September 25, 2015

Mr. Champe Green, Forest Planner
Cibola National Forest and National Grasslands
2113 Osuna Rd. NE.
Albuquerque, NM 87113

Sent via email and certified mail this date

Re: Comments on draft desired future condition statements, landscape vision statements, and the inventory and evaluation of lands that may be suitable for wilderness

Dear Mr. Green:

Please accept the enclosed comments pertaining to the Cibola National Forest's proposed desired condition statements, landscape vision statements, and the wilderness inventory and evaluation process. We appreciate the Forest Service once again offering an opportunity for the public to review and respond to draft documents related to the forest plan revision process. We believe the agency is doing a commendable job engaging the public in this process. As one of the last opportunities to provide feedback before the development of alternatives and the Draft Environmental Impact Statement, it is an important opportunity to check in and assure we are all on the same track. The referenced appendices and attachments to our comments are included in the copy sent via ground mail.

We will continue to conduct field surveys past the September 25, 2105 comment deadline to verify the accuracy of the Forest Service's substantially noticeable determinations for other improvements. We will provide this information to the Agency has it becomes available. Additionally, we will soon offer feedback to the Forest Service regarding its most recent round of public meetings that were hosted in cooperation with the landscape teams.

If you have any questions regarding this matter, please do not hesitate to contact us.

Respectfully,

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Attachment 1: Polygon Specific Comments in Response to the Phase 2 Wilderness Inventory

Figures 1 & 2: Maps showing results of analysis that pertain to vegetation type desired conditions

Appendices:
A: Congressional Guidance on Outside Sights and Sounds, by Doug Scott

B: Sampling of Photographs of Improvements (provided via DVD)

C: Photographs Verifying the Noticeability of 'Other Improvements' for Consideration in the Phase II Inventory (provided via DVD)

I. Wilderness Inventory and Evaluation Methods

A. Transparency and Public Involvement Related To Both the Inventory and Evaluation Phases

Chapter 70 of the Forest Service Handbook 1909.12 sets out a four-step process for the agency to satisfy its obligation to "[i]dentify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System [NWPS] and determine whether to recommend any such lands for wilderness designation" through a plan revision.[1] The agency must: (1) inventory all lands that may be suitable for inclusion in the NWPS; (2) evaluate the wilderness characteristics of each inventoried area using the criteria in section 2(c) of the Wilderness Act of 1964; (3) analyze some or all of the evaluated areas in the applicable NEPA document; and (4) decide which areas to recommend for inclusion in the NWPS. Chapter 70 requires the agency to provide opportunities for public engagement at *each* of the four steps:

> *Early and during each step of the process* identified in this chapter, the Responsible Official:
>
> > 1. *Shall provide opportunities for public participation* and collaboration . . . . Through such opportunities, engage the public . . . early and throughout the process to provide feedback on the inventory, evaluation, analysis, and recommendation steps identified in this chapter.
> >
> > 2. May provide additional participation opportunities specifically on this topic as necessary.
>
> *Maps, analysis, and other documentation developed through each step of the process must be made available timely to the public to increase transparency and enable feedback and input.*[2]

With respect to the evaluation step in particular, section 72 of the directives reiterates the requirement to "provide opportunities for public . . . participation" and "communicate the evaluation process to the public."[3] The agency must "ensure that the process for inventory and evaluation is transparent and accessible to the public for input and feedback" and make documentation of the evaluation "available for participation opportunities."[4] Once the evaluation phase (including public participation) is complete, Chapter 70 then requires the responsible official to identify which areas to carry forward for analysis in the NEPA process "*[b]ased on* the evaluation and *input from the public participation opportunities*."[5]

We appreciate the transparency of the wilderness inventory and evaluation process that the Cibola National Forest (CNF) has used to date. We thank you for providing an opportunity to comment on a second draft of the wilderness inventory and the substantially noticeable definition matrix. We are impressed that the CNF developed a GIS layer of those improvements it deems are substantially noticeable and appreciate that the CNF made this information available upon request to help the public

[1] 36 C.F.R. § 219.7(c)(2)(v).
[2] FSH 1909.12, ch. 70, § 70.61 (emphasis added).
[3] *Id.* § 72.
[4] *Id.* § 72.2.
[5] *Id.* § 73 (emphasis added).

engage in the process. We also appreciate the opportunity to provide feedback on the wilderness evaluation methodology. The eight-page Wilderness Evaluation Worksheet clearly and accurately explains the requirements and criteria contained in the Forest Service's Wilderness Evaluation Handbook (Chapter 70 of the planning directives). The formal structure provided in the worksheets to evaluate the wilderness characteristics of the area identified in the wilderness inventory is easy to follow.

The criteria, questions, and considerations in the worksheet list a number of factors that influence wilderness character; however, it is not clear how each factor will be assessed by agency staff and the public, and how the synthesis of each factor feeds into the final decision. We recommend that a repeatable methodology be used for each criteria and that these criterion feed into replicable analyses and recommendations spelled out for review.

We also request that the CNF provide an opportunity to comment on the results of the evaluation prior to the development, and certainly the release, of the Draft Environmental Impact Statement (DEIS).[6] This will ensure that the public can review and comment on the areas the CNF intends to carry forward to the analysis phase before the Forest Service develops alternatives and commits itself to a particular course. It will also help identify potential technical problems with the evaluation before areas are carried over into the NEPA process.

Recommendations:

- Please provide the public with an opportunity to review and comment on the results of the wilderness evaluation (i.e., the agency's evaluation for each inventoried area) prior to the development of DEIS alternatives.
- Please create a repeatable methodology for each evaluation criterion, provide an explanation for how the methodology will work (including what influence the answers to the questions in the form will have on inclusion or exclusion of areas to be carried forward as recommended wilderness in the DEIS), and make this methodology available for public review and comment.

B. Comments, Questions, and Concerns about the Wilderness Inventory Methodology and the Substantially Noticeable Definition Matrix

The term "substantially noticeable" is not defined in the Forest Service Handbook 1909.12, Chapter 70. Rather, the Handbook simply states, "Include such lands in the inventory where the other improvements or evidence of past human activities are not substantially noticeable in the area as a whole…."[7] In order to offer clarity on this matter, the CNF developed a matrix defining 'substantially noticeable' for each of the improvements listed in 71.22b. This matrix is included as Table 4 in Appendix A to the CNF's wilderness inventory and evaluation process paper. It is clear that the Agency put a lot of thought into the creation of this matrix. We appreciate that the CNF is taking this process seriously and the Agency's attempt to offer

[6] *See* FSH 1909.12, §§ 70.61, 72 (agency must "communicate the evaluation process to the public," and provide opportunities for public participation "early and throughout the process to provide feedback and input on the . . . evaluation"). *Also see* FSH 1909.12, §§ 70.61, 72 (agency must "clearly and efficiently describe and document the wilderness character associated with each area," and provide opportunities for public participation "early and throughout the process to provide feedback and input on the . . . evaluation," including providing "[m]aps, analysis, and other documentation . . . to increase transparency and enable feedback and input").

[7] *Id.* § 71.22b.

transparency regarding its determination for which improvements it considers substantially noticeable; however, several aspects of the definition matrix are deeply concerning. We detail our concerns here.

i. It's not clear that the CNF took into account whether the improvement is substantially noticeable relative *to the area as a whole* when conducting the wilderness inventory.

When assessing whether an improvement is substantially noticeable, we are concerned that the CNF did not take into account whether the improvement is substantially noticeable in the context of the whole area, as required.[8] While the introduction to Appendix A of the CNF's process paper correctly states that "improvements" means the evidence of past human activities "in the area as a whole," the detailed results documented in Appendix B to the process paper indicate otherwise. For instance, by way of example, the worksheet provided by the Forest Service in response to our FOIA request dated July 31, 2015 entitled "draft substantially noticeable matrix" documents that lands within polygon D3_5K6 were excised from the inventory because the fence within it is substantially noticeable.[9] While this worksheet is a good start, it is lacking any site-specific information detailing on-the-ground conditions, simply repeats the criteria from the definition matrix (e.g., fence line is perpendicular to landform, with sparse vegetation leaving little to no screening) and fails to demonstrate that the fence is substantially noticeable to the area as a whole.

During this comment period, to the degree time allowed, we took field trips to visit a sampling of excised areas and examine improvements that were identified as substantially noticeable. Our field verification found that many of the range fences that the Forest Service identified as substantially noticeable and used as a basis for excision of a potential wilderness area from the inventory were in fact not substantially noticeable within close proximity, much less relative to the area as a whole. See Appendix B to this letter, slides 9-13 for a small sample of the photographs that document the condition and 'noticeability' of fence improvements. We provide this Appendix via ground mail on a DVD.

While we provide examples related to two different fences in the Bear Mountains, we are concerned more generally that inappropriate excision from the inventory may have occurred across the entire forest for failure to consider the noticeability of an improvement to the area as a whole. We therefore request that the Forest Service provide additional direction in the methodology on how to discern whether an improvement is substantially noticeable *to an area as a whole*, and review each excision to ascertain whether it meets the modified criteria.

Recommendations:

- For each of the 'other improvements' categories in the definition matrix, modify as necessary the criteria so that it clearly directs how to discern whether an improvement is substantially noticeable *to an area as a whole.*
- Review each excision made between the first and second draft inventories to ascertain whether and how it meets the modified criteria.

[8] *Id.*
[9] The Draft Substantially Noticeable Matrix worksheet provides information on inventory areas to which the substantially noticeable improvements criteria were applied and area-specific comments submitted by the public on the first draft of the wilderness inventory.

- If, after review, the CNF determines certain improvements are not substantially noticeable when considering its appearance relative to the whole area, we request that these lands be added back into the inventory.

    ii. The CNF must base its final determination for whether an improvement is substantially noticeable on the improvement's actual on-the-ground appearance.

The CNF's process paper states that the definition matrix is "based on the type of materials used to construct or develop the improvement, connected aspects associated with utilizing the improvement, and how evident the improvement and associated features are on the landscape."[10] For each improvement category, the definition matrix provides examples of the characteristics of those improvements that might lead to a substantially noticeable determination.[11] The matrix also lists the data sources that the CNF will rely on to inform its noticeability determinations.

We see the utility in using this kind of information to identify the location of improvements that are potentially substantially noticeable; however, it is imperative that the CNF ultimately base its determination on what the improvements look like on the ground. CNF staff could use the Definition Matrix to inform their assessment as they conduct a site visit (i.e., the type of information to collect and include in field notes), but determining that an improvement is substantially noticeable without actually seeing the improvement seems arbitrary.[12] For example, the definition matrix offers the following two considerations when determining whether an improvement is substantially noticeable:

- Improvements are located where landforms or vegetation provides little or no visual screening from most vantage.[13]
- Deviations in form, line, color, texture, and pattern in the surrounding landscape.[14]

We are confounded as to how could the CNF accurately assess these factors without seeing the improvement first hand. The definition matrix includes several passages indicating that the CNF will field verify any improvements in order to make a substantially noticeable determination if the determination cannot be made with the data sources available.[15] Based on the documentation provided by the Forest Service in Appendix B of the process paper and the information provided in response to our FOIA request dated July 13, 2015, we are dubious that the CNF conducted a field inventory for most improvements and are perplexed by how the Agency could make a determination without photographs, site visits, or other visual records. For several improvements deemed substantially noticeable, we conducted our own field verification to document its appearance.[16] We provide these photographs in Appendix C to this letter.[17]

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[10] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, Appendix A – Substantially Noticeable Definition Matrix. p. 8.

