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## Ninth Circuit Digs Deep When Reviewing Forest Service Decision. Ecology Center, Inc. v. Austin

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## NINTH CIRCUIT DIGS DEEP WHEN REVIEWING FOREST SERVICE DECISION

*Ecology Center, Inc. v. Austin*<sup>1</sup>

### I. INTRODUCTION

Planning and managing millions of acres of forest is a fairly complex job. Aside from the statutes and regulations, the National Forest Service may now be facing a new standard of review. This new Ninth Circuit animal eclipses the old arbitrary and capricious standard with a level of scrutiny that allows judges to replace agency determinations.<sup>2</sup>

This case note will argue that the majority misapplied *Lands Council v. Powell*<sup>3</sup> to the case at bar. In doing so, the instant decision imports a bright line rule for on-site analysis when a fact specific inquiry is needed. The following analysis will address the court's decisions regarding old growth and post fire habitats, with subsequent analysis on soil quality in the present case and the impact it will have on future Forest Service decisions.

### II. FACTS AND HOLDING

The Lolo National Forest ("Forest") is a national forest in the northern Rocky Mountains of Montana composed of over 2 million acres.<sup>4</sup> The Forest's diverse plant and animal species evolved in an environment subject to "catastrophic" wildfires every 50-100 years.<sup>5</sup> In 2000, the Forest was struck by a catastrophic fire and lost approximately 74,000 acres.<sup>6</sup> As a result of the wildfires, watersheds were degraded, soils were

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<sup>1</sup> 430 F.3d 1057 (9th Cir. 2005).

<sup>2</sup> *Id.* at 1072.

<sup>3</sup> 395 F.3d 1019 (9th Cir. 2005).

<sup>4</sup> Appellant's Opening Brief at 6, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995).

<sup>5</sup> *Id.* at 7. The Forest has provided approximately 1.2 million visitor days a year. *Id.* A visitor day is equal to 12 hours of recreational use. *Id.*

<sup>6</sup> *Ecology Center*, 430 F.3d at 1061. *See also* Appellant's Opening Brief at 8, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995). The loss of 74,000 acres is equal to roughly four percent of the Forest. *Id.*

destabilized, sediment delivery to fishery habitats increased, roads that had been covered by vegetation were now exposed, and the trees weakened by the fires were more susceptible to disease and insect infestation.<sup>7</sup> The change in conditions however was not without benefit. In the wake of the forest fires emerged a habitat for post-fire species.<sup>8</sup>

The loss prompted the United States Forest Service (“Forest Service”) to develop a remedial plan known as the Lolo National Forest Post Burn Project (“Project”).<sup>9</sup> Following public comment, the Forest Service issued an Environmental Impact Statement (“EIS”)<sup>10</sup> that considered four plans, including a “no action alternative.”<sup>11</sup> The EIS did not mention the “huge cumulative effects problem” of eliminating twenty percent of the black-backed woodpecker’s habitat through a combination of logging within the Forest and on adjacent private land.<sup>12</sup>

Prior to the 2000 fires there was such a shortage of habitat caused by fires that the Forest Service considered the black-backed woodpecker

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<sup>7</sup> Answering Brief of the Federal Defendants-Appellees at 10, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995). Trees damaged by the fires were more susceptible to insect attack and created the potential for fuel accumulations that could in lead to future forest fires. *Id.*

<sup>8</sup> Appellant’s Opening Brief at 7, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995). The black-backed woodpecker is a post-fire habitat dependent species. *Id.* See also *Ecology Center, Inc. v. Austin*, 430 F.3d 1057, 1061 (9th Cir. 2005). The Ecology Center feared that the Forest Service’s impact analysis was inadequate to protect the black backed woodpecker’s habitat. *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> 42 U.S.C. § 432(C) (2000). An EIS is required for “major Federal actions significantly affecting the quality of the human environment.” *Id.* See also *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 373-75, 385 (1989). NEPA mandates agencies take a “hard look” at a project’s environmental effects. *Id.* See also *Charles J. Nagey*, 39A C.J.S. HEALTH & ENVIRONMENT §118. When a federal agency decides to execute a project an EIS is required to disclose the project’s significant environmental impacts. *Id.* The EIS’s opinions and conclusions must be supported by adequate facts and analysis. *Id.* Any conclusions the agency reaches must be accompanied sufficient documentation and disclosures. *Id.*

<sup>11</sup> *Id.* See also Answering Brief of the Federal Defendants-Appellees at 11, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995). The EIS itself was a veritable forest. *Id.* It contained 250 pages that analyzed the affected environment, over 160 pages devoted to the Project’s environmental consequences, and an administrative record with more than 20,000 pages of supporting information. Answering Brief of the Federal Defendants-Appellees at 11, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995). See also *Ecology Center*, 430 F.3d at 1072.

