a reputation for being a strong environmental advocate that finds workable solutions. SLVEC works on the Rio Grande National Forest to preserve natural resources and unfragmented wildlife habitat, and restore wildlife migration corridors. SLVEC filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

The Rocky Mountain Chapter of the Sierra Club is based in Denver, Colorado, with active members across the state. The Rocky Mountain Chapter of the Sierra Club and its members have an active interest in the management of our public lands and national forests in Southwest Colorado, including the Rio Grande National Forest and regularly follow its management including proposals for logging. The Rocky Mountain Chapter of the Sierra Club filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

The San Juan Citizens Alliance is based in Durango, Colorado, with over 500 members in La Plata, Montezuma, and Archuleta counties. The San Juan Citizens Alliance and its members have an active interest in the management of our public lands and national forests in Southwest Colorado, including the Rio Grande and San Juan national forests. The San Juan Citizens Alliance filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

Center for Native Ecosystems is a non-profit advocacy organization dedicated to conserving and recovering native and naturally functioning ecosystems in the Greater Southern Rockies and

Plains. We value the clean water, fresh air, healthy communities, sources of food and medicine, and recreational opportunities provided by native biological diversity. We also passionately believe that all species and their natural communities have the right to exist and thrive. Center for Native Ecosystems uses the best available science to forward its mission through participation in policy, administrative processes, legal action, public outreach and organizing, and education. Center for Native Ecosystems filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

Wolf Creek Wheel Club (WCWC) will be harmed by the loss of recreational value of the Continental Divide Trail that runs through the County Line planning area. The WCWC's concerns include potential degradation of the trail, and loss of esthetic values; concerns also include probable logging and destruction over the trail with which WCWC members access the Continental Divide Trail, which is unsigned and unmapped and leaves FR 118.1C approximately 4 miles from the junction of this road with the Trujillo Meadows Rd (FR116), or about 0.6 miles beyond the gate closure on FR118.1C. This trail is used not only by bicyclists, but also by hikers and equestrians.

Randall McKowan is a property owner in the County Line planning area whose property values will be affected by the proposed logging. The enjoyment of his property and the surrounding national forest lands will be severely harmed by impacts from the logging on scenic values, wildlife populations, water quality, as well as noise and traffic hazards. Randall McKowan filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

Augustine J. De Herrera & Margaret De Herrera regularly spend time on the Rio Grande National Forest and the County Line planning area. Their use and enjoyment of the planning area will be severely harmed by the proposed logging and its impacts on recreation, water quality, wildlife populations, as well as the noise and traffic hazards. Augustine J. De Herrera & Margaret De Herrera filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

Jon Sparr is an individual who regularly spends time on the Rio Grande National Forest and the County Line planning area. His use and enjoyment of the planning area will be severely harmed by the proposed logging and its impacts on recreation, water quality, wildlife populations, as well as the noise and traffic hazards. Jon Sparr filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

Alice and Gilbert Duran are property owners in the County Line planning area whose property values will be affected by the proposed logging. The enjoyment of their property and the surrounding national forest lands will be severely harmed by impacts from the logging on scenic values, wildlife populations, water quality, as well as noise and traffic hazards. Alice and Gilbert Duran filed timely comments on the County Line Vegetation Management Project during the 45-day comment period on the DEIS.

Statement of Reasons

1. Obligation under 40 C.F.R. § 1502 (NEPA Violations)*: In the County Line Vegetation Management FEIS and ROD, the USFS has failed to meet its obligations to take a "hard look" at the environmental consequences of its proposed actions, use accurate scientific analysis, or disclose important information regarding impacts.*

With the National Environmental Policy Act ("NEPA"), Congress intended that requiring agencies to prepare EIS's would help "'prevent or eliminate damage to the environment and biosphere' by focusing government and public attention on the environmental effects of proposed agency action."[1] "NEPA represents a firm Congressional mandate that environmental factors be considered on an equal basis with other, more traditional, concerns."[2] To this end, NEPA requires agencies to take a "hard look" at all potential project impacts when preparing EISs.[3]

Meanwhile, NEPA statutory standards found in Council on Environmental Quality ("CEQ") regulations recognize that intelligent decision-making can only derive from high quality information.[4] Of primary import to this project, § 1502.24 of these regulations provides that "[a]gencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in [EISs]." Information included in NEPA documents "must be of high quality." Accurate scientific analysis…[is] essential to implementing NEPA."[5] Where an agency has outdated, insufficient, or no information on potential impacts, it must develop information as part of the NEPA process.

The County Line Vegetation Management decision requires site-specific analysis; it simply cannot rely on the LRMP (standards and guidelines), mitigation measures, or BMPs (project design criteria). The Forest Service Manual states:

> "Planning for units of the National Forest System involves two levels of decisions. The first is the development of a Forest Plan . . . The second level of planning involves the analysis and implementation of management practices designed to achieve the goals and objectives of the Forest plan. This involves site specific analysis to meet NEPA requirements for decision making."[6]

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[1] Marsh v. Oregon Natural Res. Council, 490 U.S. 360, 371 & n. 14, 109 S. Ct. 1851, 1858 & n. 14, 104 L.Ed.2d 377 (1989) (quoting 42 U.S.C. § 4321); see also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349, 109 S.Ct. 1835, 1845, 104 L.Ed.2d 351 (1989).

[2] Foundation for North American Wild Sheep v. U.S. Dept. of Agriculture, 681 F.2d 1172, 1177 (9th Cir. 1982).

[3] See, e.g., Kleppe v. Sierra Club, 427 U.S. 390, 410 n. 21, 96 S.Ct. 2718, 2730 n. 21 (1976); Robertson v. Methow Valley Citizens Council, at 374.

[4] See 40 C.F.R. §§ 1500 et seq.

[5] 40 C.F.R. § 1500.1(b).

[6] FSM § 1920.

Nearly all of the conclusions in the County Line Vegetation Management FEIS are based on little to no site-specific information but mostly on references to the LRMP, project design criteria and vague expectations.

For example, the FEIS states,

> "[t]hese project design criteria have been used on most timber sales on the Forest and are consistent with the Forest Plan standards and guidelines and should be effective at minimizing negative impacts to avian species."

FEIS at 3-34 (emphasis added). However, no actual information is provided to support such a critical assertion because the USFS does not have such information. Such assertions of effectiveness are found throughout the FEIS as support for its determinations.

The CEQ Regulations state:

> "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail."[7]

The information provided in the County Line Vegetation Management FEIS is quite obviously not of "high quality" nor does it arise from "accurate scientific analysis." The FEIS is in violation of NEPA because it fails to describe how the proposed activities will comply with the LRMP in several respects that will be further explored *infra*.[8] The analysis on which the Forest has relied is inadequate, flawed and biased in a number of ways, rendering any potential decision arbitrary and capricious.[9]

Purpose and Need

The stated Purpose and Need for the County Line Vegetation Management Project is fundamentally flawed and the actions proposed in the selected alternative simply cannot be justified to meet the purpose and need statement. The ROD clearly states the purpose of the action is to "restore the County Line Analysis Area to a more healthy forest condition." ROD at 1. However, the FEIS fails to demonstrate that the analysis area is unhealthy or outside the Historic Range of Variation (HRV). The need is stated as:

- reduce the spruce beetle risk rating for stands in the analysis area,

[7] 40 C.F.R. § 1500.1(b).

[8] Native Ecosystems Council v. USFS. (9th Circuit August 11, 2005) http://www.ca9.uscourts.gov/ca9/newopinions.nsf/4F9C4F14AB81393E8825705A00003F26/$file/0435375.pdf

[9] 5 U.S.C. § 706.

- reduce the potential spread of spruce beetle within the analysis area by reducing spruce beetle populations,
- reduce fuels buildup and reduce potential wildfire severity,
- reforest areas heavily impacted by the spruce beetle,
- salvage forest products to retrieve economic value ad provide wood products to benefit the local economy, and
- reduce potential negative impacts to other forest resources.

ROD at 2.

All of these purported need statements, other than number 5, forest products, are not supported by either the best available science or the agency's statutory and regulatory structure. As will be demonstrated below and is plainly stated in the ROD and FEIS, the need statements are speculative and unsupported by science.

Courts have "afforded agencies considerable discretion to define the purpose and need of a project."[10] Preparing an EIS "necessarily calls for judgment, and that judgment is the agency's."[11] However, this discretion is not unlimited.[12] Courts evaluate a Statement of Purpose and Need under a reasonableness standard.[13] Where an action is taken pursuant to a specific statute, the statutory objectives of the project serve as a guide by which to determine the reasonableness of objectives outlined in an EIS.[14] In the case of the County Line Vegetation Management project the Purpose and Need statement does not meet the reasonableness standard and The ROD approving the FEIS and the FEIS itself is arbitrary and capricious under the APA.[15]

Beetle Risk Rating

We fundamentally disagree with the ROD and Final Environmental Impact Statement's (FEIS) conclusion that "timely stand management can lessen adverse effects in areas currently infested and may reduce tree susceptibility in adjacent, uninfested areas." FEIS at 2.

The DEIS noted that the percentage of trees infested in the analysis area would only be reduced from 50% to 30% under Alt. B. DEIS, pp. 2-16. This unit of measure for "key Issue 1" was removed from Table 2-4 in the FEIS. FEIS at 2-18. This seems to correspond to a reduction of only 20% of the spruce beetle population. With 80% of the beetles remaining to reproduce the next generation, the limited extent of the infestation treated will do nothing to slow the spread of

[10] Westlands Water Dist. v. United States DOI, 376 F.3d 853 at 1066 (citing [**21] City of Angoon v. Hodel, 803 F.2d 1016 (9th Cir. 1986)).

[11] Lathan v. Brinegar, 506 F.2d 677, 693 (9th Cir. 1974).

[12] *Id.*

[13] Friends of Southeast's Future v. Morrison, 153 F.3d 1059 C.A.9 (Alaska), 1998.

[14] City of New York v. United States Dep't of Transp., 715 F.2d 732, 743 (2d Cir. 1983).

[15] 5 U.S.C. § 706.

beetles, given beetles' geometric or even exponential population increases for each generation they aren't checked by lack of a food source or extremely cold weather. Indeed, the FEIS acknowledges that the spruce beetle epidemic cannot be stopped, that "it is not realistic to think that the proposed treatments would control the spruce beetle outbreak over the vast areas adjacent to the treated areas" (FEIS at 3-4 to 3-5), and that ultimately "the beetle population will remain large." FEIS at 4-12. This is not the first time the agency has admitted this fact and yet the science contradicts the stated purpose and need of the County Line Vegetation Management proposal. In an earlier Bark Beetle Analysis on the Routt National Forest, the Forest Service admits that thinning for spruce beetle does not work at the stand level, "treatment of individual spruce stands has proven ineffective under high beetle pressure." USDA Forest Service 2002 at 107. There is also evidence that spruce beetle infests fresh stumps. Id. at 92.

