IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLORADO Judge William J. Martínez

Civil Action No. 09-cv-01272-WJM

ROCKY MOUNTAIN WILD, a Colorado non-profit corporation, and WILDEARTH GUARDIANS, a New Mexico non-profit corporation,

Petitioners,

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TOM VILSACK, in his official capacity as the Secretary of Agriculture,
TOM TIDWELL, in his official capacity as the Chief Forester of the U.S. Forest Service,
THOMAS MALECEK, in his official capacity as District Ranger for the Rio Grande
National Forest, and

UNITED STATES FOREST SERVICE, an agency of the U.S. Department of Agriculture,

Respondents.

OPINION AND ORDER

This matter is before the Court on a Petition for Review of Agency Action (the "Petition") challenging the U.S. Forest Service's approval of the Handkerchief Mesa Timber Project, which authorized logging in certain areas of the Rio Grande National Forest in southwestern Colorado. The matter has been fully briefed (ECF No. 24, 26, 31), and Respondents (the "Forest Service") have submitted the administrative record to the Court (ECF No. 23). On December 6, 2011, the Court held oral argument on the Petition. (ECF No. 50.) After carefully analyzing the briefs, the administrative record,

¹ The Court takes judicial notice of the fact that Tom Tidwell is now the Chief Forester of the U.S. Forest Service (replacing Abigail Kimbell), see http://www.fs.fed.us/ (last visited February 2, 2012), and instructs the Clerk's office to change the docket to reflect the change. See Fed. R. Evid. 201(b) (providing that judicial notice may be taken of a fact that is "not subject to reasonable dispute in that it is . . . capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned").

and the arguments made at the oral argument, the Court INVALIDATES the Forest Service's approval of the Handkerchief Mesa Timber Project, and REMANDS for the Forest Service to conduct further environmental analyses consistent with this Opinion and Order.

I. JURISDICTION

The Court has jurisdiction over this matter under 28 U.S.C. § 1331 (federal question), and 5 U.S.C. §§ 701-706 (the Administrative Procedure Act ("APA")).²

II. BACKGROUND

A. Factual Background

The Handkerchief Mesa Timber Project ("the Project"), as approved by the Forest Service in its Decision Notice and Finding of No Significant Impact ("FONSI"), would involve logging on 3,436 acres of Handkerchief Mesa. (H007225-26.³)⁴ Handkerchief

² Petitioners' claims alleging violations of the National Forest Management Act ("NFMA") and National Environmental Policy Act ("NEPA") are properly construed as APA claims because NFMA and NEPA do not create private rights of action. *See Utah Envtl. Cong. v. Russell*, 518 F.3d 817, 823 (10th Cir. 2008) ("As neither the NFMA nor NEPA provide a private right of action, we review the Forest Service's approval of the Project as a final agency action under the Administrative Procedure Act (APA).").

³ A cite to "H00____" is a cite to a page or pages within the administrative record, located at ECF No. 23.

⁴ On December 16, 2011, the Forest Service filed a Project Status Update with the Court. (ECF No. 52.) In the Update, the Forest Service represents that it has removed two areas from the scope of the Project – the Fox Mountain and Thunder areas – and thus the Project now consists of five areas (totaling 1,897 acres), rather than the original seven areas (which totaled 3,436 acres). (*Id.* at 2.) The Forest Service explains that it performed intensive insect and disease field surveys in the Project area during the summer of 2011, revealing that trees in the Fox Mountain and Thunder area had suffered significant mortality due to Spruce Beetle activity. (*Id.*)

The Court applauds the Forest Service's efforts in continuing to monitor environmental conditions in the Project area. However, the Court declines to treat this two-page filing as

Mesa as a whole comprises approximately 92,000 acres within the 1.86 million-acre Rio Grande National Forest ("RGNF") in southwestern Colorado. (H007029; H008148.)

Handkerchief Mesa is bordered on the north by the town of South Fork, and on the south by Wolf Creek Pass and Elwood Pass. (H007029-31.)

