

Data Submitted (UTC 11): 8/13/2021 4:00:00 AM

First name: Brian

Last name: Gist

Organization: Southern Environmental Law Center

Title:

Comments: Chattooga Conservancy [bull] Defenders of Wildlife [bull] Georgia ForestWatch [bull] Sierra Club [bull] Southern Environmental Law Center [bull] The Wilderness Society August 13, 2021 VIA Electronic Mail Mr. Edward Hunter, Jr. Forest Supervisor Chattahoochee-Oconee National Forests United States Forest Service 1755 Cleveland Highway Gainesville, GA 30501 SM.FS.Foothills@usda.gov RE: Comments on Draft Programmatic Environmental Assessment for Foothills Landscape Project

Dear Mr. Hunter: We commend the Forest Service for its willingness to reconsider its approach to the Foothills Project and reset its engagement with stakeholders. In particular, the decision to adopt a programmatic review under the National Environmental Policy Act ([ldquo]NEPA[rldquo]) will better position the Forest Service to pursue the broad suite of actions contemplated in the Foothills Project. The development of an alternative with an important sideboard (unsuitable lands) is another welcome addition, and we believe this alternative can be further developed, with collaborative input, to focus the project on high priority work. As noted in the past, we share many of the same goals for the Foothills landscape and hope to work with the Forest Service to implement those actions successfully. Having selected the right tool, the Forest Service must now use it to its best advantage. A programmatic NEPA review can afford agencies more flexibility and efficiency by evaluating impacts in phases, reducing redundancy, avoiding problematic actions, and focusing subsequent decisions on the most important issues. But, like any other tool, programmatic NEPA reviews will not realize these benefits if unless correctly crafted and deployed. A programmatic review does not alter NEPA[rsquo]s underlying obligations to take a [ldquo]hard look[rldquo] at the effects of agency actions and consider those effects based on site-specific conditions. Thus, decisions regarding the scope and level of detail made in the programmatic review will dictate whether it actually achieves the desired flexibility and efficiencies at the implementation stage. Deferring hard questions and associated analytical responsibilities will only result in having to duplicate those efforts for each implementing project. Therefore, a consistent theme running throughout these comments is the need to focus the project, adopt sideboards to preclude potentially difficult issues, and conduct a more detailed 2 review of potential impacts where possible now to avoid having to consider those effects later. The programmatic approach is intended to replace the status quo of project-by-project NEPA review with a more flexible and efficient phased review. In a programmatic approach, flexibility comes from deferral of options to future decisions. Efficiency, on the other hand, comes from narrowing the range of options and considering recurring issues at the outset, before making the site-specific choices and analyses. This tradeoff is the key - efficiency (narrowing down) is in tension with flexibility (deferring choices). We hope that our comments are useful in helping pinpoint the choices that should be deferred to the future versus the ones that can and should be resolved now. A more focused scope and more detailed review at the programmatic stage is necessary for the agency to realize benefits at the implementation stage. The programmatic review should provide an intermediate level of review linking the broad goals of the Forest Plan with the site[1]specific decisions and analysis required by NEPA. But unless the programmatic review actually narrows the range of decisions and provides supporting analysis, it does little work to bridge the gap between these two levels of review. As currently written, the Draft Programmatic Environmental Assessment ([ldquo]DPEA[rldquo]) does not sufficiently limit the scope of potential actions or conduct the necessary analysis to bridge this gap. The nascent Foothills Collaborative Group adds yet another layer of complexity to this project. The Forest Service has convened a series of meetings with stakeholders in the Foothills Landscape Project in an effort to restart this collaborative. As made clear in these meetings and the DPEA itself, the Forest Service hopes to [ldquo]share the decision space[rldquo] with this group and that the group will play a role in guiding the agency[rsquo]s efforts with the Foothills Project. As discussed in more detail below, other stakeholder collaborative groups have played a crucial role in defining the scope of projects they will implement by defining the goals, activities, and locations where the activities will occur (or in some cases, will not occur). But, unlike most such collaborative groups, the Foothills Collaborative Group is being created concurrently with the project it will be charged with implementing. Thus, the scope of activities in the DPEA does

not reflect input from the Foothills Collaborative Group because that group does not yet exist. The Collaborative must be given a voice both in where the project is implemented, but what the project is. The tension over project scope and what actions to exclude at the programmatic stage is present here as well. The Forest Service wants to leave all potential opportunities on the table for site-specific project, in that the hopes the Collaborative Group will help it accomplish goals it could not accomplish otherwise. As we understand it, the goal for the Collaborative Group is to help Forest Service not only do the easy things, but also the hard things. We want the Collaborative Group to tackle the hard questions too. But for the reasons explained throughout, the time to tackle those questions is now, so that they do not have to be wrestled with again and again in each phase of implementation. Furthermore, collaborative discussions alone, no matter how well intentioned or facilitated, do not guarantee a successful outcome for every single issue. There are [ldquo]third rail[r] issues that are simply too divisive to tackle at the site-specific stage. Including these issues within the scope of the Foothills Project risks derailing the work of the Collaborative. These tough issues evade satisfactory resolution in site-specific projects because they create the potential for cumulative harms that are not prohibited or limited by broader-scale decisions like the forest plan. The Collaborative Group should be afforded the opportunity to identify these third rails issues, and the Forest Service should strongly consider limiting the project at the programmatic stage to exclude these issues. We understand that the Forest Service is reluctant to take any action off the table, but including third-rail actions risks allowing the limited number of highly divisive issues from distracting the Collaborative Group from the many issues where common ground can be found. The Forest Service must not let a bad apple spoil the bunch. Further, it is important to recognize that adopting a particular sideboard or limit on the Foothills Project does not prevent the Forest Service from pursuing that particular action. Instead, it simply means that the Forest Service would pursue that action as an independent project with an independent NEPA review rather than as a tiered project as part of the Foothills Project[r]s programmatic review. Prioritizing the Foothills projects to exclude certain challenging issues or actions could would actually expedite the Forest Service[r]s overall work plan. The majority of treatments would benefit from the expedited review, and harder questions would get extra attention. This is far preferable to a process where all treatments, even the [ldquo]easy[r]d ones, get bogged down by hard questions. We would be pleased to discuss any of the issues or examples in these comments with you further. We are committed to helping you make this project a success, and we will continue offering our input directly and through the Collaborative Group. This is an exciting opportunity to do things differently, with better outcomes for a landscape beloved by so many, and we encourage you to bring additional focus to the Foothills Project to ensure the success of the programmatic review and the project itself.

TABLE OF CONTENTS I. Programmatic Review Under NEPA

..... 6 a. Implementing Programmatic Actions Requires Site-Specific Review 7 b. CEQ Regulations for Programmatic Review
..... 8 c. Consideration of Cumulative Effects in a Programmatic Review
..... 8 d. Clarity on the Decisions Deferred to the Implementation Phase
..... 10 e. Endangered Species Act Consultation in a Programmatic Review
..... 10 II. The Role Of The Foothills Collaborative Group
..... 11 III. Other Collaborative Groups Implementing Condition-Based Projects Have Helped Define The Project[r]s Scope, Including At The Programmatic Stage
..... 12 IV. Without Additional Limits, The Potential Impacts Of Activities Authorized In The Foothills Landscape Project Are Potentially Significant 15 a. Significant Impacts Under NEPA 15 b. The Foothills Project[r]s Unbounded Scope has the Potential for Significant Impacts 16 c. The Foothills Project Includes Activities That Trigger an EIS Under Forest Service Regulations
..... 17 d. The Programmatic EA Should Adopt Sideboards to Help Avoid [ldquo]Significance Triggers[r]d
..... 18 e. Proceeding With a Programmatic EA Risks Deferring Substantial Environmental Review Until the Implementation Phase
..... 20 V. The Forest Service Should Revise The Statement Of Purpose And Need To Narrow The Scope, Avoid Problematic Issues, And Focus The Project

..... 21 VI. The Forest Service Should Consider Additional Alternatives To Focus The Project And Limit Its Potential Environmental Effects	22 a. The No-Action Alternative Must Assume That Forest Service Activities Will Continue at the Current Rate
..... 24 VII. NEPA Requires That The Proposed Action[rsquo]s Environmental Impacts Be Given A [ldquo]Hard Look[rdquo]	25 a. The Hard Look Standard and Programmatic Review
..... 25 b. Analysis of Site-Specific Impacts is Required Under the Hard Look Standard	26 c. Implementation Area Versus Stand-Level Review
..... 26 d. The Programmatic Document[rsquo]s Failure to Meaningfully Compare Alternatives is a Missed Opportunity	27 e. The DPEA[rsquo]s Discussion of Cumulative and Connected Actions Defers Much of Necessary Review to the Project Implementation Stage
..... 28 VIII. Technical Recommendations To Improve The Foothills Project	30 5 a. Aquatic Resources
..... 30 b. Fire and Fuels	31 c. Soils.....
..... 32 d. Recreation and Transportation	32 e. Vegetation
..... 33 IX. The Foothills Project[rsquo]s Climate Change Impacts Must Be Properly Considered	35 a. The Forest Service Must Reevaluate the Assumptions Underlying Its Climate Change Analysis.....
..... 35 b. The Forest Service Must Evaluate Carbon Storage, Not Just Carbon Sequestration	37 c. The Forest Service Should Evaluate the Social Cost of Carbon Emissions
..... 39 X. Precluding Activities and Locations Likely To Trigger Significant Environmental Effects Is The Logical Extension Of The Draft Programmatic EA[rsquo]s Decision Framework	41 XI. Evaluating The Effectiveness Of The Project Design Features Will Reduce The Amount Of Mitigation Analysis Required At The Implementation Phase
..... 41 XII. Future Tiered Actions Must Demonstrate Compliance With The National Forest Management Act	43 XIII. Example Sideboards For The Foothills Project[rsquo]s Programmatic Review
..... 45 XIV. Conclusion	46 6

I. Programmatic Review Under NEPA

The DPEA adopts a programmatic approach under 40 C.F.R. [sect][sect] 1502.20 and 1508.28. 1 DPEA at n. 3. Accordingly, the document should also be guided by the Council on Environmental Quality[rsquo]s ([ldquo]CEQ[rdquo]) guidance on programmatic NEPA reviews. At its core, the programmatic approach is a decision framework and does not alter the Forest Service[rsquo]s underlying obligations to consider potential impacts under NEPA or other applicable statutes. Agencies are still required to consider both broad-scale and site-specific analyses [ndash] the programmatic approach simply changes the timing and sequence of these reviews. When used correctly, the programmatic approach can improve the flexibility and efficiency of environmental review by considering potential impacts at a general level to identify and limit actions with the potential to trigger significant or controversial environmental effects. The agency can then decide to either avoid actions with the potential for those impacts or consider them in more detail at the project implementation stage. As explained in CEQ[rsquo]s Memorandum on Effective Use of Programmatic NEPA Reviews (the [ldquo]CEQ Programmatic Guidance[rdquo]) 2: By identifying potential adverse impacts early during the broad programmatic planning, programmatic NEPA reviews provide a unique opportunity to modify aspects of the proposal and subsequent tiered proposals to avoid or otherwise mitigate those impacts. CEQ Programmatic Guidance at 35. Modifying the proposal at the programmatic stage [ldquo]can expedite the preparation of subsequent project- or site-specific proposals by establishing siting, design, operational, or other relevant implementation criteria, requirements, and protocols.[rdquo] Id. [ldquo]The subsequent tiered NEPA review would then include those

measures to address potentially significant impacts and focus on the impacts and mitigation alternatives available at the project^[1] or site-specific level that were not considered in the [programmatic EA or programmatic EIS].^[rdquo] In this way, the potential benefits of the programmatic approach are a direct result of the degree to which the agency identifies potentially problematic issues at the outset and narrows the proposal to limit or avoid them. Where the agency cannot (or chooses not to) avoid these issues, they must be evaluated in site-specific detail at the project implementation stage. But, to limit the universe of issues and impacts that must be considered for each site-specific action and to justify a Finding of No Significant Impact ([ldquo]FONSI^[rdquo]), the Forest Service should focus on actions with well-understood and generally beneficial impacts, and adopt project sideboards to exclude actions with unknown or avoidable environmental impacts.

a. Implementing Programmatic Actions Requires Site-Specific Review

NEPA requires federal agencies to provide the public with [ldquo]notice and an opportunity to be heard^[rdquo] in the analysis of [ldquo]specific area[s] in which logging will take place and the harvesting methods to be used.^[rdquo] *Ohio Forestry Ass^[rsquo]n v. Sierra Club*, 523 U.S. 726, 729^[ndash]30 (1998).³ The site-specific information and analysis required under NEPA serve two purposes: (i) to ensure agencies are making informed decisions before acting; and (ii) to ensure the public is given a meaningful opportunity to participate in those decision-making processes. *WildEarth Guardians v. Mont. Snowmobile Ass^[rsquo]n*, 790 F.3d 920, 922-25 (9th Cir. 2015). Merely disclosing the existence of particular geographic or biological features is inadequate^[mdash]agencies must discuss their importance and substantiate their findings as to the impacts. *Or. Nat. Res. Council Fund v. Goodman*, 505 F.3d 884, 892 (9th Cir. 2007).⁴ [ldquo][G]eneral statements about possible effects and some risk do not constitute a hard look, absent a justification regarding why more definitive information could not be provided.^[rdquo] *Or. Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1134 (9th Cir.2007).⁵

As both regulations and caselaw make clear, an agency^[rsquo]s use of a programmatic approach does not alter its obligation to consider site-specific effects but instead allows that analysis to be deferred until the implementation phase of review. *Fund For Animals v. Mainella*, 283 F. Supp. 2d 418, 433-34 (D. Mass.2003)(Where a programmatic document fails to evaluate site-specific impacts, the deferred analysis must be conducted as part of the subsequent review at the implementation stage); *Western Watersheds Project v. Abbey*, 719 F.3d 1035, 1953-54 (9th Cir. 2013) (Where agency failed to disclose site-specific impacts and alternatives in a programmatic EIS, it must do so in a site-specific EA).

b. CEQ Regulations for Programmatic Review

The programmatic approach allows agencies to change the timing of its environmental review and conduct it in phases to [ldquo]eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.^[rdquo] 40 C.F.R. [sect] 1502.20. This approach allows the agency to [ldquo]summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and [] concentrate on the issues specific to the subsequent action.^[rdquo] *Id.* Programmatic reviews can be as broad as the agency desires. 40 C.F.R. [sect] 1508.28. However, the breadth of a programmatic review directly relates to its future utility and an overly broad programmatic review will not streamline the future NEPA review in any meaningful way. CEQ Programmatic Guidance at 15 ([ldquo]A programmatic NEPA review may not be a cost effective effort for an agency if the effort required to perform the review is substantially greater than the time and effort saved in analyzing subsequent proposals.^[rdquo]). In this context, the DPEA should provide a bridge between the broad, open-ended goals in the Forest Plan and the granular, site-specific review required to implement projects under NEPA. Thus, the DPEA is only useful to the extent it helps the agency narrow its focus and avoid problematic issues that would delay projects at the implementation stage. But, as currently written, the DPEA does not contain sufficiently detailed analysis to satisfy the need for site^[1]specific analysis and does not contain adequate sideboards to preclude actions and impacts that will require substantial analysis at the implementation stage. To realize the potential gains in flexibility and

efficiency, the Forest Service must focus the project on a more finite list of activities, include sideboards to preclude actions and areas that will necessitate more detailed review, and explain how these sideboards accomplish this purpose. Focusing the project in this fashion will allow the DPEA to bridge the gap between the Forest Plan goals and site-specific review.

c. Consideration of Cumulative Effects in a Programmatic Review

By definition, a programmatic NEPA review is designed to cover multiple related agency actions. Here, the Foothills Project seeks to authorize an undetermined number of future activities within the same geographic region and thus presents the clear potential for cumulative impacts under 40 C.F.R. [sect] 1508.7. In particular, the requirement to consider the cumulative impact of [individually minor but collectively significant actions taking place over a period of time] is squarely applicable to the project. If a programmatic proposal is not sufficiently limited to allow for cumulative impact analysis at that stage, then such analysis can be deferred. *Salmon River Concerned Citizens v. Robertson*, 798 F. Supp. 1434, 1440 (E.D. Cal. 1992), *aff'd*, 32 F.3d 1346 (9th Cir. 1994); *Northern Alaska Environmental Center v. Lujan*, 961 F.2d 886 (9th Cir.1992) (holding that an EIS's deferral of consideration of certain potential cumulative and synergistic effects is proper tiering and does not foreclose later analysis of these factors in a future EA). But, once again, the ability to defer consideration of cumulative effects does not diminish the requirement and simply delays this work until later. However, the Forest Service can adopt sideboards at the programmatic phase to limit the potential for cumulative effects and reduce the amount of analysis required at the implementation stage. Setting priorities can assist the Forest Service in avoiding cumulative effects. For example, it is much easier to discuss the cumulative effects of removing off-site pine than it is to discuss the cumulative effects of creating early successional habitat in mature, characteristic hardwood forests. If the programmatic decision allows the Forest Service to do either (or both) of those actions in any particular site-specific project, then the potential cumulative effects of the program are too slippery to grasp. The decision whether to address cumulative effects at the programmatic stage is particularly relevant if the Forest Service seeks to use categorical exclusions during implementation of the Foothills Project. See, DPEA at B63 (referencing potential use of decision memos). CEs cannot be [tiered] to a programmatic decision. CEQ Programmatic Guidance at 29 (EAs are [tiered], whereas CEs are [applied] during implementation of a program of work). CEs are stand-alone categories of action that do not have significant impacts, individually or cumulatively, by definition. 40 C.F.R. [sect] 1508.4 (defining CEs as actions [which do not individually or cumulatively have a significant effect on the human environment]). They are simply not available where the proposed action may have cumulatively significant impacts, and if the agency attempts to use them for such actions, the category itself is vulnerable to being invalidated as overbroad. As a result, programmatic analysis cannot be used to explain away cumulative impacts of CEs that are being used to segment a larger program of work. Here, the potential for significant cumulative effects has not been adequately addressed in the DPEA, and as a result there is no basis for the conclusion that the implementing activities do not have the potential for cumulatively significant effects. To be sure, the Forest Service could avoid actions that might implicate cumulative significant impacts in implementing Foothills Projects, but that would only excuse the Forest Service from needing to prepare a supplemental EIS for those projects; it would not support the use of a CE. Unless the scope of reasonably foreseeable actions and potential environmental effects are limited and considered in the DPEA, every potential action will require a full cumulative effects analysis, making use of a CE inappropriate.