<sup>12</sup> Answering Brief of the Federal Defendants-Appellees at 11-12, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995).

and other post-fire habitat dependent species “at extreme risk.”<sup>13</sup> The EIS indicated that the 2000 fires roughly doubled the amount of post-fire habitat in the Forest to 19,219 acres.<sup>14</sup> The project originally proposed salvaging 1020 acres although this was subsequently reduced to 815 acres.<sup>15</sup>

In July of 2002 the Forest Service selected a version of “Alternative Number Five” for the Project.<sup>16</sup> The Ecology Center, Inc. (“Ecology Center”) disapproved of “Alternative Number Five” because the plan involved proscribed burning and salvage logging.<sup>17</sup> The Ecology Center opined that the plan as adopted would adversely affect the habitat of the black-backed woodpecker, which is a sensitive species.<sup>18</sup> The black-backed woodpecker’s habitat would be reduced by approximately 10% if the 815 acres designated in the EIS was salvaged.<sup>19</sup>

The Ecology Center’s complaint asserted violations of the National Environmental Policy Act (“NEPA”), 42 U.S.C. §4332(C), and the National Forest Management Act (“NFMA”), 16 U.S.C. §§ 1600-1687.<sup>20</sup> The Ecology Center asserted that the Forest Service’s failure to assess the

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<sup>13</sup> *Ecology Center*, 430 F.3d at 1066.

<sup>14</sup> *Id.* From 1993 to 1998 fires created approximately 11,000 acres of post-fire habitat or roughly 6% of the amount typically generated during an average six-year time period. *Id.* At the time of the Project’s inception there were 9,349 acres from pre-2000 fires. *Id.* The 2000 fires created an additional 9,870 acres of habitat for the black-backed woodpecker and other post-fire habitat dependent species. *Id.* There were 9,100 acres of habitat located in the Project area. *Id.*

<sup>15</sup> *Id.* See also *id.* at n.5. The amount was further reduced to 155 acres by a settlement reached in *Sierra Club, Inc. v. Austin*, 82 Fed. Appx. 570 (2003). *Id.*

<sup>16</sup> *Ecology Center*, 430 F.3d at 1061.

<sup>17</sup> *Id.* See also Ecology Center homepage <http://www.ecologycenter.org/history.html> (last visited March 21, 2006). The Ecology Center was founded in 1969 during the early days of the environmental movement in the United States. *Id.* Initially the Ecology Center focused on disseminating information about the environment and public policy through its bookstore, newsletter, library and printing press. *Id.* In 1971 a catastrophic oil spill occurred in the San Francisco Bay and the Ecology Center organized volunteer clean-up crews. *Id.* Around this time the Ecology Center began displaying support for the environment and took part in early recycling efforts. *Id.* The Ecology Center’s publication, *Terrain*, takes a broad approach to environmental concerns. *Id.* One of *Terrain*’s focal points is on wilderness protection. *Id.*

<sup>18</sup> Appellant’s Opening Brief at 11, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995); see also *Ecology Center*, 430 F.3d at 1061.

<sup>19</sup> Appellant’s Opening Brief at 12, *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005) (No. 03-35995). There were approximately 1,280 acres logged on private land that abutted the Forest. *Id.* In combination with the 815 acres designated in the Project the loss of potential habitat was almost 20%. *Id.*

<sup>20</sup> *Ecology Center*, 430 F.3d at 1061-62.

effects of old-growth treatment on dependent species violated NFMA's requirement to "ensure species diversity and viability."<sup>21</sup> Additionally, the Ecology Center maintained that the Forest Service did not adequately address the scientific uncertainties of treating the Forest's old-growth areas in violation of NEPA.<sup>22</sup> Ecology Center challenged the Forest Service's action on a number of grounds. Ecology Center objected to the impact of logging on old-growth habitat dependent species, the Service's impact analysis of salvage logging on the black-backed woodpecker's habitat, the possible impact of the Project on soil conditions in violation of the Regional Soil Quality Standard ("RSQS"), and the dependability of the soil quality analysis.<sup>23</sup>

After finding that the Service's decision to permit logging was arbitrary and capricious, the Ninth Circuit reversed summary judgment in favor of the Forest Service and directed the district court to enter summary judgment for Ecology Center.<sup>24</sup>

### III. LEGAL BACKGROUND

Forest Service litigation decisions have provided insight and raised questions about what constitutes proper forestland stewardship under the NFMA.<sup>25</sup> Stewardship cases have put judges in a role that extends beyond simply interpreting the law.<sup>26</sup> Judges have used the information provided by litigants, intervenors, and amici to formulate scientific inferences about

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<sup>21</sup> *Id.* at 1063.

<sup>22</sup> *Id.* at 1065.

<sup>23</sup> *Ecology Center*, 430 F.3d at 1061. *See also id.* at 1063. Ecology Center objected to the scientific uncertainty surrounding the necessity, design and long-term effects of old-growth treatment and believed that the old-growth treatment would adversely affect species that are dependent on old-growth habitat. *Id.* *See also supra* note 13; *Ecology Center*, 430 F.3d at 1068. The Regional Soil Quality Standard precluded the Forest Service from conducting an activity that would "create detrimental soil conditions in fifteen percent of the activity area." *Id.* Ecology Center believed the methodology used to calculate the percentage of soil in a detrimental state was unreliable because the Forest Service drew its conclusions from maps, samples throughout the Forest, aerial reconnaissance, and computer modeling instead of directly observing soil conditions in the activity areas. *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> Anna M. Seidman & Douglas S. Burdin, *Forest Wildlife Management: Legal Battleground for a Scientific Dilemma*, 20 NAT. RESOURCES & ENV'T 40, 40-41 (2005).