In fact, there has been prior thinning and logging in the northern units (1957 and 1983) and the FEIS makes the claim that these activities reduced the risk of spruce beetle affecting the stands as justification for the proposed actions in County Line Vegetation Management project, (FEIS at 3-2 to 3-3) and yet in the very next sentence disproves its own logic by stating that the spruce beetle risk rating for these very stands remains high or moderate. If this is the case, then why would the proposed actions be expected to have any affect on the risk ratings?

The FEIS is itself confused on this issue. In the agency's response to comments, it attempts to justify the actions by stating that the analysis area is adjacent to the South San Juan Wilderness area "where there are very large areas of susceptible spruce." FEIS at 4-14. Yet, on the very same page, the FEIS states, the "proposed actions may reduce the spruce beetle populations to a small degree but are not designed to affect the overall populations of spruce beetle in this area." FEIS at 4-14. Thus, by how much would spruce beetle infestation in areas outside of the analysis and project areas be affected by a mere 20% reduction of the beetle population inside the project area, when millions of beetles would remain within flying or attacking distance of the thinned areas intended to be made more resilient to spruce beetle attack? With a food source remaining and no major cold spell needed to kill the beetles, population growth in the next generation of beetles will most likely overwhelm any minor reduction in current generation size despite the proposed action, given geometric or exponential population increases via successful breeding. Finally, implementation of the proposed action would occur too slowly to affectively change any beetle population dynamics. In order to adhere to NEPA's high quality and hard look tests, the Forest Service must carefully assess these issues and disclose what scientific evidence exists on the issue, or if not available, generate that information as required.

Contrary to the stated conclusion that the project will help reduce spruce beetles, careful scrutiny of the proposed prescriptions suggests that the project may actually increase spruce beetle populations. For instance, 3,575-7,150 trap trees are proposed for the thinning units. FEIS at 2-5. Unless every single one of these trap trees is removed or treated in place to kill beetles before they complete a breeding cycle, the beetle population would be increased. It is hard to imagine marking this many trees, and then finding and treating all of them the following year. Also, cutting trees for beetle traps may draw in more beetles than can fill the trees. The beetles then will attack live trees. This possible "spillover" effect has been noted in other Forest Service documents concerning beetle treatments. See, e. g., The Draft Environmental Impact Statement for the Rock Creek Integrated Management Project (on the Routt National Forest) at p. 22-23.

Also, tops and limbs, as well as short cull log sections, may still harbor beetles or constitute a food source for colonization by beetles, thus offering yet more of a food source for the beetle populations. Ultimately, the project is premised on a mere "hope" that logging can temper beetle-caused mortality. FEIS at 3-6.

Artificial Reforestation

The FEIS promises that selling spruce for logging will provide funds by which the Forest Service can replant the area and regenerate spruce in a shorter period of time than would naturally occur. Yet the Forest Service presents no evidence that the proposal will improve the potential for forest regeneration. The agency does provide the names of some past projects where artificial regeneration was supposedly implemented successfully, but no quantitative information or regeneration certification documents are provided or even cited to support such an assertion. FEIS at 4-32. In the agency's respond to our comment on this subject, it provides an unnessessary statement that the "respondent, as well as everyone else in America, uses wood products on a daily basis in some form." FEIS at 4-31. This may be valid of American consumers as a whole, but some respondents live in adobe houses or houses made of other non-wood materials and buy certified sustainably produced wood products from private lands), regardless a public NEPA document is not the place for propaganda.

Removing the spruce will eliminate a significant component of the remaining canopy cover and shade it provides. Contrary to the agency's claim that the harvest would not be a clearcut (FEIS, 3-73), the logging proposed can easily be categorized as such. Only 38 trees will be left / acre (FEIS at 2-16), when the area averages 166 currently, leaving only 23%. Many units will have a few to zero spruce or fir left after logging, though the FEIS shows high numbers for total trees left after logging. FEIS at 3-73. In addition the logging will result greatly reduced canopy cover, with needles present on the trees or not. The dead spruce that will slowly fall over will also become coarse woody debris (CWD). This CWD provides several major functions, notably shade under which shade-tolerant Engelmann spruce and Subalpine fir can successfully regenerate, and moisture retention for same. Further, this CWD may provide sufficient barriers so that cattle, elk, and mule deer cannot browse upon newly regenerated trees, whereas only CWD from logging slash would likely not be sufficient for this purpose, as log sections with diameter six inches and up and six or more feet in length would be removed to prevent beetle breeding. See FEIS at 2-7. The FEIS also presents no evidence or research that light logging slash would be sufficient to ensure a benefit to adequate regeneration as claimed (FEIS at 3-73). Notably, the FEIS acknowledges that fir regeneration is unlikely "without sufficient shade" that the snags and CWD would provide. FEIS at 3-68. These issues starkly undermine the FEIS's unsupported conclusion that the project will improve spruce regeneration potential. FEIS at 3-63 to 3-76.

One need only consider the numerous high-altitude clearcuts of the 1960's and 1970's – most approved by the Forest Service – that even after numerous attempts, failed to regenerate through either natural or artificial means. See Figures 1-2 below. In order to take the "hard look" at "high quality information" required by the NEPA, implementing regulations, and caselaw, the Forest Service must identify and disclose past successes and failures in natural and artificial

regeneration of this forest type, and assess the prospects for success based on these. Should artificial regeneration be unsuccessful, as has been the case in so many other locations where spruce planting was attempted by the Forest Service, the proposed actions would result in even less forest cover over time than the beetle killed spruce provide, not more as claimed in the FEIS (p. 2-16), and an irretrievable commitment of resources will have occurred, contrary to the FEIS's conclusion. FEIS at 3-7. Further, any and all conclusions on the effect to various species will be in error; for instance, with avian species determinations (FEIS at 3-34) and long-term recovery of the Wolf Creek and Rio de los Pinos watersheds (FEIS at 3-102).

Figures 1 and 2. Past timber harvest along FR 118 east of the County Line Planning Area. September 14, 2005.

Fire Potential

The ROD and FEIS promote the notion that the project will reduce fuel loading and fire potential and that this is desirable for forest and watershed health reasons. However the FEIS presents no scientific, and only anecdotal, evidence that such objectives are desirable and can be achieved. Spruce-fir forests, as disclosed in the FEIS, experience fires that are infrequent but of high intensity. FEIS at 3-107 to 3-110. It is not reasonable to adopt a purpose and need statement to reduce fuels buildup and reduce potential wildfire severity in this case. The FEIS recognizes that spruce beetle attacks do not usually lead to increased fire. FEIS at 3-109, -110. Schmid and Hinds (1974) cited sources who noted that there have been no large fires in spruce-fir in Colorado since 1900, including the large area of spruce killed in the 1941-1952 outbreak in northwestern Colorado. The FEIS admits that standing dead trees "could take many decades to decay and fall." FEIS at 4-66. In general, Schmid and Hinds felt that the fire risk following spruce beetle outbreaks is "overexaggerated." Id.

The FEIS itself is confused on the fire danger, issue revealing the arbitrary and capricious nature of the purpose and need statement. For example, in its response to public comments, the agency states that "this project proposes to reduce fuels," (FEIS at 4-37) and astonishingly several pages prior the agency states that the project "is not an attempt at … fuel management." FEIS at 4-31 (emphasis added). The FEIS states: "In most areas, the proposed harvest activities would be as

much a fuels treatment as a timber production action." FEIS at 3-111. Which is it, fuels management or not?

We disagree that the proposed actions would result in any reduced fire threat. Under the No Action alternative, any snags that fall and touch the ground will hold moisture in the ground and decay within five years (Schmid and Hinds 1974). Notably, this process occurs slowly over time, with many beetle-killed trees still upright after 50 or more years, as has happened on the Flattops in northwestern Colorado after the spruce beetle outbreak there in 1941-1952. The FEIS admits that standing dead trees "could take many decades to decay and fall". FEIS at 4-66. Thus it is unlikely that all the snags would be in any dry state simultaneously creating any significant fuels profile at one time.

Under the action alternatives in contrast, less CWD and canopy cover will result in greater solar exposure, drier fuels, and thus a greater risk of fire ignition, spread, and intensity. The FEIS claims that removing trees infested with beetle and the resulting slash treatment would remove the largest amount of potential fuels from the stand. Yet the FEIS notes that timber sale contract provisions allow for treating of slash so that fuel buildup can be minimized, but don't require it (FEIS, pp. 3-111), likely permitting an increase in fuels.

The FEIS presents the case of the Osier fire as an example of the impacts of "catastrophic" fire. Yet there is no evidence that a spruce beetle infestation preceded the burn. Meanwhile, the discussion of the impacts of the Osier fire upon regeneration totally undermines the argument that logging will help regenerate a spruce forest. In the Osier fire area, the FEIS notes that artificial reforestation efforts by and large failed, had to be fenced at enormous cost to protect regeneration without the aid of CWD (CWD that would be removed with the proposed County Line logging, particularly larger diameter CWD that constitute the tree boles now), the plantations had to be replanted "over and over", and the "cost of doing such projects at today's labor costs would be prohibitive." FEIS at 3-69.

Ultimately, the conclusion that a major wildfire is likely, and that Alternative A presents the most risk of type conversion, is arbitrary and capricious. Indeed, the FEIS acknowledges that fire in this timber type is very infrequent (FEIS at 3-108), as well as Veblen et. al's conclusion that wildfire is no more likely with spruce beetle killed trees than without the mortality of these trees (FEIS at 3-109). The window for high fire risk in the no-action alternative is very narrow: a forest composed of snags with no needles is not likely to become engulfed by fire because fire cannot easily spread from one snag to another, as it can between live trees. Subsequently, every conclusion based on the premise that a wildfire will occur, or is more likely to occur, is rationalization at worst, and speculation at best.

Further, it is not clear that a wildfire in the analysis area is undesireable in the first place nor that it would have adverse and irretrievable consequences on soils and watershed condition. The watersheds of southern Colorado have been experiencing stand-replacement fires for as long as they have been forested with spruce-fir. These watersheds and their resident wildlife and plants are evolutionarily adapted to such events. Rather, entering these already highly sensitive and roaded watersheds with heavy equipment and removing the majority of the basal area will have the significant and irretrievable impacts on the watersheds.