d. Clarity on the Decisions Deferred to the Implementation Phase

CEQ also instructs agencies to be clear with respect to the [anticipated timing and sequence of decisions], including [which decisions are supported by the programmatic NEPA document and which decisions are deferred for some later time, and the time-frame or triggers for a tiered NEPA review]. CEQ Programmatic Guidance at 10. [Agencies should clearly and concisely articulate their intentions to defer particular environmental review and consultation requirements for consideration until a subsequent project- or site-specific proposal is developed.] Id. The deferred analysis [should be identified and the

intended use of tiering made clear at the outset of scoping, and articulated in the programmatic review.[rdquo] Id. at 34. Here, the DPEA does not articulate the issues it believes are adequately addressed in the programmatic document and the issues it intends to defer until the project implementation phase.⁶

e. Endangered Species Act Consultation in a Programmatic Review

Under section 7(a)(2) of the Endangered Species Act ([ldquo]ESA[rdquo]), an agency must consult with (as relevant here) the Fish and Wildlife Service whenever a proposed action [ldquo]may affect[rdquo] listed species or destroy or adversely modify its critical habitat to ensure that the action is [ldquo]not likely to jeopardize[rdquo] these species. 16 U.S.C. [sect] 1536(a)(2). This process is generally referred to as Section 7 consultation. The scope of the Foothills Project and the lack of sideboards to exclude potential impacts to threatened and endangered species will complicate this analysis at both the programmatic and project implementation stages. Section 7 consultation shall occur [ldquo]at the earliest possible time to determine whether any action may affect listed species or critical habitat.[rdquo] 50 C.F.R. [sect] 402.14(a). As a result, ESA regulations allow for Section 7 consultation over [ldquo]framework programmatic action,[rdquo] defined as [ldquo]a framework for the development of future action(s) that are authorized, funded, or carried out at a later time,[rdquo] where [ldquo]any take of a listed species would not occur unless and until those future action(s) are authorized, funded, or carried out and subject to further section 7 consultation.[rdquo] Id. at [sect] 402.02. ESA Section 7 consultation for these programmatic actions occurs in two steps. First, the programmatic action is addressed through programmatic consultation, which [ldquo]allow[s] the Services to consult on the effects of programmatic actions.[rdquo] Id. The result of a formal programmatic consultation is a biological opinion that determines where the project overall is likely to jeopardize species or result in adverse modification of critical habitat. 50 C.F.R. [sect][sect] 402.14(h).

In the course of a programmatic consultation, the agency can adopt sideboards on the programmatic action to avoid or mitigate impacts to listed species or designated habitat. In the second step, site-specific actions implementing the programmatic decision are addressed through stepped-down, site-specific Section 7 consultations, ensuring adherence to any sideboards included in the programmatic biological opinion, with site-specific biological opinions accompanied by incidental take statements. Further, the agencies are prohibited from segmenting their review under the ESA. *Conner v. Burford*, 848 F.2d 1441, 1457 (9th Cir. 1988). Thus, whether at the programmatic or the project implementation stage, the potential impacts on threatened and endangered species must be fully considered including the cumulative effects of multiple actions authorized under the umbrella of the Foothills Project. Finally, we note that the Forest Service must also consider the requirement to reinstate consultation. Agencies are required to reinstate consultation under the ESA if any of the following circumstances are met: (1) the amount or extent of taking in the incidental take statement is exceeded; (2) new information reveals effects not previously considered; (3) the action is modified in a manner that causes an effect not previously considered; or (4) if a new species is listed or critical habitat designated. 50 C.F.R. [sect] 402.16(a). Given the Foothills Project[rsquo]s potential scope, the lack of site-specific analysis, and its unlimited duration, all of these factors will likely be triggered at some point during the course of the project. Adopting appropriate sideboards would reduce the risk of triggering these factors and would ease the burden of site-specific consultation when it is needed, allowing the Forest Service to better realize the potential efficiencies of the programmatic approach.

II. The Role Of The Foothills Collaborative Group

Beyond the programmatic NEPA review, we also appreciate the Forest Service[rsquo]s willingness to revisit the Collaborative Group planned for the Foothills Project. It is evident that CONF leadership and staff have invested a great deal of effort in listening to stakeholders, finding common ground with those individuals and organizations, and considering how to best engage the planned Collaborative Group. We understand the Forest Service[rsquo]s goal is to [ldquo]share the decision space[rdquo] with this group, and its hope that a successful collaborative will allow it to navigate issues and activities that would be challenging otherwise. We share the

belief that successful collaboration can deliver a better Foothills Project and better outcomes for the CONF. But the status of the Collaborative Group is out of step with that of the programmatic NEPA document. The DPEA states that the collaborative group [ldquo]will be formed, prior to a final 12 decision, to work with public land managers to further influence the scope, scale, and exact locations of specific treatments within the project area.[rdquo] DPEA at B63. Further, decisions made by the Collaborative Group [ldquo]may result in modifications to the timing, methods, and monitoring requirements within the [Foothills Landscape Project].[rdquo] Id. As of the date of this letter, the Foothills Collaborative Group does not yet exist and it seems unlikely that the group will be able to make any meaningful decisions before late 2021 or early 2022. Instead of proceeding in tandem, the Collaborative Group[rsquo]s progress is well behind that of the NEPA review. The Collaborative Group can play an important role in helping the Forest Service achieve a more successful Foothills Project, but the Collaborative Group must be afforded the opportunity to fully participate in shaping the project including decisions made at the programmatic phase. In particular, the Collaborative Group is uniquely suited to develop and recommend project sideboards that could refine the scope of actions considered in the Final Programmatic EA. Unless the Forest Service shares the decision space throughout the project, including both the programmatic and project implementation phases, it risks charging the Collaborative Group with a task it may be unable or unwilling to perform. At the scoping phase, the Forest Service was asked to consider a project alternative that would focus on [ldquo]consensus-based treatments with widespread support (of which we think there are many) developed during collaborative discussions.[rdquo] Foothills Landscape Project Scoping Report at 8.7 A explained in more detail below, we encourage the Forest Service to reevaluate this recommendation. If afforded the opportunity, we believe that a Collaborative Group can help the Forest Service define a programmatic project that achieves most of the goals identified in the DPEA on a more efficient basis and with broad support. But to do so, the Collaborative Group must be allowed to identify and resolve potential [ldquo]third rail[rdquo] issues that may otherwise jeopardize the group[rsquo]s potential success.

III. Other Collaborative Groups Implementing Condition-Based Projects Have Helped Define The Project[rsquo]s Scope, Including At The Programmatic Stage

Collaborative groups can provide input on decisions at all scales. At the broadest scale, for example, a collaborative group organized under the Federal Advisory Committee Act helped the Forest Service develop the 2012 Planning Rule and associated directives.⁸ This collaborative group addressed issues at a national scale[mdash] substituting ecological integrity for economic efficiency as the cornerstone of forest planning, developing a coarse- and fine-filter approach to protecting rare species, and ensuring that forest plans are grounded in fiscal realities. The composition, charter, and decision space for this collaborative group were well defined and its recommendations were reflected in the final product.

Collaborative groups have also been used to support forest plan revisions, with good examples in Region 8. For example, both the George Washington National Forest Stakeholders[rsquo] Group⁹ and the Nantahala-Pisgah Forest Partnership¹⁰ have provided consensus input from diverse interests on the toughest issues for planning: management area allocations, timber harvest and other vegetation management objectives, and roadmaps to generate broad support for wilderness or other Congressional designations. Further afield, the Clearwater Basin Collaborative[rsquo]s Forest Plan Subcommittee is working on similar issues.¹¹ These broader-scale collaborative groups can reveal much about the prerequisites for building trust and finding consensus, but they are less useful analogs for a collaborative group supporting a programmatic, landscape-scale project. Instead, the best model for the Foothills Project is the Cherokee National Forest[rsquo]s Goal 17 project, also known as the Dry Forest Communities Restoration project. The Goal 17 project was shaped by input from the South Zone Collaborative Group,¹² and we believe that the Foothills Project can follow a similar and equally successful track. Specifically, the Forest Service entrusted the Goal 17 Collaborative Group to develop a strategy that would increase the pace and scale of restoration work and decrease conflict over recurring issues. With information about current conditions provided by the Forest Service and stakeholders, the group recommended focusing on treatments to restore characteristic dry site communities on sites currently dominated by or encroached upon by off-site pine. In order to head off potential issues that would potentially require burdensome site-specific analysis

or conflict resolution, the group recommended sideboards to limit slopes where ground-disturbing harvest could occur and limit road construction in unroaded (Mountain Treasure) areas. Future site-specific decisions will look for opportunities to implement these programmatic priorities, and they will be made in concise EAs that are tiered to the programmatic document.¹³ The Goal 17 project analyzed cumulative, repeating impacts at the programmatic stage, allowing the site-specific EAs to only analyze issues unique to those sites. The project is working well: because there is so much broadly-supported work ready to move through the pipeline, the state forestry department is pitching in to help prepare sales. On the North Zone of the Cherokee National Forest, a collaborative group found a different solution to a familiar problem. After several years of conflict, a lawsuit, and cancelled timber sales, the Forest Service asked collaborative stakeholders to help find a new way forward. The CNF Landscape Restoration Initiative worked for several years on a science-based process to provide programmatic recommendations for future projects.¹⁴ The group found that treating sites dominated by consensus-identified uncharacteristic vegetation would maximize progress toward restoration goals and facilitate more high-consensus work getting done. That group helped the Forest Service apply the recommendations in a pilot project and provided input on subsequent site-specific projects. Although the Forest Service did not formally adopt the collaborative group's recommendations in a programmatic decision, it has adhered to the collaboratively supported priorities and pursued them in site-specific projects, reducing social conflict. In the course of recent stakeholder meetings, the Forest Service has highlighted other collaboratives around the county and there are many more that have not been discussed. In addition to the Goal 17 project, other collaboratives that seem applicable here are the Clearwater Basin and Southwestern Crown Collaboratives, which are part of the Montana Forest Collaborative Network, and 4FRI. Like the Pisgah National Forest's Grandfather District Collaborative, these are all funded as part of the Collaborative Forest Landscape Restoration Program (CFLR). While CFLR projects do not necessarily use the programmatic decisionmaking model proposed here, there are clear similarities. The CFLR program is tiered to a collaborative [idquo]proposal,[rdquo] and the forests receive funding to implement it. By law, these proposals are required to narrowly describe the kinds of treatments that are most needed to accomplish ecological restoration and fuels reduction objectives.¹⁵ CFLR projects, moreover, are subject to mandatory sideboards, such as the retention of large and old trees and limitations on roadbuilding.¹⁶ Accordingly, CFLR requires projects to pursue a narrowed focus and avoid tricky issues, just as we recommend the Forest Service should do here. The focus required by law is a major reason why these collaborative groups have been successful. If they had been asked to find consensus on contentious issues instead of commonly supported priorities, the task would have been much more difficult, if not impossible. Throughout the recent round of stakeholder meetings for the planned Foothills Collaborative Group, recurring questions have been how and when input from the Collaborative will be incorporated into the Foothills Project. Will the Collaborative be given a role in defining the scope of the project, or will its role be limited to reviewing particular implementation proposals? Looking to the success of the Goal 17 Project and the CNF Landscape Restoration Initiative, we believe strongly that the Forest Service should use the programmatic review as an opportunity to task the Collaborative Group with helping identify priorities (and sideboards) for treatments that have broad support, are ecologically beneficial, maximize benefits for the greatest number of resources, and can be accomplished within the agency's fiscal constraints. Identifying these priorities and sideboards may not be easy, but it is the kind of task well-suited for the collaborative setting. One common feature shared among all of the successful collaboratives described above is the need to find a consensus strategy that can meet each participants' needs better than the status quo. Another common feature is the fact that certain issues will not be resolved through collaborative discussions alone, no matter how well facilitated or intentioned. The risk of third rail issues creating unresolvable problems for a collaborative seems greatest when the group is charged with implementing a project it did not have a role in shaping. Therefore, we believe that the Foothills Collaborative Group should be afforded the opportunity to develop a collaborative proposal that can be compared against other alternatives in the Final PEA to support a [idquo]reasoned choice between programmatic directions.[rdquo]¹⁷

IV. Without Additional Limits, The Potential Impacts Of Activities Authorized In The Foothills Landscape Project Are Potentially Significant

As outlined in the prior letter and below, the scope of work proposed for the Foothills Landscape Project has the potential for significant environmental impacts. Unless the Forest Service adopts limits on the project to ensure that the potential environmental impacts are not significant, it must either prepare an Environmental Impact Statement ([ldquo]EIS[rdquo]) or perform sufficient analysis at the implementation stage to ensure that each and every implementation action does not itself require an EIS. CEQ regulations suggest that a programmatic document will normally be an EIS, not an EA. 40 C.F.R. [sect] 1508.28. ([ldquo]Tiering refers to the coverage of general matters in broader environmental impact statements [hellip][rdquo]) and [sect] 1502.20 ([ldquo]Agencies are encouraged to tier their environmental impact statements [hellip].[rdquo])(emphasis added to both). A programmatic EA may be used to determine whether [ldquo]a broad proposed action requires an EIS.[rdquo] FSH 1909.15 at [sect]42.1. If a programmatic EA finds that the actions authorized in the programmatic proposal are potentially significant, individually or cumulatively, then an EIS must be prepared. There is no question that the Foothills Project[rsquo]s unbounded scope has the potential for significant impacts. Therefore, the Forest Service has three choices: (i) it can adopt sufficient sideboards now to ensure against significant effects in future projects; (ii) it can prepare a programmatic EIS now; or (iii) it can prepare a programmatic EA now and potentially be required to prepare an EIS for various implementation actions.

a. Significant Impacts Under NEPA

Based on its scope, scale, duration, and lack of limits, the Foothills Project has clear potential for significant impacts on the human environment. NEPA requires federal agencies to prepare an EIS for any [ldquo]major Federal actions significantly affecting the quality of the human environment.[rdquo] 42 U.S.C. [sect] 4332(C).18 [ldquo]Human environment[rdquo] is a [ldquo]comprehensive[rdquo] term that includes [ldquo]the natural and physical environment and the relationship of people with that environment.[rdquo] 40 C.F.R. [sect] 1508.14. Nearly all actions on national forests affect the [ldquo]human environment[rdquo] to some degree. Significance is determined based on two factors: context and intensity. 40 C.F.R. [sect] 1508.27. To evaluate context, [ldquo]the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.[rdquo] 40 C.F.R. [sect] 1508.27. [ldquo]Both short- and long-term effects are relevant.[rdquo] 40 C.F.R. [sect] 1508.27. [ldquo]Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole.[rdquo] 40 C.F.R. [sect] 1508.27 and *Am. Rivers v. Fed. Energy Regulatory Comm'n*, 895 F.3d 32, 49 (D.C. Cir. 2018). [ldquo]Intensity[rdquo] [ldquo]refers to the severity of impact.[rdquo] 40 C.F.R. [sect] 1508.27(b). CEQ provided ten factors to consider when analyzing the [ldquo]intensity[rdquo] of an action. 40 C.F.R. [sect] 1508.27(b). [ldquo]Implicating any one of the factors may be sufficient to require development of an EIS.[rdquo] *Nat'l Parks Conservation Ass'n v. Semonite*, 916 F.3d 1075, 1082 (D.C. Cir.), amended in part, 925 F.3d 500 (D.C. Cir. 2019).

b. The Foothills Project[rsquo]s Unbounded Scope has the Potential for Significant Impacts

Given its sweeping scope and lack of limits, it is difficult to imagine how the Forest Service could justify a conclusion that the Foothills Project will not have significant effects. This is precisely why forest plan revisions require an EIS,¹⁹ and to the extent that the Foothills Project leaves those same broad options on the table, it will require the same. As detailed in the comments we submitted on the 2019 Draft EA, the massive scale of proposed actions could include tens of thousands of acres of commercial timber harvest, noncommercial mechanized timber harvest, prescribed burning, herbicide application, and use of industrial masticators for vegetation grinding. January 10, 2020 Letter from P. Hunter to B. Jewett re Comments on Draft EA at 12. CEQ regulations evaluate significance based on context and intensity, and the Foothills Project has the potential for significant impacts under both. The project[rsquo]s goal of [ldquo]landscape[1]scale restoration,[rdquo] DPEA at 29, suggests that project is designed to have significant effects (albeit beneficial ones). 40 C.F.R. [sect] 1508.27(b)(1)([ldquo]Impacts that may be both beneficial and adverse.[rdquo]) The changes made in the DPEA focus primarily on the process, rather than the scope of actions and potential effects. The new proposed alternative, Alternative 3, would reduce the number acres potentially subject to commercial activities by

approximately 1/3, from 157,625 acres to 104,545 acres. DPEA at 55. But the areas potentially subject to noncommercial activities would remain unchanged and the areas potentially subject to commercial activities still exceeds 100,000 acres. Id. 17 CEQ regulations identify ten intensity factors to be considered in evaluating the project's intensity, and implicating any one of the factors [ldquo]may be sufficient to require development of an EIS.[rdquo] Nat'l Parks Conservation Ass'n v. Semonite, 916 F.3d 1075, 1082 (D.C. Cir.). Without the benefit of site-specific analysis in the DPEA or limits to preclude them, all of these intensity factors are potentially triggered. The Foothills Project would impact nearly every [ldquo]interest[rdquo] on the national forest - recreational, logging, road building, wildlife, conservation, and restoration. Thus, all of the intensity factors are triggered for the project. The DPEA must be evaluated on its face and cannot be assumed to be limited where no restrictions are imposed.