[11] *Id.* For example, range improvements that are reflective and made from non-natural materials, such as galvanized metal, may be considered substantially noticeable. For vegetation treatment, stump height and change in canopy cover are aesthetic factors taken into account.

[12] The CNF could also utilize information collected during a site visit in the evaluation phase to assesses apparent naturalness.

[13] *Id.* p. 14.

[14] *Id.* pp. 12-18.

[15] *Id.* pp. 12 – 17. For each improvement category, the Definition Matrix includes the following statement: "If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement."

[16] To conduct our field verification, we relied on the GIS data provided by the CNF. We converted these GIS spatial layers into KMZ files, uploaded these KMZ files to Google Earth, and used GPS devices to direct us to the location of the improvements.

The CNF will notice that many of these improvements are far from substantially noticeable. We also came across situations where we were unable to find improvements on the ground that the CNF deemed were substantially noticeable. See Appendix B, slides 5-8 of this letter for a sampling of three examples of this situation in the Bear Mountains. With the September 25th comment deadline, we did not have the time to field verify all of improvements that the Agency determined were substantially noticeable; however, those improvements that we did verify call into question the overall accuracy of the Phase 2 wilderness inventory and the Substantially Noticeable Definition Matrix. Our photographs put a spotlight on the weakness in the data that the CNF is relying on to make its substantially noticeable determinations and underscores the need for the CNF to visit these sites and see the improvements first hand.

Recommendations: The CNF can use the definition matrix to identify the location of improvements that could be substantially noticeable and to guide the type of information to collect when in the field, but it is *imperative* that the CNF ultimately base its determination regarding the appearance of an improvement and whether it is substantially noticeable on what improvements look like on the ground. We urge the CNF to conduct site visits for all improvements that it believes are potentially substantially noticeable, and document in the record the appearance and condition of the improvements and how they are deemed substantially noticeable.

iii. The Forest Service must critically assess the quality of any data provided by the public before relying on this data in the wilderness inventory and evaluation process.

Pursuant to the Data Quality Act of 2000 and corresponding Office of Management and Budget and U.S. Department of Agriculture guidelines, the Forest Service is obligated to "ensur[e] and maximize[e] the quality, objectivity, utility, and integrity of information [it] disseminate[s]."[18] This duty applies broadly to any substantive analyses or documents prepared in conjunction with regulatory activities, including wilderness inventory and evaluation.[19] To satisfy its data quality obligation, the Forest Service must, among other things, "identify[] known sources of error and limitations in . . . data obtained from or provided by third parties;" "[e]valuate data quality and, where practicable, validate the data against other information when using or combining data from different sources;" and "[p]rovid[e] transparent documentation of data sources, methodology, assumptions, limitations, uncertainty, computations, and constraints." In other words, the Forest Service may not simply accept information provided by third parties at face-value. Instead, the Agency must assess the accuracy of that information and, where necessary, validate or ground-truth it.

These data quality standards are particularly important during the wilderness inventory, which "is intended to be reasonably broad and inclusive."[20] The CNF's process paper notes that the Agency relied on, among other things, public comments to help it make determinations about which improvements are

[17] We also provide this data in Appendix D to the citizen proposal. Appendix D of the citizen proposal includes all of our original inventory photos from 2013 and 2014. The photos in Appendix D document wilderness character, roads, and other improvements. These photos justify the boundaries for our proposed recommended wilderness areas.
[18] Public Law. No. 106-554, § 515, 114 Stat. 2763 (Dec. 21, 2000).
[19] *See* USDA, Office of the Chief Information Officer, Information Quality Activities, Regulatory, http://www.ocio.usda.gov/policy-directives-records-forms/guidelines-quality-information/regulatory (last visited Nov. 20, 2014) (describing pertinent data quality standards and information subject to those standards).
[20] FSH 1909.12, ch. 70, § 71.

substantially noticeable.[21] The CNF has received comments from the public claiming that various improvements should disqualify areas from the inventory. Given that the accuracy and reliability of those comments may vary widely, the Forest Service must independently assess whether the information provided is actually sufficient to disqualify the area per the direction articulated in the Chapter 70 directives (e.g., does the alleged improvement actually exist, and, if so, would the average, reasonable visitor find it substantially noticeable such that the area does not generally appear natural?).

As noted throughout this letter, we field-verified many of the improvements that the CNF determined were substantially noticeable and found that, in fact, these improvements are not substantially noticeable. This calls into question what information the Agency relied upon to make its determinations. While we fully support public involvement and utilizing citizen science in agency decision making, we remain extremely concerned that the CNF relied upon public comments in the wilderness inventory without verifying the accuracy of the information.

Recommendation:

- The CNF must ensure that it is relying upon accurate information in the forest planning process. The Forest Service must identify known sources of error and limitations in data obtained from or provided by third parties; evaluate data quality and, where practicable, validate the data against other information when using or combining data from different sources; and provide transparent documentation of data sources, methodology, assumptions, limitations, uncertainty, computations, and constraints.[22]
- To the extent that the CNF is unsure of the quality of the data provided by the public when making determinations about improvements that are substantially noticeable, the CNF must verify the accuracy of this information before relying upon it. Validating the accuracy of information may require site visits.

iv. The criteria in the Substantially Noticeable Definition Matrix are too restrictive.

The process paper notes that principles for scenery management were considered by the interdisciplinary team to create the Substantially Noticeable Definition Matrix. According to the process paper, "these principles consider the degree to which the landscape appears unaltered by human activities (deviations from the natural character may be present, but if present they repeat the form, line, color, texture, and pattern common to the surrounding landscape, so completely that *they are not evident*)."[23] Human activity that is "not evident" is a far different and more restrictive standard than human activity that is "substantially noticeable" to the average visitor.[24] While the principles for scenery management may offer

[21] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, Appendix A – Substantially Noticeable Definition Matrix. p. 10.
[22] The agency should attempt to make determinations about whether an improvement is substantially noticeable based on photographic documentation. To validate the accuracy of any photographs, the agency should check the photographs metadata, including the coordinates of where the photo was taken. Comments about the presence and appearance of an improvement but that are not accompanied by accurate photographs should not be taken on face value without field verification.
[23] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, p. 8.
[24] It has long been understood that naturalness refers to "apparent naturalness" and not necessarily ecological naturalness. The Wilderness Act defines wilderness as an area that "...generally *appears* to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable." (emphasis added) The area must appear natural to the average visitor.

insight when undertaking the Chapter 70 process, the CNF must ensure that the scenery management principles are consistent with the direction in Chapter 70.

In addition to our general concerns with the definition matrix offered above, we have concerns with the individual definitions provided for specific categories of improvements. We believe many of the examples and criteria listed in the matrix are too strict and should be revised and reapplied. We offer a few examples of overly strict criteria here.

- The use of "Range Improvements" in the inventory process appears to be inconsistent with congressional direction regarding grazing in wilderness areas. The congressional grazing guidelines, which are reprinted in FSH 2323.22 - Exhibit 01, include the following excerpts that are especially relevant to the consideration of range improvements in the wilderness inventory: (1) "The maintenance of supporting facilities, existing in the area prior to its classification as wilderness (including fences, line cabins, water wells and lines, stock tanks, etc.), is permissible in wilderness." (2) "The placement or reconstruction of deteriorated facilities or improvements should not be required to be accomplished using 'natural materials'…."[25] Notwithstanding this congressional direction, the CNF's inventory eliminated many areas during Phase 2 based on the presence of range fences, corrals, and stock watering structures. See Appendix B, slides 9-13 for a small sampling of photographs documenting range improvements that we firmly believe are far from substantially noticeable but that disqualified lands from the inventory. We provide additional photographic documentation in Appendix C to this letter.

This interpretation based on plain reading of the Wilderness Act is used by US Fish and Wildlife Service, the BLM, and Congress.

Part 610, chapter 4, section 4.9 of the USFWS' Natural and Resources Management Policy explains that to make a determination of substantially unnoticeable it must be possible to observe the area as being generally natural based on "apparent naturalness." ("We make a distinction between an area's "apparent naturalness" and "historic conditions" in the context of biological integrity, diversity, and environmental health. The term "historic conditions" refers to the condition of the landscape in a particular area before the onset of significant, human-caused change. The term "apparent naturalness" refers to whether or not an area looks natural to the average visitor who is not familiar with historic conditions versus human-affected ecosystems in a given area. We address the question of the presence or absence of apparent naturalness (i.e., are the works of humans substantially unnoticeable to the average visitor?) in the inventory phase of the wilderness review. In the study phase of the wilderness review, we make an assessment of an area's existing levels of biological integrity, diversity, and environmental health…We avoid an approach to assessing naturalness that limits wilderness designation only to those areas judged pristine. Land that was once logged, used for agriculture, or otherwise significantly altered by humans may be eligible for wilderness designation if it has been restored or is in the process of being restored to a substantially natural appearance.") *Available at:* http://www.fws.gov/policy/610fw4.pdf.

BLM Manual 6310.06(C)(2)(b), pages 6-8 explains that in determining what is substantially unnoticeable, the agency must ask if the works of humans appear to be substantially unnoticeable to the average visitor, pointing out the important difference between an area's natural integrity and its apparent naturalness . *Available at:* http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_manual.Par.38337.File.dat/6310.pdf

Also note that after Congress passed The Wilderness Act the Forest Service adopted the 'purity' principal. The 'purity' principal is the assumption that land must be untouched or pure to be considered 'wilderness.' In 1978, a committee report in the legislative history, however, specifically refutes the "purity" principal: "Generally, the committee believes that the so-called 'purity' concept of wilderness long adhered to by the Forest Service, is unnecessarily restrictive and should be abandoned." U.S. Congress. Senate. Committee on Energy and Natural Resources. Endangered American Wilderness Act of 1977. S. Rept. 95-490 on H.R. 3454. 95th Cong. 1st sess. October 11, 1977.

[25] House Committee on Interior and Insular Affairs Reports (95-620 and 95- 1821) providing guidance as to how section 4(d)(4)(2) of the Wilderness Act should be interpreted. Guidelines are reprinted at FSH 2323.22 - Exhibit 01.

Furthermore, the CNF's definition of substantially noticeable range improvements cites the use of "unnatural, reflective materials" in range fences, corrals, and water developments as a rationale for finding an improvement substantially noticeable.[26] We find this distinction between unnatural and natural materials to be arbitrary as metal fence posts that are painted green or brown or are rusty causing it to blend into the landscape very well.