<sup>26</sup> *Id.* at 40.

what makes an effective wildlife management strategy.<sup>27</sup> The ultimate goal is to better define the Forest Service's duties under NFMA.<sup>28</sup>

The NFMA directs the Secretary of Agriculture to "develop, maintain, and, as appropriate, revise land and resource management plans" for the units under the Forest Service's care and control.<sup>29</sup> Diversity of plant and animal species is among NFMA's paramount tenets,<sup>30</sup> as is maintaining "tree species similar to that existing in the region controlled by the plan."<sup>31</sup> In addition to requiring plans based on sound principles of science management, the NFMA plans must also be open to public scrutiny.<sup>32</sup> The comment process allows the public to offer opinions regarding proposed regulations and provide input during the planning stages for individual forests under the Forest Service's care.<sup>33</sup>

In 1982, the Forest Service promulgated regulations to fulfill the requirements of NFMA.<sup>34</sup> These regulations introduced the concept of a "management indicator species" ("MIS") as a means to measure the effect of management actions on other species.<sup>35</sup> The growth or decline of a designated MIS suggested whether or not agency actions adversely affected other species.<sup>36</sup> MIS viability is determined by evaluating the quantity and type of habitat available in a designated forestry unit.<sup>37</sup> Actions that will impact an MIS's habitat will not only affect its population but also the population of species represented by the MIS.<sup>38</sup> This method of using an MIS as a harbinger for other species has been dubbed the "proxy-on-proxy" approach.<sup>39</sup> Courts differ as to whether the

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<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

<sup>29</sup> 16 U.S.C. §1604 (2000). Units are areas of the National Forest under the control of the Forest Service. *Id.* See also Anna M. Seidman & Douglas S. Burdin, *Forest Wildlife Management: Legal Battleground for a Scientific Dilemma*, 20 NAT. RESOURCES & ENV'T 40, 40 (2005).

<sup>30</sup> 16 U.S.C. § 1604(g)(3)(B) (2000).

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> Seidman & Burdin, *supra* note 29, at 43. There were 7,000 original comments and a total of 190,000 comments submitted when the Forest Service undertook the 2005 Planning Regulations. *Id.*

<sup>34</sup> 47 FR 43026-01; 47 Fed. Reg. 43,048; 36 C.F.R. §219 (1982).

<sup>35</sup> 36 C.F.R. § 219.19 (1982).

<sup>36</sup> Seidman & Burdin, *supra* note 29, at 41.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

1982 Forest Service planning regulations mandate “on-the-ground counting” to reasonably assess population or if proxy-on-proxy is sufficient.<sup>40</sup>

The Ninth Circuit first addressed the issue of whether the proxy-on-proxy method is sufficient to satisfy NEPA in *Inland Empire Public Lands Council v. United States Forest Service*.<sup>41</sup> In *Inland Empire*, the Forest Service planned to conduct a timber sale in Kootenai National Forest and completed a site specific EIS with public comment.<sup>42</sup> The Public Lands Council and other plaintiffs asserted that the Forest Service’s EIS violated NEPA and NFMA for failing to conduct adequate population viability research for “sensitive” species in the area affected by the Forest Service’s action.<sup>43</sup> The plaintiffs also alleged violation of 36 C.F.R. § 219.19 because the Forest Service’s “habitat viability analyses” was insufficient.<sup>44</sup> The district court granted summary judgment to the Forest Service because the Forest Service’s choice of scientific methodology was entitled deference from the reviewing court.<sup>45</sup> The Ninth Circuit court held that the Forest Service’s use of proxy-on-proxy methodology was a reasonable indicator of species viability.<sup>46</sup> Although the court was unwilling to require assessment under regulatory section 219.19<sup>47</sup> based on population size, population trends, or the population dynamics of other species, it did encourage the use of population assessments.<sup>48</sup>

In 2002, the Ninth Circuit’s analysis was used in *Idaho Sporting Congress, Inc. v. Rittenhouse*,<sup>49</sup> which further clarified when habitat is a reasonable indicator of species’ viability.<sup>50</sup> In *Rittenhouse* several

<sup>40</sup> *Id.* On-the-ground counting means inventorying actual wildlife populations through data collection and evaluation. *Id.*

<sup>41</sup> 88 F.3d 754 (9th Cir. 1996).

<sup>42</sup> *Id.* at 758.

<sup>43</sup> *Id.* Plaintiffs wanted the Forest Service to examine “the species’ population size, their population trends, or their ability to interact with other groups of the species living in neighboring patches of forest.” *Id.*

<sup>44</sup> *Id.* at 760. Plaintiff’s argued that 36 C.F.R. § 219.19 mandated the Forest Service to examine the population of each species, the population dynamics, and whether each species could travel between different patches of forest. *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 761.