c. The Foothills Project Includes Activities That Trigger an EIS Under Forest Service Regulations

The scope of the Foothills Project also includes actions that would require an EIS under the Forest Service's own regulations. Forest Service regulations direct that an EIS is normally required for proposals [ldquo]that would substantially alter the undeveloped character of an inventoried roadless area or a potential wilderness area.[rdquo] 36 C.F.R. [sect] 220.5(a)(2). Among other actions, regulations state that this requirement is triggered by [ldquo]c[on]structing roads and harvesting timber in an inventoried roadless area where the proposed road and harvest units impact a substantial part of the inventoried roadless area.[rdquo] Id. The project includes six inventoried roadless areas, constituting 2% of the total project area. DPEA at Table 51 and 4. The project area includes 99% of the Boggs Creek Inventoried Roadless Area and 100% of the Miller Creek Inventoried Roadless Area. Id. Over the course of scoping this project, activities planned within Inventoried Roadless Areas have expanded and now include [ldquo]treatment opportunities, which would meet project objectives and maintain or enhance the characteristics of those Inventoried Roadless Areas, could occur if conditions warrant action.[rdquo] Id. at 4. The DPEA contemplates both road construction and timber harvesting activities, and the DPEA includes no safeguards to ensure that these activities do not [ldquo]impact a substantial part of the inventoried roadless area.[rdquo] Accordingly, the DPEA cannot support a conclusion that an EIS is not required. The assurance that these activities would be carried out in compliance with [ldquo]overarching law, policy, and regulation that guide management activities permissible in roadless areas,[rdquo] DPEA at D4, does nothing to avoid a significance finding as these requirements apply to all agency actions in Inventoried Roadless Areas, including the actions that trigger an EIS under 36 C.F.R. [sect] 220.5(a)(2). 18

d. The Programmatic EA Should Adopt Sideboards to Help Avoid [ldquo]Significance Triggers[rdquo]

Limiting the amount of road construction and timber harvest in Inventoried Roadless Areas is one example of how the Forest Service can limit the project's scope to avoid [ldquo]significance triggers[rdquo] [ndash] actions that have the potential for significant effects unless they are expressly limited or prohibited. Caselaw clarifies the issues and circumstances frequently found to trigger a finding of significance in Forest Service decisions: [middot] Type/intensity of harvest;²⁰ [middot] Economic cost of harvest;²¹ [middot] Old-growth characteristics;²² [middot] Presence within an area potentially suitable for future protection as wilderness;²³ [middot] Proximity to a unique area such as designated wilderness;²⁴ [middot] Risk factors for soil impacts and erosion;²⁵ [middot] Sensitivity of receiving waters and fisheries;²⁶ [middot] Impacts to wetlands;²⁷ [middot] Efficacy of site-specific BMPs;²⁸ [middot] Recreational values and uses;²⁹ [middot] Scenic and aesthetic qualities of the site;³⁰ [middot] Geology of the particular area;³¹ [middot] The presence of rare species (e.g., sensitive, forest concern, regional forest concern, species of conservation concern);³² [middot] Impacts to quality of wildlife habitat;³³ [middot] Impacts to connectivity of wildlife habitat;³⁴ [middot] Condition and location of access roads;³⁵ [middot] The likelihood that the action will cause an increase of use on a particular road associated with the project;³⁶ [middot] The history of similar activities at the particular site;³⁷ [middot] Foreseeable future activities at the particular site;³⁸ [middot] The degree of scientific certainty that activities or mitigation measures will have the predicted effect given a site's unique characteristics;³⁹ [middot] Absence of data about the ecological importance of the site;⁴⁰ and [middot] Recency of data that are

subject to change over time (e.g., wildlife population data).⁴¹ Imposing sideboards on the Foothills Project to minimize these significance triggers will help the Forest Service justify FONSI's, both at the programmatic and project implementation phases. This would also track the recommendation in CEQ's Programmatic Guidance: [Idquo]identifying potential adverse impacts early during the broad programmatic planning, programmatic NEPA reviews provide a unique opportunity to modify aspects of the proposal and subsequent tiered proposals to avoid or otherwise mitigate those impacts.[rdquo] CEQ Programmatic Guidance at 34.

e. Proceeding With a Programmatic EA Risks Deferring Substantial Environmental Review

Until the Implementation Phase As discussed previously, a programmatic approach alters the timing but not the rigor of analysis required for NEPA review. But limits adopted on the scope of the project in the programmatic review can reduce the amount of subsequent review required, including by limiting the potential for significant impacts. If the Forest Service's programmatic review is limited to an EA and does not adopt limits to preclude significant effects in the future, it will defer a substantial portion of the required NEPA analysis until the implementation phase. This may leave the Forest Service in the strange position of preparing a programmatic EA but being required to prepare an EIS for individual projects at the implementation phase. EISs and EAs serve two different purposes. An EA is intended to [Idquo]provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement.[rdquo] 40 C.F.R. [sect] 1508.9(a). An EA also allows an agency to consider alternatives whenever there are unresolved conflicts in the use of its resources[mdash]meaning that different choices (such as choices of locations) will have different environmental consequences. 42 U.S.C. [sect] 102(2)(E). An EIS, in contrast, provides a more rigorous look at the impacts of a project known to have potentially significant impacts. An EIS must [Idquo]provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.[rdquo] 40 C.F.R. [sect] 1502.1. An EIS requires more detailed review and investigation of environmental risks and alternatives. N. Idaho Cmty. Action Network v. U.S. Dep't of Transp., 545 F. 3d 1147, 1153 (9th Cir. 2008). There are two ways the Forest Service can avoid deferring the bulk of NEPA review until the project implementation phase. Without substantially narrowing the focus of the project, the agency could prepare a programmatic EIS, evaluating the full range of environmental impacts that could result from the activities potentially authorized as part of the project. Having fully evaluated the range of impacts at the programmatic stage, the agency would only need to refer back to the programmatic document and apply that analysis to the site-specific conditions. But, for a project as broad and unbounded as the Foothills Project, the amount of analysis required to reach this level of detail would be enormous and would likely require an investment of resources similar to the preparation of a forest plan. Alternatively, the Forest Service could expressly limit the activities, locations, and context of proposed actions to avoid circumstances with the potential to trigger significant effects. Excluding [Idquo]significance triggers[rdquo] [ndash] actions, locations, and potential impacts that are likely to result in significant environmental impacts - would substantially reduce the likelihood that future actions would require in-depth environmental review. Further, capping the total number of activities that could be undertaken as part of the project (i.e., a limit on the number of acres commercially harvested) and distributing those caps by type of harvest, timing of harvest, watershed, and/or implementation area would further reduced potential for significant impacts. 21

V. The Forest Service Should Revise The Statement Of Purpose And Need To Narrow The Scope, Avoid Problematic Issues, And Focus The Project

The sweeping and unbounded scope of the Foothills Project risks losing the potential efficiencies of the programmatic NEPA review and will complicate the implementation of future projects. But adopting a more focused statement of purpose and need in the programmatic document will limit the amount of environmental review required at the implementation phase. NEPA requires a statement of purpose and need to [Idquo]briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.[rdquo] 40 C.F.R. [sect] 1502.13; FSH 1909.15 [sect] 11.21. This statement is

necessary to inform the public of exactly what the agency intends to do. [Idquo]NEPA forces agencies to explain what it is they seek to do, why they seek to do it, what the environmental impacts may be of their proposed action, and what alternatives might be available to the agency that might lessen environmental impact. Without a clear [lquo]what and why[rquo] statement, the public is kept in the dark.[rdquo] Soda Mountain Wilderness Council v. Norton, 424 F. Supp. 2d 1241, 1262 (E.D. Cal. 2006). Coherent purpose and need statements are critical because [ldquo]the available reasonable alternatives are dictated by the underlying purpose of the proposed action.[rdquo] Wilderness Soc. v. U.S. Forest Serv., 850 F. Supp. 2d 1144, 1163 (D. Idaho 2012). [ldquo][A] purpose can [] be unreasonable if the agency draws it so broadly that an infinite number of alternatives would accomplish [it] and the project would collapse under the weight of the possibilities.[rdquo] Webster v. U.S. Dep't of Agric., 685 F.3d 411, 422 (4th Cir. 2012). The need for a cogent statement of purpose and need applies the same in a programmatic document. [ldquo]The purpose and need sets the tone for the scoping process and the course for conducting the NEPA review.[rdquo] CEQ Programmatic Guidance at 19. A statement of purpose and need must be [ldquo]focused enough for the agency to conduct a rational analysis of the impacts and allow for the public to provide meaningful comment on the programmatic proposal.[rdquo] Id. If the statement of need is too vague and over-broad, the programmatic review risks spinning into abstraction with too many potential alternatives or alternatives so broad as to be meaningless. The DPEA certainly toes that line. The Foothills Project[rquo]s purpose is to [ldquo]create, restore, and maintain resilient ecosystems through active management.[rdquo] DPEA at 35. But as the Forest Service knows, [ldquo]restoration[rquo] and [ldquo]resilience[rquo] are not self-applying concepts. Restoration for what dimensions of ecological integrity? And at what scales? The project[rquo]s goal is further explained through eleven bullet points, such as [ldquo]Improve forest composition and structure;[rdquo] [ldquo]Reduce risks to forest health;[rdquo] and [ldquo]Enhance and provide sustainable recreation opportunities.[rdquo] Id. These eleven bullets are expanded further into twenty-seven sets of [ldquo]Existing and Desired Conditions.[rdquo] Id. at Table 16. The project[rquo]s [ldquo]Implementation Framework[rquo] goes on to describe [ldquo]more than 30 management actions (or [lquo]tools[rquo]) are proposed to meet the restoration needs throughout the landscape.[rdquo] Id. at B56. 22 This shifting and ever-expanding statement of purpose and need has consequences for the quality of the NEPA review. A project[rquo]s [ldquo]reasonable alternatives are dictated by the underlying purpose of the proposed action.[rdquo] Wilderness Soc. v. U.S. Forest Serv., 850 F. Supp. 2d 1144, 1163 (D. Idaho 2012). Each of the DPEA[rquo]s eleven bullets could stand alone as a statement of purpose and need. By seeking to accomplish them all, at the same time and across the entire Foothills Project area, the project[rquo]s underlying purpose becomes so broad as to be nearly meaningless. There are an infinite number of reasonable alternatives that could satisfy this purpose, because it includes so many different objectives that can be combined in so many different ways. CEQ encourages the opposite approach [ndash] the statement of purpose and need should be [ldquo]focused enough for the agency to conduct a rational analysis of the impacts and allow for the public to provide meaningful comment on the programmatic proposal.[rdquo] CEQ Programmatic Guidance at 19. Once again, the solution to this problem remains the same. The Forest Service should focus on a narrower or more constrained list of activities. Doing so will improve the quality of the NEPA analysis, allow the public to better understand the actions contemplated by the agency, and will ultimately result in a more successful project. The Forest Service adopted this approach with respect to the Goal 17 Project, and we strongly encourage the same to be done here.

VI. The Forest Service Should Consider Additional Alternatives To Focus The Project And Limit Its Potential Environmental Effects

The alternatives analysis is the [ldquo]heart[rquo] of the NEPA review. 40 C.F.R. [sect] 1502.14. NEPA requires federal agencies to [ldquo]study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.[rdquo] 42 U.S.C. [sect] 4332(2)(E). Agencies must [ldquo][u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.[rdquo] 40 C.F.R. [sect] 1500.2(e); see also 40 C.F.R. [sect] 1508.9(b) (EAs must discuss alternatives); Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1229 (9th Cir. 1988)

(federal action involving unresolved conflicts as to proper use of resources triggers NEPA's alternatives requirement, whether or not an EIS is also required). Accordingly, [qu]an agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, and sufficient to permit a reasoned choice.[qu] Idaho Conservation League v. Mumma, 956 F.2d 1508, 1520 (9th Cir. 1992) (internal citations omitted); see also Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 816 (9th Cir. 1988), rev'd on other grounds, 490 U.S. 332 (1989) (reasonable range of alternatives framed by purposes of project). The failure to consider a [qu]viable but unexamined alternative[qu] will render the analysis inadequate. Dubois v USDA, 102 F.3d 1273, 1289 (1st Cir. 1996); and 40 C.F.R. [sect] 1502.14. 23 CEQ[rsquo]s guidance advises that programmatic alternatives be focused enough to permit comparison of different programmatic directions. CEQ Programmatic Guidance at 31. Agencies should use a meaningful comparison of alternatives [qu]at the programmatic level to support focusing future decisions and eliminating certain alternatives from detailed study in subsequent NEPA reviews.[qu] Id. Only by [qu]articulating the reasoned choice between alternatives, with a discussion of why considered alternatives were not chosen, [can] the range of alternatives in tiered NEPA reviews can be appropriately narrowed.[qu] Id. Here, the DPEA considers two action alternatives and one no-action alternative. DPEA at 55. The two action alternatives differ only in geographic scope. Alternative 2 would authorize the full range of proposed management activities within the entire 157,625-acre project area. Alternative 3 is identical to Alternative 2, except that commercial activities would be prohibited in 53,000 acres designated unsuitable for timber production. Id. The two action alternatives demonstrate both the problem with the Forest Service[rsquo]s current approach, and the solution. First, the problem: Foothills Landscape Project seeks to authorize [qu]more than 30 management actions[qu] across over 150,000 acres. DPEA at B56. These thirty actions could be combined in a virtually infinite number of potential alternatives, and any attempt to compare the environmental impacts of so many different alternatives would quickly become impossible. Courts have cautioned against this exact situation, where a project[rsquo]s purpose is so broadly defined that an [qu]infinite number of alternatives would accomplish [it] and the project would collapse under the weight of the possibilities.[qu] Webster v. U.S. Dep't of Agric., 685 F.3d 411, 422 (4th Cir. 2012) (citation omitted). Currently, the agency has a programmatic analysis, but it is not proposing to make a programmatic decision. Instead, it is explicitly leaving all its options on the table. As a result, the DPEA does not make a detailed comparison of different programmatic directions that might be pursued. But the Forest Service knows how to fix this problem: the difference between Alternatives 2 and 3 is a limitation on where commercial harvesting activities can be conducted. The additional limit imposed in Alternative 3 is an example of the sideboards that have been discussed throughout these comments and can help narrow the universe of potential effects. By excluding commercial activities in unsuitable areas, Alternative 3 allows the Forest Service to better quantify the potential impacts of its actions and avoid an issue that could be problematic at the implementation phase (conducting commercial harvests in areas designated unsuitable). Implementing limits like this one would serve multiple purposes by avoiding [qu]significance triggers[qu] and reducing the amount of site-specific review required by precluding certain categories of potential impacts. Other useful sideboards have been proposed previously but were dismissed without adequate consideration. See, Foothills Landscape Project Scoping Summary Report (May 2018) at 8-13. For example, Alternative D (limiting time frame of project) and Alternative G (exclude treatments in Inventoried Roadless Area) would all be useful sideboards for this project. A more complete list of potential sideboards is set forth below in Section XIII. 24 Developing potential sideboards is a task uniquely well-suited for the planned Foothills Collaborative Group. Therefore, we encourage the Forest Service to afford the Collaborative Group the opportunity to develop an additional alternative with more robust sideboards and consider this new alternative in the Final Programmatic EA. Doing so will allow for the Forest Service to make a more meaningful comparison of alternatives [qu]at the programmatic level to support focusing future decisions and eliminating certain alternatives from detailed study in subsequent NEPA reviews.[qu] CEQ Programmatic Guidance at 22.

a. The No-Action Alternative Must Assume That Forest Service Activities Will Continue at the Current Rate

The Forest Service should also clarify the extent to which the No Action Alternative reflects the agency[rsquo]s current ability to undertake projects within the Foothills Project region. [qu][In] situations where there is an

existing program, plan, or policy, CEQ expects that the no-action alternative in an EIS would typically be the continuation of the present course of action until a new program, plan, or policy is developed and decided upon. CEQ Programmatic Guidance at 22. Both in the statement of alternatives and in its comparison of environmental effects, it is unclear the extent to which the No Action Alternative reflects the Forest Service's current number and frequency of actions within the Foothills Project area. For example, the discussion of alternatives states that the No Action Alternative reflects ongoing management in which individual NEPA analysis is completed for actions tiered to the Forest Plan. DPEA at 55. But it also states that the No Action Alternative forecasts potential effects should the responsible official choose not to proceed with any management activities proposed for the Foothills Landscape and that each resource would continue in its present state. Id. (emphasis added). At a minimum, the DPEA's Assumptions for Analysis Appendix D should include an assumption regarding the type, frequency, and impacts of actions assumed as part of the No Action Alternative. As currently drafted, the DPEA seemingly includes two different versions of no action. The current no action alternative assumes no action whatsoever, which, as noted above, is not what CEQ guidance requires. Alternative 2 may actually be closer to what CEQ defines as the no action alternative for a programmatic analysis. Alternative 2 doesn't narrow the decision space from the forest plan; it instead provides a landscape assessment of all options but not a proposed decision to choose one direction for future management from among all the options. See CEQ Programmatic Guidance at 9 (differentiating NEPA decisions from non-NEPA assessments). In effect, Alternative 2 proposes to continue implementing all the options from the forest plan, just as the Forest Service currently can do and is doing. To properly contrast with this open-ended alternative, the Forest Service should further develop Alternative 3 (and perhaps other action alternatives) to explore the pros and cons of different directions for future management. 25