- Compounding the problem of using excessively restrictive criteria for considering non-road improvements in the Phase 2 inventory, the CNF's method also eliminates areas with routes, including unauthorized routes, that were included in the Phase 1 inventory if these routes provide access to a substantially noticeable non-road improvement.[27] In fact, Chapter 70 specifically directs units to include areas in the inventory that include unauthorized routes.[28] This method could be used as a back-door way to eliminate many areas containing unauthorized routes and ML 1 roads that should be included in the wilderness inventory under the Chapter 70 directives.

- The CNF is relying on the INFRA database pertaining to system and decommissioned roads to inform the "other improvements" category.[29] The CNF already considered roads in the Phase 1 inventory, yet it appears to be doing so again here, which is inconsistent with the Chapter 70 process. Additionally, the Handbook is clear that areas containing decommissioned and ML 1 roads will be included in the inventory.[30] We are troubled with the CNF's use of the INFRA database for roads and the misapplication of the road improvement category in the inventory. For example, the CNF disqualified lands within polygon D3_5K16 from the inventory because of a timber harvest from the 1960s and the presence of decommissioned roads associated with the harvest.[31] We are concerned that the CNF inappropriately eliminated areas containing decommissioned, closed, user-created and other roads that should be included in the wilderness inventory per the Chapter 70 directives.

- The vegetation treatment and timber harvest categories include the following examples of improvements that may be considered substantially noticeable:
    - High stumps…, and
    - Change in canopy cover.[32]

  We are dubious that these improvements would be substantially noticeable to the average forest visitor, which is the appropriate standard for assessing what is substantially noticeable. In Appendix B, slide 3 of this letter we offer two photos of high stumps in polygon D3_5K16. While the stumps shown in these photographs are not within lands up for consideration in the wilderness

[26] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, Appendix A - Substantially Noticeable Definition Matrix, Table-4. pp. 9-10
[27] *Id*., 9.
[28] FSH 1909.12, ch. 70, § 71.22(a)(1)(b).
[29] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, App - Substantially Noticeable Definition Matrix, Table-4. p. 18.
[30] FSH 1909.12, ch. 70, § 71.22(a)(1)(b).
[31] The CNF's worksheet includes the following statement for polygon D3_5K16: "Past timber harvest in the 1960s with decommissioned road system; has stumps, slash, cull logs evident, change in canopy is evident on NAIP, and road system contributes."
[32] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, App - Substantially Noticeable Definition Matrix, Table-4., pp. 12-13.

inventory process, we believe they offer insight into the appropriateness of this criterion. Clearly these stumps are not substantially noticeable relative to the area as a whole. Photos in slide 4 show where a logging project occurred in the mid-1960s; no evidence of this project exists on the ground today. In addition, change in canopy cover is somewhat arbitrary. Consider the situation where a forest fire burned through part of a potential inventory area such that the forest canopy was reduced in the burned area. Is this a valid reason to excise the area from the inventory, even though the fire was a natural process? Consider also the situation where an old timber cut that affected the canopy cover at the time of cutting now mimics the effect of a wildfire. Is it arbitrary to excise this area for being substantially noticeable? In fact, the CNF disqualified lands within polygon D3_5K6 from the inventory based on a timber harvest that occurred in the mid-1960s, nearly half a century ago.[33] Perhaps a more rational and less arbitrary approach to assessing whether an old timber cut is substantially noticeable would be to document evidence of fresh cutting such as raw dozer scars and slash piles. The examples listed in the vegetation treatment and timber harvest categories are overly strict and reach well beyond the intent of Chapter 70.

- In the historic mining category, the CNF lists plastic and metal pipes on the ground as an example of an improvement that is substantially noticeable.[34] In many situations, old pipes lying around could be easily removed and hence not be substantially noticeable.[35] We are also dubious that the presence of old pipes would dominate the landscape to the extent that they would be substantially noticeable relative to the area as a whole thereby warranting the disqualification of lands from the inventory.

Recommendation: Reconsider the factors cited in the decision matrix that constitute a basis for excising areas or portions of areas from the inventory, insuring that the factors are not overly strict or inappropriately based on a standard of "not evident" as opposed to "not substantially noticeable to the average forest visitor." Revise methodology accordingly and reapply criteria.

v. Concerns specific to polygons removed from the inventory because they dropped below the 5,000 acre size threshold after the CNF applied the Substantially Noticeable Definition Matrix.

The concerns expressed above in this section of our letter are compounded when entire polygons are removed from the wilderness inventory because they drop below the 5,000 acre size threshold following the application of the substantially noticeable definition matrix. This happened to polygon D3_5K2 where two fences cross the periphery of the polygon severing about 400 acres. After this acreage was removed from the inventory, the remaining polygon fell below the 5,000 acre threshold thereby eliminating it from further consideration.

[33] This information is provided in the "draft substantially noticeable matrix" that was provided in response to our FOIA request dated July 31, 2015.
[34] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, App - Substantially Noticeable Definition Matrix, Table-4. p. 15.
[35] US Fish and Wildlife Service addresses this issue in its inventory guidance, stating "Land that was once logged, used for agriculture, or otherwise significantly altered by humans may be eligible for wilderness designation if it has been restored or is in the process of being restored to a substantially natural appearance." *Available at:* http://www.fws.gov/policy/610fw4.pdf.

Recommendation: As detailed above, we offer several recommendations for improving the process paper and definition matrix. After the CNF revises the process paper and definition matrix, we request that the CNF reapply the criteria to those lands it disqualified in the Phase 2 inventory. We request that the CNF pay particular attention to those polygons it removed from the Phase 2 inventory because the polygon dropped below the 5,000 acre threshold. If, after the reapplication of the Phase 2 criteria, polygons exceed the 5,000 acre threshold, we request that the CNF add these back into the inventory.

C. Comments, Questions, and Concerns about the Wilderness Evaluation Criteria Definition Matrix and Comment Form

The purpose of the evaluation stage is to determine to what degree the inventoried areas possess wilderness quality in order to help decide which areas to carry forward to the NEPA analysis and eventual recommendation. It is not to determine if areas possess wilderness qualities, a question that was asked and answered in the inventory stage. We offer the following comments related to the evaluation form in this context.

i. It is unclear how the Agency will utilize the information collected in the comment form to evaluate wilderness characteristics.

As an initial matter, it is unclear how the Forest Service will utilize the information collected in this form to evaluate the inventoried areas' wilderness characteristics. As stated above, it is unclear what methodology the CNF will use to produce repeatable results. It is also unclear what influence the answers to these questions will have on inclusion or exclusion of areas to be carried forward as recommended wilderness in the NEPA process. Pursuant to the Handbook, the Agency's evaluation process must be transparent. [36]

Recommendation: The Agency should clarify how it intends to balance and consider the answers to these questions in its evaluation of the inventoried areas and subsequent decision of which areas to carry forward for analysis in the relevant NEPA document.[37]

ii. Criterion 1 – Apparent naturalness: The degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

FSH 1909.12, 72.1(1) directs that in evaluating this criterion, the Agency should consider:

> a. The composition of plant and animal communities. The purpose of this factor is to determine if plant and animal communities appear substantially unnatural (for example, past management activities have created a plantation style forest with trees of a uniform species, age, and planted in rows);
>
> b. The extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention; and

[36] *See* FSH 1909.12, §§ 70.6, 72, 72.2.
[37] *Id.* §§ 72-73.

c. The extent to which improvements included in the area (sec. 71.22 of this Handbook) represent a departure from apparent naturalness.

Following this direction, the CNF should include only those questions in its evaluation form that assess how the area appears, and should avoid including questions that assess the ecological purity of the area. To that end, we are concerned that the first consideration listed under this criterion is inappropriately assessing purity and not apparent naturalness. Specifically, the public is prompted to consider the "Extent that current vegetation species composition and structure has changed from historical conditions (pre-EuroAmerican settlement)" and defines *species compostion* in a footnote to mean "the number and proportion of species present. Structure refers to the size, density, and arrangement of plants."

Highlighting that this consideration is off-point, we note that the Forest Service Handbook, text included above, provides an example of a community that appears unnatural as a plantation style forest with uniform rows. This is a lot different than a community with species composition that might vary from historic conditions.

This issue could be remedied by shifting the focus of the inquiry. For example, while "air quality" or the "historical condition" of vegetation is not a proper measure of an area's naturalness, the *appearance* of the area's air or vegetation to the average visitor unfamiliar with historic or ecological conditions *is* a proper consideration. If the air *appears* smoggy or polluted or the vegetation *appears* heavily disrupted by man to the average visitor, the area may not satisfy the naturalness criterion. We suggest that the CNF eliminate this consideration from the evaluation matrix and rely instead on the following consideration, which is already in the form: "Does the forest appear natural (consider elements, including but not limited to, vegetation, wildlife, soil, air, etc.)?"[38] This consideration focuses its inquiry on apparent naturalness, not ecological naturalness, when evaluating an area's vegetation thereby making it consistent with the Agency's planning directives, other land management agencies, and Congress' intent.

On the evaluation form under Question 1c, there are several considerations listed. With one exception, the form explicitly asks about the appearance of improvements and activities (e.g., vegetation management, mining, wildlife and range improvements, roads, etc.). The exception is "miles of fencing or pipeline per square mile." The relevant inquiry is not the presence of these improvements, but rather their *effect* on the area's apparent naturalness. As with considerations like air quality, if past or current human activities or improvements have impacted the area such that it no longer *appears* natural to the average visitor unfamiliar with the area prior to those activities or improvements, then the area may not satisfy the naturalness criterion. The mere presence of those improvements, however, is not dispositive. For example, an old fence that is not visible from all vantage points due to vegetative cover, topography, materials from which it is constructed, and condition of the improvement (materials might be weathered) may be substantially unnoticeable to the average visitor. Indeed, photographs attached as Appendix B, slides 9-13 to this letter show just two fences in the Bear Mountains that are generally substantially

[38] Cibola National Forest Inventory and Evaluation Process of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System, App C – Evaluation Criteria Definition Matrix and Comment Form. p. 33. A plain reading of this consideration is that the CNF will focus exclusively on apparent naturalness. For example, while "air quality" or "soil conditions" is not a proper measure of an area's naturalness, the *appearance* of the area's air or soil resources to the average visitor unfamiliar with historic or ecological conditions *is* a proper consideration. If the air *appears* smoggy or polluted or the soil *appears* heavily eroded to the average visitor, the area may not satisfy the naturalness criterion.

unnoticeable but that disqualified lands from the Phase 2 inventory. In Appendix C to this letter, we provide a robust collection of photos documenting the condition of fence lines for polygons D3_5K5 and D3_5K7. Accordingly, the Agency should revise how this consideration is written to be consistent with the others. All of the considerations should take into account whether the area *appears* natural *in spite of* human activities or improvements that may be present.