<sup>47</sup> 36 C.F.R. § 219 (2006).

<sup>48</sup> *Inland Empire*, 88 F.3d 754, 761 n.8.

<sup>49</sup> 305 F.3d 957 (9th Cir. 2002).

<sup>50</sup> *Id.*

conservation groups sought to enjoin timber sales in the Boise National Forest and brought suit against the Forest Service for violations of NEPA and NFMA.<sup>51</sup> The Boise Forest Plan used seven MISs in its proxy-on-proxy approach to ensure viable wildlife populations.<sup>52</sup> After reviewing the Forest Service's record in combination with a monitoring report, the court found the Forest Service's methodology inaccurate.<sup>53</sup> The court in *Rittenhouse* also relied on expert opinions to investigate the MISs' habitats separately from the old-growth analysis.<sup>54</sup> The court held that the Forest Service's use of the habitat as a proxy for viability violated NFMA because the agency's decision rested on flawed methodology.<sup>55</sup>

Reliance on faulty data was again at issue in *The Lands Council v. Powell*.<sup>56</sup> The plaintiffs in *Lands Council* used NEPA and NFMA to challenge a Forest Service timber harvest in the Idaho Panhandle Forest.<sup>57</sup> The court agreed with the plaintiffs that the final EIS failed to meet NEPA's "hard look" requirement because there was no catalog of past projects and no discussion of how those projects harmed the environment.<sup>58</sup> The court found that the Forest Service improperly used

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<sup>51</sup> *Id.* at 960.

<sup>52</sup> *Id.* at 962.

<sup>53</sup> *Id.* at 972. One area the Forest Service had determined to have 1,280 of old-growth for dedication in actuality had none. *Id.* See also *id.* at 967-69. The Forest Service's methodology contained incorrect assumptions regarding the sustainability of dedicated old growth, the amount and definitions of old growth dedicated were inadequate, and the current plan's approach to sustaining old growth was invalid. *Id.* After a series of forest fires destroyed 55,000 acres of dedicated land the Forest Service failed to update its old growth assumptions. *Id.* The failure to update the assumptions resulted in grossly inaccurate expectations for the old growth needed to maintain the MIS. *Id.* at 967-69.

<sup>54</sup> *Id.* at 972. Typically old-growth analysis can be used as a proxy for the pileated woodpecker but in this instance the two habitats may not overlap. *Id.*

<sup>55</sup> *Id.* The court once again reiterated its position in *Inland Empire* that although population analysis is not required it is encouraged. *Id.*

<sup>56</sup> 395 F.3d 1019 (9th Cir. 2005).

<sup>57</sup> *Id.* at 1024. The proceeds from harvesting 1,408 acres were to be used to fund a watershed restoration project in the Little North Fork of the Coeur d'Alene River. *Id.* See also *id.* at 1026. Plaintiff's unsuccessfully attempted to convince to court to apply the "rule of reason" standard instead of the arbitrary and capricious standard. *Id.* The court declined to grant the plaintiff's request because the rule of reason review is not materially different from the arbitrary and capricious standard and the Supreme Court applies the arbitrary and capricious standard to NEPA review. *Id.* (citing *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989)).

<sup>58</sup> *Id.* at 1027. See also *id.* at 1027-28. When assessing a project's cumulative effects the EIS must adequately catalog past, present, and future projects and analyze how the differences in projects have affected the environment. *Id.*



outdated survey data when it assessed the project's cumulative impact on the habitat and population of the Westslope Cutthroat Trout.<sup>59</sup> The Forest Service's model used to predict in-stream sedimentation lacked key variables, and the Forest Service failed to adequately disclose the model's flaws in the final EIS.<sup>60</sup> The court held that the lack of sufficient disclosure, not the use of the model itself, violated NEPA.<sup>61</sup> In *Lands Council*, the Forest Service predominately used proxy-on-proxy analysis, in addition to some spot field surveys and on-the-ground detection.<sup>62</sup> The Forest Service's database on snags, a proxy for the MIS, was found to be outdated and inaccurate.<sup>63</sup> Without the necessary habitat proxy variable, an accurate assessment of species viability could not be made, and the spot assessments were insufficient to cure the defect.<sup>64</sup>

The use of habitat as a proxy for species viability was again tested in *Native Ecosystems v. United States Forest Service*.<sup>65</sup> Native Ecosystems claimed the Forest Service violated NEPA 42 U.S.C. § 4321 when it prepared an Environmental Assessment ("EA") rather than an EIS and only considered two alternatives to the proposed Jimtown Vegetation Project ("Jimtown Project") in the Helena National Forest.<sup>66</sup> Native Ecosystems also claimed that the Forest Service violated NFMA 16 U.S.C. 1600 *et seq.* because the Jimtown Project threatened the northern goshawk's habitat.<sup>67</sup> The record showed that the Forest Service's EA satisfied NEPA and provided the mandatory "hard look" before engaging in projects that affect the environment.<sup>68</sup> Native Ecosystems failed to raise substantial questions about whether the Jimtown Project would have a significant impact on the environment, and the court found that the Forest

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<sup>59</sup> *Id.* at 1031.