Spruce Thinning

It is important to note that there are no available concrete data regarding the total number of acres infested and the severity of the outbreaks, by region or nationally. There is no evidence or research finding that spruce-beetle outbreaks are outside their normal HRV and therefore need to be somehow controlled by humans. Indeed, Appendix A, pp. A-45, of the Rio Grande National Forest LRMP Final EIS concludes that "the number of spruce beetle outbreaks during pre-settlement times is probably not significantly different from the amount of outbreaks after settlement". Insect outbreaks are a natural process in coniferous forest ecosystems (McGregor and Cole 1985, DellaSala et al. 1995, Dillon and Knight in prep.). Indeed, insect herbivores play important roles as recyclers of nutrients, agents of disturbance, members of food chains, and regulators of the productivity, diversity, and density of plants (Clancy 1993). At endemic levels, bark beetles are beneficial to forest health by culling out older, weaker trees (Samman et al. 2000). When conditions are favorable (particularly in warm, dry summers, Samman et al. 2000), bark beetle populations can irrupt and kill trees over thousands of acres (Veblen 2000). Insect outbreaks can affect stand dynamics on a landscape scale: Veblen et al. (1994) found that spruce beetle irruptions had affected 39% of his Colorado study area, and that the interval between beetle outbreaks averaged 117 years. Romme et al. (1986) found that beetle outbreaks have only a short-term effect on wood production; production levels accelerate following outbreaks and reach pre-outbreak levels within 6 to 15 years. The FEIS dismisses this citation in the response to comments as being for a different beetle species (the mountain pine beetle) in lodgepole pine in Wyoming (FEIS at 4-11), but we find this dismissal ironic considering that "[t]hinning to manage spruce beetle impacts is a research data gap", and the entire justification for this project is based on "management tactics that have proven successful with other closely related species of Dendroctonus bark beetles." FEIS at 1-2.

There are many ecological benefits associated with insect outbreaks and in fact, no information is provided that would indicate the undesirability of such outbreaks or the extent of early successional habitat present on the forest as a result of these events. Intensively disturbed forests (catastrophic fire, insect epidemics, etc. etc.) may in fact be underrepresented on the Rio Grande National Forest and thus the viability of wildlife and plant populations that depend on these habitat types on the forest may be in jeopardy, a violation of the NFMA diversity requirements. Such species include the Three-toed woodpecker, among others.

Beetle kills increase stand diversity on a landscape scale (Romme 1982), and are an important agent in maintaining the patch dynamics of coniferous ecosystems. In fact, one of there very justification used in the FEIS is that management "should be to increase stand heterogeneity (FEIS at 3-7), but the insects are already undertaking this activity at a much lower ecological and economic cost to the American taxpayers. Outbreaks have the beneficial effect of creating an abundance of large-diameter snags (Veblen et al. 1991), which provide critical foraging habitat for woodpeckers and nesting habitat for cavity-nesting birds and mammals. They also produce the complex structural habitats preferred by denning lynx (Koehler and Brittell 1990). Keller (1987) found that three-toed woodpeckers, which prey primarily on bark beetles, remain at low population levels until an insect outbreak, at which time the woodpeckers increase in numbers and reduce the peak beetle populations during an the outbreak and cause it to subside sooner.

Few publications offer any ecological justification for the prescriptions proposed with the County Line Project, or provide evidence from observational or experimental studies that indicate that there is a relationship between stand density and susceptibility to bark beetle infestation. Indeed, logging and firewood removal can actually spread bark beetle infestation by transporting infested wood to new forests; logging operations following bark beetle outbreaks can pose an extreme hazard to other forest areas. The only way to reduce the risk of spreading bark beetle infestation via these activities is to peel all logs before removing them from site or burn them. Yet the DEIS fails to even discuss this mitigation to genuinely attain the stated purpose and need for the project, much less adopt it as part of the proposed action. In order to reduce the outbreak hazard caused by the logging slash, the bark from all logs and slash must be peeled, burned, or chemically treated; alternatively, all slash can be piled and covered with plastic sheeting and stored in the sun for an extended period of time (Massey and Parker 1981). Any thinning projects to increase the resilience of the forest to bark beetle attack must remove the majority of stressed trees and all slash within a very large area because bark beetles are capable of dispersing (flying, maybe aided by wind) up to 30 miles to attack new trees (Schmid and Frye, 1977). Furthermore, effective forest thinning must be implemented on this same spatial scale over only one or two years. Very often, this is prohibitively expensive and prone to failure due to the vast amount of stressed trees that must be treated in such a short amount of time (DeMars and Roettgering 1982).

Should the epidemic continue and the spruce-beetle population remain high, when and how does the Forest Service decide that the sanitation/salvage and/or thinning effort are not working? How is the project modified in this situation? Note that the Rock Creek Project on the Routt National Forest did develop thresholds for "suppression actions would no longer be biologically effective in a given area" and such efforts would cease. Rock Creek DEIS at 21-22.

The FEIS suggests that the proposed action will also increase windthrow potential for the standing dead timber remaining after harvest. FEIS at 3-74. However, this important environmental impact is summarily dismissed with the unsupported statement that these units are "not in a high risk windthrow area topographically." FEIS at 3-74. This cursory treatment of an important impact of the action alternative is a violation of the NEPA and APA.

To be effective, thinning treatments must significantly reduce water stress, which is unlikely during severe drought. Also, mechanical thinning treatments can compact soil and roots (leading to greater water stress) and stress trees through damage from logging operations, making trees more susceptible to bark beetle attack, not less (Wilson 1997). Furthermore, thinning treatments can produce severe bark beetle outbreaks by creating a vast amount of logs, slash, and stumps, which are good food sources and breeding grounds for bark beetles. Bark beetles can proliferate in the slash and then spread to the standing trees greatly increasing the likelihood of a bark beetle outbreak (Massey and Parker 1981). To reduce the threat caused by thinning treatments, all slash must be treated on site to reduce the suitability for bark beetles. Thinning should occur in early fall in order to allow maximum time for the wood to dry before the next generation of bark beetles emerges in the spring and all slash should be bucked into short sections or chipped to accelerate drying (Massey and Parker 1981). Yet the FEIS largely fails to consider any of these measures, requiring only that logs six or more inches in diameter and at least six feet long "be

traded to specified locations and decked for treatment within one year of decking". FEIS at 2-7. These decks will attract many beetles, as freshly cut and windthrown logs are the spruce beetle's favorite breeding medium. How can the public be assured that the proper treatment, to prevent beetles from successfully breeding in these decks, will be accomplished? Spruce beetles can complete a breeding cycle in one year, thus they could emerge and attack other trees prior to treatment under this mitigation measure.

The use of trap or bait trees can also have a differential impact on pests and natural enemies, as natural enemies often emerge after the bark beetles. Removal of infested timber after the emergence of bark beetles but before the emergence of natural enemies could contribute to an imbalance in natural enemy and pest populations for instance. (Bellows et al 1998).

What concrete, non-anecdotal evidence does the Forest Service have that creating conditions "less favorable" to spruce beetle infestations is possible through spruce-fir thinning? None is presented in the FEIS, and the agency admits that "[t]hinning to manage spruce beetle impacts is a research data gap". FEIS at 1. Rather we are assured information from other forest types and other species of beetle are sufficient. FEIS at 2. The Forest Service must carefully assess these questions and disclose what scientific evidence exists on the issue in order to pass NEPA's hard look and high quality information tests, or if not available, generate that information as required.

Mitigation effectiveness

The County Line Vegetation Management FEIS and ROD rely entirely on project design criteria and mitigation, voluntary and involuntary, to explain away any significant impacts on many of the resources considered in the FEIS.

Several resource issues are simply ignored based solely on design criteria and mitigation measures. For example noxious weeds, fire and fuels, water quality, soil compaction etc. Such reliance on project design criteria and mitigation measures has been found to be inconsistent with NEPA by the federal court system.[16] Neighbors of Cuddy Mountain provides clarification with respect to the Forest Service's duty to properly formulate and discuss mitigation measures:

> "The Forest Service's perfunctory description of mitigating measures is inconsistent with the "hard look" it is required to render under NEPA . . . A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA."[17]

While the use of project design criteria and mitigation measures is to be encouraged in timber salvage projects, we note that the use of these measures is not in and of themselves sufficient to ensure compliance with the law. Again Neighbors of Cuddy Mountain,

[16] Neighbors of Cuddy Mountain 137 F.3d.

[17] Id. at 1380 (quoting Carmel-by-the-Sea v. U.S. Dep't of Transp., 123 F.3d 1142. 1154 (9th Cir. 1997 and Northwest Indian Cemetery Protective Ass'n v. Peterson, 795 F.2d 688, 697 (9th Cir. 1986), rev'd on other grounds, 485 U.S. 439 (1988).

> "The Forest Service's broad generalizations and vague references to mitigation measures in relation to the streams affected …. do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the Forest Service is required to provide."[18]

The FEIS contains numerous "Project Design Criteria" (FEIS at 2-5 through 2-11) that are actually mitigation measures. Subsequently, the Rio Grande National Forest must substantively assess the effectiveness and feasibility of each of these "project design criteria", yet the FEIS fails to do so. Rather than this substantive hard look at the effectiveness of project design criteria and mitigation measures, the FEIS provides unsubstantiated assurances that they are effective. This is an especially critical NEPA requirement, as the FEIS states that the "effects analysis is entirely based upon the implementation of the project design criteria." FEIS at 2-5 (emphasis added).

For example the FEIS states that fences "…have been used successfully for years throughout the National Forest." FEIS at 2-23. However, no substantive evidence is provided to back up this important claim. Such speculative and unsubstantiated assurances are provided throughout the effects analysis for all resources. A sampling:

- "project design criteria have been used on most timber sales on the Forest and are consistent with Forest Plan standards and guidelines and should be effective at minimizing negative impacts on avian species." FEIS at 3-34 (emphasis added).
- "[r]etaining adequate screening along open sections of roads should be effective at minimizing disturbance and harassment of deer and elk." FEIS at 3-35 (emphasis added).
- "[r]etention of CWD is required on all timber sales on the Forest and has proven to be effective means (*sic*) of retaining the desired quantities of CWD for small mammals and other wildlife species." FEIS at 3-35 (emphasis added).
- "[t]he use of these timber sale contract provisions and carefully locating skid trails have proven to be effective means of minimizing damage to understory vegetation, maintaining the desired quantities of CWD and protecting residual trees [for lynx]." FEIS at 3-42 (emphasis added).
- "[t]he Forest Service would frequently review the project for compliance with these and other timber sale requirements and would also do periodic monitoring to assess the effectiveness of these practices." FEIS at 4-106 (emphasis added).