The stated purpose of the Project is "to make live and dead timber available to the timber industry as part of the [RGNF's] time sale program and to achieve the goals, objectives, and desired future conditions for the project area" (H007229.) The Forest Service further explained in the final Environmental Assessment ("EA") that the Project is desirable because it would, *inter alia*: (1) favor the growth of desirable trees by reducing competition from less desirable trees; (2) reduce current or potential impacts from insects and disease by removing infected trees and by thinning stands to increase tree health; (3) follow up on past and current silvicultural prescriptions; (4) take advantage of past investments by utilizing the existing transportation network; and (5) salvage blowdown and other dead or dying trees. (H007229.)

The Project would involve "harvest[ing] trees 8 inches in diameter breast height (DBH) and larger . . . using a variety of silvicultural treatments." (H007226.) This harvesting "would remove approximately 10 to 35% of the current stand basal area" (H007032.) The harvest would result in approximately 8.3 million board feet of commercial timber sales, as well as personal use firewood sales, over a period of approximately five years. (H007032, H007226.) The Project would also include 10.8

binding on the Forest Service going forward. Instead, the Court finds it appropriate to analyze the Petition in relation to what was approved in the more official and binding FONSI.

miles of road reconstruction and 44.0 miles of road maintenance. (H007226.)

According to the EA, Handkerchief Mesa was heavily logged in the late 1800s and early 1900s for railroad ties and mine props. (H007057.) During the 1950s and 1960s, large clearcuts were made (ranging from 10 to over 40 acres in size), while in the 1970s logging was limited to smaller clearcuts of less than 10 acres each. (*Id.*) Reforestation of the clearcuts began in the 1960s and continued through the mid-1980s. (*Id.*) The EA represents that "all of the clearcuts are fully stocked with regeneration." (*Id.*)

In the late 1990s, the Forest Service initiated its analysis of a potential Handkerchief Mesa timber sale. (H000890-97.) This resulted in a 2000 FONSI for logging in the Poage Lake and Thunder areas. (H006485-704.) The Forest Service withdrew that project a year later, however, pending changes to the RGNF Land and Resource Management Plan ("the Forest Plan"). (H001129.)

In 2004, preliminary analysis began for the current Project. (H007033.) In April 2008, the Forest Service issued its EA for the Project. (H007028-214.) The EA analyzed three different action alternatives:

- "Alternative 1 No Action," which would involve no logging;
- "Alternative 2 Watershed Emphasis," which would involve logging on 3,651 acres within seven areas in Handkerchief Mesa Campo Molino, Cross, Demijohn, Ford/Five mile, Fox Mountain, Poage Lake, and Thunder and would produce 9.1 million board feet of timber products; and
- "Alternative 3 Proposed Action," which would involve logging on 4,267 acres within the same seven areas, and would produce 11.4 million board feet of timber products.

(H007040-46.) The EA analyzed the three alternatives' likely effects on a host of environmental issues, including forest regeneration, old growth forests, soil health (compaction, erosion, mass movement, etc.), cultural resources, watershed and aquatic resources, plant species and wildlife habitat. (H007056-129.) The administrative appeal to this Court, as discussed in more detail below, relates to only two of those issues: soil compaction and forest regeneration.

In the same month, April 2008, the Forest Service issued its FONSI. (H007215-51.) As part of its FONSI, the Forest Service set forth its decision to move forward with Alternative 2, with some modifications. These modifications reduced the total acreage within the seven areas to be logged to 3,436 acres. (H007225-27.)⁵

In June 2008, Petitioners⁶ filed an administrative appeal of the EA and FONSI. (H007294-314.) In July 2008, the appeal was administratively denied. (H007315-26.)

B. Procedural Background

On June 1, 2009, Petitioners filed the Petition which commenced this action.

(ECF No. 1.) In the Petition, they brought three claims, alleging that the Forest Service:

(1) violated NFMA by failing to meet soil productivity and management standards; (2) violated NFMA by failing to meet forest regeneration standards (by allegedly failing to

⁵ The FONSI removed certain acreage from the Project due to concerns expressed by the United States Fish and Wildlife Service regarding the Project's effects on certain areas, and the EA's own findings regarding the Project's adverse impact on watershed health in certain areas. (H007225.)