VII. NEPA Requires That The Proposed Action's Environmental Impacts Be Given A Hard Look

NEPA declares a broad national commitment to protecting and promoting environmental quality. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). That commitment is realized through a set of action-forcing procedures that require that agencies take a hard look at environmental consequences, and that provide for broad dissemination of relevant environmental information. Id. at 350 (citations omitted). This hard look must include some quantified or detailed information supporting the conclusions of an EA. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004). An agency has satisfied the hard look requirement if it has examined the relevant data and articulated a satisfactory explanation for its action including a rational connection between the facts found and the choice made. *Black Warrior Riverkeeper, Inc. v. U.S. Army Corps of Engineers*, 833 F.3d 1274, 1285 (11th Cir. 2016) (citation omitted). The hard look requirement is violated when the agency failed entirely to consider an important aspect of the problem. *Sierra Club v. U.S. Army Corps of Engineers*, 295 F.3d 1209, 1216 (11th Cir. 2002).

a. The Hard Look Standard and Programmatic Review

The Forest Service must decide whether it intends to conduct this hard look now or later. The DPEA, as currently written, does not contain sufficient site-specific analysis to satisfy NEPA's hard look standard without additional site-specific review at the implementation phase. Although additional information has been provided compared to the prior Draft EA, much of this information is high level data regarding general conditions throughout the geographic range of the Foothills Project and does not allow for site-specific impacts of future actions to be evaluated. *Or. Nat. Res. Council Fund v. Goodman*, 505 F.3d 884, 892 (9th Cir. 2007) (Merely disclosing the existence of particular geographic or biological features is inadequate—agencies must discuss their importance and substantiate their findings as to the impacts.) The comments we previously submitted regarding the Draft EA illustrated in detail the type of site-specific analysis required to satisfy NEPA's hard look standard. See, January 10, 2020 Letter from P. Hunter to B. Jewett re Foothills

Landscape Project Draft EA Comments at 124-190. In those prior comments, we noted that all forest stands are not created equal. They vary by too many factors to capture with a few [ldquo]design elements,[rdquo] including the different habitat values, different spatial relationships to other habitats, different proximity to communities, different elevations, different slopes and aspects, different hydrology, different soil types, different past management, and different use by people. In short, each patch of forest is unique. Hoffman on behalf of NLRB v. Cement Masons Union Local 337, 468 F.2d 1187, 1192 (9th Cir. 1972) (holding that [ldquo]each parcel of real property is unique,[rdquo] and that each parcel [ldquo]serves a unique public interest because of its location and other intangible factors[rdquo]). 26 Therefore, the Forest Service has three options with respect to its evaluation of the Foothills project[rsquo]s potential impacts: (i) it can add an enormous amount of new analysis to the programmatic document; (ii) it proceeds based on the expectation that the bulk of this analysis will be deferred until the project implementation stage; or (iii) it can adopt project sideboards at the programmatic stage to reduce the number of issues and analysis required at the implementation stage. Currently, the Forest Service appears to be pursuing the second option, deferring the bulk of analysis to the future, but we are concerned it may not realize how inefficient that will be in practice. As we stated before, we believe the third option is clearly the best one.

b. Analysis of Site-Specific Impacts is Required Under the Hard Look Standard

The unique characteristics of each site proposed for treatment, as well as the particular treatment itself, determines the issues that NEPA analysis must address before the agency may act. The broader the set of issues (including issues for which the impacts may be cumulative), the more complex the analysis. At this stage, where particular sites have not been identified and priorities have not been narrowed or sideboards adopted, there is a clear limit to the analysis that the Forest Service is able to do. This leaves most of the [ldquo]hard look[rdquo] to the future. The DPEA proposes to use a series of [ldquo]indicators[rdquo] and [ldquo]measures[rdquo] to evaluate the potential impacts to different resources. DPEA at 58-105. These metrics seek to quantify the impact of proposed actions on specific environmental impacts. But they accomplish this goal to varying degrees and ultimately provide no site-specific information. The Forest Service can rely on this level of analysis in a programmatic document, but only if it intends to conduct additional site-specific analysis at implementation. But the Forest Service cannot rely on this information alone to satisfy NEPA[rsquo]s hard look requirement. Further, the Forest Service must anticipate that particular actions and sites may present environmental impacts that do not fall squarely within the framework of Indicators and Measures contained in the DPEA. The DPEA only provides a minimum a framework for considering potential impacts and will necessitate site-specific analysis at the implementation phase.

c. Implementation Area Versus Stand-Level Review

At this point in Foothills Project development, the agency[rsquo]s plans for the scale of future site-specific analysis remain unclear but we note, out of an abundance of caution, that consideration of site-specific impacts at the implementation phase must be more granular and at a smaller scale than the Implementation Areas described in the DPEA. The DPEA identifies sixteen [ldquo]Implementation Areas[rdquo] ([ldquo]IA[rdquo]) that were [ldquo]were identified for logical and operational functionality in order to strategically plan the sequence of work across the landscape.[rdquo] DPEA at 5. The DPEA suggests that concentrating [ldquo]implementation efforts at these smaller scales within the greater context of the Foothills Landscape logistically allows for efficient planning and distribution of time and resources driven by need and operational feasibility.[rdquo] Id. at 6. NEPA[rsquo]s hard look requirement necessitates more detailed, granular information than the IA-level data contained in the DPEA. Yet at several locations, the document suggests that the IA-level analysis is sufficient to satisfy NEPA[rsquo]s site-specific analysis requirement. For example, the DPEA asserts that its maps have been modified to show [ldquo]site specific conditions per IA for all resources or issues.[rdquo] DPEA at Table 15 (emphasis in original). Appendix F is titled [ldquo]Site Specific Conditions[rdquo] and contains IA-level data, and DPEA elsewhere refers back to Appendix F for [ldquo]site-specific conditions [that] are shown per resource.[rdquo] Id. at 57. If anything, the information in Appendix F demonstrates the need for further

site-specific analysis. The maps in Appendix F demonstrate the great diversity and heterogeneity in conditions found across different IAs, and within the same IAs. Compliance with NFMA and NEPA turns on taking these differences into account. Moreover, Appendix F includes no commitments regarding what specific activities will take place in a specific area. Regeneration logging on highly erosive soils with low T-factors has different effects than prescribed burning on those same soils. Designation of implementation areas does not help resolve these differences; site-specific analysis considering specific activities in specific locations does. That is why the site-specific evaluation required under NEPA requires more detailed review than IA-level information. It is perfectly appropriate for the Forest Service to use this IA-level data for planning purposes and to help identify areas potentially eligible for action based on existing and desired conditions. DPEA at 29. Further, IAs may be helpful to cap the cumulative activities within a geographic sub-region of the project and avoid concentrating actions in a way that would lead to significant impacts. But most of the Indicators and Measures identified in the DPEA cannot, and should not, be evaluated at the IA level and instead must be analyzed using more granular, stand-level data.

d. The Programmatic Document's Failure to Meaningfully Compare Alternatives is a Missed Opportunity

The DPEA's comparison of Alternatives 2 and 3 is an example of a missed opportunity to use the programmatic document to expedite future site-specific reviews. The DPEA's two action alternatives are different in one key respect — whether they authorize commercial activities in areas deemed unsuitable for timber production under NFMA. DPEA at 55. CEQ regulations direct that the alternatives analysis should be presented in [ldquo]comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.[rdquo] 40 C.F.R. [sect] 1502.14. But instead of meaningfully comparing the environmental effects of the two action alternatives, the DPEA repeatedly describes the effects of the two alternatives as similar, with Alternative 3's having effects on a [ldquo]lesser scale[rdquo] or to a [ldquo]lesser degree.[rdquo] DPEA at 61-62; 68; 70; 75; 77; and 88-89. 28 Setting aside whether this analysis is sufficient to satisfy the regulation (it is not), this cursory comparison is a critical missed opportunity for the Forest Service to get more mileage out of its programmatic review. The exclusion of commercial harvest from unsuitable areas is a perfect example of how sideboards can be used at the programmatic stage to avoid potential impacts or difficult issues at the implementation stage. But it is not enough for the agency to include this limit; it must explain how the sideboard serves to curtail the project's potential future environmental impacts. By doing this work at the programmatic phase, the Forest Service can leverage it later to expedite the environmental review at the implementation stage and incorporate the programmatic analysis by reference. Relating back to prior analysis is one of the key potential efficiencies afforded by the programmatic approach, but is only available if that comparative analysis is actually performed at the outset. 42 This type of explanation would be relatively easy regarding the removal of unsuitable areas from consideration for commercial timber harvest in Alternative 3. Areas are set aside as unsuitable for specific reasons and the Forest Plan assumes that commercial logging will not be focused in these areas. By excluding them in project proposals, the agency avoids having to assess under NEPA the tradeoffs between logging in these areas and protecting their other values, as well as the need to explain how proposed activities meet the limited exceptions under NFMA for timber production in unsuitable areas. Unfortunately, the DPEA's explanation that Alternative 3's effects will be [ldquo]the same but less[rdquo] provides little meaningful analysis to leverage in the future. The Forest Service should not only add an additional alternative with more robust sideboards, but it must also explain how those sideboards serve to curtail the potential for environmental effects of the action.

e. The DPEA's Discussion of Cumulative and Connected Actions Defers Much of Necessary Review to the Project Implementation Stage

If a programmatic proposal is not limited enough to allow for cumulative impact analysis, then such analysis can be deferred. *Salmon River Concerned Citizens v. Robertson*, 798 F. Supp. 1434, 1440 (E.D. Cal. 1992), *aff'd*, 32 F.3d 1346 (9th Cir. 1994); *Northern Alaska Environmental Center v. Lujan*, 961 F.2d 886 (9th Cir.1992) (holding that an EIS's deferral of consideration of certain potential cumulative and synergistic effects is proper tiering and

does not foreclose later analysis of these factors in a future EA). The DPEA's discussion of environmental impacts includes a section for cumulative impacts, but once again this analysis is insufficiently detailed to satisfy NEPA without substantial additional analysis. The DPEA's cumulative effects analysis is organized based on the same Indicators and Measures outlined above, but includes a brief statement regarding the potential for the cumulative impact under these measures. DPEA at 57-105. Despite the Foothills Project's lack of limits on the number, location, and types of activities involved, the DPEA largely concludes that projects authorized under the DPEA have little potential for cumulative effects. For example, the DPEA's discussion of cumulative effects on aquatic resources illustrates how this approach falls short. First, the DPEA's Indicators and Measures identify what will be measured but do not quantify or limit how much of that effect may occur. Further, NEPA requires conclusions to be supported by necessary analysis and there is no analysis to support the conclusion that aquatic effects would be "short term and small scale." The DPEA states that disturbance "is not expected to exceed 10% of any watershed," but this limit appears to be aspirational and nonbinding. Further, the conclusion that disturbances "would not appreciably increase the level of effects on aquatic resources" is also unsupported. Again, the programmatic review is most useful when it links project sideboards with potential for environmental impacts. With the benefit of this analysis, the agency can refer back to this discussion and expedite its review at the implementation stage. But when the programmatic document contains little analysis of how sideboards impact the potential for environmental impacts and particularly the potential for cumulative impacts this analysis does little work to streamline the review at the implementation stage. Although not a perfect example,⁴³ the 10% disturbance limit at least illustrates, at a conceptual level, how sideboards can be used to facilitate the consideration of cumulative effects. If the programmatic document adopted this limit as a binding parameter of the project and explained how the disturbance limit would prevent cumulative impacts on aquatic resources, then the sidebar and discussion would provide a basis for narrower review at the implementation stage.

VIII. Technical Recommendations To Improve The Foothills Project

In the comments submitted on the prior Draft EA, we identified a variety of measures that the Forest Service should adopt to improve the Foothills Landscape Project. See, January 10, 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 61-91. These include recommendations to: improve vegetation management actions; better disclose impacts to the recreation system; improve the use of prescribed fire; minimize impact to soils; and minimize impacts to aquatic resources. These comments remain largely applicable here, and are incorporated by reference. Further, these recommendations illustrate the type of technical discussion that should be considered through the Collaborative Group to define the scope of the project, prioritize actions, identify appropriate locations, and mitigate the effects of actions. As previously discussed, these considerations are intertwined with the Forest Service's NEPA review and should be considered at both the programmatic phase and the implementation phase. To stimulate further discussion and lay the foundation for future action by the Collaborative Group, we submit additional comments on the broader concepts underlying actions proposed for the Foothills Project. We also clarify our previous comments by highlighting where additional information is still needed to address previous comments.

a. Aquatic Resources

The July 2021 revision to the Foothills Project Aquatic Resources Report has some minor wording shifts, and rearrangement of paragraphs and tables. However, none of our January 10, 2020 comments to the September 2019 Foothills Project Aquatic Resources Report have been resolved. In summary, our comments requested (including but not limited to): [middot] Modeling of mass erosion and sedimentation per year and per decade, including activities throughout the watershed, not just the riparian corridor; [middot] Inclusion of larger riparian corridors to accommodate activities in steeper slopes; [middot] Consideration of impacts a minimum of 3 miles

downstream of the CNF; [middot] Addressing all stream biota, including benthic; [middot] Site specific evaluation of trout impacts; [middot] Inclusion of ephemeral stream impacts; [middot] Commitment for no mesic hardwood gap creation or new wildlife openings in the riparian corridor; [middot] Realistic BMP effectiveness, including long term failures; [middot] Disclose baseline conditions; [middot] Do not average stream ratings; [middot] Address two watershed that are not currently meeting designated uses; [middot] Evaluate stream impact from prescribed fire; 31 [middot] Commit to specific changes in recreation and fish passage structures or do not include them as mitigation strategies; [middot] Correctly calculate impervious percentage of watershed; [middot] Use all twelve stream indicators instead of only one; and [middot] Evaluate stream impacts locally instead of only watershed wide.

b. Fire and Fuels

The DPEA does not contain sufficient information to assess the impacts of the proposed use of prescribed fire. The issue is that the impacts of prescribed fire come not only from the logistics of its implementation (e.g., fire lines and connected actions) but also from the fire regime itself. As fire managers know, fire behavior can change dramatically depending on conditions. Fire is not like a light-switch, [ldquo]on[rdquo] or [ldquo]off[rdquo]. The DPEA explains there will be an implementation plan for each burn unit, but does not describe the frequency, intensity, seasonality, location or size of burn units. Some of that information is scattered in descriptions of other treatments, but there is no complete description. DPEA at B19. While the fire and fuels analysis uses several valid assumptions, it also relies on the hidden assumption that dry forests that do not burn become more flammable. A corollary of that assumption is: prescribed fires will reduce the intensity and extent of wildfires. A study in Mississippi pine-hardwood forests calls that assumption into question because researchers found that prescribed fire did not reduce the incidence, size, or intensity of wildfires.⁴⁴ Other researchers have found that prescribed fire can reduce wildfire hazard, but those results come from low productivity ecosystems where fuels accumulate slowly and fuel continuity is easily disrupted by prescribed fire. The Mississippi researchers explain their findings by postulating that fire suppression had converted the landscape from more flammable forests types to less flammable. Indeed, Nowacki and Abrams, who have been leaders in pointing out the importance of fire in Appalachian forests, argue that a lack of fire can inhibit future fires by allowing less flammable species to dominate.⁴⁵ For instance, an increase in understory maples may reduce litter flammability and raise humidity levels in the understory. In the DPEA, multiple proposed treatments aim to increase grass cover, which is easier to ignite than much of the existing groundcover. Thinning has also been used in the region to facilitate prescribed fires, and multiple thinning treatments in the DPEA would likely dry fuels, making them more likely to carry fire.