Finally, the FEIS relies on numerous undisclosed standards and guidelines to ensure that water quality and other resources are protected. For instance, the FEIS promises "standards and guidelines that have proven effective would provide that protection." FEIS at 3-96. What standards? What guidelines? When and how were they documented as effective? Overall the effectiveness and feasibility of any standards, much less what they are, are undisclosed. This clearly fails NEPA's hard look test.

[18] Id. at 1381.

2. Range of alternatives (Violations of NEPA and Forest Service Handbook and Manual): *The County Line Vegetation Management project violates the NEPA because it runs afoul of the requirement to consider an adequate range of reasonable alternatives.*

NEPA requires that agencies "rigorously explore and objectively evaluate all reasonable alternatives."[19] Yet the two action alternatives are quite similar, as both include the salvage units that constitute the vast majority of timber output, road construction, and likely impacts to soils, water quality, scenery, wildlife, and many other values.

For instance, even though wildlife is a key issue, there is no difference in the suitable to unsuitable classification (695 acres) for lynx that would occur under each of the action alternatives. The FEIS fails to look at an alternative that would use trap trees alone and thinning to reduce the risk rating. The FEIS thus clearly contains an inadequate range of alternatives.

3. The National Forest Management Act and Forest Plan Consistency: *The County Line Vegetation Management project FEIS and ROD are inconsistent with the Rio Grande National Forest LRMP and Regional Guidance and thus the NFMA.*

Once the USFS adopts a Forest Plan to guide management decisions for a national forest, "[a]ll projects and decisions [within that national forest] must be consistent with the overall forest plan." [20]

Unstable Soils

The National Forest Management Act ("NFMA") at requires promulgation of regulations to ensure there is no irreversible damage to "soil slope or other watershed conditions" and no seriously adverse impact to water conditions or fish habitat.[21] NFMA's planning regulations address this "no irreversible damage" requirement in greater detail at 36 C.F.R. § 219.27. Particularly relevant for purposes of the County Line Project is 36 C.F.R. § 219.27(e), which provides:

> *Riparian areas. Special attention shall be given to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This area shall correspond to at least the recognizable area dominated by the riparian vegetation. No management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat. Topography, vegetation type, soil, climatic conditions, management objectives, and other factors shall be considered in determining what management practices may be performed within these areas or the constraints to be placed upon their performance.*

[19] 40 CFR 1502.14(a).

[20] Colorado Off Highway Vehicle Coalition v. U.S. Forest Service, 357 F.3d 1130, 1132 (10th Cir. 2004), citing 16 U.S.C. §1604(I), see also UEC II, 2005 WL 1995583 at *1 ("[i]ndividual projects . . . must comply with the Forest Plan and NFMA").

[21] 16 U.S.C. 1604(g)(3)(E)(i) and (iii).

Despite these requirements, it appears that the Forest Service has not yet even reviewed all road locations for soil concerns. FEIS at 2-8 (soils project design criteria #5). In other words, the Forest Service does not know where, or even if, roads could be built without harming soils. This clearly fails NEPA's high quality and hard look information tests, and provides the public with no opportunity to review this data.

On March 3, 2000, Rio Grande National Forest Supervisor Peter Clark signed a decision Notice (DN) and Finding of No Significant Impact (FONSI) approving a reclassification of lands suitable for timber production. This Timber Suitability Amendment (TSA) added about 2% of the Forest to the suitable timber base, changed the management emphasis of Management area 5.11 to emphasize more logging.

On April 24, 2000, Colorado Wild appealed Supervisor Clark's DN and FONSI. That appeal was denied on Nov. 27, 2000. Of major concern was the reclassification of soil types with mass movement potential, notably soil types 460 and 750 M, from unsuitable to suitable. While the FEIS states that mass movement "highest risk areas" have been eliminated from salvage proposals, it fails to identify what constitutes "highest" risk, or what their soil type is (Map A-10 and A-13 show locations of soils with high mass movement potential.)

The FEIS concludes that the "risk from existing roads is moderate because some these roads are located across steeper slopes" (FEIS, pp. 3-83). What research or data is this conclusion based on? To the contrary, McIver et al. conclude the following regarding post-fire salvage logging, with several references to logging in general (underlined):

> *The extent to which logging exacerbates soil, sediment, and hydrological problems in postfire landscapes will depend on site characteristics, site preparations, logging method, and whether new roads are needed. Of these, road building and continued use of roads are probably the biggest potential contributors to postfire erosion, just as they are in green tree stands (Megahan 1980). For green tree stands, for example, Megahan (1971) estimates that 90 percent of accelerated sediment transport in a logging operation is caused by road building. Beschta (1978) reports that midslope roads on steep terrain are the primary contributors to increased sediment production during logging operations in the Oregon Coast Range. Swank and others (1989) estimate that while erosion owing to timber harvesting was 7 times that of undisturbed areas, erosion rates on landings and roads were 100 times those of undisturbed areas. Similarly, Megahan and Kidd (1972) estimate that erosion rates in stands subjected to timber removal by ground cable logging increased 1.6-fold over undisturbed stands, compared to a 220-fold increase due to logging roads. The continued use of even well-constructed gravel roads can contribute substantial amounts of sediment compared to undisturbed areas (Reid and Dunne 1984). Although we could find no studies that looked at the effects of postfire road building and use per se, it is likely that roads will contribute most to sediment production in the postfire environment, just as they do in unburned stands.*

(Underlining emphasis added.) Though even the "use" of such roads represents the greatest risk of erosion and concomitant impacts to water quality, the County Line project proposes to reconstruct many miles of roads. This stands in stark contrast to the FEIS's conclusion that only

a "moderate" risk exists. In such an environmentally sensitive area (watershed of concern, past logging and erosion impacts, Rio Grande cutthroat trout immediately downstream), the logging proposed and the "moderate" risk incurred pose a substantial risk to various resources. Without assessing the aforementioned research, the FEIS fails NEPA's hard look and high quality information tests, as well as NFMA's prohibition on irreversible damage. Subsequently, we hereby incorporate all issues and concerns raised in our April 24, 2000 appeal of the TSA. That appeal, in brief, noted that any project such as the County Line project would violate NFMA, requiring that the Forest Service:

> *Insure that timber will harvested from National Forest System lands only where-soil, slope or other watershed conditions will not be irreversibly damaged [and where]there is assurance that such lands can be adequately restocked within five years after harvest.*[22]

With the TSA, the Rio Grande National Forest provided no assurance that existing technology and knowledge is available to ensure timber production without irreversible damage to soils productivity, or watershed conditions.

The TSA DN also removed the following standard from the Forest Plan on page III-20:

> *Regulated timber harvest activities will occur on only those lands classified as "Suitable" and "Scheduled" for timber production. On Unsuitable or Suitable but not scheduled lands, limited timber cutting may occur for such purposes as salvage, protection or enhancement of biodiversity or wildlife habitat, scenic-resource management, or to perform research or administrative studies consistent with Management Area direction.*

Again we dispute the legality – and wisdom – of elimination of this standard from the Forest Plan. Elimination of this standard violated the NFMA and NEPA for the reasons outlined in our April 24, 2000 appeal, notably that the TSA failed to demonstrate that the soil types in question are suitable for logging activities and thus violated NEPA, failed to consider impacts to watersheds and soil from permitting timber harvest on a unstable soil, and changed standards that have placed more land in the tentatively suitable base.

While this standard would permit "limited" salvage logging, the proposal to essentially clearcut 841 acres and then thin another 715 acres, providing up to 29 MMBF (one of the largest single logging operations ever in the Rocky Mountain Region) in no way constitutes "limited" timber cutting. Meanwhile, as outlined in the Purpose and Need section above, the Forest Service's rationale to improve forest health (and thus supposedly protect or enhance biodiversity or wildlife habitat) is unsupported by any scientific evidence or research, and indeed is contradicted by research cited herein. Subsequently, the County Line Vegetation Management Project cannot be approved, as the TSA was arguably approved illegally, and the project itself cannot be reasonably justified as "limited" or providing any scientifically supportable forest health purpose.

Water Quality

[22] NFMA §(6)(g)(3)(E)(i).

The action considered will allow for degradation of Wolf Creek and Rio de los Pinos and its tributaries: waterbodies that currently meet or exceed Colorado State water quality standards (so-called High Quality 2 waters). The segments of Wolf Creek and Rio de los Pinos and its tributaries affected by your permitted action are designated as High Quality 2 waters currently meeting or exceeding water quality standards, so no degradation is allowed without proper analysis of it's effects on the water. By allowing logging and road construction to take place, the Rio Grande National Forest is permitting prohibited degradation to occur, without the required "full satisfaction of the intergovernmental coordination and public participation" process. This non-action is clearly contrary to Colorado State's antidegradation standards, and therefore illegal under the CWA. The Forest Service may not continue to authorize this activity unless and until it coordinates with the Colorado Water Quality Control Commission and completes the required review process.

At that time, the agency must ensure that an antidegradation review consisting of the following components is completed before allowing an activity that has the potential to lower water quality: (1), a finding that it is necessary to accommodate important economic or social development in the area in which the waters are located; (2), full satisfaction of all intergovernmental coordination and public participation provisions; and (3), assurance that the highest statutory and regulatory requirements for point sources, including new source performance standards, and best management practices for nonpoint source pollutant controls are achieved. In addition, water quality may not be lowered to less than the level necessary to fully protect existing uses and "fishable/swimmable" uses at any time. The antidegradation review requirements of this provision of the antidegradation policy are triggered by any action that would result in the lowering of water quality in a high-quality water, such as the action permitted/proposed by your agency here.

The antidegradation policy is a key method of implementing the primary goal of the Clean Water Act, namely to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA §101(a). It is also an important method of implementing the Act's interim goal of providing for the "protection and propagation of fish, shellfish, and wildlife and recreation in and on the water" CWA §101(a)(2). Congress underscored the importance of the antidegradation policy in its 1987 amendments to the Clean Water Act. PUD No. 1 of Jefferson County v. Washington Department of Ecology, 114 S.Ct. 1900, 1905 (1994). As such an important and integral part of the Clean Water Act, the antidegradation policy cannot be simply ignored, but must be fully implemented and any studies required must be completed before any action is taken that has the potential to lower water quality.