⁶ The appeal was actually filed by Colorado Wild and WildEarth Guardians. Colorado Wild has since merged with another environmental organization to form Rocky Mountain Wild, which replaced Colorado Wild as a named Petitioner in this action. (ECF No. 44, 48.)

account for the impact of the spruce budworm on regeneration); and (3) violated NEPA by failing to adequately analyze the Project's effects on soil compaction, and the Project's and the spruce budworm's effects on regeneration. (*Id.* at 14-17.) The Forest Service filed an Answer on August 7, 2009. (ECF No. 9.) On October 19, 2009, the Forest Service filed the Administrative Record. (ECF No. 23.)

On December 11, 2009, Petitioners filed their Opening Brief, along with two exhibits, including the Declaration of Dr. Arthur D. Partridge. (ECF No. 24.) On January 25, 2010, the Forest Service filed its Response (ECF No. 26), and on February 16, 2010, Petitioners filed their Reply (ECF No. 31). The Court discusses the parties' arguments in these briefs in the Analysis section below.

The Court notes, however, that Petitioners' Opening Brief not only raised arguments concerning the Forest Service's analysis of soil compaction and forest regeneration (ECF No. 24, at 18-22, 23-29), but also argued that the Forest Service failed to sufficiently analyze the Project's effects on stream health (*id.* at 22-23, 29). On January 25, 2010, the Forest Service filed a Motion to Strike, by which it sought to strike (1) the Declaration of Dr. Arthur D. Partridge, and (2) Petitioners' argument regarding stream health. (ECF No. 25.) Petitioners filed a Response to the Motion (ECF No. 29), and the Forest Service filed a Reply (ECF 33).

On March 25, 2010, Senior District Judge John L. Kane, who was previously assigned to this action, issued an Order granting in part and denying in part the Forest Service's Motion to Strike. (ECF No. 34.) First, Judge Kane ruled that Dr. Partridge's Declaration properly supplements the Administrative Record, but that the Declaration is

only properly considered

insofar as it tends to show either that the agency analysis was clearly inadequate or that the agency improperly failed to set forth opposing views widely shared in the relevant scientific community. It is not, however, admitted for purposes of providing an opposing expert opinion in opposition to the substantive result of the [Forest Service's] NEPA process.

(*Id.* at 11-12; see also id. at 14.) Second, Judge Kane struck Plaintiffs' argument regarding stream health standards, finding that the argument was not raised within any of the claims asserted in the Petition. (*Id.* at 12-15.)

On March 26, 2010, this action was reassigned to Senior District Judge Walker D. Miller. (ECF No. 35.) On August 2, 2011, the action was reassigned to the undersigned upon the retirement of Judge Miller. (ECF No. 38.) On December 6, 2011, the Court held oral argument on the Petition. (ECF No. 50.) This appeal is now ripe for adjudication.

III. ANALYSIS

A. Standard of Review, Scope of Review, and Burden of Proof

Under the APA, a reviewing court shall set aside agency action if it is, *inter alia*, "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). An agency decision will be considered arbitrary and capricious

if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S.

29, 43 (1983). A reviewing court should engage in a "thorough, probing, in-depth review," *Wyoming v. United States*, 279 F.3d 1214, 1238 (10th Cir. 2002) (citation omitted), with its review "generally limited to . . . the administrative record," *Custer Cnty. Action Ass'n v. Garvey*, 256 F.3d 1024, 1027 n.1 (10th Cir. 2001).

However, "[t]he scope of review under the 'arbitrary and capricious' standard is narrow and a court is not to substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43; see also Davis v. Mineta, 302 F.3d 1104, 1111 (10th Cir. 2002) (stating that the court's review is "highly deferential"). The Court confines its review "to ascertaining whether the agency examined the relevant data and articulated a satisfactory explanation for its decision, including a rational connection between the facts found and the decision made." *Colo. Wild v. U.S. Forest Serv.*, 435 F.3d 1204, 1213 (10th Cir. 2006).

"[T]he burden of proof rests with the appellants who challenge [the agency] action." *Citizens' Comm. to Save Our Canyons v. Krueger*, 513 F.3d 1169, 1176 (10th Cir. 2008) (citation and internal quotation marks omitted).

B. Statutory Overview

1. Overview of NFMA

"NFMA establishes a two-step process for forest planning. First, the Forest Service prepares a forest plan." *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 785 (10th Cir. 2006) (citation and internal quotations omitted); *see also* 16 U.S.C. § 1604(a) (providing that the Forest Service shall "develop, maintain, and, as appropriate, revise land and resource management plans for units of the National

Forest System."). A forest plan is designed to create "general, forest-wide planning goals." *Utah Envtl. Cong. v. Bosworth*, 443 F.3d 732, 737 (10th Cir. 2006).