<sup>60</sup> *Id.* at 1031-32.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at 1036.

<sup>63</sup> *Id.* "Snags are dead, standing trees, and they are a key habitat for the pine marten, one of the Indicator Species. The database contains no information about this key habitat variable." *Id.* at 1036 n.24.

<sup>64</sup> *Id.* The court poignantly spells out, "If the habitat trend data is flawed, the proxy on proxy result, here species population trends, will be equally flawed." *Id.*

<sup>65</sup> 428 F.3d 1233 (9th Cir. 2005).

<sup>66</sup> *Id.* at 1235. The Forest Service also considered a "no action" alternative. *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.* at 1244-45.

Service's alternatives were sufficient.<sup>69</sup> Upon determining that the data used to identify the goshawk's habitat was accurate and the Forest Service's action would leave sufficient habitat for the goshawk, the choice to employ proxy-on-proxy was upheld.<sup>70</sup> The court offered a two-part test of when the proxy method should be upheld:

Our case law permits the Forest Service to meet the wildlife species viability requirements by preserving habitat, but only where both the Forest Service's knowledge of what quality and quantity of habitat is necessary to support the species and the Forest Service's method for measuring the existing amount of that habitat are reasonably reliable and accurate.<sup>71</sup>

The Eleventh Circuit analyzed the proxy-on-proxy method in *Sierra Club v. Martin*.<sup>72</sup> The Forest Service sought to allow logging in the Chattahoochee and Oconee National Forests ("CONF"), and the Sierra Club alleged violations of NFMA because the logging would endanger CONF's soil, watershed, fish, and wildlife.<sup>73</sup> Specifically, the Sierra Club asserted that NFMA required collecting and considering population inventory information when a proposed, endangered, threatened, or sensitive species of plants and animals ("PETS species") was present in a project area.<sup>74</sup> Sierra Club also claimed that the Forest Service violated 36 C.F.R. § 219 because it failed to procure population data for MIS.<sup>75</sup> The Forest Service argued that population studies are only mandated when there is a "high potential for occupancy by PETS species."<sup>76</sup> The Forest Service conceded that sensitive species were located within the project areas and would be destroyed by the logging, but it maintained that because the species existed in other parts of CONF, the projects would not

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<sup>69</sup> *Id.* at 1249. *See also id.* at 1246-47. There is no "numerical requirement as the bellwether of reasonableness." *Id.* The substance of the alternatives is the determinative factor. *Id.* Alternatives that do not advance a project's stated purpose are not reasonable. *Id.*

<sup>70</sup> *Id.* at 1251.

<sup>71</sup> *Id.*

<sup>72</sup> 168 F.3d 1 (11th Cir. 1999).

<sup>73</sup> *Id.* at 2.

<sup>74</sup> *Id.* at 3-4.

<sup>75</sup> *Id.* at 5.

<sup>76</sup> *Id.* at 4.

adversely affect species viability or diversity.<sup>77</sup> However, because the Forest Service arrived at its conclusion without any inventory or population data on the PETS species, the court held that the Forest Service violated the Forest Plan's explicit mandate to gather adequate population inventory information when a project area has a high potential for PETS species occupation.<sup>78</sup> The court found an obligation to "maintain population data on all affected species" by reading 36 C.F.R. § 219.19 and 36 C.F.R. § 219.26 together.<sup>79</sup> The Forest Service was not obligated to collect population data on all species, only MIS, because MIS is used as a proxy to "measure the effects of management strategies on Forest diversity" and requiring the Forest Service to collect inventory data on *all* species would render section 219 nonsensical.<sup>80</sup> The court differed in opinion from the Ninth Circuit in *Inland Empire*, where habitat analyses could serve as a sufficient proxy to comply with 36 C.F.R. § 219.19.<sup>81</sup> For the Eleventh Circuit, 36 C.F.R. § 219.19 required the Forest Service to evaluate "both amount and quality of habitat *and of animal population trends* of the management indicator species."<sup>82</sup>

#### IV. INSTANT DECISION

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

<sup>79</sup> *Id.* at 5.

"Forest Planning shall provide for the diversity of plant and animal communities and tree species consistent with the overall multiple use objectives of the planning area. Such diversity shall be considered throughout the planning process. Inventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present condition."

*Id.* (citing 36 C.F.R. § 219.19 (2006)).

"Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area . . . (1) In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management indicator species . . . (6) *Population trends of the management indicator species will be monitored and relationships to habitat changes determined.*"

*Id.* (citing 36 C.F.R. § 219.26 (2006)).

<sup>80</sup> *Id.* at 6-7.

<sup>81</sup> *Id.* at n.10. See also *supra* notes 40-47.

<sup>82</sup> *Sierra Club*, 168 F.3d 1, 7 (11th Cir. 1999). See also *id.* at 7 n.10. The court highlighted the factual differences between the present case and *Inland Empire*. *Id.* In *Inland Empire* the Forest Service used a site-specific EIS and detailed field studies before concluding that the MIS would not be significantly harmed. *Id.* (citing *Inland Empire*, 88 F.3d at 758, 761 (9th Cir. 1996)).