Streams in the analysis area have been classified by the state of Colorado for cold-water aquatic life, recreation, water supplies and agriculture and are not in violation of state standards. (FEIS at 3-87). The project area includes the 7th level Rio de los Pinos watershed (13010005050101) which has been identified as a "watershed of concern" because of past logging and road building. (FEIS at 3-88).

The FEIS relies inordinately on Forest Plan standards and guidelines or project design criteria (which are confusingly the same as BMPs) to assert that water quality standards will be met. FEIS at 3-100 to 3-102. But there is no basis for that conclusion. The project design criteria are

voluntary, preferred measures taken by the timber companies to protect soil and water quality. BMPs or project deign criteria reduce, but do not eliminate, sediment runoff if they are used (and used correctly), but they do not take into account the size of the receiving river, its loading capacity, or its currently impaired or overloaded status.

The FEIS in this case is incomplete and inadequate to confirm that the BMPs, project design criteria or mitigation measures would, in fact, allow water quality standards to be met. To support the efficacy of BMPs and the other mitigation measures, the Forest Service may not rely merely on prior experience and professional expertise without providing substantial data used to draw conclusions on the mitigation measures' effectiveness.[23] In an attempt to comply, the Forest Service discusses the numerous BMPs to be used, but sources and data are completely lacking. That is a far cry from providing "substantial support" for the mitigation measure's effectiveness and the scientific data demonstrating their effectiveness that are required by Idaho Sporting Congress.

The antidegradation policy is a key method of implementing the primary goal of the Clean Water Act, namely to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[24] It is also an important method of implementing the Act's interim goal of providing for the "protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."[25] Congress underscored the importance of the antidegradation policy in its 1987 amendments to the Clean Water Act.[26] As such an important and integral part of the Clean Water Act, the antidegradation policy cannot be simply ignored, but must be fully implemented and any studies required must be completed before any action is taken that has the potential to lower water quality.

Under §313 of the CWA, federal agencies are responsible for compliance with all State requirements for water pollution control, including a State's antidegradation policies: "Each department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government…shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution..."[27] Courts have also found the CWA to be directly applicable to National Forest activities like the one at issue here, where the Forest Service must comply with State water quality standards when permitting activities on National Forest lands.[28]

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[23] Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1150 (9th Cir. 1998)("NEPA's implementing regulations require agencies to 'identify any methodologies used and [] make explicit reference by footnote to the scientific and other sources relied upon for conclusions used in any EIS statement.'" citing 40 C.F.R. § 1502.24).

[24] 33 U.S.C §101(a).

[25] 33 U.S.C §101(a)(2).

[26] PUD No. 1 of Jefferson County v. Washington Department of Ecology, 114 S.Ct. 1900, 1905 (1994).

[27] 33 U.S.C §1323(a).

[28] *See* Marble Mountain Audubon Society v. Rice, 914 F.2d 179, 182 (9th Cir. 1990); Northwest Indian Cemetery Protective Assn v. Peterson, 795 F.2d 688 (9th Cir. 1986), accord Oregon Natural Resources Council v. U.S. Forest Service, 832 F.2d 1489 (9th Cir. 1987).

The road construction and reconstruction and attendant infrastructure can be the source of significant discharge. States are required by CWA §401 to provide a water quality certification before a federal license or permit can be issued for any activity that may result in a discharge into navigable waters.[29] The certification must "set forth any effluent limitations…necessary to assure that any applicant" will comply with various provisions of the Act and "any other appropriate" state law requirement.[30] This is an affirmative duty imposed on the State by the CWA, and clearly any action that requires a Federal license or permit must have an accompanying State 401 certification before the Federal agency can issue the license or permit. The antidegradation policy of the State, as mandated by the CWA, requires the State to impose conditions or limitations when issuing the certification that provide the proper level of protection to the water and thereby prevent lowering of water quality and protect designated uses.

CWA §303 places directly on Federal agencies the responsibility to comply with all federal, state, and local requirements for water pollution control and it explicitly applies to "runoff" as well as "discharge" of pollutants. "State standards adopted pursuant to §303 are among the "other limitations" with which a State may ensure compliance through the §401 certification process.[31] Although §303 is not specifically listed in §401(d), the statute allows States to impose limitations to ensure compliance with §301 of the Act, and §301 in turn incorporates § 303 by reference. EPA's view supports this interpretation. Such limitations are also permitted by §401(d)"s reference to "any other appropriate" state law requirement."[32]

EPA's regulations implementing this section of the CWA likewise require the State to complete §401 certification. When doing so, States are required to find that "there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards."[33]

The Forest Service is considering the County Line Vegetation Management project without obtaining the legally required State 401 certification, in clear violation of the CWA. Because a Federal license or permit is required before this activity can take place on National Forest land, and because the activity, specifically road construction and reconstruction as well as all the attendant infrastructure (e.g. culverts), will result in discharges to the Wolf Creek and Rio de los Pinos and its tributaries, the agency is required to obtain State certification of the activity pursuant to § 401 of the CWA.[34]

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[29] 33 U.S.C §1341.

[30] Ibid at (d).

[31] 33 U.S.C 1341 (d).

[32] PUD No. 1 of Jefferson County v. Washington Department of Ecology, 114 S.Ct. 1900 (1994).

[33] 40 CFR §121.2(a)(3).

[34] 33 U.S.C §1341.

Federal regulations implementing CWA §303 require that the State of Colorado's antidegradation policy and implementation methods shall, at a minimum, be consistent with the following: (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.[35] (2) Only where the quality of waters exceed levels necessary to support the most sensitive biological beneficial uses is the State allowed to degrade water quality in order to accommodate important socioeconomic development.[36] Even where these high quality waters exist, a situation present in this case only for some pollutants and parameters, the regulations require that the State assure water quality adequate to protect existing uses fully.[37] Where the quality of the water is not higher than the standards, the regulations absolutely prohibit additional pollutant loads.

Analysis for the water resource and its related legal structure has been formalized in FSM 2500, notably 2531 and 2532, and has been part of R-2's planning desk guide, Chapter 8, since 1994. The Watershed Conservation Practices Handbook, FSH 2509.25-96-1 (WCPH), issued by the Regional Forester on 12/26/1996. The WCPH definition (FSH 2509.25.05; page 7) identifies T-Walk as the Regional standard method for determining stream health. Methods other than T-Walk may certainly be used; however, such methods must be at least as rigorous as T-Walk (page 7).

> *Standard… In the water influence zone next to perennial and intermittent streams, lakes, and wetlands, allow only those actions that maintain or improve long-term stream health and riparian ecosystem condition.*
>
> *The water influence zone (WIZ) includes the geomorphic floodplain, riparian ecosystem, and inner gorge. Its minimum horizontal width (from top of each bank) is the greater of 100 feet or the mean height of mature dominant later-seral vegetation. It includes adjacent unstable and highly-erodible soils. The WIZ protects interacting aquatic, riparian, and upland functions by maintaining natural processes and resilience of soil, water, and vegetation systems…*
>
> *Design Criteria. …*
>
> - *Keep heavy equipment out of streams, swales, and lakes, except to cross at designated points, build crossings, or do restorative work, or if protected by at least 1 foot of packed snow or 2 inches of frozen soil.*

The FEIS fails to assess how "limited cuts" within the WIZ (FEIS at 3-100) will maintain or improve long-term stream health and riparian ecosystem condition. With over 50% of the Rio de los Pinos 7th level watershed of concern in the WIZ (FEIS at 3-88), clearly major impacts are likely. Even without past harvest on public lands, water quality has already been affected in the area, particularly during rainfall events (FEIS at 3-94). While the FEIS concludes that stream health on Wolf Creek is currently "adequate to robust" (FEIS at 3-95), the impacts associated

[35] 40 CFR 131.12(a)(1).

[36] 40 CFR §131.12(a)(2).

[37] 40 CFR §131.12(a)(2).

with road building (1.1 miles – FEIS at 3-101), mass movement potential areas, road reconstruction, road use, and removal of so much basal area is highly likely to significantly harm water quality. Further, the FEIS acknowledges that bank instability is causing impacts to the Rio de los Pinos. While field surveys in 2003 indicate that bank stability and vegetation are improving (FEIS at 3-103), the FEIS fails to discuss whether this improvement is significant or merely a minor improvement over significantly degraded conditions.

The WCPH further requires that no more than 15% of the soils in any watershed be detrimentally compacted, eroded, or displaced. Yet the FEIS discloses that 21.4% of the 7th level watershed of concern (Rio de los Pinos Tributary) will be affected under Alt. B. (FEIS at 2-21). Further, the FEIS notes that more than 15% disturbance of the sixth-level watershed disturbance will occur (FEIS at 3-54, 3-103), flatly violating the WCPH and the NFMA. Meanwhile, the FEIS concludes that 14.5% of the Wolf Creek watershed will be disturbed. (FEIS at 3-99). While this (barely) falls within the 15% maximum permitted by the WCPH, the calculation fails to include past private lands logging private lands logging currently happening within the watershed (FEIS at 3-103), which when included exceeds the 15% maximum, potentially by a significant amount as there are no standards or guidelines for private land logging that might limit the amount of detrimentally impacted soils. Id. Regardless, the WCPH doesn't distinguish between activities that occur on public versus private lands, the 15% is a maximum for the watershed. Subsequently, addition of the County Line project to the cumulative soil effects would violate the WCPH outright.

The FEIS notably calculates the total equivalent disturbance acreage as 15% of each harvest area. What data or research is this figure based on? It appears that the Forest Service chose to calculate it at 15%, not because there is any data or research that can justify this figure, but because that is the maximum permitted. Given the significant percentage of timber to be removed from the salvage units, a much greater percentage of total disturbance area must be expected, greatly increasing the watershed impacts to well above 15% and further contributing to violation of the WCPH.

The Watershed Conservation Practices Handbook 1996,'99 requires that WCP shall be applied to its land management actions (FSH 2509.25_21.1), and that implementation of WCP shall be monitored using recorded measures of stream metrics, including widths-depths, woody debris, substrates, bank stability, flow regime, water chemistry and aquatic biota/ in comparison with reference stream in the same physiographic area (21.2.2) using T-WALK as a minimum regional health screening tool. The results of this assessment will determine one of six stream health classes. It is not clear from the County Line project FEIS that these T-Walk standards have been met for Wolf Creek (it apparently was done for the other watershed, Rio de Los Pinos – FEIS 3-91) nor that the post-project surveys will be completed. Until this information is made clear, the project may be in violation of the WCPH.