For these reasons, prescribed fire may not reduce wildfire risk in the Foothills, and other treatments may actively raise wildfire risk. This is not to say that prescribed fire cannot be used to reduce wildfire risk, only that it will not necessary do so. Additional analysis is needed to determine under what circumstances actions proposed in the DPEA would reduce wildfire risk.

c. Soils

The July 2021 revision to the Foothills Project Soil Resources Report was expanded by 92 (electronic version) pages (from 91 pages in the 9/19 version to 183 pages in the 7/21). The changes and additions seem to consist completely of organizational changes: minor wording shifts, quoting USFS guidance and NRCS soil classification, and rearrangement of paragraphs and tables. However, none of our comments to the September 2019 Foothills Project Soil Resources Report have been resolved. In summary, our comments requested (including but not limited to): [middot] Calculate site specific T-Factors for soil loss, and remove good, fair, and poor subjective and vague ratings; [middot] Site specific timelines showing cumulative effects; [middot] Define acreage to be impacted per watershed; [middot] Commit to not exceed assumptions used to estimate soil loss and compaction; [middot] Include erosion control measures for moderate risk soils; [middot] Exclude heavy equipment on unsuitable or severe rut hazard soils; [middot] Show timeline for nutrient availability from soil weathering; [middot]

Define natural inputs for plant available phosphorus; [middot] Commit to distribute slash; [middot] Provide baseline soil conditions for each specific location based on current field review; [middot] Consider impacts from old temporary roads that will be reused; and [middot] Include compaction from mastication.

d. Recreation and Transportation

We are pleased to read in the DPEA plans to permanently close some of the many failing roads on the CONF and to restrict others to administrative use only. Additional funding through programs such as Legacy Roads and Trails may help to make these aspirations a reality, and we share your hope that such funds will be available soon. The Forest Service certainly has an obligation to take these steps, as they created many of these roads to begin with. It is sobering to read of the many roads currently being used illegally, but the report is consistent with our own observations. 33 It is imperative that the Foothills Project include sideboards on any new roads, including temporary roads, to ensure that they are returned to resource production quickly after use, and to ensure that they do not become additional vectors for illegal use.

e. Vegetation

An implicit assumption in the DPEA appears to be that the landscape consists of patches of even-aged forest of different age classes, which remain in a stable proportion over time even as the location of different ages shifts across the landscape. For instance, one treatment seeks to [ldquo]establish areas of young oak forests to create a more balanced and resilient age-class distribution.[rdquo] DPEA at B8. The idea of a [ldquo]balanced[rdquo] age class distribution assumes even-aged stands and a relatively stable age distribution across the landscape. Those traits accurately describe some forested landscapes, but not the Foothills. This model better describes the forests of the Upper Midwest at the edge of the boreal forest⁴⁶. The age structure of Foothills forests differ from those of Upper Midwest because the disturbance regimes differ. Disturbance in the para-boreal forests of the Upper Midwest is dominated by large fire and straight-line wind (derecho) events, which can individually flatten over 100,00 acres of forest.⁴⁷ Forests of the Southern and Central Appalachians are typically uneven-aged with trees of many different ages occupying any given stand simultaneously.⁴⁸ This finding applies to oak forests⁴⁹, southern yellow pine forests, and mesic deciduous forests⁵⁰. Even trees with specific adaptations to high-intensity disturbance such as Table Mountain pine often form uneven-aged stands.⁵¹ Uneven-age stands are the norm in the Southern and Central Appalachians because fine scale disturbances predominate over large, intense disturbances.⁵² For southern yellow pine regeneration, these findings do not support the plan that [ldquo][a] follow up harvest to remove residual sheltering trees would occur once the site has been adequately regenerated to the target species and adequately stocked.[rdquo] DPEA at B5. Dominant trees in these uneven-aged forests reach much greater ages than currently common in the Foothills Landscape. Our research in old-growth forests of the Chattahoochee National forest produced a median age of 189 for chestnut oaks and 213.5 years for white oak, the two most common species. That longevity means that in 80 years, the threshold for [ldquo]late successional[rdquo] stands, is equivalent to a person being in their 30s. These ages are likely underestimates of the typical longevity of these species because core samples from still living trees missed the pith and were taken at roughly 4.5[rsquo] above ground, so the first several years did not appear in the core samples. These ages are also consistent with ages found by other species for trees common in the region.^{53,54} These general traits of Foothills forests have many implications for management and specific treatments. For instance, efforts to regenerate southern yellow pines often assume that they require fully open canopies and that at any one-time conditions are favorable for their regeneration throughout most of the stand. The dominance of fine-scale disturbances raises the possibility that they may require favorable seedbed conditions, but not ascend to the canopy until a fine-scale disturbance increases light levels above those typical of the stand. In fact, researchers studying an old-growth stand in the Georgia Ridge and Valley found that "[o]f the 32 pines, 31 experienced release events, with 166 release events occurring overall. Per tree, an average of 5.18 release events occurred."⁵⁵ McEwan and others studying another Appalachian old-growth forest [ldquo]posit that [fire and gap dynamics] may have a synergistic effect on long-term dynamics, wherein fire [lsquo]filters[rsquo] the seedling pool and gap openings provide canopy accession opportunities.[rdquo]⁵⁶ In mesic deciduous forests, studies

consistently find diverse and complex forests. Runkle found that canopy gaps cover 3.2% to 24.2% of old-growth stands.⁵⁷ While the research supports canopy gaps as a natural part of mesic forests, it also suggests that plans for [ldquo]intermediate thinning between gaps, retaining 70-80 ft²/ac basal area in the thinned portion of the stand[rdquo] would exceed natural levels of canopy openness. DPEA at B15.

The research suggests the canopy is closed between gaps, and retaining 70-80 ft²/ac basal area would remove a third to a half of the canopy, more opening than even the most open reference site. Potential connected actions for the treatment include [ldquo]herbicide use for release and/or mid-story reduction.[rdquo] DPEA at 49. Understory saplings play a critical role in responding to canopy gaps in mesic deciduous forests.⁵⁸ The best available science does not appear to support either the thinning outside of gaps or herbicide use to remove understory or midstory vegetation.

IX. The Foothills Project[rsquo]s Climate Change Impacts Must Be Properly Considered

[ldquo]It is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible.[rdquo] Executive Order 13,990 (Jan. 20, 2021).⁵⁹ To meet the hard look requirement under NEPA, the Forest Service must revise its analysis to more accurately disclose the effect of the Foothills Project on climate change. Recently, CEQ instructed federal agencies to [ldquo]consider all available tools and resources in assessing [greenhouse gas] emissions and climate change effects of their proposed actions, including, as appropriate and relevant, [CEQ[rsquo]s 2016 Greenhouse Gas Guidance].[rdquo] 86 Fed. Reg. 10252 (Feb. 19, 2021). That guidance cautions that [ldquo]a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA.[rdquo] 2016 CEQ Greenhouse Gas Guidance at 11. Instead, agencies should [ldquo]quantify a proposed agency action[rsquo]s projected direct and indirect [greenhouse gas] emissions, taking into account available data and [greenhouse gas] quantification tools that are suitable for the proposed agency action.[rdquo] Id. at 4. The guidance specifically notes the advantages of considering climate change effects in programmatic NEPA documents like the DPEA. Id. at 31-32. a. The Forest Service Must Reevaluate the Assumptions Underlying Its Climate Change Analysis While no assumptions are listed for climate change in Appendix D, the assessment of climate change impacts appears to rest on a few major assumptions. DPEA at D3. As discussed more below, the analysis is flawed because it focuses overwhelmingly on carbon sequestration rate but largely ignores carbon storage and the release of carbon through the Foothills Project activities. Regarding sequestration rates, the conclusion that the Foothills Project will positively influence carbon sequestration appears to rely heavily on the assumptions that climate change

will drive broad scale tree mortality and wildfire in the Foothills, and that a combination of logging and prescribed fire is able to prevent that mortality. While climate change will produce novel conditions that stress ecosystems, species may replace each other gradually rather than in large die-off events. If replacement is gradual, the broad scale die-off assumption may not hold. While climate change is expected to generally increase the risk of wildfire, mesophication[mdash] succession to less flammable vegetation types[mdash]may also be occurring in the region.⁶⁰ Indeed, our region is predicted to become wetter overall due to climate change.⁶¹ For that reason, the assumption about future wildfires may not hold. On the other side, climate change could produce such dramatic ecosystem stress that silvicultural and prescribed fire interventions will be overwhelmed, so the assumption of mitigation may not be valid. The analysis also appears to assume that fuels that would accumulate in the absence of the Foothills Project, and would be converted to atmospheric CO₂ in the coming decades via wildfire. However, wildfires only consume a small percentage of available fuels. Tree boles do not burn well and, even under extreme wildfire conditions, a large amount of surface fuel remains after fires. Fuels remaining after wildfire need to be included in the analysis. Finally, the analysis appears to assume that fire will have a dominant influence on greenhouse gas emissions in the Foothills Project area. While fire has the potential to both release CO₂ and strongly influence sequestration, it is not the only influence process. For example, vegetation growth and decay processes also have strong impacts and will also be influenced by the Foothills Project. Analyses is needed to determine the relative strengths of these different influences. Beyond these assumptions, the relationship between fuels and carbon storage needs to be clarified or reanalyzed. Greenhouse gas emissions

under Alternative 1 are described as [ldquo][fuel]loading and lower carbon sequestration, with a higher carbon release over the long-term as fuel loading increases within forests.[rdquo] DPEA at 70. Fuel is, by definition, made out of carbon compounds. The fire triangle that is basic to wildland fire training includes oxygen, heat, and fuel because heat triggers a chemical reaction between the fuel and the oxygen that produces CO₂ and H₂O. Fire is literally a process of converting stored carbon into greenhouse gases. Taking this basic understanding that fuel-loading is literally carbon sequestration and applying it to the Alternative 1 greenhouse gas emissions, we get [ldquo][carbon sequestration] and lower carbon sequestration, with a higher carbon release over the long-term as [carbon sequestration] increases within forests.[rdquo] DPEA at 70. That conclusion does not make sense. Considering fuel accumulation now and carbon release in a wildfire later does not resolve the conundrum because, as discussed above, wildfires would release only part of the accumulated

fuel. Alternatives 2 and 3 have similarly contradictory impact statements, only with the direction of changes reversed. Similarly, the conclusion that [ldquo][t]he long-term effects would last as long as treatments are being maintained to reduce the fuel loading[rdquo] does not make sense. DPEA at 71. The presumed effect in this case is carbon sequestration, which is in fact accomplished by fuel loading. Reducing fuel loading would reduce carbon storage. Using prescribed fire to consume fuels now will prevent a future wildfire from releasing those same fuels as CO₂ in the future, but only because the current prescribed fire would release those fuels as CO₂ now. The influence of prescribed fire on carbon sequestration is an area of active research. Studies using different scales and assumptions in different ecosystems have produced a variety of results. However, a recent full ecosystem carbon modeling that accounts for the potential of prescribed fires to prevent wildfires found that whether prescribed fires increase or decrease net emissions depends on their frequency and how much they can reduce the risk of severe wildfires.⁶² b. The Forest Service Must Evaluate Carbon Storage, Not Just Carbon Sequestration Critically, the DPEA falls short of the mark by ignoring the project[rsquo]s largest single contribution to climate change effects: harvesting thousands of acres of trees. According to a 2015 Forest Service analysis, the CONF stores approximately 65 megatons of carbon.⁶³ The disturbance leading to the greatest reduction in carbon storage[mdash]by far[mdash]is timber harvest which, between 1990 and 2011, accounted for 83% of the disturbances affecting carbon storage on the forest.⁶⁴ The second highest disturbance was wind events, which accounted for 11% of disturbances affecting carbon storage, followed by fire and insects at 3% each.⁶⁵ Nationally, carbon losses from timber harvests are five times higher than those from all other disturbances combined, including wildfire.⁶⁶ Simply put, the greatest source of greenhouse gas emissions on the CONF and forests nationwide is timber harvest.

Harvesting trees

immediately releases significant amounts of accumulated carbon back into the atmosphere with only a fraction of live-tree carbon stored in wood products long-term.⁶⁷ One study estimates that harvesting, primary processing, and secondary processing may leave as little as 18% of live-tree volume to be converted into harvested wood products.⁶⁸ Another estimates that of the wood delivered to mills[mdash]which excludes significant amounts of wood discarded at the harvesting site[mdash]only 67.5% of softwoods are converted to harvested wood products, and 56.8% of hardwoods, [ldquo]with the balance of carbon assumed to be immediately emitted to the atmosphere.[rdquo]⁶⁹ These and other studies indicate that conservatively at least 50% of the carbon stored in a live tree is emitted to the atmosphere at the time of harvest. The DPEA sidesteps this impact by focusing on carbon sequestration instead of storage. But these concepts are not interchangeable. Carbon sequestration refers to the rate at which carbon is removed from the atmosphere and sequestered in trees. For example, Forest Service data indicate that an oak/pine stand on the CONF increases its rate of carbon sequestration from harvest until approximately thirty years of age, peaking at a net annual primary productivity of 8.5 tons of carbon per hectare.⁷⁰ The rate of sequestration subsequently decreases slightly through approximately age 100 but then maintains a primary productivity of 5 tons per hectare.⁷¹ We agree with the agency that these older trees likely sequester carbon at a lower overall rate. See Foothills 2021 Climate Change Specialist Report at 4. But that is only a piece of the puzzle. Carbon storage is the amount of carbon stored in a living tree. Using the sequestration rates provided by the Forest Service, an 80-year old pine/oak stand is predicted to store over 450 tons of carbon.⁷² Harvesting that stand will release at least 225 tons of carbon into the atmosphere almost immediately. A new stand will not re[1]sequester that lost carbon for nearly 40 years[mdash]and that does not take into account the carbon that would have continually been sequestered in the 80-year old stand had it not been harvested which would extend the amount of time to re-sequester the carbon emitted at harvest by decades. This

is the point: while younger trees may sequester carbon at higher rates, harvesting

older trees emits carbon to the atmosphere that, in the best case scenario, will not be recoverable for decades to centuries. Net emissions matter in the short term, while we still have a rapidly-closing opportunity to limit catastrophic climate change. The agency should not approach this issue with blinders on. The agency's suggestions that [effects occurring within 10 to 15 years following each treatment are considered short-term and are considered recoverable by natural processes] is therefore misplaced. Foothills 2021 Climate Change Specialist Report at 2. The carbon emission effects associated with timber harvests proposed under the Foothills Project are irrecoverable on any timescale relevant to avoiding the worst impacts of climate change. This is not disclosed anywhere in the DPEA. The agency has tools available to help it [quantify [the Foothills Project's] direct and indirect [greenhouse gas] emissions.] The agency has already estimated baseline carbon stocks on the CONF. Based on the ecotypes and stand ages targeted by specific activities in the Foothills Project, the agency can make basic predictions about the amount of carbon released via harvesting. With additional information about harvested timber end uses, the agency can make additional estimates regarding carbon emissions over the life of the harvested wood product. Some of this information and the tools necessary to complete this analysis are available on the agency's website where it has compiled [a toolbox of calculation tools to help quantify forest carbon for planning and reporting.]⁷³ Assessing carbon storage also requires accounting for belowground carbon because soils can be a major carbon pool in temperate forests. Timber harvests typically decrease soil carbon, and soil carbon characteristically takes several decades to return to pre-harvest levels.⁷⁴ In temperate forests, timber harvests reduce soil carbon by an average of 8%.⁷⁵ These effects may vary by the intensity of harvest.⁷⁶ c. The Forest Service Should Evaluate the Social Cost of Carbon Emissions One specific tool the agency should use is the social cost of carbon protocol. That tool is designed to [allow agencies to incorporate the social benefits of reducing emissions of . . . greenhouse gases, or the social costs of increasing such emissions, in decision making.] Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990, 9 (Feb. 2021). The federal government recently announced new dollar estimates of the social cost of carbon per metric ton of CO₂ to [enable Federal agencies to immediately and more appropriately account for climate impacts in their decision-making.]⁷⁷ With the tool available, the Forest Service must use it or explain why its application is inappropriate here. *Vecinos para el Bienestar de la Comunidad Costera, et al., v. FERC*, No. 20-1045, 2021 WL 3354747, at *4 (D.C. Cir. Aug. 3, 2021) (remanding agency decision for failure to apply social cost of carbon protocol or explain why its application was unnecessary). We agree with the agency that the end product of harvested wood can affect a timber sale's carbon impact and the social cost associated with emitting carbon into the atmosphere. In that regard, the Forest Service points to the possibility that [wood products can be used in place of other, more emission intensive materials, like steel or concrete, and wood-based energy can displace fossil fuel energy.] Foothills 2021 Climate Change Specialist Report at 3. The agency uses the statement to downplay the overall climate effects of the Foothills Project but it falls flat for two reasons. First, we are aware of no information suggesting that wood harvested as part of the Foothills Project will be used to replace steel, concrete, or fossil fuel energy. Without supporting information, the agency cannot suggest that the climate effects of its timber harvest will be mitigated based on potential, unconfirmed end uses of the wood product. Second, burning wood instead of fossil fuels to generate energy is not beneficial from a climate standpoint. Combustion of forest biomass emits more CO₂ per unit of energy generated than fossil fuels like coal or natural gas.⁷⁸ And as discussed above, new forests grown to replace those harvested for bioenergy will not re-sequester the carbon emitted at harvest for decades to centuries[mdash]a timescale inapplicable to addressing climate change's most serious and immediate threats. In summary, to properly consider the Foothills Project's impacts on climate change and meet NEPA's hard look standard, the agency must analyze and disclose the amount of carbon emitted through timber harvesting. These emissions should be placed into context by using the social cost of carbon protocol. Proper accounting of the project's carbon effects is not just a paper exercise; the severity of the climate crisis could lead the agency to develop a new action alternative with fewer climate change effects or forego the harvesting of older trees that are currently storing the highest amounts of carbon. X. Precluding Activities and Locations Likely To Trigger Significant

Environmental Effects Is The Logical Extension Of The Draft Programmatic EA's Decision Framework In Appendix B, the DPEA describes a Decision Framework that would guide implementation of the Foothills Project. This decision framework is structured around a series of proposed actions, followed by Existing Condition (need), Desired Conditions, Known Conditions That Trigger Restoration Actions, and How to Implement Change. DPEA at B2 - B38. This Decision Framework is the perfect location for the Forest Service to implement sideboards, and is the obvious and logical extension of the decision process that the agency already proposes. Just as the Decision Framework explains the conditions that would trigger certain actions, it should also use sideboards to limit or preclude the activity in certain areas. In other words, context can be used to define both when an action would be taken and when it would not be taken. Without expressly defining such limits, the DPEA must assume that the action can and would be used in all circumstances that otherwise meet the Existing Conditions and Known Conditions that Trigger Restoration Actions in the Decision Framework. The use of sideboards also fits neatly into the decision trees for the project. DPEA at B59 - B62. These decision trees guide the Forest Service's treatment activities in the four identified conditions (Immature Pine, Mature Pine, Mesic, Non-Mesic) through a series of yes/no questions. But beyond identifying the suitable activity, the same decision tree of yes/no questions could be used to apply project sideboards and identify areas where the actions would be inappropriate.