"Second, the Forest Service is required to implement the forest plan by approving or disapproving specific projects. Projects must be consistent with the governing forest plan" *Silverton Snowmobile Club*, 433 F.3d at 785 (citation and internal quotations omitted); *see also* 16 U.S.C. § 1604(i) (providing that "[r]esource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans").

2. Overview of NEPA

NEPA "require[s] agencies to consider environmentally significant aspects of a proposed action." *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1162 (10th Cir. 2002). "NEPA does not, however, require agencies to elevate environmental concerns over other appropriate considerations; it requires only that the agency take a 'hard look' at the environmental consequences before taking a major action." *Krueger*, 513 F.3d at 1178 (citation and internal quotation marks omitted). Also, "NEPA dictates the process by which federal agencies must examine environmental impacts, but does not impose substantive limits on agency conduct." *Russell*, 518 F.3d at 821. NEPA merely guards against "uninformed – rather than unwise – agency action." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989).

In conducting this analysis [under NEPA], the [agency] must prepare one of the following: (1) an environmental impact statement, (2) an environmental assessment, or (3) a categorical exclusion. An

environmental impact statement involves the most rigorous analysis, and is required if a proposed action will "significantly affect[] the quality of the human environment." 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.4.

If an agency is uncertain whether the proposed action will significantly affect the environment, it may prepare a considerably less detailed environmental assessment. 40 C.F.R. § 1508.9. An environmental assessment provides "sufficient evidence and analysis" to determine whether a proposed project will create a significant effect on the environment. *Id.* If so, the agency must then develop an environmental impact statement; if not, the environmental assessment results in a "Finding of No Significant Impact," and no further agency action is required. Id.

Bosworth, 443 F.3d at 736.

C. Discussion

1. Soil Compaction

a. Measured Soil Compaction Levels and Mitigation

The Forest Plan contains a Standard which reads, "Manage land treatments to limit the sum of . . . detrimentally compacted . . . land to no more than 15% of any land unit." (H000087.) The first issue raised by Petitioners is, under NFMA, whether the Project is "consistent with" this 15 percent soil compaction standard. 16 U.S.C. § 1604(i); Silverton Snowmobile Club, 433 F.3d at 785.

Petitioners argue that the Project violates NFMA because the EA itself indicates that certain affected areas already exceed 15 percent compaction. (ECF No. 24, at 18.) Indeed, the EA indicates that Stands 19, 26, and 27 within the Ford/Five Mile area are already "exceeding standards [with] estimated 15 to 17% [soil quality standard] impacts." (H007071-72.) The Forest Service concedes that certain areas already have greater than 15 percent compaction, while emphasizing the low total acreage of those

areas. (ECF No. 26, at 16-17 & n. 6 & 7.) Despite the low acreage involved, the Forest Service's decision to include those areas within the scope of the Project was not "consistent with" the Forest Plan's requirement to "[m]anage land treatments to limit the sum of . . . detrimentally compacted . . . land to no more than 15% of any land unit." Absent some other meritorious argument why inclusion of those areas was acceptable, the decision violated NFMA. 16 U.S.C. § 1604(I); Silverton Snowmobile Club, 433 F.3d at 785.

The Forest Service argues that those areas exceeding 15 percent compaction were properly included within the scope of the Project because the areas will be reclaimed, *following* the logging, by using a winged subsoiler⁷ to bring compaction levels below 15 percent. (*Id.* at 13-14, 17 n.7.) There are two issues raised by this argument: (1) whether it is acceptable for the Forest Service to approve logging on areas already exceeding 15 percent compaction, as long as reclamation performed following the logging brings compaction levels back below 15 percent; and (2) whether the Forest Service laid out in the EA a sufficient plan for reclamation.