Recommendations for Criterion 1:

- We urge CNF staff to conduct field visits for all inventoried areas as it evaluates wilderness character. This is particularly important when gauging an area's apparent naturalness.
- Insure that all questions/considerations are designed to inquire about the apparent naturalness and not the ecological naturalness. (For example, change Question 1c from: "Miles of fencing or pipeline per square mile" to read "Appearance of any fences or pipelines located in the area.") To this end, the CNF could simply rely on the third consideration when evaluating the appearance of vegetation, which reads: "Does the forest appear natural (consider elements, including but not limited to, vegetation, wildlife, soiul, air, etc.)?"

iii. Criterion 2 – Outstanding opportunities for solitude or a primitive and unconfined type of recreation: the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Question 2a of this criterion is trying to assess the degree of solitude that the area offers. FSH 1909.12,72.1(2) directs the Forest Service to "[c]onsider impacts that are pervasive and influence a visitor's opportunity for solitude within the evaluated area. Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area." The key concept is to identify *pervasive* impacts that would interfere with solitude. The evaluation form states this in Question 2a, but loses the concept in the tiered considerations ("Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise? Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area's adjacent, cherry-stemmed roads."). The prime consideration in assessing solitude is whether a person can be alone in the area or sufficiently distant from others to feel secluded. This should be judged by the characteristics within the area and not by factors outside of the area unless they are so pervasive that they dominate the setting within the area.[39] "Topography" and "screening" are valid factors so long as they refer to a person's ability to avoid seeing others within an area, and not applied to viewing sights outside of the area. Hence, we urge the CNF to be judicious in reviewing and validating information submitted here to insure that the CNF is only considering pervasive impacts and not casual ones.

Question 2b of this criterion is trying to assess the degree to which the area offers opportunities "to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature."[40] One of the considerations for gauging this question is the "percent of area with a primitive

[39] See Appendix A, Doug Scott, 2006. Congressional Sights and Sounds for a discussion on the legislative basis of this assertion.
[40] Cibola National Forest. Draft Evaluation Criteria Definition Matrix and Comment Form. p. 5.

recreation opportunity spectrum class."[41] We are concerned that the CNF is using only the Primitive ROS classification when making this calculation. We request that the CNF use Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classifications for this analysis. We believe that all three ROS classifications are assigned to lands that can provide primitive or unconfined recreation where people can connect to nature. We base this assertion on the descriptions of these areas offered in the Forest Service ROS User Guide.[42] The description for Semi-Primitive Motorized is: "Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted."[43]

As for the statement in the Semi-Primitive Motorized setting that motorized equipment is allowed, this simply describes the current situation / existing condition of an area. Should the CNF decide to recommend an area for wilderness, prescriptions could be adopted that would manage the RWA as non-motorized. Further, based on the GIS analysis that the CNF conducted to create its ROS Inventory Existing Condition Maps, very little of the Apache Kid and none of the Withington Wilderness Areas are classified as Primitive.[44] Yet, in reality, both of these wilderness areas have tremendous opportunities to enjoy primitive settings, experiences, and activities as defined in the ROS User Guide. The fact that the CNF classified most of these two wilderness areas as Semi-Primitive Non-Motorized highlights that, at the very least, this ROS classification should be included in the analysis for Criterion 2.

We are also concerned with how the CNF conducted its ROS existing condition inventory. According to the CNF's ROS methodology report, the CNF used all system roads to determine ROS classifications on the Magdalena Ranger District because the District had not finished travel planning at the time the analysis was undertaken.[45] We urge the CNF to reinventory the ROS existing condition on the Magdalena District using the District's recently released travel plan draft decision. This draft decision proposes to designate 851 miles of road for public motorized use, down from 1,170 miles of road at the outset of the process. This change in open road mileage will impact the results of the analysis.

Next, we are concerned about how the CNF treated ML 1 and ML 2 roads in the ROS existing condition analysis. The CNF appears to have classified roads as either "primitive" or "better than primitive." Roads classified as "better than primitive" receive a higher weight than "primitive" roads. Routes not considered a road for the purpose of this analysis, like decommissioned roads, do not receive a weighted value. Roads with a higher weighted value have more of an impact on the surrounding area (i.e. whether the area is considered more roaded and available for motorized use). First, it is unclear whether the CNF considered ML 1 roads as primitive roads. The following statement on page 6 makes us think the CNF is considering ML 1 roads as primitive: "By forest consensus, all Maintenance Level 2 roads and below, and

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[41] *Id.*
[42] USDA Forest Service. ROS User Guide. 1982. pp. 6-8. Available at http://www.fs.fed.us/cdt/carrying_capacity/rosguide_1982.pdf. Last viewed Sept. 15, 2015.
[43] *Id.*, 6-8.
[44] USDA Forest Service. Cibola National Forest Recreation Opportunity Spectrum Inventory Report (Draft). April 28, 2014. p. 15.
[45] *Id.*, 4. (Forest personnel did the initial mapping of motorized and non-motorized travel routes. The Forest used the final Travel Management Decision for the Sandia, Mountainair, and Mount Taylor Ranger Districts. No final decision has been made for the Magdalena Ranger District, so all system roads on the District were included.)

all user created roads added to the system are considered primitive."[46] Meanwhile, Table 2 in the same report, and pasted below, reads as though ML 1 roads are not considered motorized routes and therefore are not taken into account.[47] Notice that none of the descriptions in the field titled "Route Type Description for ROS Model" accurately depict ML 1 roads.

Table 2: Route Designations and Values for ROS Model

Route Designation	Route Type Description for ROS Model	Value for ROS Model
Better than primitive	State/County/Private/Other Fed Roads open for motorized use	10
Better than primitive	Improved roads open for motorized use	10
Primitive	Unimproved roads open for motorized use and Motorized trails	3
Non-motorized	Trails not open for motorized use	1

The description here says that primitive roads are "unimproved roads *open to motorized use*…." Table 2 and the preceding statement seem to conflict.We contend that ML 1 roads not be considered a motorized road for the purposes of this analysis since these roads are not open for motorized use, administrative or public. These roads are closed and in storage. Second, the CNF considered all ML 2 roads as "primitive" roads. We contend that the CNF should have used a finer scale approach for ML 2s. We suggest that ML 2 roads displayed on the MVUM be considered primitive motorized roads since they are open to public motorized use. Inversely, ML 2 roads not displayed on an MVUM should not be considered motorized roads for the purposes of this analysis since they are closed to public motor vehicle use. This would mean that all non-MVUM roads – ML 1s and closed ML 2s – would not receive a weighted value for the purposes of this analysis.

Recommendations for Criterion 2:

- For Question 2a, the CNF should consider only *pervasive* impacts from developments external to the area, and rate solitude primarily on a person's ability to avoid seeing others *within* an area.
- Under Question 2b, the CNF is planning to calculate the "percent of area with a primitive recreation opportunity spectrum class." We request that the CNF use Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized ROS opportunities in this analysis, and not rely just on Primitive areas.
- We request that the CNF reinventory the Magdalena District ROS opportunities using the draft travel plan decision that was released in May 2015.
- As the CNF conducts an ROS reinventory for the Magdalena District, we request that the CNF make adjustments to the analysis regarding ML 1 and ML 2 roads. Specifically, ML 2 roads not displayed on the MVUM (i.e., not open to public motorized use) and ML 1 roads should not be regarded as roads (i.e. not receive a weighted value) for the purposes of the ROS analysis.

[46] *Id.*, 6.
[47] *Id.*

II. Phase 2 Wilderness Inventory

In this section of our letter, we comment on specific polygons in the Phase 2 wilderness inventory.

Between Phase 1 and Phase 2 of the wilderness inventory process, the CNF excised 120,666 acres from the inventory, an extensive amount of land. The revisions to the inventory were based on, among other things, application of the "other improvements" criterion from section 71.22(b) of the Forest Service Handbook. This criterion requires the inclusion of those areas in the inventory where improvements are not substantially noticeable. To help it determine whether an improvement is substantially noticeable, the CNF developed a definition matrix for each improvement category listed in 71.22(b). As detailed above, we have significant concerns with elements of this definition matrix and the CNF's overarching methodology. We also have concerns with the application of the definition matrix to individual polygons. We provide our polygon specific comments in spreadsheet format as Attachment 1 to this letter.

We field verified the noticeability of select improvements that are located in polygons that are a priority to our organizations. To conduct this field verification effort, we used a GIS layer that displays all improvements that the CNF deemed are substantially noticeable. We CNF provided this layer to us in response to a FOIA request filed by The Wilderness Society. With so much land removed from the inventory as a result of the Phase 2 process, we had to prioritize polygons knowing that we could not verify everything. We attempted to field verify as many of the improvements as possible within these polygons but were limited by time and resource constraints. For those sites that we visited, our field verification found that many improvements are not substantially noticeable and, in some cases, they are hardly noticeable at all.

Appendix C of this letter, which we provide on an accompanying DVD, includes photographs of improvements, and most of these photographs are accompanied by coordinates and field notes documenting the improvement's appearance. Additionally, Appendix D of our citizen proposal offers hundreds of photographs documenting the wilderness character of our proposed recommended wilderness areas as well as the appearance and condition of roads and other improvements. For those improvements that we believe are not substantially noticeable, we offer an explanation supporting our conclusion in the spreadsheet. We also offer recommendations to the CNF that, if adopted, would improve the accuracy of the wilderness inventory.

A common trend from this field verification exercise is the importance of seeing these improvements firsthand. You will notice from the photographs that many, if not most, of the improvements that we inventoried are not substantially noticeable. This underscores the importance of having site-specific, on-the-ground information that speaks to the appearance of these improvements. This may require the Agency to conduct a field trip. Indeed, for many of the recommendations offered in the attached spreadsheet, we request that the CNF conduct a site visit to gauge whether an improvement is substantially noticeable.

III. Desired Future Conditions

Thank you for the opportunity to comment on the CNF's proposed desired condition statements. We offer feedback on those desired conditions pertaining to recreation, roads, designations, terrestrial species and habitat, and vegetation types. Though we appreciate the effort that has gone into the development of these proposed statements, we also see room for improvement, which we detail below

A. Recreation

Outdoor recreation represents one of the most vigorous growth areas in the U.S. economy. Much of this recreation is supported by public land. Outdoor recreationists made more than 938 million visits to Federal lands and waterways, spending $51 billion and supporting 880,000 jobs.[48] Recreation on national forests alone contribute $13 billion to the country's GDP each year and supports 194,000 jobs.[49] Statewide, recreation totals 13.5 percent of visitor spending.[50] The CNF's mountain districts are spread across central New Mexico with land in several rural counties. Many of these counties are struggling economically. The CNF could help play a role in improving these local economies. We encourage the Forest Service to include a desired condition statement that addresses the unique role that the CNF could play in helping improve the local economy in these rural communities through recreation and tourism.