XI. Evaluating The Effectiveness Of The Project Design Features Will Reduce The Amount Of Mitigation Analysis Required At The Implementation Phase CEQ regulations require the alternatives analysis to consider appropriate mitigation measures not already included in the proposed action or alternatives. 40 C.F.R. [sect] 1502.14(f) and 40 C.F.R. [sect] [sect] 1508.20. The DPEA's discussion of mitigation appears to be through the requirements listed in the Project Design Features, Best Management Practices, and Standards. DPEA at B50-B55. These Project Design Features must be implemented, depending on the triggering activities of the treatment, for all proposed actions. Id. at 45. These requirements are derived from sources including Georgia's Best Management Practices for Forestry Practices, USFS Southern Regional guidance or Foothills Landscape-specific design features and are in addition to Forest Plan standards and BMPs. Id. 42 Mitigation is an inherently site-specific inquiry, so courts have sanctioned the use of an adaptive mitigation approach in programmatic documents. *Wilderness Soc'y v. U.S. Bureau of Land Mgmt.*, 822 F. Supp. 2d 933, 941 (D. Ariz. 2011), *aff'd sub nom. Wilderness Soc. v. Bureau of Land Mgmt.*, 526 F. App'x 790 (9th Cir. 2013). This approach allows the agency to tailor the mitigation measures based on site-specific analysis, monitoring, and other factors. But, an adaptive mitigation approach that lacks at least some evaluation of effectiveness is useless in making that determination. Id. at 941 (emphasis in original). Without analytical data to support . . . proposed mitigation measures, they do not amount to anything more than a mere listing of good management practices that is insufficient for NEPA purposes. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1151 (9th Cir. 1998), overruled on other grounds by *Lands Council v. McNair*, 537 F.3d 981 (9th Cir. 2008). Thus, the Forest Service is not required to identify with specificity the mitigation measures that will be used in each future project at this point. However, the review of mitigation in a programmatic document must discuss existing conditions, potential environmental impacts, and the effectiveness of potential mitigation measures in addressing these impacts. *Wilderness Soc'y v. U.S. Bureau of Land Mgmt.*, 822 F. Supp. 2d at 943-4 (Noting that programmatic FEIS discussed the effectiveness of mitigation measures applicable to travel, livestock grazing, environmental justice, and special status species.) And, as in any mitigated FONSI, the Forest Service must ensure that the mitigation measures needed to avoid significant impacts are binding commitments, not just possible options. This is where the DPEA's discussion of Project Design Features falls short. The Project Design Features are identified only by broad categories (e.g., Soil and Water, Non-Native Invasive Species, and Vegetation Management) and include no discussion linking a specific Project Design Feature to the specific environmental impact that would be mitigated. And there is no information regarding the measure's potential effectiveness. Without some information regarding a Project Design Feature's effectiveness, it is impossible to understand the extent to which they could be effective in mitigating the environmental effects of a proposed action. This discussion of effectiveness can and should be addressed at the programmatic level. Even if the list of Project Design Features was sufficient to pass muster at the programmatic stage, its lack of detail will be a problem at

the project implementation stage. Without information regarding the effectiveness of a specific Project Design Feature in mitigating an environmental effect, this analysis will do little work in addressing the mitigation analysis required at a specific site. Conducting this additional level of review at the programmatic stage will allow the Forest Service to refer back to the analysis and expedite its review at the implementation stage. Further, the DPEA relies on this same discussion to dismiss the potential cumulative effects to Biological Resources and Terrestrial Wildlife. DPEA at 68 and 88. It is not possible to validate this statement (or any other assumptions regarding the impact of design features and 43 mitigation measures) without analysis discussing the measure's effectiveness. Past monitoring data, to the extent it is available, could help the Forest Service overcome this hurdle. For this same reason, the Foothills Project should include a robust monitoring program to evaluate the success and effects of covered actions over time. Once again, the use of sideboards can assist the agency here. Under CEQ regulations, mitigation includes "[a]voiding the impact altogether by not taking a certain action or parts of an action." 40 C.F.R. [sect] [sect] 1508.20(a). Precluding certain actions at the programmatic phase allows the agency to incorporate mitigation into the project's design by excluding potential impacts from the outset. Avoiding environmental impacts altogether is not only environmentally preferable, but is also the most efficient approach for the agency because it avoids the need for site-specific application of mitigation to impacts at the implementation phase.

XII. Future Tiered Actions Must Demonstrate Compliance With The National Forest Management Act

In our January 10, 2020 comments on the Draft EA, we raised several concerns related to compliance with the National Forest Management Act. See 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 95-115. The DPEA does not resolve several of those concerns so we reincorporate those earlier comments here. However, we understand that the agency plans to tier future site-specific environmental reviews to the current programmatic EA, and many of our concerns could potentially be resolved through that future tiering process. As a result, we reiterate our concerns only briefly. First, the CONF Forest Plan requires site-specific activities, such as timber sales, to be supported by site-specific analysis. The Forest Plan Record of Decision commits that "[f]inal decisions on proposed projects will be made on a site-specific basis using appropriate analysis and documentation." Forest Service, Record of Decision for the Final Environmental Impact Statement of the Land and Resource Management Plan Revision for the Chattahoochee-Oconee National Forests (Jan. 2004) at 28. The Forest Plan also includes the requirement: "[A]ny decisions on projects to implement the Plan are based on site-specific analysis." Forest Service, Land and Resource Management Plan: Chattahoochee-Oconee National Forests (2004) at 2-2. The analysis prepared to date in the DPEA does not meet this site-specificity requirement. Instead, "[t]reatments . . . will be determined based on the conditions on the ground and the desired conditions for the landscape" later. DPEA at 29. To be clear, we support a tiered approach. But we want to underscore that the agency cannot implement most of the proposed actions with no further analysis without running afoul of its Forest Plan and NFMA. Future site-specific analysis is additionally necessary to show that on-the-ground actions are consistent with the various requirements of the Forest Plan. See 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 110-114. Second, we support the sideboard adopted in Alternative 3, which removes management prescriptions designated as unsuitable for timber production from consideration for commercial logging activities. Timber production activities are generally prohibited on unsuitable lands with some minor exceptions. 16 U.S.C. [sect] 1604(i). Removing unsuitable management prescriptions from consideration for commercial timber harvest is a logical step to streamline future tiered analyses, avoid conflict over whether certain activities meet the limited exceptions to timber production in those areas under NFMA, and allow the agency to implement on-the-ground activities more efficiently. Further, we anticipate that avoiding commercial activities in unsuitable prescriptions will not meaningfully detract from the agency's ability to pursue its objectives in the Foothills landscape as it still leaves over 104,000 [suitable] acres available for commercial timbering activities. DPEA at 55. Third, the DPEA continues to fail to demonstrate "[t]hat timber will be harvested . . . only where . . . soil, slope, or other watershed conditions will not be irreversibly damaged." 16 U.S.C. [sect] 1604(g)(3)(E)(i). Again, this concern can be resolved through future, site-specific analysis. We commend the Forest Service for providing additional information in the DPEA and for presenting the information more clearly. But the Implementation Area-level information is still insufficient to show compliance with NFMA's substantive standards related to soils, slopes, and watershed conditions. That analysis can only be completed when the agency is considering specific

actions in specific places; now, the agency's proposal remains too high-level. For example, to demonstrate a lack of significance under NEPA, and consistency with NFMA's substantive requirements, the agency relies on keeping soil loss below certain thresholds for specific soils. See, e.g., Foothills 2021 Soil Report at 80-84. This threshold is referred to as the T-factor. Id. at 16-17 (providing T-factors for various soil types). These T-factors can vary significantly across implementation areas. For instance, approximately 1/3 of the Tiger Implementation Area cannot withstand soil loss of greater than 2 tons/acre/year, while 2/3 can withstand losses of up to 5 tons/acre/year. Id. at 17. This is a significant difference that must be considered as the agency plans site-specific actions in this Implementation Area. If regeneration logging may cause the loss of 2 or more tons of soil per acre annually, it cannot be allowed in 1/3 of this Implementation Area without potentially running afoul of NEPA and NFMA. Because there are no site-specific (i.e., activity-specific and location-specific) proposals before the agency right now, it cannot meaningfully gauge compliance with this requirement. The best the agency offers is that literature reviews suggest erosion rates can be kept below what NRCS has rated the T-Factor for more than 99% of the soils. Id. at 40. This is insufficient. We do not have access to the cited studies but we doubt they stand for the proposition that site-specific considerations are not necessary because past actors have successfully limited soil loss. If anything, we suspect these past actors kept soil loss below various threshold specifically by taking site-specific considerations into account—something the agency is deferring in the DPEA. 45 More to the point, past analyses by the CONF demonstrate why this site-specific analysis is necessary. The agency completed site-specific T-factor analysis as part of its Union County Target Range Project. That analysis showed the project would cause a loss of 3.9 tons/acre/year which was just below the applicable threshold of 4 tons/acre/year. See Soil and Water Resources Report For the Proposed Union County Target Range Project at 8 (Aug. 2019). That level of soil loss would exceed the T-factor for nearly half of the acreage open to logging under Alternative 3 of the Foothills Project. See Foothills 2021 Soil Report at 17. The potential to exceed the T-factor is real and must be taken into account in site-specific analysis and design to ensure compliance with NEPA and NFMA. While our comments focus on T-factor analysis as an example to explain why future, site-specific analysis is necessary to demonstrate compliance with NFMA's requirements, our concerns are not limited to T-factor considerations only. Similar points could be made regarding the need for site-specific planning and analysis on soils with very severe erosion hazard ratings. The point is the information currently before the agency is insufficient to demonstrate NFMA compliance. We support the agency's proposal to tier site-specific reviews to the current DPEA and look forward to engaging with the agency in that process. XIII. Example Sideboards For The Foothills Project's Programmatic Review The recurring theme throughout these comments is the need to focus and limit the potential scope of the Foothills Project. The tension here is obvious. On one hand, the Forest Service seeks to avoid limiting its ability to undertake future actions that it may seek to pursue as part of this project. On the other hand, proceeding with the project's current unlimited menu of options risks losing the potential efficiencies of the programmatic approach and may limit the usefulness of the Foothills Collaborative Group. But, as the Goal 17 Project illustrates, there is a better way forward. The Forest Service can find a middle ground by crafting a programmatic project that allows it to achieve most of its objectives, implement a more flexible and efficient NEPA review, and improve project support through the Collaborative Group. This result can be achieved through the use of carefully crafted project sideboards. To that end, below is a list of potential sideboard topics that the Forest Service could use to focus and streamline the Foothills Project. These would allow the Forest Service to pursue many (or even most) of the actions currently contemplated as part of the Foothills Project. But, by better defining the project's outer bounds and addressing third rail issues, the Forest Service can avoid entangling the vast majority of uncontroversial projects with the few controversial ones. And, as stated previously, excluding a project now does not prevent the Forest Service from pursuing it later. Therefore, we suggest that the Collaborative Group should be afforded the opportunity to develop sideboards regarding topics including the following: 46 [middle dot] Habitat of threatened and endangered species; [middle dot] Areas containing Section 106 resources; [middle dot] Commercial timber harvest in Georgia Mountain Treasure Areas; [middle dot] Commercial timber harvest in existing old growth stands; [middle dot] Actions in Inventoried Roadless Areas; [middle dot] The duration of the project; [middle dot] Activities within a half mile from an existing road; [middle dot] Ecological integrity, including species composition and fine scale structure. [middle dot] Soil types and erosion hazard areas; [middle dot] Total acres of commercial timber harvest; [middle dot] Total acres of noncommercial timber harvest; [middle dot] Total number of

miles of new roads; and [middot] Tree thinning activities in mesic areas. These are intended for illustrative purposes only, and we believe that the Collaborative Group should discuss and formally recommend specific sideboards for the project. These collaborative recommendations, in turn, should be incorporated as part of a new alternative in the Final Programmatic EA. XIV. Conclusion We appreciate the Forest Service's willingness to revisit its approach to the Foothills Landscape Project, the Foothills Collaborative Group, and the NEPA review of this project. If properly employed, the combination of the programmatic NEPA review and the Collaborative Group have the potential to help the Forest Service implement the project with greater flexibility, efficiency, and stakeholder support. But doing so will require focusing the scope of the project, adopting sideboards to avoid potentially divisive issues, and sharing decision space with the Collaborative Group throughout the decision-making process. We look forward to working with the Forest Service to develop these sideboards, develop a more focused alternative, and put the Foothills Project on a course for success. We are happy to discuss any of these matters further and look forward to continued participation in the Foothills Collaborative stakeholder group.

Sincerely, Nicole Hayler Executive Director Chattooga Conservancy 867 Chattooga Ridge Road Ben Prater Director, Southeast Program Defenders of Wildlife Rankin Ave., 2nd Floor 47 Mountain Rest SC 29664 (864) 647-9849 info@chattoogariver.org Asheville, NC 28801 (828) 412-0981 bprater@defenders.org Anne Heikkila Board Chair Georgia ForestWatch 81 Crown Mountain Place Bldg. C, Suite 200 Dahlonega, GA 30533 (706) 782-6097 director@gafw.org Larry Winslett Wildlands and Wildlife Comm. Chair Sierra Club, Georgia Chapter 743 E. College Ave., Suite B 1 Decatur, GA 30030 (404) 607-1262 winfog@windstream.net Brian L. Gist Senior Attorney Southern Environmental Law Center Ten 10th Street NE Suite 1050 Atlanta, GA 30309 404-521-9900 bgist@selcga.org Hugh Irwin Senior Conservation Specialist The Wilderness Society P.O. Box 817 Black Mountain, NC 28711 828-820-2885 Hugh_irwin@twc.org CC: Stephanie Israel (CONF)

1 The Council on Environmental Quality is currently in the process of reevaluating the 2020 revisions to its NEPA regulations, citing serious concerns with the legality of those regulations. Further, the 2020 CEQ NEPA Regulations are the subject of ongoing legal challenges. Therefore, all citations to the CEQ NEPA regulations in this comment letter will refer to the 1978 version of these regulations unless stated otherwise.
<https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol37/pdf/CFR-2019-title40-vol37.pdf#page=474>

2 Memorandum on Effective Use of Programmatic NEPA Reviews, Council on Environmental Quality (December 18, 2014) https://www.energy.gov/sites/default/files/2014/12/f19/effective_use_of_programmatic_nepa_reviews_18dec2014.pdf

3 Project implementation requires a site-specific decision, and site-specific decisions require site-specific analysis. *Ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095-97 (9th Cir. 2006). The actual location of development greatly influences the likelihood and extent of habitat preservation. Disturbances on the same total surface area may produce wildly different impacts on plants and wildlife depending on the amount of contiguous habitat between them. *New Mexico ex rel Richardson*, 565 F.3d at 706. *Stein v. Barton*, 740 F. Supp. 743, 749 (D. Ak. 1990) (NEPA requires site-specificity to ensure that agencies are making informed decisions prior to acting and that the public is given a meaningful opportunity to participate in those decision-making processes); *City of Tenakee Springs v. Block*, 778 F.2d at 1407 (reasoning that an EIS must give decisionmakers sufficient data); *New Mexico ex rel Richardson v. Bureau of Land Management*, 565 F.3d 683, 718-19 (10th Cir. 2009) (requiring site-specific NEPA analysis when agency did not propose to undertake a future NEPA process).

4 *Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989, 995 (9th Cir. 2004) (holding numeration of logging

acres and road miles insufficient to describe actual environmental effects).

5 Or. Natural Res. Council Fund v. Goodman, 505 F.3d 884, 892 (9th Cir. 2007) (holding the Forest Service's failure to discuss the importance of maintaining a biological corridor violated NEPA, explaining that "[m]erely disclosing the existence of a biological corridor is inadequate" and that the agency must "meaningfully substantiate [its] finding").

6 For comparison, see Decision Notice for the Cherokee National Forest's Goal 17 project at 2-3.
https://www.fs.usda.gov/nfs/11558/www/nepa/110674_FSPLT3_4840187.pdf 11

7 https://www.fs.usda.gov/nfs/11558/www/nepa/107667_FSPLT3_5112645.pdf

8 <https://www.fs.usda.gov/main/planningrule/committee> 13

9 <https://www.fs.usda.gov/detail/gwj/news-events/?cid=FSEPRD488746>

10 <https://npforestpartnership.org/>

11 <https://clearwaterbasincollaborative.org/subcommittees/forest-plan-revision/>

12 https://www.fs.usda.gov/nfs/11558/www/nepa/110674_FSPLT3_4660332.pdf

13 E.g., https://www.fs.usda.gov/nfs/11558/www/nepa/113680_FSPLT3_5359354.pdf;
<https://www.fs.usda.gov/project/?project=59945>

14 <http://www.communityplan.net/cherokee/>

15 PL 111-11 [sect] 4003(c) (2009).

16 Id.

17 CEQ Programmatic Guidance at 31.

18 The adjective "major" for purposes of NEPA does not have a meaning independent of significantly. 40 C.F.R. [sect] 1508.18. 16

19 36 C.F.R. [sect] 219.16(a)(2).

20 Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997); House v. Forest Service, 974 F. Supp. 1022 (E.D. Ky. 1997).

21 Kettle Range Cons. Group v. Forest Service, 148 F. Supp. 2d 1107 (E.D. Wash. 2001).

22 Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997); Lands Council v. Cottrell, 731 F. Supp. 2d 1028 (D. Idaho) (R&R adopted 731 F. Supp. 2d 1074); Neighbors of Cuddy Mountain v. Forest Service, 137 F.3d 1372 (9th Cir. 1998); Idaho Sporting Cong. v. Alexander, 222 F.3d 562 (9th Cir. 2000) (overruled on other grounds); Wildwest Inst. v. Austin, 2006 WL 8435846, at *1 (D. Mont. 2006).

23 Lands Council v. Martin, 529 F.3d 1219 (9th Cir. 2008); Mountaineers v. Forest Service, 445 F. Supp. 2d 1235 (W.D. Wash. 2006). 24 Sierra Club v. Bosworth, 352 F. Supp. 2d 909 (D. Minn. 2005).

25 Cowpasture River Pres. Ass[rsquo]n, 911 F.3d 150, 177 (4th Cir. 2018); Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Kettle Range Cons. Group v. Forest Service, 148 F. Supp. 2d 1107 (E.D. Wash. 2001); Blue Mountain Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998); Wildwest Inst. v. Austin, 2006 WL 8435846, at *1 (D. Mont. 2006).

26 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); League of Wilderness Defenders v. Forest Service, 2005 WL 3307087, at *1 (D. Or. 2005).

27 Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009).

28 Colorado Env[rsquo]l Coalition v. Dombeck, 185 F.3d 1162, 1173 (10th Cir. 1999); Ohio Valley Env[rsquo]l Coalition v. Hurst, 604 F. Supp. 2d 860, 889 (S.D.W.Va. 2009); Hells Canyon Pres. Council v. Connaughton, 2012 WL 13047991 (D. Or. 2012) (R&R adopted 2013 WL 665134 (2013)).