I. When Reclamation Must Occur

As to the first issue, Petitioners argue that a Forest Service handbook – the Region 2 Soil Management Handbook ("R2 Handbook") – has a standard requiring the Forest Service to reclaim areas containing greater than 15 percent compaction *prior* to approving any new activities in those areas. The Forest Service is correct that such a handbook is normally not binding on an agency because, unlike the Forest Plan, the

⁷ A winged subsoiler is a machine that lifts and breaks apart compacted soil. (H007075.)

handbook is not adopted in accordance with the procedural requirements of the APA (e.g., published in the Federal Register or the Code of Federal Regulations, subjected to notice and comment rulemaking, etc.). See, e.g., W. Radio Servs. Co., Inc. v. Espy, 79 F.3d 896, 901-02 (9th Cir. 1996). However, Petitioners are also correct that, when such a non-binding handbook is incorporated into an EA and treated by the agency as binding, it is arbitrary and capricious to violate provisions of the handbook. See, e.g., Ecology Ctr. v. Castaneda, 574 F.3d 652, 660 (9th Cir. 2009); Ecology Ctr., Inc. v. Austin, 430 F.3d 1057, 1069-70 (9th Cir. 2005), overruled on other grounds by The Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008) (en banc).

Here, the Forest Service treated the R2 Handbook as binding, and so the Forest Service is bound by its provisions. (*See* H007139 (a passage in the EA stating that the R2 Handbook "must be considered as a whole and in context. The [R2 Handbook] allows for a wide range of monitoring techniques to assess soil impacts. . . . [The Forest Service's chosen] method of assessment is well within the direction contained in [the R2 Handbook]."); *see also* H007072 (a passage in the EA stating, "The [R2 Handbook] states that the emphasis on soil protection is to protect the soil resource 'before excess damage occurs.' [The R2 Handbook] goes on to state: 'Where excessive soil impacts already exist from prior activity, the emphasis shall be on preventing additional detrimental impacts and on reclamation where feasible.' This means that stands exceeding soil standards could be harvested, so long as there are no additional soil impacts to the stand.").

Petitioners' argument with respect to the timing of the reclamation ultimately

misses the mark, however, because the R2 Handbook's language is inconclusive as to when reclamation must occur if compaction levels exceeding 15 percent are identified. The provision of the R2 Handbook advanced by Petitioners reads, "if a standard is exceeded in an initial entry, future entries must have no additional detrimental effect unless mitigative measures have been applied or natural recovery has taken place between entries." (H000400 (emphasis added).) However, as pointed out by the Forest Service, a provision of the Handbook preceding this passage reads, "Detrimental Compaction No more than 15 percent of an activity area will be *left* in a detrimentally compacted [] condition. . . . Project plans which propose to exceed Regional standards for Detrimental Compaction . . . should contain justification and planned mitigation, and be approved by the Forest Supervisor." (Id. (emphasis added).) Given these seemingly inconsistent passages, there are insufficient grounds to conclude that the Forest Service would act arbitrarily and capriciously by allowing logging in these small areas, as long as sufficiently planned reclamation activities would return the soil to less than 15 percent compaction following the logging.

ii. Whether the Reclamation Plan Is Sufficient

The fundamental problem with the Forest Service's analysis is its cursory discussion of the reclamation activities it plans to perform following the logging. In several sections in the EA, the Forest Service briefly states its basic plan to use the winged subsoiler to alleviate soil compaction following the logging. (See H007127 ("In stands exceeding standards, the winged subsoiler would be used to alleviate soil conditions and meet standards following harvest."); see also H007051, H007072,

H007073, H007074.) Other than such undetailed statements regarding the plan to use the winged subsoiler, the EA only contains a description of the winged subsoiler's effectiveness in alleviating soil compaction. (H007074-75.)

As Petitioners argue, the Forest Service has not provided a sufficiently detailed plan for actually using the subsoiler and ensuring that soil compaction levels would be returned to levels below 15 percent.⁸ While the EA discusses in detail the *effectiveness* of the winged subsoiler, it contains no discussion of the *plan* for using the subsoiler, including who will conduct the reclamation (the logging companies?), whether the Forest Service will oversee the reclamation, and how soon after logging the reclamation will occur.⁹ Further, some language in the EA is ambiguous as to whether the winged subsoiler will be used in all areas that ultimately have more than 15 percent compaction following the logging, or instead will only be utilized in the areas that *already* had 15 percent compaction as of April 2008. (*See, e.g.*, H007074 ("In stands already exceeding standards, those stands would be reclaimed after harvest using the winged subsoiler."); *id.* ("The winged subsoiler can be used to restore soil health (reduce compaction) in units that do not currently meet standards.").)