The FEIS fails to assess and disclose numerous other impacts to water quality, including the affects to water quality of the annual applications of magnesium chloride to 1.8 miles of Forest Road 118 (FEIS at 2-4). The FEIS simply writes this off with a cursory statement in the response to comments section that the chemical has little impact outside of 20 yards from the

roadway. FEIS at 4-77. However, we do not believe this narrative based on opinion meets the requirements of the NEPA.

The proposed action will also impact water quality with the construction of four small stream crossings for a temporary road (FEIS at 3-101). The proposed 15.6 miles of road reconstruction and 2.3 miles of temporary road would also impact water quality through sedimentation and erosion. The 15.6 miles of roads requiring reconstruction are nearly recovered; some are barely detectible in the field as judged by appellant's site visits. Watershed Specialist Report at Photos 1-12. This road reconstruction should really be considered new road construction due to this state of advanced recovery. Meanwhile, the proposed action is likely to cause additional water quality impacts through increased stream flows. The FEIS notes that removal of 25% or more of the basal will cause increased stream flows, and clearly the proposed action would remove much greater than 25% of the basal area. Yet the FEIS fails to disclose the anticipated pre-and post-action basal areas, either on a unit-by-unit basis or for the project as a whole.

The FEIS notes that no violations of water quality standards occurred as of the last state review (FEIS at 3-87). In order to take the requisite hard look at this critical issue, the Forest Service should disclose the numerical results and the standards against which they are gauged.

Meanwhile, the FEIS suggests that "adequate buffering" would prevent erosion into waterways. FEIS at 3-99. Yet the proposed action permits "limited" harvest within the WIZ. FEIS at 3-100. With the Rio de los Pinos 7th level watershed of concern, this constitutes over 50% of the watershed. FEIS at 3-88 to 3-89. Thus "adequate buffering" promises little in ensuring that major water quality impacts will not accrue from the proposed activity.

Finally, the analysis is flawed because it fails to account for past timber harvest on private lands which is disclosed in the FEIS but never addressed in any detail whatsoever. "Timber harvesting on private lands adjacent to the analysis area resembles the final cut of a shelterwood harvest and provides a stark contrast to the Forest Service lands." FEIS at 3-57 to 3-58. In addition, illegal harvest on Forest Service lands appear unaccounted for in the watershed and aquatic resources section: "[a]bout 10 acres in one stand in the southern unit, stand 309-02, which lies adjacent to private land, was illegally cut." FEIS at 3-64. However, the FEIS states clearly that, if considered, the salvage activities on private lands would result in "a total watershed disturbance (6th level) that slightly exceeds the 15% concern level." FEIS at 3-54 and 3-103. The FEIS explains away this clear violation with additional monitoring, but monitoring itself does not cure the violation. FEIS at 3-103.

Given all the impacts to water quality likely from the proposed action, the FEIS doesn't even dare conclude that no Irreversible or Irretrievable Commitment of Resources would occur, rather stating that "Any minor impacts to watershed condition or stream health would heal with time." FEIS at 3-103. Such impacts may <u>not</u> heal over time and further are barred by the WCPH standard for 15% disturbance. Loss of streambanks, fostering lack of high-altitude forest regeneration, and extirpation of individual core/conservation populations of Rio Grande Cutthroat trout are likely permanent impacts that cannot be easily, if at all, undone.

The United States EPA raised these same concerns in its comments on the DEIS. In particular, the EPA stated, the "soil and water quality impacts listed in the DEIS imply that Alternative B is more protective of the aquatic environment overall than both other alternatives, *but no quantitative basis is provided* for those conclusions." Appendix B at B-121 (emphasis added). The EPA gave the DEIS a rating of "EC-2" which means "environmental concerns, insufficient information," based on their concerns regarding the potential adverse impacts to water quality, soil erosion, and fish and wildlife habitat.

4. Species Viability (Violations of NFMA, ESA and APA): *The County Line Vegetation Management project will jeopardize the viability of species that find optimal habitat in interior forests and naturally disturbed areas. The project also violates the NFMA diversity provision as well as the ESA.*

NFMA directs the Secretary of Agriculture to issue regulations that will "provide for diversity of plant and animal communities . . . in order to meet overall multiple-use objectives."[38] Pursuant to this statute, the Forest Service adopted regulations that charge the agency with managing fish and wildlife habitat to maintain viable populations of existing native and desired non-native vertebrate species within the planning area.[39] These regulations, which are still in force for the Rio Grande National Forest, because the forest amended its plan under this set of regulations, not the 2005 planning regulations, require each National Forest to adopt Management Indicator Species ("MIS"), obtain population data for these MIS, and determine trends.

On October 24, 2003, Forest Supervisor Peter Clark signed a Decision Notice and Finding of No Significant Impact (DN/FONSI) for a MIS Amendment to the Revised LRMP for the Rio Grande National Forest in Colorado. This decision amended the Revised Forest Plan by designating MIS, modifying the standards and guidelines of the Forest Plan, and modifying the Forest Plan's Monitoring and Evaluation Strategy. MIS on this list included for analysis in the County Line FEIS include brown creeper, hermit thrush, Rocky Mountain elk, mule deer, and Rio Grande Cutthroat trout.

We expect the USFS to claim the Forest Plan Amendment controls here and we do not disagree, but that amendment is not consistent with the 1982 planning regulations under which the plan was amended in 2003. The Tenth Circuit found that the underlying Forest Plan's "diversity provisions reflect the 1982 rules," and that it was therefore appropriate to apply the 1982 regulations in resolving the case.[40]

On April 19, 2004, the Regional Office granted Colorado Wild's appeal of the Ward Lake timber sale agreeing that the proposed Ward Lake timber sale violated the Forest Service's obligation under the NFMA to monitor for and analyze population and population trend information for those species identified as MIS in that Forest Plan.[41] On January 30, 2004, Judge Weinshienk of

[38] *See* 16 U.S.C. § 1604(g)(3)(B).

[39] *See* 36 C.F.R. § 219.19 (1982).

[40] Utah Environmental Congress v. Bosworth ("UEC II"), ___ F.3d ___ (10th Cir. 2005), 2005 WL 1995583.

[41] Appeal Decision #2004 02 04 0009.

the U.S. District Court in Colorado, granted Colorado Wild's motion for a preliminary injunction of the Missionary Ridge timber sale on the same legal grounds.[42]

Specifically, the Court held that Colorado Wild had a substantial likelihood of prevailing on the merits of its claim that the Forest Service failed to adequately monitor for MIS species in the San Juan National Forest at both the forest-wide and project levels, and that the agency cannot legally rely on habitat analysis to approximate or extrapolate population data for the selected MIS. Subsequent to the granting of this preliminary injunction the San Juan National Forest decided to withdraw the proposed Missionary Ridge timber sale. The Tenth Circuit's decisions in Utah Environmental Congress v. Bosworth ("UEC I") and Utah Environmental Congress v. Bosworth ("UEC II") are also applicable to the current situation.[43] In those two cases, the Tenth Circuit unequivocally held that the 1982 regulations implementing the National Forest Management Act ("NFMA"), 36 C.F.R. Part 219, require the USFS to obtain "actual, quantitative population data" for Management Indicator Species prior to authorizing site-specific projects such as the County Line Vegetation Management project.[44] Additionally, in UEC I and in UEC II the Tenth Circuit categorically rejected the USFS's argument that the 1982 regulations allow the agency to conduct MIS population surveys at the forest-level, rather than the project-level: "the regulations anticipate application of [the 1982 regulations] to project level as well as plan level management actions."[45]

As with the GMUG and San Juan National Forests, wholly inadequate MIS assessments – utilizing flawed forest-wide MIS population data and trend determinations based on either habitat estimations or simply no data at all – are now being utilized by the Rio Grande National Forest in its MIS Assessments. Notably, the Rio Grande National Forest's population data and trend determinations are based upon a September 2002 report by Scott W. Gillihan of the Rocky Mountain Bird Observatory, entitled "Population Data for Avian Management Indicator Species on the Rio Grande National Forest". The population estimates therein appear in turn to be based upon the Breeding Bird Survey (BBS), Monitoring Colorado's Birds (MCB) produced by the Rocky Mountain Bird Observatory (RMBO), Christmas Bird Count (CBC) Breeding Bird Census (BBC) and sometimes others. These are precisely the data sets found to be inadequate by Judge Weinshienk in the Missionary Ridge case. Furthermore, Gillihan even conditioned his estimates stating they should be "used with discretion".

The FEIS then acknowledges that population data are estimations based on habitat. FEIS at 3-18. While the FEIS indicates that some population transects have been established for some species such as hermit thrush, the FEIS concludes that "until Forest-wide trend data are established via

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[42] Colorado Wild v. U.S. Forest Service, 299 F.Supp.2d 1184 (D.Colo. 2004).

[43] Utah Environmental Congress v. Bosworth ("UEC I"), 372 F.3d 1219 (10th Cir. 2004); Utah Environmental Congress v. Bosworth ("UEC II"), ___ F.3d ___ (10th Cir. 2005), 2005 WL 1995583.

[44] 372 F.3d at 1226, 2005 WL 1995583 at 5 (rejecting the USFS argument that "it need not conduct 'head-counts' of MIS in a planning area because it had discretion to assess a project's effects on MIS using habitat data, population data, or both").

[45] 372 F.3d at 1225, 2005 WL 1995583 at 5.

Forest-wide monitoring protocols, avian MIS population data at the Forest level are of necessesity, estimated from known acreages and distributions of habitat types and structural associations, and species habitat affinities." FEIS at 3-18. Thus, the Rio Grande National Forest is clearly in violation of the planning regulations at 40 C.F.R. §219.19. Ultimately, each of the conclusions on the impacts to viability of MIS – including brown creeper (FEIS at 3-42 to 3-43) and hermit thrush (FEIS at 3-43) – not only fail to adhere to 40 C.F.R. §219.19, but fail NEPA's hard look and high quality information tests.

While the new planning rule, which took effect on January 5, 2005, eliminated the requirement that the national forests establish forest-wide population data and determine trend for MIS, the Rio Grande Forest is required to adhere to the previous planning regulations at 40 C.F.R. §219.19 (1982) because the amendment was under those rules.

On January 2, 2004, Colorado Wild also joined Center for Native Ecosystems and other organizations in appealing the adoption of the MIS list for the Rio Grande National Forest. The Forest Service has yet to rule on that appeal. We therefore hereby reincorporate by reference all concerns raised in that appeal, including that the MIS list fails to include any MIS for wetland ecosystems, and the lack of any MIS to indicate for management changes upon key spruce-fir forest type components such as course woody debris and snags (obviously critical with the County Line Project). Further, the MIS list fails to account for sub-nivean habitat conditions, which may also be significantly affected by the removal of snags that will over time become CWD. Meanwhile, the MIS list appears inadequate to represent the habitat needs of birds of conservation priority – boreal owl, olive-sided flycatcher, and Hammond's flycatcher. FEIS at 3-31. What are the habitat needs of these species, and how do or don't brown creeper and hermit thrush represent their habitat affinities and needs?