29 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Sierra Club v. Bosworth, 352 F. Supp. 2d 909 (D. Minn. 2005). 19

30 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997).

31 House v. Forest Service, 974 F. Supp. 1022 (E.D. Ky. 1997).

32 Lands Council v. Cottrell, 731 F. Supp. 2d 1028 (D. Idaho)(species viability).

33 Found. for N. Am. Wild Sheep v. Dep[rsquo]t of Ag., 681 F.2d 1172 (9th Cir. 1982).

34 Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009).

35 Or. Nat. Desert Ass[rsquo]n v. Rose, 921 F.3d 1185, 1189 (9th Cir. 2019); Klamath-Siskiyou Wildlands Ctr. v. BLM, 387 F.3d 989 (9th Cir. 2004).

36 Found. for N. Am. Wild Sheep v. Dep[rsquo]t of Ag., 681 F.2d 1172 (9th Cir. 1982).

37 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997); Conservation Congress v. Forest Service, 2013 WL 4829320, at *1 (E.D. Cal. 2013).

38 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988).

39 Blue Mountain Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998); Cascadia Wildlands v. Forest Service, 937 F. Supp. 2d 1271 (D. Or. 2013).

40 Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009).

41 Klamath-Siskiyou Wildlands Ctr. v. Forest Service, 373 F. Supp. 2d 1069 (E.D. Cal. 2004)

42 [ldquo]For example, in the absence of certainty regarding the environmental consequences of future proposed actions, agencies may be able to make broad program decisions and establish parameters for subsequent analyses based on a programmatic review that adequately examines the reasonably foreseeable consequences of a proposed program, policy, plan, or suite of projects.[rdquo] CEQ Programmatic Guidance at 11. 29

43 A 10% limit on a disturbance across an entire watershed could still allow appreciable cumulative effects if all

of the disturbances are concentrated in a specific location, in a limited timeframe, and depending on intensity. Once again, more explanation is necessary to ensure that this limit achieves the intended results.

44 Brewer, Stephen, and Corey Rogers. "Relationships between prescribed burning and wildfire occurrence and intensity in pine[ndash]hardwood forests in north Mississippi, USA." *International Journal of Wildland Fire* 15, no. 2 (2006): 203-211.

45 Nowacki, G.J. and Abrams, M.D., 2008. The demise of fire and [ldquo]mesophication[rdquo] of forests in the eastern United States. *BioScience*, 58(2), pp.123-138. 32 the

46 Heinselman, M.L., 1973. Fire in the virgin forests of the Boundary Waters Canoe Area, Minnesota. *Quaternary research*, 3(3), pp.329-382.

47 Frelich, L.E., 2002. *Forest dynamics and disturbance regimes: studies from temperate evergreen-deciduous forests*. Cambridge University Press.

48 Abrams, M.D., Orwig, D.A. and Demeo, T.E., 1995. Dendroecological analysis of successional dynamics for a presettlement-origin white-pine-mixed-oak forest in the southern Appalachians, USA. *Journal of Ecology*, pp.123-133.

49 McEwan, R.W., Hutchinson, T.F., Ford, R.D. and McCarthy, B.C., 2007. An experimental evaluation of fire history reconstruction using dendrochronology in white oak (*Quercus alba*). *Canadian Journal of Forest Research*, 37(4), pp.806-816.

50 Lorimer, C.G., 1980. Age structure and disturbance history of a southern Appalachian virgin forest. *Ecology*, 61(5), pp.1169-1184.

51 Brose, P.H. and Waldrop, T.A., 2006. Fire and the origin of Table Mountain pine pitch pine communities in the southern Appalachian Mountains, USA. *Canadian Journal of Forest Research*, 36(3), pp.710-718. 52 Runkle, J.R., 1982. Patterns of disturbance in some old-growth mesic forests of eastern North America. *Ecology*, 63(5), pp.1533-1546. 34

53 Johnson, K.E., Smith, L.G. and Brosi, S.L., 2017. How old is the old-growth? *Dendrochronological Assessments to Protect Unique Appalachian Forest*.

54 Speer, J.H., Grissino-Mayer, H.D., Orvis, K.H. and Greenberg, C.H., 2009. Climate response of five oak species in the eastern deciduous forest of the southern Appalachian Mountains, USA. *Canadian Journal of Forest Research*, 39(3), pp.507-518.

55 Petrucelli, C.A., Sakulich, J., Harley, G.L. and Grissino-Mayer, H.D., 2014. Structure and dynamics of an old-growth pine-oak community in the southern Appalachian mountains, Georgia, USA. *southeastern geographer*, 54(2), pp.161-182.

56 McEwan, R.W., Pederson, N., Cooper, A., Taylor, J., Watts, R. and Hruska, A., 2014. Fire and gap dynamics over 300 years in an old-growth temperate forest. *Applied Vegetation Science*, 17(2), pp.312-322.

57 Runkle, J.R., 1982. Patterns of disturbance in some old-growth mesic forests of eastern North America. *Ecology*, 63(5), pp.1533-1546. 35

58 Lorimer, C.G., 1980. Age structure and disturbance history of a southern Appalachian virgin forest. *Ecology*, 61(5), pp.1169-1184.

59 [https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order\[1\]protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order[1]protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/) 36

60 Nowacki, G.J. and Abrams, M.D., 2008. The demise of fire and [ldquo]mesophication[rdquo] of forests in the eastern United States. *BioScience*, 58(2), pp.123-138.

61 See 6th IPCC Report (2021) (available at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter_12.pdf). 37

62 Volkova, L., Roxburgh, S.H. and Weston, C.J., 2021. Effects of prescribed fire frequency on wildfire emissions and carbon sequestration in a fire adapted ecosystem using a comprehensive carbon model. *Journal of Environmental Management*, 290, p.112673.

63 <https://www.fs.fed.us/climatechange/documents/SouthernRegionCarbonAssessment.pdf>

64 [https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment\[1\]Southern-Region.pdf](https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment[1]Southern-Region.pdf)

65 Id.

66 N.L. Harris et al., Attribution of net carbon change by disturbance type across forest lands of the conterminous United States, 11 *Carbon Balance Mgmt.* 24 (2016), <https://cbmjournal.biomedcentral.com/articles/10.1186/s13021-016-0066-5>. 38

67 James E. Smith et al., Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States, Gen. Tech. Rep. NE-343, Northern Research Station: U.S. Department of Agriculture, Forest Service, https://www.nrs.fs.fed.us/pubs/gtr/ne_gtr343.pdf.

68 Ingerson, Ann, [ldquo]Wood Products and Carbon Storage: Can Increased Production Help Solve the Climate Crisis?,[rdquo] *The Wilderness Society* (2009).

69 Stockman et al., Estimates of carbon stored in harvested wood products from the United States forest service northern region, 1906-2010, *Carbon Balance and Management* 7:1 (2012).

70 [https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment\[1\]Southern-Region.pdf](https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment[1]Southern-Region.pdf)

71 Id.

72 [https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment\[1\]Southern-Region.pdf](https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment[1]Southern-Region.pdf) 39

73 <https://www.fs.usda.gov/managing-land/sc/carbon>

74 James, J. and Harrison, R., 2016. The effect of harvest on forest soil carbon: A meta-analysis. *Forests* 7: 308.

75 Nave, L.E., Vance, E.D., Swanston, C.W. and Curtis, P.S., 2010. Harvest impacts on soil carbon storage in temperate forests. *Forest Ecology and Management*, 259(5), pp.857-866.

76 Zhang, X., Guan, D., Li, W., Sun, D., Jin, C., Yuan, F., Wang, A. and Wu, J., 2018. The effects of forest

thinning on soil carbon stocks and dynamics: A meta-analysis. *Forest Ecology and Management*, 429, pp.36-43.
40

77 [https://www.whitehouse.gov/cea/blog/2021/02/26/a-return-to-science-evidence-based\[1\]estimates-of-the-benefits-of-reducing-climate-pollution/](https://www.whitehouse.gov/cea/blog/2021/02/26/a-return-to-science-evidence-based[1]estimates-of-the-benefits-of-reducing-climate-pollution/)

78 U.S. Env'tl. Protection Agency, Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520 (July 8, 2019), <https://www.govinfo.gov/content/pkg/FR-2019-07-08/pdf/2019-13507.pdf>. Specifically, burning wood-based biomass emits 65% and 285% more CO₂ per unit of energy generated than coal and natural gas, respectively. Rachel Carson Council, Wood Pellet Production, the Destruction of Forests, and the Case for Environmental Justice at 5 (2019), <https://rachelcarsoncouncil.org/clear-cut/>. 41

Chattooga Conservancy [bull] Defenders of Wildlife [bull] Georgia ForestWatch [bull] Sierra Club [bull] Southern Environmental Law Center [bull] The Wilderness Society August 13, 2021 VIA Electronic Mail Mr. Edward Hunter, Jr. Forest Supervisor Chattahoochee-Oconee National Forests United States Forest Service 1755 Cleveland Highway Gainesville, GA 30501 SM.FS.Foothills@usda.gov RE: Comments on Draft Programmatic Environmental Assessment for Foothills Landscape Project

Dear Mr. Hunter: We commend the Forest Service for its willingness to reconsider its approach to the Foothills Project and reset its engagement with stakeholders. In particular, the decision to adopt a programmatic review under the National Environmental Policy Act ([ldquo]NEPA[rldquo]) will better position the Forest Service to pursue the broad suite of actions contemplated in the Foothills Project. The development of an alternative with an important sideboard (unsuitable lands) is another welcome addition, and we believe this alternative can be further developed, with collaborative input, to focus the project on high priority work. As noted in the past, we share many of the same goals for the Foothills landscape and hope to work with the Forest Service to implement those actions successfully. Having selected the right tool, the Forest Service must now use it to its best advantage. A programmatic NEPA review can afford agencies more flexibility and efficiency by evaluating impacts in phases, reducing redundancy, avoiding problematic actions, and focusing subsequent decisions on the most important issues. But, like any other tool, programmatic NEPA reviews will not realize these benefits if unless correctly crafted and deployed. A programmatic review does not alter NEPA[rsquo]s underlying obligations to take a [ldquo]hard look[rldquo] at the effects of agency actions and consider those effects based on site-specific conditions. Thus, decisions regarding the scope and level of detail made in the programmatic review will dictate whether it actually achieves the desired flexibility and efficiencies at the implementation stage. Deferring hard questions and associated analytical responsibilities will only result in having to duplicate those efforts for each implementing project. Therefore, a consistent theme running throughout these comments is the need to focus the project, adopt sideboards to preclude potentially difficult issues, and conduct a more detailed 2 review of potential impacts where possible now to avoid having to consider those effects later. The programmatic approach is intended to replace the status quo of project-by-project NEPA review with a more flexible and efficient phased review. In a programmatic approach, flexibility comes from deferral of options to future decisions. Efficiency, on the other hand, comes from narrowing the range of options and considering recurring issues at the outset, before making the site-specific choices and analyses. This tradeoff is the key - efficiency (narrowing down) is in tension with flexibility (deferring choices). We hope that our comments are useful in helping pinpoint the choices that should be deferred to the future versus the ones that can and should be resolved now. A more focused scope and more detailed review at the programmatic stage is necessary for the agency to realize benefits at the implementation stage. The programmatic review should provide an intermediate level of review linking the broad goals of the Forest Plan with the site[1]specific decisions and analysis required by NEPA. But unless the programmatic review actually narrows the range of decisions and provides supporting analysis, it does little work to bridge the gap between these two levels of review. As currently written, the Draft Programmatic Environmental Assessment ([ldquo]DPEA[rldquo]) does not sufficiently limit the scope of potential actions or conduct the

necessary analysis to bridge this gap. The nascent Foothills Collaborative Group adds yet another layer of complexity to this project. The Forest Service has convened a series of meetings with stakeholders in the Foothills Landscape Project in an effort to restart this collaborative. As made clear in these meetings and the DPEA itself, the Forest Service hopes to [ldquo]share the decision space[rdquo] with this group and that the group will play a role in guiding the agency[rsquo]s efforts with the Foothills Project. As discussed in more detail below, other stakeholder collaborative groups have played a crucial role in defining the scope of projects they will implement by defining the goals, activities, and locations where the activities will occur (or in some cases, will not occur). But, unlike most such collaborative groups, the Foothills Collaborative Group is being created concurrently with the project it will be charged with implementing. Thus, the scope of activities in the DPEA does not reflect input from the Foothills Collaborative Group because that group does not yet exist. The Collaborative must be given a voice both in where the project is implemented, but what the project is. The tension over project scope and what actions to exclude at the programmatic stage is present here as well. The Forest Service wants to leave all potential opportunities on the table for site-specific project, in that the hopes the Collaborative Group will help it accomplish goals it could not accomplish otherwise. As we understand it, the goal for the Collaborative Group is to help Forest Service not only do the easy things, but also the hard things. We want the Collaborative Group to tackle the hard questions too. But for the reasons explained throughout, the time to tackle those questions is now, so that they do not have to be wrestled with again and again in each phase of implementation. Furthermore, collaborative discussions alone, no matter how well intentioned or facilitated, do not guarantee a successful outcome for every single issue. There are [ldquo]third rail[rsquo] issues that are simply too divisive to tackle at the site-specific stage. Including these issues within the scope of the Foothills Project risks derailing the work of the Collaborative. These tough issues evade satisfactory resolution in site-specific projects because they create the potential for cumulative harms that are not prohibited or limited by broader-scale decisions like the forest plan. The Collaborative Group should be afforded the opportunity to identify these third rails issues, and the Forest Service should strongly consider limiting the project at the programmatic stage to exclude these issues. We understand that the Forest Service is reluctant to take any action off the table, but including third-rail actions risks allowing the limited number of highly divisive issues from distracting the Collaborative Group from the many issues where common ground can be found. The Forest Service must not let a bad apple spoil the bunch. Further, it is important to recognize that adopting a particular sideboard or limit on the Foothills Project does not prevent the Forest Service from pursuing that particular action. Instead, it simply means that the Forest Service would pursue that action as an independent project with an independent NEPA review rather than as a tiered project as part of the Foothills Project[rsquo]s programmatic review. Prioritizing the Foothills projects to exclude certain challenging issues or actions could would actually expedite the Forest Service[rsquo]s overall work plan. The majority of treatments would benefit from the expedited review, and harder questions would get extra attention. This is far preferable to a process where all treatments, even the [ldquo]easy[rdquo] ones, get bogged down by hard questions. We would be pleased to discuss any of the issues or examples in these comments with you further. We are committed to helping you make this project a success, and we will continue offering our input directly and through the Collaborative Group. This is an exciting opportunity to do things differently, with better outcomes for a landscape beloved by so many, and we encourage you to bring additional focus to the Foothills Project to ensure the success of the programmatic review and the project itself.

TABLE OF CONTENTS I. Programmatic Review Under NEPA

..... 6 a. Implementing Programmatic Actions Requires Site-Specific Review 7 b. CEQ Regulations for Programmatic Review 8 c. Consideration of Cumulative Effects in a Programmatic Review 8 d. Clarity on the Decisions Deferred to the Implementation Phase 10 e. Endangered Species Act Consultation in a Programmatic Review 10 II. The Role Of The Foothills Collaborative Group 11 III. Other Collaborative Groups Implementing Condition-Based Projects Have Helped Define The Project[rsquo]s Scope, Including At The Programmatic Stage 12 IV. Without Additional Limits, The Potential Impacts Of Activities Authorized In The Foothills Landscape Project Are Potentially Significant 15 a.