The EA's cursory discussion of the Forest Service's plan to use the winged

⁸ The Forest Service provided no response to this argument in its Response Brief, instead only reiterating the winged subsoiler's effectiveness. (See ECF No. 26, at 17-19.)

⁹ At oral argument, counsel for the Forest Service was able to give a little more explanation of the plan to use the winged spoiler following logging. However, even this level of explanation does not rise to the level of the "hard look" required by NEPA. Further, the Court cannot attribute significant weight to such an oral representation made by counsel, where the EA itself so utterly lacked any description of the plan.

subsoiler to reclaim detrimentally compacted soil is entirely inadequate to the purpose of ensuring that Forest Plan standards will be met. This violates NEPA. *See Wyo. Outdoor Council v. U.S. Army Corps of Eng'rs*, 351 F. Supp. 2d 1232, 1249-52 (D. Wyo. 2005) (stating that a "perfunctory description or a mere listing of mitigation measures . . . is insufficient to support a finding of no significant impact," and holding that agency's lack of a specific plan for monitoring mitigation activities was arbitrary and capricious); *cf. Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1276-77 (10th Cir. 2004) (finding mitigation measures to be sufficient where they involved close daily monitoring and monitoring that continued for five years after the project was completed).

b. Areas In Which Soil Sampling Was Not Completed

Petitioners also argue that the Forest Service violated NEPA by failing to conduct sufficient soil surveys to ensure that the Forest Plan's 15 percent compaction limit would be met in all areas. (ECF No. 24, at 24; ECF No. 31, at 7-10.)¹⁰ They point out that the Forest Service did not conduct soil surveys on nine whole land units and for seven additional stands within four other land units. (ECF No. 24, at 13.) According to Petitioners, these unsurveyed lands account for at least 1,099 acres of the total 3,436 acres involved. (ECF No. 31, at 8.) In response, the Forest Service argues that there is no legal requirement that the Forest Service conduct on-the-ground soil surveys in every single land unit. (ECF No. 26, at 14-17.) In reply, Petitioners concede that hand surveys need not be conducted in every unit, but if they are not, the Forest Service must

¹⁰ Plaintiff brings this claim under NFMA and NEPA. However, the claim is in essence a NEPA claim based on the Forest Service's failure to take a sufficiently "hard look" at soil characteristics in unsurveyed areas.

at least apply some other reliable methodology to estimate soil compaction in unsurveyed land units, which the Forest Service failed to do. (ECF No. 31, at 8-10.)

The Court agrees with Petitioners. The Forest Service was not required to conduct soil surveys in every land unit; but it must, however, at least have some reliable methodology for estimating soil compaction in every land unit. Cf. Lands Council v. Powell, 395 F.3d 1019, 1034-35 (9th Cir. 2005) (where Forest Service had not tested soils in much of the activity area, court held that the Forest Service violated NFMA because the modeling methodology used was not verified with on-the-ground analysis, and therefore there was no indication of the methodology's reliability). The EA does not even contain estimates for the soil compaction levels in unsurveyed areas. There is absolutely no indication of what soil compaction levels might be in those untested areas. The Forest Service nonetheless still proceeded to approve logging in those areas. Also, there is no indication that, following logging, the Forest Service will conduct soil surveys (or use some other means to estimate compaction levels) in those areas to determine whether use of the winged subsoiler in those areas remains necessary. Under these circumstances, the Forest Service failed to take a sufficiently "hard look" at soil compaction in those unsurveyed areas, and therefore violated NEPA. See Krueger, 513 F.3d at 1178.

2. Regeneration and the Spruce Budworm

The NFMA by its very language requires the Forest Service to "insure that timber will be harvested from National Forest System lands only where . . . there is assurance that such lands can be adequately restocked within five years after harvest." 16 U.S.C.

§ 1604(g)(3)(E)(ii). The Forest Plan also contains the equivalent standard: "When trees are harvested to meet timber production objectives, the cutting shall be done in such a way that there is assurance that the technology and knowledge exist to restock these areas adequately with trees within five years after final harvest." (H000097.)