Recommendation: Under the General Recreation section on page 70, we request that the CNF add the following statements:

- *Through well-planned, sustainable, nature-based recreation, the Cibola National Forest enhances the vitality of nearby rural communities by contributing to tourism, local economic sustainability, quality of life, and public health.*

- *The public is aware of the recreation opportunities and niche (i.e., rugged and remote ranges offering exploration and primitive recreation; urban gateway offering easily accessible recreation and learning in the case of the Sandias) that exist on the Cibola National Forest, including its non-motorized trail system, campgrounds, night skies, and wilderness areas.*

B. Designated Areas

The Planning Rule requires that the plan revision "must provide for… management of areas recommended for wilderness designation to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation."[51] The preamble to the final rule provides the following explanation: "The Department believes the requirement in the final rule meets the Agency's intent to ensure that the types and levels of use allowed would *maintain wilderness character* and would not preclude future designation as wilderness. Specific direction regarding incompatible uses

[48] Federal Interagency Council on Outdoor Recreation. Outdoor Recreation: Jobs and Income. Available at http://www.fs.fed.us/research/docs/outdoor-recreation/recreation-economy.pdf. Last viewed September 14, 2015.
[49] *Id.*
[50] Outdoor Industry Association. "The Outdoor Recreation Economy: New Mexico." Boulder, CO. 2012.
[51] 36 C.F.R. § 219.10(b)(1)(iv).

in recommended wilderness areas will be found in the Forest Service Directives System and in plans themselves."[52]

The previous planning rule, adopted in 1982, provided no specific requirements or guidance for management of Recommended Wilderness Areas (RWAs). Thus, the 2012 Rule provides a new, legally enforceable regulatory requirement for management of RWAs.

The Forest Service planning directives consist of the Forest Service Manual (FSM) and Forest Service Handbook (FSH). The FSM generally contains the more significant policy and standards governing Forest Service programs, while the FSH provides specialized guidance and instruction for carrying out the direction issued in the FSM. See Overview of the Forest Service Directive System (http://www.fs.fed.us/im/directives/dughtml/overview.html).

The FSM states: "Any area recommended for wilderness or wilderness study designation *is not available for any use or activity that may reduce the wilderness potential of an area*."[53]

The FSH states: "When developing plan components for recommended wilderness areas, the responsible official has discretion to implement a range of management options. All plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation. In addition, the plan may include one or more plan components for a recommended wilderness area that:

1. Enhance the ecological and social characteristics that provide the basis for wilderness designations;
2. Continue existing uses, only if such uses do not prevent the protection and maintenance of the social and ecological characteristics that provide the basis for wilderness designation;
3. Alter existing uses, subject to valid existing rights; or
4. Eliminate existing uses, except those uses subject to valid existing rights."

The CNF's proposed desired condition statement lays out the following condition for recommended wilderness areas: "Recommended wilderness areas are managed to protect and enhance the wilderness character *that exists at the time of recommendations*."[54]

We are concerned that this proposed desired condition will be succeeded by plan components that will allow non-conforming uses that exist in the area at the time of recommendation to continue. We are concerned that allowing non-conforming uses to continue in RWAs, especially uses that could degrade wilderness character, will diminish an areas potential to be designated wilderness in the future in violation of the Forest Service Manual's direction and the intent of the 2012 rule. The 2015 FSH directives' option allowing for continuation of existing uses can come into play only when those uses would not reduce an area's wilderness potential.

[52] 77 Fed. Reg. 21224, April 9, 2012 (emphasis added).
[53] FSM 1923.03(3), emphasis added.
[54] USDA Forest Service. Cibola National Forest Draft Forest-wide Ecological and Socioeconomic Desired Conditions. July 21, 2015. p. 74. (emphasis added).

The CNF's proposed desired condition, on the other hand, could be interpreted as generally allowing "non-conforming uses" to continue in RWAs as long as these uses do not degrade the wilderness character that existed at the time the area was recommended. First, this is not consistent with the Forest Service Manual direction and rule intention. Second, the Forest Service should only allow non-conforming uses if it can demonstrate that doing so will not diminish the wilderness potential of an area. In our experience, motorized and mechanized recreation can reduce wilderness potential. Motorized vehicles can compromise an area's "primeval character" and its "outstanding opportunities for solitude or a primitive and unconfined type of recreation," as defined in the Wilderness Act, 16 U.S.C. 1131(c).[55] Also, allowing motorized or mechanized uses in recommended wilderness areas can have the effect at a social level of diminishing the potential that the area will be designated wilderness.[56]

Recommendation: We request that the CNF make the following edit to its proposed desired condition statement on page 74, lines 15-16 regarding the management of RWAs.

> " Recommended wilderness areas are managed to protect and enhance *their* wilderness character ~~that exists at the time of recommendations~~ *and ensure uses do not preclude future designation as wilderness*."

C. Roads, Facilities, and Other Infrastructure

We agree with many of the CNF's proposed desired condition statements that pertain to roads. In this section, we offer edits to an existing statement and offer additional desired condition statements for the CNF to adopt.

The travel planning process completed under 36 CFR 212, subpart B resulted in the designation of a system of roads, trails, and areas that are open to public motor vehicle use, including the class of vehicle and time of year. The travel management rule also designated roads, trails, and areas to be identified on an MVUM. After designated roads, trails, and areas have been identified on an MVUM, motor vehicle use inconsistent with those designations is prohibited. Except for the Magdalena Ranger District, which recently issued its draft decision, all CNF ranger districts have completed subpart B.

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[55] C.f. *Montana Wilderness Association v. McAllister*, 666 F.3d 549 (9th Cir. 2011) (Forest Service failed to maintain wilderness character of Wilderness Study Areas by ignoring the impact of increased motorized and mechanized recreational use on opportunities for solitude). *Also see:* C.f. *Russell Country Sportsmen v. U.S. Forest Service*, 668 F.3d 1037, 1043 (9th Cir. 2011) (Forest Service maintains wilderness potential of Wilderness Study Area "when it either preserves against decline or enhances the wilderness protection of the area. Preserving motorized recreational uses, by contrast, does nothing to maintain the area's potential for wilderness designation."). *Also see:* Idaho Conservation League. 2011. *In Need of Protection: How Off-Road Vehicles and Snowmobiles Are Threatening the Forest Service's Recommended Wilderness Areas,* 26 pp. *Also see:* Clearwater National Forest Travel Planning, Draft Environmental Impact Statement, p. 3-83 to 3-84 ("As motorized technology continues to be developed, levels of access into remote, back-country locations will rise and with this increased use will come additional noise and disturbance which adversely affects attributes of wilderness character. . . . The increase in vehicle capability, numbers, and local use puts areas of recommended wilderness at far greater risk of degradation and loss of wilderness character than they were when the Forest Plan was written. In addition, other areas recommended for wilderness have not received serious consideration for designation once motorized use has become established.")

[56] Clearwater National Forest Travel Planning, Draft Environmental Impact Statement, p. 3-83 to 3-84 ("areas recommended for wilderness have not received serious consideration for designation once motorized use has become established.")

To address its unsustainable and deteriorating road system, the Forest Service promulgated the Roads Rule (referred to as "subpart A") in 2001.[57] The rule directs each National Forest to conduct "a science-based roads analysis," generally referred to as the "travel analysis process" or "TAP."[58] FSM 7712 and FSH 7709.55, Chapter 20 provide detailed guidance on conducting travel analysis. Based on that analysis, forests must first "identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands."[59] The Rule further defines the minimum road system as:

> the road system determined to be needed [1] to meet resource and other management objectives adopted in the relevant land and resource management plan . . . , [2] to meet applicable statutory and regulatory requirements, [3] to reflect long-term funding expectations, [and 4] to ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.[60]

Forests must then "identify the roads . . . that are no longer needed to meet forest resource management objectives and that, therefore, should be decommissioned or considered for other uses, such as for trails."[61]

While subpart A does not impose a timeline for agency compliance with these mandates, the Forest Service Washington Office, through a series of directive memoranda, has ordered forests to complete their TAPs by September 30, 2015, or lose maintenance funding for any road not analyzed.[62] The memorandum issued in December 2013 clarifies that each forest must:

- Develop a list of roads that are *likely not needed for future use*; and
- Produce a map that displays roads that are *likely needed* and *likely not needed in the future.*

Travel Analysis does not result in a decision with a selected alternative to be implemented. The end product will be a report that displays the findings as opportunities and provides recommendations. These recommendations will inform future management decisions for, and administration of, the National Forest Transportation System.

With the exception of the Sandia Ranger District, the travel analysis process (TAP) reports for the CNF mountain districts, completed between 2008 and 2010, identified recommended minimum road systems.[63]

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[57] 66 Fed. Reg. 3206 (Jan. 12, 2001); 36 C.F.R. part 212, subpart A.
[58] 36 C.F.R. § 212.5(b)(1).
[59] *Id.*
[60] *Id.*
[61] *Id.* § 212.5(b)(2). The requirements of subpart A are separate and distinct from those of the 2005 Travel Management Rule, codified at subpart B of 36 C.F.R. part 212, which address off-highway vehicle use and corresponding resource damage pursuant to Executive Orders 11,644, 37 Fed. Reg. 2877 (Feb. 9, 1972), and 11,989, 42 Fed. Reg. 26,959 (May 25, 1977).
[62] Memorandum from Joel Holtrop to Regional Foresters *et al.* re Travel Management, Implementation of 36 C.F.R., Part 212, Subpart A (Nov. 10, 2010); Memorandum from Leslie Weldon to Regional Foresters *et al.* re Travel Management, Implementation of 36 C.F.R., Part 212, Subpart A (Mar. 29, 2012); Memorandum from Leslie Weldon to Regional Foresters *et al.* re Travel Management Implementation (Dec. 17, 2013).
[63] For example, the Mountainair TAP excluded 129 miles of its 524-mile system from its recommended minimum road system, and identified approximately 33% of system routes as having greater risk than benefit that should be considered for decommissioning. The Magdalena TAP excluded approximately 483 out of 1,398 miles from its recommended minimum road

While this is a critical step (and one that most national forests have yet to undertake), the CNF still must identify roads that are likely not needed for future use and implement those recommendations in order to achieve compliance with subpart A.

i. Desired Future Condition – Decommissioned Roads

Travel management planning decisions did not decommission any roads. Instead, the CNF has hundreds of miles of system and non-system roads that were not designated as open to public motor vehicle use during the subpart B travel planning process. For this reason, we are concerned with the CNF's proposed desired condition statement that reads:

> NFS roads decommissioned per a travel management decision are either converted to other uses in a timely manner, or treated in an effective way to eliminate motor vehicle traffic use.[64]

Recommendation: We request that the CNF change this proposed desired condition on page 78, lines 4-6, regarding decommissioned roads to the following:

> Proposed: NFS roads ~~decommissioned per a travel management decision~~ *identified as likely not needed for future use as part of the travel analysis process and/or not recommended as part of the minimum necessary road system* are either *decommissioned or* converted to other uses in a timely manner~~ or treated in an effective way to eliminate motor vehicle traffic use~~.