*A. The Majority Opinion*

The majority addressed the Forest Service's decision not to directly monitor the impact of treating old-growth areas on post-fire habitat dependent species.<sup>83</sup> While conceding that an agency's choice of methodology is entitled to deference, the majority also pointed out that the rule is not absolute.<sup>84</sup> In order to comply with NFMA, the court found an agency must demonstrate the reliability of the methodology used. Otherwise, the methodology and decisions it produces would be considered arbitrary and capricious.<sup>85</sup> The court declined to adopt the Forest Service's position that as long as a species' requisite amount of habitat is maintained, a species is viable.<sup>86</sup> The court held the Forest Service's continued treatment of old-growth areas without observing the effect on dependent species was arbitrary and capricious.<sup>87</sup> The court analogized the Forest Service's decision to a pharmaceutical company marketing a drug without first determining the drug's safety and efficacy.<sup>88</sup> Just as the pharmaceutical company's decision to market without clinical testing would be arbitrary and capricious, so too would the Forest Service's decision to treat old-growth areas without verifying whether treatment was safe and effective for a dependent species.<sup>89</sup>

The majority considered whether the EIS adequately addressed "in any meaningful way the various uncertainties that surrounded the scientific evidence."<sup>90</sup> While the EIS did identify the public's concern about treatment in relation to dependent species' viability, it did not explain in sufficient detail the basis for those concerns nor did the EIS address them.<sup>91</sup> Because the Forest Service decided to abstain from further study regarding the public's concern without explaining why further study was unnecessary, the majority held the Forest Service's

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<sup>83</sup> *Ecology Center*, 430 F.3d at 1063.

<sup>84</sup> *Id.* at 1064.

<sup>85</sup> *Id.* (citing *Lands Council*, 379 F.3d at 752) (9th 2004).

<sup>86</sup> *Id.*

<sup>87</sup> *Id.* at 1065.

<sup>88</sup> *Id.* at 1064.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.* at 1065.

<sup>91</sup> *Id.*

analysis was inadequate under NEPA.<sup>92</sup>

The majority also took issue with the EIS's failure to adequately explain why removing a portion of the habitat created by the fires would not adversely affect the black-backed woodpecker's viability.<sup>93</sup> Although the 2000 fires did create additional habitat for the black-backed woodpecker, the EIS did not contain sufficient data to determine whether or not sufficient levels of habitat would remain after completion of the Project.<sup>94</sup> The EIS also fell short of NEPA's requirement to provide the public with the environmental data the Forest Service expert used to formulate its opinion.<sup>95</sup> The Forest Service's inadequate explanation and omission of information necessary to properly evaluate the EIS were held to violate NEPA.<sup>96</sup>

Next, the majority used the Forest's plan to determine whether or not the black-backed woodpecker's viability would be adversely affected by salvaging.<sup>97</sup> The Forest Service did not provide an adequate factual basis for the necessary analysis nor did it sufficiently explain its decision.<sup>98</sup> The Court found that the Forest Service's decision to permit salvaging of the black-backed woodpeckers' habitat was arbitrary and capricious because the court was unable to reasonably determine that species' viability would not be adversely affected by salvaging.<sup>99</sup> The court found the Forest Service's decision violated NFMA<sup>100</sup>.

The majority's final inquiry was directed at the Forest Service's decision to verify soil conditions in the salvage areas after authorizing the Project but prior to harvesting.<sup>101</sup> The court was unconvinced by the Forest Service's argument that RSQS was not binding because it was not

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<sup>92</sup> *Id.* Having found that that the Forest Service's decision violated NEPA and the NFMA, the court declined to address the Ecology Center's concern that the project would adversely affect two old-growth dependent species, the pileated woodpecker, and the northern goshawk. *Id.*

<sup>93</sup> *Id.* at 1067. *See also id.* at 1065-67. The black-backed woodpecker classification as a "sensitive species" raises added viability concerns. *Id.*

<sup>94</sup> *Id.* at 1067.

<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> *Id.* at 1068.

<sup>98</sup> *Id.*

<sup>99</sup> *Id.*

<sup>100</sup> *Id.*

<sup>101</sup> *Id.* at 1071.

incorporated into the Lolo National Forest Plan (“Plan”).<sup>102</sup> The court found that because the draft and final EIS discussed RSQS it would be arbitrary and capricious under NEPA to later ignore the standard.<sup>103</sup> Furthermore, the court held that the purpose of RSQS was to ensure compliance with NFMA, and because the Project was not developed in conformity with RSQS the Forest Service could not prove the Project complied with NFMA.<sup>104</sup> The court analogized the Service’s actions in the present case to the Forest Service’s lack of testing in *Lands Council*.<sup>105</sup> The court found that soil analysis from areas with similar ecological characteristics to the proposed harvest areas was insufficiently reliable.<sup>106</sup> The court reasoned that although field reports indicated a small percentage of activity areas were directly observed, the record provided too little information to accurately assess the report’s reliability nor was there any indication in the draft or final EIS that the Forest Service relied upon the field reports when it made its final decision.<sup>107</sup> The court concluded that the Forest Service’s decision to verify soil conditions in the activity after approving the Project did not distinguish the case at bar from *Lands Council* and the Project violated NFMA.<sup>108</sup> The court also held that the Forest Service’s decision to authenticate the soil condition estimates after it approved the Project failed to satisfy NEPA because “NEPA requires consideration of the potential impact of an action *before* the action takes place.”<sup>109</sup>

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<sup>102</sup> *Id.* at 1069-70.