Meanwhile, how do or don't brown creeper and hermit thrush represent the habitat needs and affinities for secondary cavity nesters that will be significantly affected by the project, such as three-toad woodpecker? FEIS at 3-34. Notably, the FEIS states that "brown creepers cannot exploit the bark beetle resource like tree-drilling woodpeckers." FEIS at 3-42 to 3-43. Since the purpose of the whole project, and indeed an objective within the LRMP, is to keep spruce beetles endemic in the forest rather than in epidemic-level populations, failing to adopt a tree-drilling woodpecker as an MIS will fail to capture the effects of the single greatest management action on the forest – salvage logging of spruce beetle killed spruce (including the nearby Grouse, La Manga, Spruce Hole, Trujillo, and Neff Mountain timber sales – which cumulatively could result in 2,987 acres of spruce-fir habitat being altered, as well as the recent Million Fire salvage sale).

Other Impacts to Terrestrial Wildlife

The FEIS acknowledges that analysis of the area as a wildlife corridor for Canada lynx was dropped (FEIS at 2-27), stating that "Corridors and linkages are more appropriately considered at above-project scales." FIES at 2-27. What "above-project scale" analyses have been performed addressing large ranging wildlife corridor use, importance, and impacts of the proposed action in the area? Even though the FEIS fails to disclose what other assessments have been performed, and what their conclusions were, it concludes without justification that "Minimal influences on habitat connectivity are anticipated." FEIS at 3-41. To the contrary, Figure 3.1 (FEIS at 3-56)

clearly suggests that major impacts will accrue to any wildlife movement corridor function the project and analysis area provide, as the forested stringers will be heavily logged – essentially clearcut – eliminating any forested cover that could otherwise provide north-south corridor function in the area. The FEIS's conclusion thus clearly fails NEPA's hard look and high quality information tests, especially in light of the fact that the project will convert 715 acres denning habitat to "other" habitat under Alternative B. FEIS at 3-41.

Another major failure of the FEIS and its analysis of impacts on the lynx is the manner is which winter carnivore competition is totally ignored. One of the major impacts of logging and especially road construction and reconstruction is the increased access created for other carnivores that compete with the lynx for prey species. See Ruediger et al, 2000, at 30. The FEIS seems to ignore this critical impact.

We are also seriously concerned about the changes in the wildlife project design criteria that were made between the time USFWS provided its concurrence and the ROD was signed. This appears to be a violation of the ESA. These changes include:

- Dropping the statement more is desirable from design criteria common to all action alternatives #6;
- 3 piles/acre of larger material was changed to "at least 1 pile/acre in" in design criteria common to all action alternatives #6;
- Omitting the biologist's determination from design criteria common to all action alternatives #8;
- Eliminated entirely design criteria common to all action alternatives #10 protecting riparian areas.

Biological Evaluation at 10 and 11 and letter from Peter L. Clark to Allan Pfister dated July 21, 2005. A new concurrence letter is required with these significant changes to the project design criteria that are intended to mitigate impacts on lynx in the analysis area.

The analysis also fails to identify and assess the impacts of the proposed action to distinct wildlife (elk and deer) migration corridors between winter and summer range. Further, the FEIS fails to identify how much spruce versus fir exist in each unit, merely relying on the remaining intermix of fir and spruce for security cover and forage. FEIS at 3-48. Without such quantification, it is impossible to conclude that such "remaining intermix" would be sufficient for elk and deer security cover and forage. Notably, stands with a high proportion of spruce will die from beetle attack and/or be logged, and thus provide insufficient cover for these animals.

Goshawk Mitigation Measures

In Appeal Decision #2004-02-04-0009, the Regional Office also ruled that the Grand Mesa-Uncompahgre-Gunnison National Forest's goshawk mitigation measures are scientifically questionable. Unfortunately, the County Line Vegetation Management project suffers from this same flaw. These mitigation measures are substantially the same as that found in the Rio Grande National Forest Land and Resource Management Plan. In the Ward Lake Appeal Response the Reviewing Officer states, "the Forest needs to explain how these guidelines and studies all fit

together and why the mitigation measures presented in the EA represent the best science to protect goshawks." Appeal Decision #2004-02-04-0009. The Biological Evaluation for the County Line Vegetation Management project should have given more consideration to the Technical Conservation Assessment by Kennedy (2003). Further, the analysis considers the impacts to the species at the scale of the entire Ranger District. This scale washes out any impacts on the species and should have been undertaken at a more meaningful scale such as the project area or the LAU as was used in the analysis of impacts on lynx.

Impacts to Aquatic Wildlife

The FEIS states that "Stream habitat condition generally does not pose a serious threat to the existence of Rio Grande Cutthroat trout." FEIS at 3-21. This statement is not supported, given that 23 percent of the known populations are at risk and stable, 24 percent are at risk and declining, and status of 25 percent is unknown. Id. Given the risk of sedimentation when logging on unstable soils permitted through the TSA discussed above, the core/conservation Wolf Creek Rio Grande Cutthroat trout population located downstream of the project is at a high risk of extirpation. Biological Evaluation at 26. Indeed, the FEIS acknowledges that some sections of stream already have increased sedimentation as a results of road building and logging on soils prone to mass movement. FEIS at 3-22. The five year implementation of the project anticipated may result in five years, if not more, of continued sedimentation impacts to water quality. Thus there could be significant, long-term effects to this important population of a sensitive specie proposed for listing under the Endangered Species Act, not "short term" effects as claimed. FEIS at 3-35. This is further compounded should "project design criteria" – whose effectiveness and feasibility have not been assessed as outlined above – aren't adhered to or are not fully effective. Meanwhile, the FEIS notes that population data for this MIS is also only an estimation, failing to indicate how such estimates were arrived at. FEIS at 3-21.

Three-toed and hairy woodpecker

The removal of dead and dying trees (future snags) and fragmentation of large tracts of unharvested areas will have significant affects on the three-toed and hairy woodpecker in the planning area. McIver and Starr (2000) reviewed several studies that documented that post-fire logging caused "significant changes in abundance and nest density of cavity-nesting birds…[m]ost cavity-nesters showed consistent patterns of decrease after logging, including the …hairy and three-toed woodpeckers."

The northern three-toed woodpecker occurs primarily in spruce-fir forests where it can be normally found in low population densities. Normal densities exist around 1 pair per 100 acres but during beetle outbreaks can increase to 1 pair per acre.[46] This woodpecker species requires clumped snags in spruce-fir forests and 99% of their winter diet is composed of insects, primarily spruce beetles.[47] In fact, Koplin and Baldwin (1970) found that three-toed woodpeckers

[46] Hoover, R.L. and D.L. Wills, ed. 1984 Managing Forested Lands for Wildlife, CO Div. Of Wildlife in cooperation with USDA Forest Service, Rocky Mountain Region, Denver, CO.

[47] Ibid.

consumed as much as 2-26% of the brood of an endemic population of Dendroctonus obesus and reduced brood survival of an epidemic population of spruce beetles by 70-79%.[48]

Reducing snag density and reducing the food source of this species will have a significant effect on its viability in the project area and forest wide.[49] In fact, the USFWS has suggested in a separate salvage situation that at least six to seven snags should be retained per acre.[50] Spruce mortality from epidemic beetle outbreaks serves a critical role in the balance of this ecosystem including providing abundant habitat and food for cavity nesters and insectivores such as the three-toed woodpecker and Neotropical migratory bird species such as the Olive-sided flycatcher, Hammond's flycatcher, and boreal owl. Commercially removing this material stops this process in its tracks and deprives many species of developing habitat and food sources. Despite these very real negative effects the Forest Service has treated the three-toed woodpecker with a qualitative analysis in the FEIS, and absolutely no quantitative information has been presented to support the claims of the Forest Service.

The Forest Service provided no population monitoring data or analysis of such data in the project record, which documents that the viability of the three-toed woodpecker would be maintained in the planning area or the Forest-wide. This includes a lack of monitoring data from past projects which can be used to predict the woodpecker's response to activities planned in the County Line Vegetation Management. As with other MIS, sensitive species, and T&E species, the FEIS and project record are devoid of any substantive determinations one way or the other regarding viability.

5. Cumulative Effects (Violations of NEPA): *The County Line FEIS fails to account for significant contributors to cumulative effects.*

The Forest Service Environmental Policy and Procedures Handbook sets the standard for analysis of cumulative effects:

> "Individual actions when considered alone may not have a significant impact on the quality of the human environment. Groups of actions, when added together, may have collective or cumulative impacts, which are significant. Cumulative effects that occur must be considered and analyzed without regard to land ownership boundaries. Consideration must be given to the incremental effects of past, present, and reasonably foreseeable related future actions of the Forest Service, as well as those of other agencies and individuals."

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[48] Koplin, J.R. and P.H. Baldwin. 1970. Woodpecker predation on an endemic population of Englemann spruce beetles. The Am. Midl. Nat. 83 (2): 510-515.

[49] There is a strong chance that the absolute numbers of snags per acre will be much lower and even zero on some acres because of the practice of averaging snags across stands that may include entirely unharvested areas. The unharvested areas, in high mortality cases are pure stands of snags, thus naturally the average across 40 acres would be significantly inflated. In other words, maintaining the stated average number of snags would not provide sufficient habitat for three-toed woodpecker, as such habitat would be very fragmented.

[50] USDA Forest Service, 1998. BE of Sensitive Animal Species For the Modified Alternative Portion of the South SERP, Dixie National Forest, Cedar City Ranger District.

The Council on Environmental Quality has extensively described the minimum requirements for analysis and mitigation of cumulative impacts on Environmental Quality in its publication "Considering Cumulative Effects Under the National Environmental Policy Act (1997), by the CEQ regulations implementing NEPA (40 C.F.R. 1508.7; 1508.8), and by the Forest Service's Environmental Policy and Procedures Handbook (FSH 1909.15.15.1). Specific examples of quantitative information to be addressed by cumulative effects analyses are identified by these sources as well as other regulations or rules for specific resources, such as threatened, endangered, and sensitive wildlife. FSM 2620.3; 2620.44; 2621.3.