We believe our desired condition statement more accurately reflects the Agency's transportation policies and current condition as a result of the recent travel planning and travel analysis processes.

ii. Desired Future Condition – Passenger Car Roads

Over the past 11 years, the number of miles of road maintained for passenger cars in the National Forest System has gone from approximately 79,800 to 64,622; a reduction of 19 percent.[65] Between 1991 and 2015, passenger car mileage dropped 28,978 miles, a 31% reduction.[66] This large downgrade in maintenance levels equates to a loss of access among forest visitors who do not own a high-clearance vehicle. It becomes an equity issue when only those who can afford more expensive 4WD vehicles can reach trailheads and recreational destinations. Moreover, those who choose to drive smaller and more energy efficient vehicles are also thwarted when passenger vehicle roads diminish. It is important that the Agency maintain its remaining passenger car roads as these roads provide important access to many forest visitors.

Recommendation: We request that the CNF develop a desired condition specific to maintaining passenger vehicle roads. We recommend the following statement regarding passenger car roads:

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system, and the Mt. Taylor TAP excluded approximately 215 out of 1,545 miles. While the Sandia TAP did not recommend a minimum road system, it did identify 4.8 out of 75 .2 miles for decommissioning.

[64] USDA Forest Service. Cibola National Forest Draft Forest-wide Ecological and Socioeconomic Desired Conditions. July 21, 2015. p. 78, lines 4-6.

[65] USDA Forest Service. FY2016 Budget Justification. Available at http://www.fs.fed.us/sites/default/files/media/2015/07/fy2016-budgetjustification-update-four.pdf.

[66] USDA Forest Service. 1998. National Forest Road System and Use. Available at http://www.fs.fed.us/eng/road_mgt/roadsummary.pdf. Table B in this report provides passenger vehicle road miles in 1991.

The Cibola National Forest will ensure that road miles for passenger cars is not further reduced and that passenger vehicle roads are properly maintained to ensure safe and reliable public access.

iii. Desired Future Condition – Road Density

Research shows that road density is a useful indicator for measuring the risk that a road poses to wildlife as well as water quality, fish and watershed health. Included as an Appendix H to our scoping letter dated April 3, 2015 is a literature review that includes the supporting science for why route density is an important metric for measuring landscape health. We recommend that the CNF establish a desired condition that addresses road density.

Recommendation: We offer the following desired condition regarding route density:

The National Forest Road System meets density standards, based on the best available science, for all motorized routes in important watersheds and wildlife habitat, migratory corridors, and general forest matrix, and for relevant threatened and endangered species and species of conservation concern.

iv. Desired Future Condition – Ensuring a Climate Resilient Road System

As climate change impacts grow more profound, forest managers must consider the impacts on the transportation system as well as from the transportation system. In terms of the former, changes in precipitation and hydrologic patterns will strain infrastructure at times to the breaking point resulting in damage to streams, fish habitat, and water quality as well as threats to public safety. In terms of the latter, the fragmenting effect of roads on habitat will impede the movement of species which is a fundamental element of adaptation. Refer to the literature review that was submitted as Appendix H to our scoping letter dated April 3, 2015 for more discussion about the impacts associated with the Agency's road system in the face of climate change. Through planning, forest managers can proactively address threats to infrastructure, and can actually enhance forest resilience by removing unneeded roads to create larger patches of connected habitat. We request that the CNF develop a desired condition statement that addresses the importance of designing and implementing a climate-ready transportation system.

Recommendation: We offer the following desired condition regarding roads and climate change:

The forest road and trail system is designed and maintained to withstand future storm events (reflecting modern climate predictions). The forest road and trail system is the minimum necessary to meet the goals and objectives set forth in the land management plan and minimize habitat fragmentation and disturbances.

We support the desired condition about Inventoried Roadless Areas (IIRAs) on page 74. In addition to protecting and conserving the roadless character of IRAs, we encourage the CNF to include a second

desired condition that addresses the need to restore the roadless character of IRAs and other unroaded lands that contain unneeded improvements or invasive species.

Recommendation: We recommend the following statement regarding IRAs:

> *Where unneeded improvements (e.g., roads, fences, corrals, stock tanks, infrastructure associated with abandoned mines) and invasive species are located in inventoried roadless areas and other unroaded lands, the roadless and ecological characteristics of these areas will be restored. Restoration activities will be consistent with the provisions of the 2001 Roadless Area Conservation Rule.*

D. Terrestrial Species and Habitat

The potential impacts of climate change in the Southwest indicate that rising temperatures, water shortages, and changing ecological conditions will put pressure on wildlife populations, distribution, viability, and migration patterns.[67] Warming environments may disproportionally affect top predators and herbivores.[68] Managing for connectivity to facilitate movement and gene flow is recognized as an important conservation strategy for enabling adaptation to changing stressors, including climate change. The CNF has two proposed desired condition statements related to connectivity; these statements are found on page 58, lines 15-17 and 22-24. These desired conditions appear to relate the arrangement, connectivity, composition, size and relative abundance of habitat patches that occur within an area of land. Neither of these statements appear relevant to connectivity in terms of anthropogenic disturbance and the ability of the landscape to facilitate or impede the movement of organisms and process of ecosystems.

Recommendation: We request that the CNF include a desired condition that addresses anthropogenic disturbances that are causing fragmentation, reducing permeability, and impacting species movement across the forest. We offer the following:

> *Habitat loss and fragmentation is reduced and permeability is enhanced by conserving and restoring habitat linkages within and, where possible, between the national forests and other public and privately conserved lands. Fences, roads, and other man-made features do not impede wildlife movement or contribute to habitat fragmentation.*

E. Vegetation Types

We take a different approach in terms of providing feedback on the proposed desired conditions related to vegetation types. The focus of these comments is on the need for realistic desired conditions that reflect the requirements in the Agency's planning handbook.

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[67] U.S. Department of Agriculture Forest Service. 2010. Southwestern Region climate change trends and forest planning. Albuquerque, NM: USFS Region 3. Available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5284414.pdf.

[68] State of New Mexico. 2005. Potential effects of climate change on New Mexico: Agency Technical Work Group. Available at https://www.env.nm.gov/aqb/cc/Potential_Effects_Climate_Change_NM.pdf.

Chapter 20 of the Forest Service Handbook 1909.12 provides direction for the Agency to follow as it establishes desired conditions for the planning area. This direction states, among other things, that a plan's set of desired conditions must "be internally consistent so they are feasible and attainable," "reflect…the fiscal capability of the Agency," and "be achievable even if the time for success exceeds the plan period."[69]

The current focus of the vegetation section on ERUs leads to vegetation desired condition statements that are not achievable, given current conditions, administrative and operating constraints, and budget limitations and are inappropriate under a changing climate. While the focus on ERUs is understandable, given the Forest Service's long-standing emphasis on the typing of vegetation, in this case, that focus creates problems. To begin with, there are simply too many ERUs to make a useful framework for planning. The Desired Conditions document contains descriptions of 35 different vegetation types, only 10 of which represent more than two percent of the Forest. The inclusion of so many minor vegetation types, while thorough, is a distraction to anyone trying to understand the condition of the Forest. The Desired Conditions statement should break the forest down into a manageable and meaningful number of subdivisions for analysis, and it should describe conditions that are achievable.

Second, so little is known about most ERUs that it is simply not informative to break the forest down this way. Of the Desired Conditions statements, barely half include any kind of quantitative description, and most of these (for woodland and shrubland types) consist only of vague references to "open" and "closed" forests of "small, medium, and large" trees and shrub cover. Only the Forest vegetation types include enough information to begin to assess departure from desired conditions or the effectiveness of management to achieve them. Riparian vegetation types, which play an outsized role in the functioning of the overall ecosystem, are described using only a single photo and the names of some common species. The Desired Conditions statements should utilize a classification system that actually allows assessment of the relative condition of the Forest. Without it, the desired conditions cannot be determined to be achievable.

Even the Desired Conditions statements that *do* contain quantitative information are the unfortunate legacy of an outdated approach to vegetation description that does not represent the best available science for Southwestern forests. The "desired seral stage proportions" are the product of the effort by the Nature Conservancy to identify Fire Regime Condition Classes for the entire country back in the early 2000s. Under that scheme, it was essential to break all vegetation down into a handful of vegetation structural stages to feed into the Vegetation Dynamics Development Tool, a stage-based transition matrix model that formed the foundation of the FRCC assessment process. All vegetation, regardless of how its ecology actually functioned, had to be forced into this framework for the model to work. FRCC was criticized from the beginning because of the unreasonable simplifying assumptions that must be made for it to work (e.g. that all stands follow the simplified developmental pathway; that a single vector of structural stages resulting from running the transition matrix out to stability (a necessary mathematical consequence of the method) represents the "natural range of variability" (sic)) and has fallen out of favor among fire scientists at the Forest Service. That's certainly not the fault of the CNF, but it makes no sense to adhere to this flawed and antiquated process to derive "Desired Conditions" in 2015.

[69] FSH 1909.12, ch. 20 §22.11.

Even if that method made sense for some vegetation types, like cooler, wetter forests of the Northern Rockies and Pacific Northwest, where vegetation actually proceeds through stages of development from stand initiation to even-aged to old-growth forest, it never made sense for the dry, frequent-fire forests of the Southwest, where stand structure dynamics play out on a much finer scale. The failure of the FRCC approach is evident in the desired seral stage proportions for Ponderosa Pine Forest, the most abundant ERU on the CNF, which put 96% of the ERU in the late seral class (100% according to the CNF's Forest Assessment)[70]. This reflects the fact that Southwestern ponderosa pine functions differently than the framework required by FRCC and from which the desired seral stage proportions derive. The Desired Condition of vegetation on the CNF should reflect what is known about vegetation ecology in 2015, not a rigid, flawed framework for modeling vegetation left over from more than a decade ago.

Finally, the ERU approach taken in the Desired Conditions report is an unsuitable approach in an era of rapid climate change. While ERUs take into account the physical site, they are fundamentally based on the vegetation that is currently found on the site, the current climate, and the historical disturbance regime. Given a changing climate, we can expect these ERUs to change such that their composition, structure, and dynamics will not match the desired conditions described in the report. Even if we accept the validity of the FRCC-derived reference conditions, rigidly described conditions will not remain appropriate for any given site in the future. Instead, we need descriptions of desired conditions that confer resilience to a site undergoing change, and we need map units that will remain relevant despite those changing conditions.