<sup>103</sup> *Id.* at 1069.

<sup>104</sup> *Id.* at 1070.

<sup>105</sup> *Id.*

<sup>106</sup> *Id.* (citing *Lands Council*, 379 F.3d at 752 (9th Cir. 2004), as amended by 395 F.3d at 1034).

<sup>107</sup> *Ecology Center*, 430 F.3d at 1070-71.

<sup>108</sup> *Id.* at 1071.

<sup>109</sup> *Id.* (citing *Neighbors of Cuddy Mountain*, 137 F.3d 1380).

### B. *The Dissent*<sup>110</sup>

Judge McKeown's dissent viewed the majority's decision as an "intrusion into the administrative process" that unduly enhanced the scrutiny courts apply to Forest Service scientific and administrative judgments.<sup>111</sup> McKeown's primary concern was over the majority's application of *Lands Council*<sup>112</sup> to the case at bar.<sup>113</sup> As applied by the majority to this case, *Lands Council* now stands for the proposition that soil walkthroughs are required in every case.<sup>114</sup> While *Lands Council* took issue with the Forest Service's lack of any on-site analysis, the majority held that the Forest Service "failed to conduct *enough* of them."<sup>115</sup> The dissent argued that the majority's opinion permitted the court of appeals to assess the detail and quality of an agency's analysis, "even in the absence of contrary scientific evidence in the record."<sup>116</sup> In doing so the majority

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<sup>110</sup> *Ecology Center*, 430 F.3d at 1071-78. Judge McKeown wrote the dissenting opinion. *Id.* See also *Native Ecosystems Council v. U.S. Forest Service*, 428 F.3d 1243, 1246-47. Judge McKeown wrote the opinion for the majority. *Id.* In the opinion he made two points directly related to his dissent in *Ecology Center*. *Id.* First, he pointed out the need for courts to defer to agency decisions as mandated by the Supreme Court. *Id.* "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." *Id.* (citing *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378). Second, the number of alternatives contemplated by an agency does not provide any indicia of reasonableness under NEPA. *Id.* The court is only to examine the substance of the alternatives contemplated by the agency. *Id.* See also *supra* notes 64-69; *Sierra Club v. Austin*, 82 Fed. Appx. 570 (2003). Judge McKeown joined the majority opinion in *Sierra Club*, a case that scrutinized different facets of the Forest Service's Project following the 2000 fires in Lolo National Forest. *Id.* Specifically, the majority found that there was not "any analysis of the project's impact on the potential for the unroaded areas to be designated as IRA's or wilderness in the future." *Id.* But cf. *id.* at 574-76 (Kozinski, J., dissenting). "The majority's claim that there was no "analysis of the project's impact on the potential for the unroaded areas to be designated as IRAs or wilderness in the future," *Native Ecosystems Council*, at 574-76 (Kozinski, J., dissenting) (citing *Memdispo* at 7), is simply untrue." *Id.*

<sup>111</sup> *Id.* at 1072.

<sup>112</sup> *Lands Council v. Powell*, 395 F.3d 1019 (9th Cir. 2004).

<sup>113</sup> *Ecology Center*, at 1072-77.

<sup>114</sup> *Id.* at 1073. The *Lands Council* court found that spreadsheet models, unaccompanied on the ground walkthroughs (to verify the spreadsheet predictions) violated the NFMA. *Id.* A walk though is an on-site analysis of the actual conditions thought to exist from data provided by spreadsheets. *Id.* at 1073.

<sup>115</sup> *Id.* at 1075.

<sup>116</sup> *Id.* at 1073. See also *supra* note 109 (providing for when a court must defer to agency decisions).

drew a bright line rule where case-by-case analysis belonged.<sup>117</sup>

The dissent argued the analogy of the Forest Service to a pharmaceutical company went too far.<sup>118</sup> The majority posited that because it would be arbitrary and capricious for a pharmaceutical company to “market a drug to the general population without first conducting a clinical trial” so too was the Forest Service’s decision to “treat more and more old-growth forest without first determining that such treatment is safe and effective for the dependent species.”<sup>119</sup> The dissent argued that aside from the differences between humans and trees, the FDA process, with its substantive and administrative prerequisites for drug approval through clinical tests, is not the same as NEPA and NFMA in environmental actions.<sup>120</sup> The dissent’s opinion pointed out that the majority’s analogy demonstrated how far the majority was willing to inject itself into the internal processes of the Forest Service.<sup>121</sup> The dissent maintained that the majority’s opinion marked a departure from established precedent to defer to an agency’s expertise and experience, especially on matters of engineering and science.<sup>122</sup>

## V. COMMENT

Reviewing courts must give deference to an agency decision, provided the agency’s methodology is not arbitrary and capricious.<sup>123</sup> Under this narrow scope of review a court is not to substitute its own judgment for that of the expert agency.<sup>124</sup> When the agency fails to adequately articulate a sufficient correlation between relevant facts and the decision made, a court shall overturn the agency decision as arbitrary and capricious.<sup>125</sup> The question in this case was whether or not the majority crossed the line from reviewer to decision maker by extending the

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<sup>117</sup> *Ecology Center*, 430 F.3d at 1075.