At minimum, an adequate cumulative effects analysis must:

(1) identify the past, present, and reasonably foreseeable actions of Forest Service and other parties affecting each particular aspect of the affected environment;
(2) provide quantitative information regarding past changes in habitat quality and quantity, water quality, resource values, and other aspects of the affected environment that are likely to be altered by Forest Service actions;
(3) estimate incremental changes in these conditions that will result from Forest Service actions in combination with actions of other parties, including synergistic effects;
(4) identify any critical thresholds of environmental concern that may be exceeded by Forest Service actions in combination with actions of other parties, and;
(5) identify specific mitigation measures that will be implemented to reduce or eliminate such effects.

Using these minimum criteria established by the CEQ, by regulations implementing NEPA, and by Forest Service rules and regulations as a guide, it is abundantly clear that the Forest Service have not even attempted to complete a legally adequate cumulative effects analysis for any aspect of the environment affected by the proposed County Line Vegetation Management.

Despite this clear direction, the County Line Vegetation Management FEIS avoids the required analysis and ignores important contributors to cumulative effects. The cumulative effects sections in the County Line Vegetation Management FEIS consist of nothing more than weak narrative statements of the Forest Service's opinion that are conveniently broken into separate geographic areas. The Forest Service avoids the required cumulative effects analysis by separating each analysis and ignoring the overall impacts of the proposed actions across the project area as a whole, and relying on BMPs. The FEIS assumes that water quality will be protected if BMPs and mitigation measures are implemented. However, while prevention and minimization of adverse impacts at the project site is indeed necessary, it is not sufficient to avoid cumulative effects (CEQ 1971).

Further, a recent USDA Office of the Inspector General Report concluded that reliance on speculative mitigation measures "significantly compromised environmental quality."[51] (emphasis added).

[51] Office Of Inspector General, U.S. Dept' Of Agric., Evaluation Report No. 08801-10-At: Forest Service Timber Sale Environmental Analysis Requirements (1999).

The County Line Vegetation Management FEIS clearly fails to provide "quantified" or "detailed" information. Two areas in which this failure is most pronounced are: 1) The cumulative effects the salvage sale will have on sedimentation and erosion in conjunction with the severely damaging erosion and sedimentation which has already occurred; and 2) Failure to address the cumulative effects of the salvage sale in conjunction with the extensive private land logging activities in the project area.

Seldom in the FEIS are the past, present or future projects that may contribute to cumulative impacts listed or even discussed in any greater detail than a casual reference. Nowhere is any attempt made to quantify the cumulative impacts; especially glaring is the omission of any quantified analysis of cumulative watershed impacts using such standard measures as sedimentation, turbidity, water temperature, etc. No attention is provided to other factors such as reopening nearly 16 miles of decommissioned roads, private land logging, increased OHV (ATV) use, increased risk of fire ignition from increased access, grazing, noxious weed infestations, etc.

The analysis is especially flawed because it fails to account for past timber harvest on private lands which is disclosed in the FEIS but never addressed in any detail whatsoever. "Timber harvesting on private lands adjacent to the analysis area resembles the final cut of a shelterwood harvest and provides a stark contrast to the Forest Service lands." FEIS at 3-57 to 3-58. In addition, illegal harvest on Forest Service lands appear unaccounted for in the watershed and aquatic resources section: "[a]bout 10 acres in one stand in the southern unit, stand 309-02, which lies adjacent to private land, was illegally cut." FEIS at 3-64.

The FEIS states that cattle grazing numbers and illegal and legal ATV use are outside the scope of the analysis. FEIS at 1-12 We disagree. Neither the past impacts on soils and water quality nor the reasonably foreseeable future impacts are considered in the FEIS. There have been considerable impacts from ATV use in the analysis area and the impacts on soils and water quality. The same can be said for grazing impacts.

With many fewer trees, grass may grow, inviting, or at least allowing, increases livestock pressure on early successional grasses and forbs. Cattle grazing numbers can dramatically affect regeneration – a major objective of the project – as cattle compact soil, preventing seedling mergence and trample young seedlings that do emerge. ATV's will have much easier access to the area over time, as forests will be opened and snags – or future CWD – will be removed. ATV's may compact or tear up soils which can both lead to an increase in runoff, sedimentation, and thus water quality violations, all the while preventing or harming regeneration. Subsequently, in order to adhere to NEPA's high quality and hard look tests, the Forest Service must carefully assess impacts from these activities during and after project implementation and disclose what scientific evidence exists on the issue, or if not available, generate that information as required.

6. Socio-Economic Analysis (Violations of NEPA, MUSYA, RPA, NFMA, APA and GCCPA): *The socio-economic analysis is incomplete because it fails to provide the Forest Service with the information needed to insure that the County Line Vegetation Management project is economically justified.*

By failing to incorporate ecosystem service benefits and externalized costs into the County Line Vegetation Management decision the Forest Service has violated the NEPA. Without incorporating ecosystem service benefits and externalized costs into the County Line Vegetation Management decision, the Forest Service cannot meet NEPA's requirements to fully disclose the direct, indirect, and cumulative economic impacts of the timber sale program and to give appropriate consideration to environmental amenities in decision-making.[52]

By failing to utilize appropriate professional expertise capable of disclosing all natural resource benefits and externalized costs, the Forest Service is in violation of NEPA's mandate to rely upon a systematic and interdisciplinary approach to decision making.[53]

By ignoring ecosystem service benefits and externalized costs, the Forest Service also runs afoul of regulations implementing NEPA which require full disclosure of direct, indirect, and cumulative economic impacts, identification of environmental effects and values in adequate detail so that they can be compared with economic and technical analyses, rigorous analysis of the benefits of implementing the "no action" alternative in timber sales, and use of appropriate professional expertise.[54]

The Forest Service is also in violation of its Environmental Policy and Procedures Handbook, which reiterates requirements set forth in NEPA and the CEQ Regulations implementing NEPA.[55] These requirements also appear in the Forest Service Manual.[56]

The County Line Vegetation Management FEIS and ROD fail seriously to consider the opportunity costs of the project, in other words, all of the existing economic activity that the planning area supports that may be displaced by the logging project. Instead the FEIS provides only a strict PNV which is a simple financial calculus of the revenues to the USFS minus the dollar costs. FEIS at 3-127.

The FEIS ignores significant sources of jobs and income that already exist all or in part because of the forests and waters that currently exist in the planning area. For example, there is a ski yurt system in the planning area that operates a special use permit and generates jobs and income. There are several fishing and hunting outfitters in both Colorado and New Mexico that depend to some degree on the abundant fish and wildlife in the planning area. The Continental Divide Trail is adjacent to the planning area. Snowmobiling is a major activity in the Cumbres Pass area in the winter. During a site visit appellants spoke with hunters who stated after the logging the elk would not return for at least a decade and thus neither would the hunters. Hunting parties bring

[52] 42 U.S.C. § 4332 (C); 4332 (B).

[53] 42 U.S.C. § 4332 (A).

[54] 40 C.F.R. § 1501.2(a); 1501.2(b); 1502.6; 1502.16; 1502.24; 1507.2(a); 1507.2(b); 1508.7; 1508.8; 1508.27.

[55] FSH 1909.15.

[56] FSM 1950.

significant dollars into the local economy when they travel from out of state and purchase supplies in the small communities near the planning area. These communities will not see this income for the decade or so that the hunters are displace.

By failing to incorporate ecosystem service benefits and externalized costs into the County Line Vegetation Management decision the Forest Service has violated the APA. Sources of information and methodologies for quantifying these benefits and costs are readily available and used by the Forest Service and other federal agencies outside the context of the timber sale program. In light of this, the decision to ignore these benefits and costs violates the APA's prohibitions on making decisions that are arbitrary, capricious, and unreasonable.[57]

Industry Capacity

Without analysis, data, or any justification, the FEIS concludes that the timber volume to be provided with the County Line project is well within the timber industry's capacity to process. FEIS at 4-124. How did the Rio Grande National Forest draw this conclusion? With what data? What mills, logging equipment, and operators were considered in this assessment? There are several other significant logging projects pending in Colorado that would affect the salability of County Line, including Rock Creek (Routt NF, 40 MMBF) and Piney Lake (White River NF, 14-16 MMBF).

To the contrary, the assessment in the Missionary Ridge timber sale analysis clearly suggests that this timber sale, at about 25% of the total sawtimber processed in 1999 (when several large mills were still open that have since closed – including nearby South Fork and Espanola) (FEIS at 3-124), is no where within the industry's capacity to process. The FEIS fails to adhere to NEPA's hard look and high quality information requirements, and the Rio Grande National Forest must genuinely assess the capacity of the timber industry to handle this volume of timber.

7. Scenic Resources (Violations of NEPA and NFMA): *The County Line Vegetation Management FEIS accounts only for the impacts on scenic resources from unpiled slash or unmerchantable tree accumulation and logging truck, trails, and landings and ignores road building and realignments.*

The FEIS acknowledges that no site specific assessment using the private land as the viewing platform was performed. FEIS at 4-64. Further, the FEIS only vaguely references "critical viewing angles" (FEIS at 3-58) rather than identifying particular viewpoints to assess scenery impacts from.

In order to adhere to NEPA's high quality and hard look tests, the Forest Service must carefully assess the scenery impacts from private land and other concretely identified vantage points or "viewing angles", acknowledge the major impacts on scenery from past logging on both public and private lands, and permit the public an opportunity to comment on the impacts. The LRMP requires that the next lowest Scenery Integrity Objective below "High or Moderate" must be met following project implementation. Based on the impacts from past logging in the area, and the

[57] 5 U.S.C. § 706.

major extent of the logging proposed (in actuality a clearcut, as noted above), the analysis must honestly assess and disclose whether the next lowest SIO will even be met.

Meanwhile, the Colorado Divide National Scenic Trail will be directly affected for approximately .90 miles. FEIS at 3-120. This obviously should be included as a viewing platform for assessment of adherence to the SIO.

Request for Relief

To obviate the need to pursue further administrative and legal remedies, appellants request the following relief:

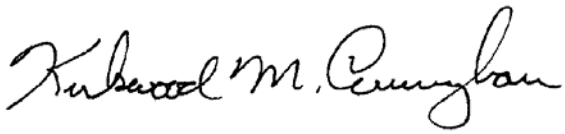
1. That the County Line Vegetation Management decision be withdrawn.

2. That a supplemental FEIS be prepared to address all of the deficiencies identified in this appeal.

Submitted this 19th day of September, 2005 for the appellants.

By:

Bryan Bird
Lead Appellant



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Rocky Mountain Chapter of the Sierra Club

Mark Pearson
San Juan Citizen's Alliance

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