In the past two decades, much has been learned about the composition and structural dynamics of Southwestern forests, and that science was recently summarized in the U.S. Forest Service publication "Restoring Composition and Structure in Southwester Frequent-Fire Forests: A science-based framework for improving ecosystem resiliency" (General Technical Report RMRS-GTR-310). This publication describes the ecology of Southwestern ponderosa pine and dry mixed conifer forests, the two types that make up nearly two-thirds of the forest and woodland vegetation on the CNF and almost all of the non-P-J forest. It shows that these dry forests function at the scale of tree groups, individual trees, and grass-forb-shrub interspaces, not the broad seral stages required by the FRCC/seral stage proportion approach. GTR-310 provides a realistic and science-based description of reference conditions that is both quantitative and simpler than the ERU-based approach of the current Desired Conditions report. It also provides a scientific basis for improving the resilience of Southwestern forests in the face of climate change.

In our scoping comments, we described a three-zone fire management strategy that identified different desired conditions based on distance from affected communities. In the zone nearest communities – the Widland-Urban Interface – vegetation should be managed to minimize fire risk to homes. At some distance from communities, though, fire is no longer a threat, and a "Backcountry Zone" can be managed to allow fire to play its natural role. The desired condition there is one in which fire maintains the characteristic heterogeneity of the vegetation, as recently proposed by the Forest Service for the three "early adopter" forests in the southern Sierra Nevada and described in recent papers in *Science* (see North et al. 2015a) and the *Journal of Forestry* (see Miller and Aplet 2015).

[70] USDA Forest Service. 2014. Cibola National Forest Assessment. p. 38.

In between these two zones is an area close enough to homes that the public is likely not going to be comfortable letting fires burn – at least not until necessary treatments are completed in the Wildland-Urban Interface – but far enough away that it does not need to be managed strictly for community protection. Most fires will be suppressed, but if the vegetation is in its desired condition, the fires that do burn should do minimal ecological damage.

This three-zone strategy can provide the simplicity that can make for a more understandable and achievable set of desired condition statements. It avoids the pitfalls of the stage-based desired conditions in the current report, and it provides a framework for achieving resilience in the face of climate change. If fuels are managed appropriately in the Wildland-Urban Interface, the forest and adjacent communities will be resilient to anticipated future fire activity. In the Wildfire Resilience Zone, GTR-310 provides quantitative descriptions of reference conditions that should make the forest more resilient to escaped wildfire, and in the Backcountry, fire-resilient conditions can be achieved through the use of prescribed fire and managed wildfire.

In Figure 1, we represent what such a three-zone strategy might look like on the CNF. To identify the Wildfire Resilience (Restoration) Zone, we have buffered the Wildland-Urban Interface (obtained from the CNF's website) by five miles, a reasonable "comfort zone" beyond which people may be willing to allow natural fires to burn under moderate weather without a sense of direct threat (Aplet and Wilmer 2010). In reality, this distance will need to be socially negotiated and can provide the basis for different alternatives evaluated in the Plan EIS. Our analysis shows the Wildland-Urban Interface to occupy 263,413 acres (16.3%) of the Forest, 773,725 acres (47.9%) to be in the Restoration Zone, and 578,694 acres (35.8%) in the remote Backcountry Zone, mostly on the Magdalena Ranger District. The nature of the vegetation in each zone can be seen in Figure 1.

In addition to this analysis, we conducted an assessment of where the "operable and restorable" acres are on the forest. These are the acres that are both appropriate to subject to forest restoration treatments and located where they can be treated using mechanical equipment. To make this assessment, we applied methods derived from North et al. (2015b) to determine the extent of "operable" land across the forest. Following North, we removed from the landbase: 1) designated wilderness, 2) Inventoried Roadless Areas, 3) steep ground >35% slope, and 4) remaining areas farther than 1000 feet from existing roads. Use of machinery is prohibited in wilderness and IRAs and impractical on steep slopes and far from roads (without prohibitively expensive new road construction). We then overlaid this "mask" on ponderosa pine and mixed-conifer forest types, the vegetation types on the CNF for which mechanical treatment is a viable tool. (Other vegetation types, like pinyon-juniper woodland, may warrant restoration treatment, but mechanical treatment is not practical, due to the cost of treatment and the improbability of removing commercially viable product to offset treatment costs. There, restoration options are limited to hand treatment and the use of fire.). We then overlaid the "operable-restorable" area on the three-zone map to determine how much mechanical restoration and fuel treatment could be done in the Restoration Zone and Wildland-Urban Interface.

The result is displayed in Figure 2, which reveals that 68,091 acres of the WUI is "operable," including 37,573 acres of forest that could be treated mechanically. In the Wildfire Resilience (Restoration) Zone, the analysis shows that 166,933 acres of ponderosa pine and dry mixed-conifer forest potentially suitable for restoration exists on operable ground, mainly on the Mt. Taylor Ranger District, in the Manzano

Mountains, and the northwest corner of the San Mateo Mountains, and could provide the basis for a concerted forest restoration initiative. A substantial fraction of these acres occur in the Zuni Mountains, where the Blue Mountains Collaborative Forest Landscape Restoration Project has already made restoration a management priority.

The remainder of the Wildfire Resilience Zone consists either of inoperable ground or of vegetation types that are inappropriate for mechanical treatment. Where such acres are in or adjacent to the WUI, they may be worth treating using hand crews and prescribed fire. Beyond the Wildfire Resilience Zone, however, desired conditions may be achieved by allowing vegetation to burn under moderate weather conditions for their ecological benefits. The remoteness of most of the San Mateo Mountains unit qualifies it perfectly for assignment to this zone, as do the Gallinas.

In conclusion, we recommend that the CNF reevaluate its approach to describing vegetation desired conditions and abandon the ERU-based approach that results in too many poorly described units with desired conditions derived from a flawed and antiquated approach to defining FRCC. Such an approach does not meet the requirements of desired conditions to be achievable, reflect the capability of the plan area, and reflect the fiscal capability of the Agency. Instead, we recommend that vegetation desired conditions be described in terms of the desired future fire behavior of three zones based on proximity to communities. Within the Wildland-Urban Interface (or Community Fire Planning Zone, see Aplet and Wilmer 2010) vegetation should be in a condition that presents a minimal threat to communities. For dry forests within the Wildfire Resilience Zone, GTR-310 can provide a detailed, science-based description of desired conditions, and in the Backcountry Zone, desired conditions should result from the free play of fire as a natural process. Within the WUI and the Wildfire Resilience Zone, desired conditions can be achieved through silvicultural means where operating constraints allow and through the use of fire elsewhere, as should be the case in the Backcountry. Such an approach is simple, constrained to the capability of the area and budget realities, and above all, achievable.

This "three-zone approach" also facilitates a realistic approach to climate change adaptation (as opposed to the naïve and simplistic approach described in the Desired Conditions report, whereby all vegetation deemed to be "of high vulnerability to climate change" are to have their "tree basal area…restored or maintained at the low end of the desired range…"). By tying mapped zones to the location of human communities, rather than the locations of mutable ERUs, desired conditions can be described that will endure in the face of climate change. As an "early adopter forest," the CNF a has an opportunity to forge a new and relevant approach to climate change by describing desired conditions that confer resilience to both human communities and the forest ecosystem. To do so, though, it must abandon the traditional focus on vegetation types and seral stages that underlies the current vegetation desired conditions and embrace a new approach based on the best available science.

Recommendations:

- We recommend that the CNF reevaluate its approach to designing vegetation desired conditions based on ERUs.
- We recommend that vegetation desired conditions be described in terms of the desired future fire behavior of three zones based on proximity to communities. This "three-zone approach" also facilitates a realistic management scheme for addressing climate change adaptation.

IV. Landscape Vision Statements

The vision statement for the Magdalena and San Mateo Mountains overlooks many important values and multiple uses. We pose the following questions for the Magdalena Ranger District Landscape Team to consider in the context of its vision statement and ask that the team contemplate revising its statement based on the answers to these questions:

- Does the local community see value in the tremendous recreation opportunities that exist in the Magdalena Ranger District, including opportunities to hike, camp, hunt, bird watch, view wildlife, star gaze, and picnic? Are the developed recreation facilities, such as camp grounds and hiking trails, important to the local community?
- Socorro County is well-known for having extremely dark night skies. Is it important to sustain these pristine night skies?
- The San Mateos are well-regarded for their prime hunting opportunities. Does the local community believe it is important to sustain healthy wildlife population and quality habitat in the San Mateo and Magdalena Mountains?
- Does the local community value the Apache Kid and Withington Wilderness Areas and the opportunities to experience undeveloped, pristine, natural settings?
- New Mexico is arid and the San Mateo, Bears and Magdalena Mountains are particularly so. Is it important to conserve and manage the few springs and aquatic resources that exist here?
- Indigenous people have inhabited New Mexico for many centuries. New Mexico has also been part of the Spanish empire, part of Mexico, and a U.S. territory. Many cultures have converged across the state, including lands in and around the CNF's mountain districts, over the centuries. In particular, the Magdalena District and its surrounding areas have received attention from archeologists and historians. Is the local community proud of its rich cultural heritage and traditional way of life?
- Many people appreciate living near the San Mateo and Magdalena Mountains due to their beauty and rugged character. Is it important to maintain this visual resource?

Recommendation: We kindly request that the Magdalena District Landscape Team consider the above questions in the context of its vision statement. If, after considering these questions, the Team feels that its current vision statement is missing important values that are important to the local community, we encourage the Team to revise its vision statement accordingly.

V. Conclusion

We extend our appreciation to the Forest Service for the opportunity to provide these comments in response to the wilderness inventory and evaluation methodology, the Phase 2 wilderness inventory maps, draft desired condition statements, and the landscape teams' vision statements. To date the CNF has done a commendable job interacting with the public, providing timely information, and responding to concerns. Our intent in providing these comments is to work cooperatively with the Forest Service and the larger

interested public to ensure that the CNF – as a public trust resource – is properly managed for the long-term public interest for the benefit of existing and future generations.

We look forward to working with the Forest Service as the forest plan revision process moves forward. We will follow up with you to set up a meeting to discuss our comment letter.

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APPENDIX A

CONGRESSIONAL GUIDANCE ON OUTSIDE SIGHTS AND SOUNDS[71]
WRITTEN BY DOUG SCOTT, 2006

This idea of outside sights and sounds as a criterion for whether each acre qualified as wilderness has no basis in the Wilderness Act, its legislative history, or how Congress has subsequently applied it.

First, the word "sight" does not appear in the Act. The word "sound" appears once, in a technical provision having to do with mining claims, and not in the sense of auditory phenomenon.

Second, were this idea to be taken seriously, it would disqualify, for example, almost all of the 228,480 acres of wilderness Congress designated in Mount Rainier National Park in 1988, leaving just the deep canyons, crevasses, and summit crater as qualified for wilderness—for these are the only portions of the park from which clearcuts and towns outside the park, and the roads and facilities within the park, are not visible.

The Legislative Intent of the Authors of the Wilderness Act Definition.

In fact, Congress was very explicit in rejecting the notion of outside influences disqualifying land as wilderness. Looking back at the Act's section 2(c) definition, wilderness is among other things "an area of undeveloped Federal land retaining its primeval character and influence." Note that these words, and the others in this subsection, all pertain to the *entity* of wilderness itself, not its surroundings. That is no accident, but the conscious intent of the senator who wrote those words.