<sup>118</sup> *Id.* at 1077.

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> *Id.* (citing *United States v. Alpine Land & Reservoir Co.*, 887 F.2d 207, 213 (9th Cir. 1989).

<sup>123</sup> *Motor Vehicle Mfrs. Ass’n. of United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

<sup>124</sup> *Id.*

<sup>125</sup> *Id.*



decision in *Lands Council*.<sup>126</sup>

Making accurate predictions for forest stewardship is a formidable task because ecosystems are dynamic and constantly evolving.<sup>127</sup> In order to ensure the predictions used for models remain accurate, the Forest Service should use some type of “science consistency checks.”<sup>128</sup> Field analyses, monitoring, and evaluation are the preferred methods to ensure a model’s accuracy.<sup>129</sup>

In *Lands Council*,<sup>130</sup> the Forest Service did not conduct any on-site inspections but instead relied on unverified spreadsheet predictions.<sup>131</sup> The model used required on-site verification to ensure that the Forest Service’s predictions about soil quality were accurate. That was a clear-cut case of an arbitrary and capricious decision. When a model requires on the ground analysis, an agency is obligated to perform some degree of on-site verification. Without some measure of on-site verification an agency decision will be arbitrary and capricious. It makes little sense to base policy decisions on an unverified model that has not been backed by some guarantee that the predictions have, in fact, come to fruition.

What began as a case specific decision, *Lands Council* has been transformed into a slippery slope for agencies. The specific circumstances of the case indicated that reliance on spreadsheet models without on-site spot verifications to affirm the model’s predictions violated NFMA.<sup>132</sup> The substantive safeguards in NFMA do not specifically prohibit reasonable scientific modeling nor is it prohibited by NEPA.<sup>133</sup> We are left with a standard that essentially mandates on-site verification when

<sup>126</sup> Ecology Center, Inc. v. Austin, 430 F.3d 1057, 1072 (9th Cir. 2005).

<sup>127</sup> Charles F. Wilkinson, *Environmental Restoration: Challenges for the New Millennium: A Case Study in the Intersection of Law and Science: The 1999 Report of the Committee of Scientists*, 42 ARIZ. L. REV. 307, 315 (2000).

<sup>128</sup> See generally *id.* at 316.

<sup>129</sup> *Id.* The article suggests that this may best be accomplished by independent scientists, “including scientists from Forest Service Research.” *Id.* The scientists from Forest Science Research are not affiliated with land management and would provide an unbiased opinion. *Id.* Allowing independent scientists (in addition to those from Forest Science Research) the opportunity to provide analyses would help resolve the problems of inadequate funding. *Id.* It would also be in line with the public policy of providing transparency in land management decisions. *Id.*

<sup>130</sup> *Lands Council*, 395 F.3d 1019 (9th Cir. 2004).

<sup>131</sup> *Id.* at 1035.

<sup>132</sup> *Id.*

<sup>133</sup> Ecology Center, Inc. v. Austin, 430 F.3d 1057, 1073 (9th Cir. 2005).

modeling is used but provides no indication of how much verification is required.

The court's decision makes it difficult for an agency to predict the *de minimis* level of on-site verification. In *Ecology Center*, the Forest Service conducted the on ground walkthroughs that were lacking in *Lands Council*.<sup>134</sup> The Forest Service unsuccessfully argued that the verifications it performed set it apart from the facts in *Lands Council*.<sup>135</sup> We are left with no indication of how many more walkthroughs would have satisfied the court and how many will be required in the future when a policy decision is based on modeling.

## VI. CONCLUSION

Now the question remains as to how much on-site verification would have delivered the Forest Service from this new, harder to define arbitrary and capricious standard. The answer is unclear and is equally murky for future policy decisions. The Ninth Circuit has opened the door for judges to supplant expert agency decisions with their own notions of what sufficient verification is and what sufficient verification of a reasonable scientific method is not.

SETH D. OKSANEN<sup>136</sup>

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<sup>134</sup> *Id.* (McKeown, J., dissenting). See also 16 U.S.C. §§ 1600-1687 (2000).

<sup>135</sup> *Ecology Center, Inc. v. Austin*, 430 F.3d 1057, 1068-70 (9th Cir. 2005).

<sup>136</sup> I would like to give special thanks to Crystal Hermann (for her diligence and understanding), Haley Corbett (for her *extreme* patience and willingness to share her tact), Eric Oelrich (for his extensive eleventh hour edits), and Professor Dale Whitman (for his candor and advice on a previous work that made me a better writer).