Petitioners argue that the Forest Service violated NFMA and NEPA because the Forest Service's analysis fails to indicate that sufficient reforestation will occur within five years after the approved timber harvest. (ECF No. 24, at 19-22, 25-26.) Specifically, they argue that the spruce budworm's documented presence in the affected areas, and the budworm's known impacts on regeneration, were not sufficiently analyzed in the EA. (*Id.*) Given this allegedly deficient analysis, Petitioners argue that it is insufficiently clear that the logged areas will sufficiently regenerate within five years, as required by NFMA. (*Id.*)

In response, the Forest Service argues that it did sufficiently take into account the presence of the spruce budworm in analyzing the projected regeneration of the affected areas. (ECF No. 26, at 19-25.) Specifically, the Forest Service argues that it conducted surveys to determine the extent of spruce budworm infestation, and designed silvicultural methods to alleviate the spruce budworm problem. (*Id.* at 21-22.) It argues that, given the advance regeneration that already exists, and the possibility of artificial regeneration following the logging, the five-year regeneration requirement will be met. (*Id.* at 23.)

While this is a closer issue, the Forest Service's analysis in the EA again provides an inadequate basis to ensure that the five-year regeneration requirement will

be met. The EA's discussion of regeneration and the spruce budworm is centered on pages H007059 through H007064 of the EA. That section's first mention of regeneration and the spruce budworm actually indicates the Forest Service's understanding that the spruce budworm could negatively impact regeneration: "In many of the stands there is sufficient advance regeneration to fulfill regeneration requirements, however, within the lower elevation units, defoliation and mortality is occurring due to a spruce budworm infestation." (H007059 (emphasis added); see also H007062 ("In most stands, there is abundant advance regeneration present that would meet stocking requirements." (emphasis added)).)

The EA's primary focus, and one of the primary foci of the Forest Service's arguments in its briefs and at oral argument, is on the conclusion that thinning the forest will alleviate the spruce budworm problem:

- "Generally, budworm outbreaks are most severe in dense stands as suppressed understory trees intercept budworm populations that disperse from overstory trees, thus making them more susceptible to defoliation damage and high mortality rates." (H007059.)
- "Open stands benefit from lower probabilities of successful dispersal of spruce budworm due to lower host densities." (H007060.)
- Under "Alternative 1 No Logging," "[u]ndersory trees would continue to be . . .
 highly susceptible to defoliation damage and high mortality rates from spruce
 budworm populations." (H007061.)
- With the group selection method of logging, "[r]egeneration between the groups within the group selection stands would continue to be susceptible to defoliation damage and high mortality rates from spruce budworm populations; within the groups forest conditions would be *improved* for regeneration because dispersal distances of budworm populations from overstory trees would be increased." (*Id.* (emphasis added).)

 "Alternative 3 [which involves the most logging] would best address impacts to regeneration from spruce budworm populations. Removing 35% of the basal area throughout a stand would open the stand and increase the dispersal of budworm populations from overstory trees to understory trees, thus *improving* conditions for current and future regeneration within and throughout these stands." (H007063 (emphasis added).)

These arguments are unavailing for several reasons.

First, the only conclusions regarding *regeneration* that are made in these analyses is that thinning the forest by logging can "improve" regeneration. Such vague statements provide no indication that the five-year regeneration requirement will be met. Also, these passages from the EA appear to be focused more on how to alleviate or cure spruce budworm infestation, rather than how to ensure that the five-year regeneration requirement is met. It may very well be that logging is necessary in order to alleviate the spruce budworm problem. But the Court notes that the stated purpose for this logging project is "to make live and dead timber available to the timber industry. . . ." (H007229.) Further, the question presented here is not about some vaguer notion of creating a generally healthier forest. The question before this Court, which is constrained by NFMA's and the Forest Plan's requirements, is whether the Forest Service sufficiently analyzed whether the five-year regeneration requirement will be met. There is insufficient indication of this, and thus the Court holds that the Forest Service's analysis violated NEPA. Utah Shared Access Alliance v. U.S. Forest Serv., 288 F.3d 1205, 1208 (10th Cir. 2002) ("The role of the courts in reviewing compliance with NEPA is simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions ").