In early versions of the bill that became the Wilderness Act, the wording of this phrase was slightly different: "areas … retaining their primeval *environment* and influence." In July 1960, Senator James Murray (D-MT), introduced a new revision of the Wilderness Bill he had earlier introduced.[72] Senator Murray was the lead sponsor and the chairman of the committee handling the bill; his stated intent is definitive legislative history. In introducing his revised version of his own bill, he carefully explained to the Senate a key word change:

> In the opening sentence of the bill change the word "environment" (line 9) to "character" and delete the words "recreational, scenic, scientific, educational, conservation, and historical."

[71] This section was written by Doug Scott, a wilderness historian with the Campaign for America's Wilderness, in comments to the Green Mountain National Forest on their proposed forest plan revision.

[72] S. 3809, 86th Congress. Throughout its eight-year consideration by Congress, the legislation was commonly referred to as "the Wilderness Bill." Sen. Murray's explanations are prime documentation of the congressional intent behind the words of the final Act.

> Explanation: These are amendments pending before the Interior Committee. *The word "character" is substituted because "environment" might be taken to mean the surroundings of the wilderness rather than the wilderness entity*.[73]

As Senator Murray's explanation illustrates, the authors of the Wilderness Act took great care to document precise guidance on their legislative intent in choosing the words in the law. They did not want the *qualification* of land that might be designated as wilderness to be decided on the basis of the surrounding **environment** and any impacts from outside the boundary, even immediately outside the boundary. Rather, they specified that the test was the **character** of the wilderness entity itself.

Later, when some agencies misapplied this aspect of the Wilderness Act to assert that outside sights and sounds led them to judge lands not qualified for wilderness, Senator Frank Church (D-ID), who had been the floor manager when the Senate debated and passed the Act, reminded them of Sen. Murray's definitive explanation at a Senate hearing:

> The Wilderness Act calls for the designation of suitable wild lands which are of wilderness "character." This term "wilderness character" applies only to the immediate land involved itself, not to influences upon it from outside areas. This point was specified precisely in an early amendment to the wilderness bill…What [Sen. Murray's 1960] amendment made clear is that the suitability of *each acre of possible wilderness* is to be ascertained on the basis of that wilderness entity, not on the basis of insubstantial outside influences. *Sights and sounds from outside the boundary do not invalidate a wilderness designation or make threshold exclusions necessary, as a matter of law*.[74]

Despite Senator Church's clarification, use of the erroneous sights and sounds criterion recurred. The issue came to a head during congressional action on the Endangered American Wilderness Act of 1978, sponsored by Representative Morris K. Udall (D-AZ) and Senator Church.[75] Like Church, Udall had been involved in the enactment of the Wilderness Act [both were at President Lyndon Johnson's side as he signed the Act] and was, in 1978, chairman of the House committee handling all wilderness legislation. In its formal report to the House of Representatives explaining the 1978 bill, Udall's Committee on Interior and Insular Affairs discussed the Forest Service's renewed use of the sights and sounds concept:

> Testimony presented during nine days of Subcommittee hearings on H.R. 3454 repeated allegations that the Forest Service has been unduly restrictive in setting wilderness evaluation criteria which relied solely on the most stringent possible interpretation of the definition section (section 2(c)) of the Wilderness Act.
>
> … many areas, including the Lone Peak and Sandia Mountain proposals[76] in H.R. 3454, received lower wilderness quality ratings because the Forest Service

[73] Ibid., emphasis added.
[74] *Preservation of Wilderness Areas*, Hearings before the Subcommittee on Public Lands, Committee on Interior and Insular Affairs, U.S. Senate, on S. 2453 and Related Wilderness Bills, May 5, 1972, page 59, emphasis added.
[75] Public Law 95-237; February 24, 1978.
[76] Areas subsequently designated as wilderness in the 1978 law.

> implemented a "sights and sounds" doctrine which subtracted points in areas where the sights and sounds of nearby cities (often many miles away) could be perceived from anywhere within the area. This eliminated many areas near population centers and has denied a potential nearby high quality wilderness experience to many metropolitan residents, and is inconsistent with Congress['s] goal of creating parks and locating wilderness areas in close proximity to population centers. The committee is therefore in emphatic support of the Administration's decision to immediately discontinue this "sights and sounds" doctrine.[77]

During Senate hearings on the Endangered American Wilderness Act, Dr. M. Rupert Cutler, the Assistant Secretary of Agriculture, assured the Senator Pete Domenici (R-NM), who raised the same concern about agency views on the Sandia Mountain Wilderness proposal, that in relation to that area and all wilderness areas:

> there is no reference in the Wilderness Act to criteria for wilderness that includes such things as the sights, sounds, and smells of civilization which is a set of criteria which has been misapplied to wilderness areas.[78]

Other examples abound. In an earlier case, the National Park Service proposed to exclude a large expanse of the Lava Beds National Monument, California, from wilderness designation because from throughout that roadless land one could see, in the distance, "the rectilinear land forms of agriculture" (e.g. cultivated hay fields). In 1972 Congress rejected that concept and designated the entire area as wilderness.[79] Similarly, a portion of the wilderness boundary within Joshua Tree National Monument, [80] California, originally designated in 1976, abuts a maintenance area. The Senate Interior Committee explained:

> A boundary adjustment in the Indian Cove area is designed to exclude the existing maintenance area from the wilderness, but *the wilderness line is located on the very edge of the maintenance area* on its east and north sides.[81]

Congress brings wilderness boundaries to the edge of human development precisely in order to best protect the maximum area of wildlands by statute. The boundary of the Pusch Ridge Wilderness, as designated in 1978, is instructive. This area reaches right to the city limits of Tucson, Arizona. One glace at the boundary map makes it clear that sights and sounds is not used as a wilderness criterion by Congress.

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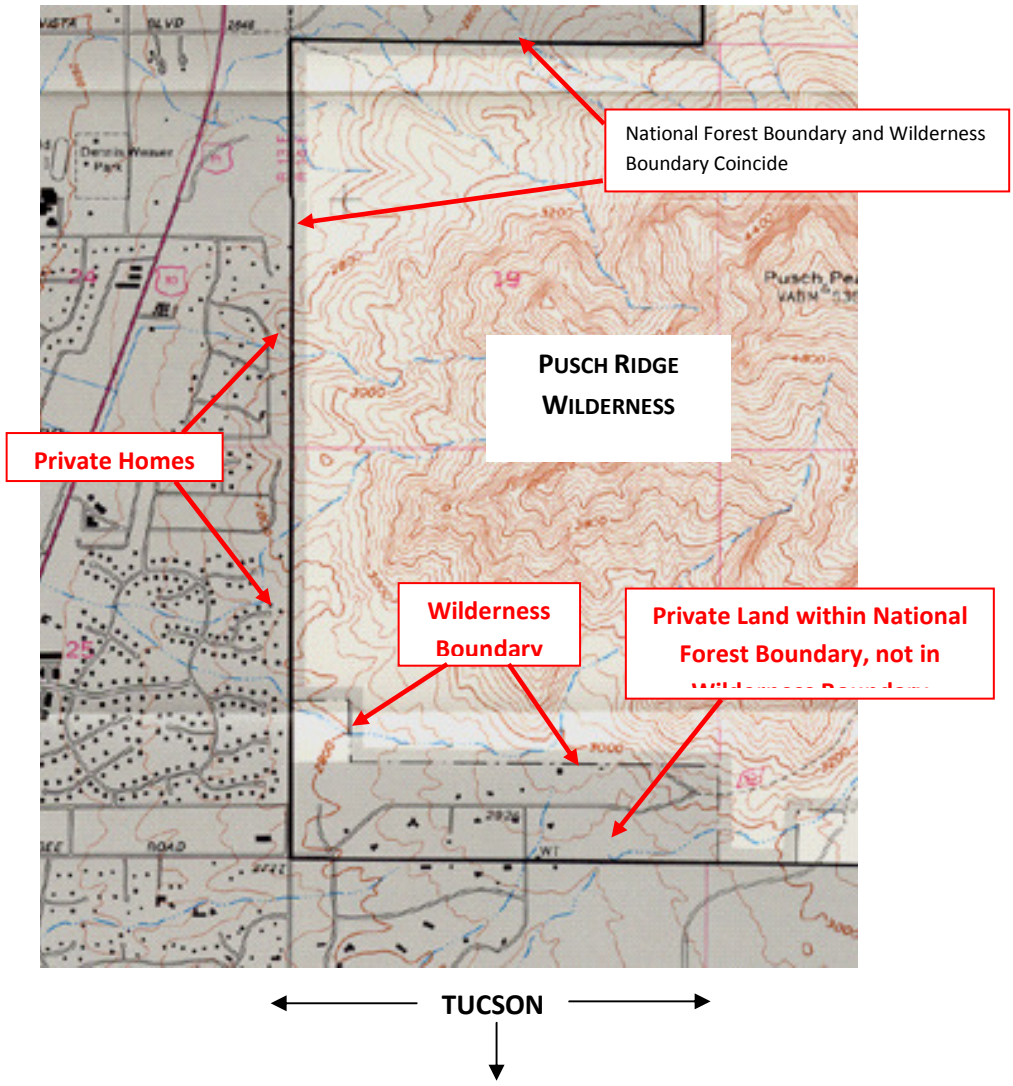
[77] House Report 95-540, 95th Congress, July 27, 1977, page 5, emphasis added.
[78] *Endangered American Wilderness Act of 1977*, Hearings before the Subcommittee on Parks and Recreation of the Committee on Energy and Natural Resources, United States Senate on S. 1180, September 19 & 20, 1977, Publication No. 95-88, Committee on Energy and Natural Resources, page 41.
[79] Public Law 92-493, 86 Stat. 811.
[80] Now Joshua Tree National Park. The initial wilderness was designated by Public Law 94-567; 90 Stat. 2693.
[81] *Wilderness Designations with Units of the National Park System*, Senate Report 94-1357, September 29, 1976, page 6, emphasis added.



There is a danger that the use of arbitrary criteria, or criteria not following the Wilderness Act and the precedents of the Congress, could unfairly constrain public review by misleading the public as to what lands can or cannot be recommended to Congress as wilderness.

The topics of perceived solitude (or lack thereof) and outside sights and sounds have had a particular history of inappropriate use as the basis for assertions as to whether a particular area, or portion of an area, can qualify for congressional designation. Congress has repeatedly had to correct those who have misused these as wilderness criteria. Such misuse can easily undermine the fairness of agency evaluations in such processes as inventorying roadless areas, an in evaluation of wilderness potential in BLM Resource Management Plans or revisions of National Forest Plans. Beyond discouraging the public from appreciating that wilderness protection is indeed possible for such lands, the misuse of these criteria could result in inadvertently preempting the prerogatives of the Congress.