Petitioners also argue that the Forest Service violated NEPA because it only conducted surveys on spruce budworm infestation in 16 of the 45 units that were approved for logging. (ECF No. 24, at 20-21, 26 n.20.) The Forest Service concedes that its surveys spanned 1,225 acres of the 3,651 acres involved. (ECF No. 26, at 21-22.) The Forest Service argues, again, that it was not required to conduct surveys in every land unit. As it did previously with regard to the issue of the soil compaction surveys that were completed, the Court agrees that while there is no requirement that surveys be completed in every land unit, there must nevertheless be some reliable methodology to at least estimate environmentally significant impacts in all areas. See Lands Council v. Powell, 395 F.3d 1019, 1034-35 (9th Cir. 2005). Here, there is no indication of the extent, if any, of spruce budworm infestation in unsurveyed areas. Despite this material gap in the information available to it, the Forest Service still proceeded to approve logging in those areas. Such an unsupported decision violates NEPA. See Krueger, 513 F.3d at 1178.

The Court further notes that another issue addressed above – mitigation – is relevant to the spruce budworm problem as well. In discussing Alternatives 2 and 3, the EA's cumulative effects summary states, "If current spruce budworm infestation rates continue as expected, the overall appearance and forest condition of the Analysis Area would be impacted. Forest condition in the Analysis Area as a whole would rebound more quickly with localized mitigation of spruce budworm populations." (H007127, H007129.) There is no indication at all in the EA regarding what these "localized mitigation" measures are or might be. The Court finds fault with the Forest Service's

failure to lay out a more detailed plan regarding use of the winged subsoiler to alleviate soil compaction. The Court finds even greater fault with simply identifying the fact that mitigation measures exist, without even mentioning what those mitigation measures are, not to mention how and when they might be used. *See Wyo. Outdoor Council*, 351 F. Supp. 2d at 1249-52.

3. Failure to Prepare an Environmental Impact Statement

Finally, Petitioners argue that the Forest Service violated NEPA by failing to prepare an Environmental Impact Statement ("EIS"), because the Project "will likely have significant impacts on the human environment." (ECF No. 24, at 28-29.)

Petitioners ask the Court to affirmatively hold that the Project *will* significantly impact the human environment, and therefore that the Forest Service violated NEPA by failing to prepare an EIS.

The Court declines to do so. It is the role of the Forest Service, with its specific scientific expertise, to determine whether the Project will significantly affect the quality of the human environment. See Utah Shared Access Alliance, 288 F.3d at 1208 ("The role of the courts in reviewing compliance with NEPA is simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary and capricious.") (internal quotation marks omitted); Krueger, 513 F.3d at 1178 (stating that NEPA requires "that the agency take a 'hard look' at the environmental consequences before taking a major action") (emphasis added). In this Opinion and Order, the Court has only determined that the Forest Service's decision, and the level of analysis conducted, violated NFMA and NEPA. It

will be for the Forest Service to analyze anew, on remand, whether the Project will significantly affect the quality of the human environment.

IV. CONCLUSION

In accordance with the foregoing, the Court ORDERS as follows:

- For the reasons stated above, the Court FINDS that the EA and FONSI issued by Respondents in April 2008 violate NFMA and NEPA;
- The April 2008 EA and FONSI are hereby INVALIDATED and shall have no further legal or practical effect;
- 3. On remand, if Respondents wish to continue to seek approval of all or a portion of the Handkerchief Mesa Timber Project, they shall first complete an environmental analysis (an EA or EIS, whichever Respondents determine is appropriate) that complies with NFMA and NEPA;
- 4. The Clerk of Court shall enter Judgment in favor of Petitioners;
- The Clerk of Court shall award Petitioners their costs under Fed. R. Civ. P.
 54(d)(1); and
- 6. The Court FINDS that Petitioners are the prevailing parties in this action under 28 U.S.C. § 2412(d)(1)(A). Within thirty (30) days of final judgment in this action, Petitioners shall file an application for attorney's fees and/or other expenses that complies with 28 U.S.C. § 2412(d)(1)(B), and which shall include, without limitation, argument regarding why Petitioners believe (if they do) that the position of the United States in this action was not substantially justified. (See ECF No. 1, at 17.) This application, as

well as the timing and content of the parties' remaining briefing on such application, shall comply with D.C.COLO.LCivR 7.1 and WJM Revised Practice Standards III.C and III.I.

Dated this 9th day of February, 2012.

BY THE COURT:

William J. Martinez

United States District Judge