Significant Impacts Under NEPA	15 b. The Foothills Project[rsquo]s Unbounded Scope has the Potential for Significant Impacts
Includes Activities That Trigger an EIS Under Forest Service Regulations	16 c. The Foothills Project
Adopt Sideboards to Help Avoid [ldquo]Significance Triggers[rdquo]	17 d. The Programmatic EA Should
Proceeding With a	18 e. Proceeding With a
Programmatic EA Risks Deferring Substantial Environmental Review Until the Implementation Phase	20 V. The Forest Service Should Revise The Statement
Of Purpose And Need To Narrow The Scope, Avoid Problematic Issues, And Focus The Project	21 VI. The Forest Service Should Consider Additional Alternatives To Focus The
Project And Limit Its Potential Environmental Effects	22 a. The
No-Action Alternative Must Assume That Forest Service Activities Will Continue at the Current Rate	24 VII. NEPA Requires That The
Proposed Action[rsquo]s Environmental Impacts Be Given A [ldquo]Hard Look[rdquo]	25 a. The Hard Look
Standard and Programmatic Review	25 b. Analysis of Site-Specific Impacts
is Required Under the Hard Look Standard	26 c. Implementation Area Versus Stand-Level Review
Compare Alternatives is a Missed Opportunity	26 d. The Programmatic Document[rsquo]s Failure to Meaningfully
27 e. The DPEA[rsquo]s Discussion	27 e. The DPEA[rsquo]s Discussion
of Cumulative and Connected Actions Defers Much of Necessary Review to the Project Implementation Stage	28 VIII. Technical Recommendations To Improve The Foothills Project
28 VIII. Technical Recommendations To Improve The Foothills Project	30 5 a. Aquatic Resources
30 5 a. Aquatic Resources	30 b. Fire and Fuels
30 b. Fire and Fuels	31 c.
31 c.	32 d. Recreation and
Soils.....	32 d. Recreation and
Transportation	32 e. Vegetation
32 e. Vegetation	33 IX. The Foothills Project[rsquo]s
33 IX. The Foothills Project[rsquo]s	33 IX. The Foothills Project[rsquo]s
Climate Change Impacts Must Be Properly Considered	35 a. The Forest Service Must Reevaluate the
Assumptions Underlying Its Climate Change	35 a. The Forest Service Must Reevaluate the
Analysis.....	35 b. The Forest Service
35 b. The Forest Service	35 b. The Forest Service
Must Evaluate Carbon Storage, Not Just Carbon Sequestration	37 c. The Forest Service Should Evaluate
the Social Cost of Carbon Emissions	39 X. Precluding Activities and Locations Likely To Trigger
37 c. The Forest Service Should Evaluate	39 X. Precluding Activities and Locations Likely To Trigger
the Social Cost of Carbon Emissions	41 XI. Evaluating The Effectiveness Of The Project Design Features Will Reduce The
41 XI. Evaluating The Effectiveness Of The Project Design Features Will Reduce The	41 XI. Evaluating The Effectiveness Of The Project Design Features Will Reduce The
Amount Of Mitigation Analysis Required At The Implementation Phase	41 XII.
41 XII.	41 XII.
Future Tiered Actions Must Demonstrate Compliance With The National Forest Management Act	43 XIII. Example Sideboards For The
43 XIII. Example Sideboards For The	43 XIII. Example Sideboards For The
Foothills Project[rsquo]s Programmatic Review	45 XIV. Conclusion
45 XIV. Conclusion	46 6
46 6	

I. Programmatic Review Under NEPA

The DPEA adopts a programmatic approach under 40 C.F.R. [sect][sect] 1502.20 and 1508.28. 1 DPEA at n. 3. Accordingly, the document should also be guided by the Council on Environmental Quality[rsquo]s ([ldquo]CEQ[rdquo]) guidance on programmatic NEPA reviews. At its core, the programmatic approach is a decision framework and does not alter the Forest Service[rsquo]s underlying obligations to consider potential impacts under NEPA or other applicable statutes. Agencies are still required to consider both broad-scale and site-specific analyses [ndash] the programmatic approach simply changes the timing and sequence of these reviews. When used correctly, the programmatic approach can improve the flexibility and efficiency of environmental review by considering potential impacts at a general level to identify and limit actions with the

potential to trigger significant or controversial environmental effects. The agency can then decide to either avoid actions with the potential for those impacts or consider them in more detail at the project implementation stage. As explained in CEQ's Memorandum on Effective Use of Programmatic NEPA Reviews (the [Idquo]CEQ Programmatic Guidance[rddquo]) 2: By identifying potential adverse impacts early during the broad programmatic planning, programmatic NEPA reviews provide a unique opportunity to modify aspects of the proposal and subsequent tiered proposals to avoid or otherwise mitigate those impacts. CEQ Programmatic Guidance at 35. Modifying the proposal at the programmatic stage [ldquo]can expedite the preparation of subsequent project- or site-specific proposals by establishing siting, design, operational, or other relevant implementation criteria, requirements, and protocols.[rdquo] Id. [ldquo]The subsequent tiered NEPA review would then include those measures to address potentially significant impacts and focus on the impacts and mitigation alternatives available at the project[1]or site-specific level that were not considered in the [programmatic EA or programmatic EIS].[rdquo] In this way, the potential benefits of the programmatic approach are a direct result of the degree to which the agency identifies potentially problematic issues at the outset and narrows the proposal to limit or avoid them. Where the agency cannot (or chooses not to) avoid these issues, they must be evaluated in site-specific detail at the project implementation stage. But, to limit the universe of issues and impacts that must be considered for each site-specific action and to justify a Finding of No Significant Impact ([ldquo]FONSI[rddquo]), the Forest Service should focus on actions with well-understood and generally beneficial impacts, and adopt project sideboards to exclude actions with unknown or avoidable environmental impacts.

a. Implementing Programmatic Actions Requires Site-Specific Review

NEPA requires federal agencies to provide the public with [ldquo]notice and an opportunity to be heard[rddquo] in the analysis of [ldquo]specific area[s] in which logging will take place and the harvesting methods to be used.[rdquo] Ohio Forestry Ass[rddquo]n v. Sierra Club, 523 U.S. 726, 729[ndash]30 (1998).³ The site-specific information and analysis required under NEPA serve two purposes: (i) to ensure agencies are making informed decisions before acting; and (ii) to ensure the public is given a meaningful opportunity to participate in those decision-making processes. WildEarth Guardians v. Mont. Snowmobile Ass[rddquo]n, 790 F.3d 920, 922-25 (9th Cir. 2015). Merely disclosing the existence of particular geographic or biological features is inadequate[mdash]agencies must discuss their importance and substantiate their findings as to the impacts. Or. Nat. Res. Council Fund v. Goodman, 505 F.3d 884, 892 (9th Cir. 2007).⁴ [ldquo][G]eneral statements about possible effects and some risk do not constitute a hard look, absent a justification regarding why more definitive information could not be provided.[rdquo] Or. Natural Res. Council Fund v. Brong, 492 F.3d 1120, 1134 (9th Cir.2007).⁵

As both regulations and caselaw make clear, an agency[rddquo]s use of a programmatic approach does not alter its obligation to consider site-specific effects but instead allows that analysis to be deferred until the implementation phase of review. Fund For Animals v. Mainella, 283 F. Supp. 2d 418, 433-34 (D. Mass.2003)(Where a programmatic document fails to evaluate site-specific impacts, the deferred analysis must be conducted as part of the subsequent review at the implementation stage); Western Watersheds Project v. Abbey, 719 F.3d 1035, 1953-54 (9th Cir. 2013) (Where agency failed to disclose site-specific impacts and alternatives in a programmatic EIS, it must do so in a site-specific EA).

b. CEQ Regulations for Programmatic Review

The programmatic approach allows agencies to change the timing of its environmental review and conduct it in phases to [ldquo]eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.[rdquo] 40 C.F.R. [sect] 1502.20. This approach allows the agency to [ldquo]summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and [] concentrate on the issues specific to the subsequent action.[rdquo] Id. Programmatic reviews can be as broad as the agency desires. 40 C.F.R. [sect] 1508.28. However, the breadth of a programmatic review directly relates to its future utility and an overly broad programmatic review will not

streamline the future NEPA review in any meaningful way. CEQ Programmatic Guidance at 15 ([ldquo]A programmatic NEPA review may not be a cost effective effort for an agency if the effort required to perform the review is substantially greater than the time and effort saved in analyzing subsequent proposals.[rdquo]). In this context, the DPEA should provide a bridge between the broad, open-ended goals in the Forest Plan and the granular, site-specific review required to implement projects under NEPA. Thus, the DPEA is only useful to the extent it helps the agency narrow its focus and avoid problematic issues that would delay projects at the implementation stage. But, as currently written, the DPEA does not contain sufficiently detailed analysis to satisfy the need for site[1]specific analysis and does not contain adequate sideboards to preclude actions and impacts that will require substantial analysis at the implementation stage. To realize the potential gains in flexibility and efficiency, the Forest Service must focus the project on a more finite list of activities, include sideboards to preclude actions and areas that will necessitate more detailed review, and explain how these sideboards accomplish this purpose. Focusing the project in this fashion will allow the DPEA to bridge the gap between the Forest Plan goals and site-specific review.

c. Consideration of Cumulative Effects in a Programmatic Review

By definition, a programmatic NEPA review is designed to cover multiple related agency actions. Here, the Foothills Project seeks to authorize an undetermined number of future activities within the same geographic region and thus presents the clear potential for cumulative impacts under 40 C.F.R. [sect] 1508.7. In particular, the requirement to consider the cumulative impact of [ldquo]individually minor but collectively significant actions taking place over a period of time[rdquo] is squarely applicable to the project. *Id.* If a programmatic proposal is not sufficiently limited to allow for cumulative impact analysis at that stage, then such analysis can be deferred. *Salmon River Concerned Citizens v. Robertson*, 798 F. Supp. 1434, 1440 (E.D. Cal. 1992), *aff'd*, 32 F.3d 1346 (9th Cir. 1994); *Northern Alaska Environmental Center v. Lujan*, 961 F.2d 886 (9th Cir.1992) (holding that an EIS's deferral of consideration of certain potential cumulative and synergistic effects is proper tiering and does not foreclose later analysis of these factors in a future EA). But, once again, the ability to defer consideration of cumulative effects does not diminish the requirement and simply delays this work until later. However, the Forest Service can adopt sideboards at the programmatic phase to limit the potential for cumulative effects and reduce the amount of analysis required at the implementation stage. Setting priorities can assist the Forest Service in avoiding cumulative effects. For example, it is much easier to discuss the cumulative effects of removing off-site pine than it is to discuss the cumulative effects of creating early successional habitat in mature, characteristic hardwood forests. If the programmatic decision allows the Forest Service to do either (or both) of those actions in any particular site-specific project, then the potential cumulative effects of the program are too slippery to grasp. The decision whether to address cumulative effects at the programmatic stage is particularly relevant if the Forest Service seeks to use categorical exclusions during implementation of the Foothills Project. See, DPEA at B63 (referencing potential use of decision memos). CEs cannot be [ldquo]tiered[rdquo] to a programmatic decision. CEQ Programmatic Guidance at 29 (EAs are [ldquo]tiered,[rdquo] whereas CEs are [ldquo]applied[rdquo] during implementation of a program of work). CEs are stand-alone categories of action that do not have significant impacts, individually or cumulatively, by definition. 40 C.F.R. [sect] 1508.4 (defining CEs as actions [ldquo]which do not individually or cumulatively have a significant effect on the human environment.[rdquo]). They are simply not available where the proposed action may have cumulatively significant impacts, and if the agency attempts to use them for such actions, the category itself is vulnerable to being invalidated as overbroad. As a result, programmatic analysis cannot be used to explain away cumulative impacts of CEs that are being used to segment a larger program of work. Here, the potential for significant cumulative effects has not been adequately addressed in the DPEA, and as a result there is no basis for the conclusion that the implementing activities do not have the potential for cumulatively significant effects. To be sure, the Forest Service could avoid actions that might implicate cumulative significant impacts in implementing Foothills Projects, but that would only excuse the Forest Service from needing to prepare a supplemental EIS for those projects; it would not support the use of a CE. Unless the scope of reasonably foreseeable actions and potential environmental effects are limited and considered in 10 the DPEA, every potential action will require a full cumulative effects analysis, making use of a CE inappropriate.

d. Clarity on the Decisions Deferred to the Implementation Phase

CEQ also instructs agencies to be clear with respect to the [“]anticipated timing and sequence of decisions,[”] including [“]which decisions are supported by the programmatic NEPA document and which decisions are deferred for some later time, and the time-frame or triggers for a tiered NEPA review.[”] CEQ Programmatic Guidance at 10. [“]Agencies should clearly and concisely articulate their intentions to defer particular environmental review and consultation requirements for consideration until a subsequent project- or site-specific proposal is developed.[”] Id. The deferred analysis [“]should be identified and the intended use of tiering made clear at the outset of scoping, and articulated in the programmatic review.[”] Id. at 34. Here, the DPEA does not articulate the issues it believes are adequately addressed in the programmatic document and the issues it intends to defer until the project implementation phase.⁶

e. Endangered Species Act Consultation in a Programmatic Review

Under section 7(a)(2) of the Endangered Species Act ([“]ESA[”]), an agency must consult with (as relevant here) the Fish and Wildlife Service whenever a proposed action [“]may affect[”] listed species or destroy or adversely modify its critical habitat to ensure that the action is [“]not likely to jeopardize[”] these species. 16 U.S.C. [sect] 1536(a)(2). This process is generally referred to as Section 7 consultation. The scope of the Foothills Project and the lack of sideboards to exclude potential impacts to threatened and endangered species will complicate this analysis at both the programmatic and project implementation stages. Section 7 consultation shall occur [“]at the earliest possible time to determine whether any action may affect listed species or critical habitat.[”] 50 C.F.R. [sect] 402.14(a). As a result, ESA regulations allow for Section 7 consultation over [“]framework programmatic action,[”] defined as [“]a framework for the development of future action(s) that are authorized, funded, or carried out at a later time,[”] where [“]any take of a listed species would not occur unless and until those future action(s) are authorized, funded, or carried out and subject to further section 7 consultation.[”] Id. at [sect] 402.02. ESA Section 7 consultation for these programmatic actions occurs in two steps. First, the programmatic action is addressed through programmatic consultation, which [“]allow[s] the Services to consult on the effects of programmatic actions.[”] Id. The result of a formal programmatic consultation is a biological opinion that determines where the project overall is likely to jeopardize species or result in adverse modification of critical habitat. 50 C.F.R. [sect][sect] 402.14(h).

In the course of a programmatic consultation, the agency can adopt sideboards on the programmatic action to avoid or mitigate impacts to listed species or designated habitat. In the second step, site-specific actions implementing the programmatic decision are addressed through stepped-down, site-specific Section 7 consultations, ensuring adherence to any sideboards included in the programmatic biological opinion, with site-specific biological opinions accompanied by incidental take statements. Further, the agencies are prohibited from segmenting their review under the ESA. *Conner v. Burford*, 848 F.2d 1441, 1457 (9th Cir. 1988). Thus, whether at the programmatic or the project implementation stage, the potential impacts on threatened and endangered species must be fully considered including the cumulative effects of multiple actions authorized under the umbrella of the Foothills Project. Finally, we note that the Forest Service must also consider the requirement to reinstate consultation. Agencies are required to reinstate consultation under the ESA if any of the following circumstances are met: (1) the amount or extent of taking in the incidental take statement is exceeded; (2) new information reveals effects not previously considered; (3) the action is modified in a manner that causes an effect not previously considered; or (4) if a new species is listed or critical habitat designated. 50 C.F.R. [sect] 402.16(a). Given the Foothills Project[’]s potential scope, the lack of site-specific analysis, and its unlimited duration, all of these factors will likely be triggered at some point during the course of the project. Adopting appropriate sideboards would reduce the risk of triggering these factors and would ease the burden of site-specific consultation when it is needed, allowing the Forest Service to better realize the potential efficiencies of the programmatic approach.

II. The Role Of The Foothills Collaborative Group

Beyond the programmatic NEPA review, we also appreciate the Forest Service's willingness to revisit the Collaborative Group planned for the Foothills Project. It is evident that CONF leadership and staff have invested a great deal of effort in listening to stakeholders, finding common ground with those individuals and organizations, and considering how to best engage the planned Collaborative Group. We understand the Forest Service's goal is to "share the decision space" with this group, and its hope that a successful collaborative will allow it to navigate issues and activities that would be challenging otherwise. We share the belief that successful collaboration can deliver a better Foothills Project and better outcomes for the CONF. But the status of the Collaborative Group is out of step with that of the programmatic NEPA document. The DPEA states that the collaborative group "will be formed, prior to a final 12 decision, to work with public land managers to further influence the scope, scale, and exact locations of specific treatments within the project area." DPEA at B63. Further, decisions made by the Collaborative Group "may result in modifications to the timing, methods, and monitoring requirements within the [Foothills Landscape Project]." Id. As of the date of this letter, the Foothills Collaborative Group does not yet exist and it seems unlikely that the group will be able to make any meaningful decisions before late 2021 or early 2022. Instead of proceeding in tandem, the Collaborative Group's progress is well behind that of the NEPA review. The Collaborative Group can play an important role in helping the Forest Service achieve a more successful Foothills Project, but the Collaborative Group must be afforded the opportunity to fully participate in shaping the project including decisions made at the programmatic phase. In particular, the Collaborative Group is uniquely suited to develop and recommend project sideboards that could refine the scope of actions considered in the Final Programmatic EA. Unless the Forest Service shares the decision space throughout the project, including both the programmatic and project implementation phases, it risks charging the Collaborative Group with a task it may be unable or unwilling to perform. At the scoping phase, the Forest Service was asked to consider a project alternative that would focus on "consensus-based treatments with widespread support (of which we think there are many) developed during collaborative discussions." Foothills Landscape Project Scoping Report at 8.7 A explained in more detail below, we encourage the Forest Service to reevaluate this recommendation. If afforded the opportunity, we believe that a Collaborative Group can help the Forest Service define a programmatic project that achieves most of the goals identified in the DPEA on a more efficient basis and with broad support. But to do so, the Collaborative Group must be allowed to identify and resolve potential "third rail" issues that may otherwise jeopardize the group's potential success.

III. Other Collaborative Groups Implementing Condition-Based Projects Have Helped Define The Project's Scope, Including At The Programmatic Stage

Collaborative groups can provide input on decisions at all scales. At the broadest scale, for example, a collaborative group organized under the Federal Advisory Committee Act helped the Forest Service develop the 2012 Planning Rule and associated directives.⁸ This collaborative group addressed issues at a national scale—substituting ecological integrity for economic efficiency as the cornerstone of forest planning, developing a coarse- and fine-filter approach to protecting rare species, and ensuring that forest plans are grounded in fiscal realities. The composition, charter, and decision space for this collaborative group were well defined and its recommendations were reflected in the final product.

Collaborative groups have also been used to support forest plan revisions, with good examples in Region 8. For example, both the George Washington National Forest Stakeholders' Group⁹ and the Nantahala-Pisgah Forest Partnership¹⁰ have provided consensus input from diverse interests on the toughest issues for planning: management area allocations, timber harvest and other vegetation management objectives, and roadmaps to generate broad support for wilderness or other Congressional designations. Further afield, the Clearwater Basin Collaborative's Forest Plan Subcommittee is working on similar issues.¹¹ These broader-scale collaborative groups can reveal much about the prerequisites for building trust and finding consensus, but they

are less useful analogs for a collaborative group supporting a programmatic, landscape-scale project. Instead, the best model for the Foothills Project is the Cherokee National Forest's Goal 17 project, also known as the Dry Forest Communities Restoration project. The Goal 17 project was shaped by input from the South Zone Collaborative Group,¹² and we believe that the Foothills Project can follow a similar and equally successful track. Specifically, the Forest Service entrusted the Goal 17 Collaborative Group to develop a strategy that would increase the pace and scale of restoration work and decrease conflict over recurring issues. With information about current conditions provided by the Forest Service and stakeholders, the group recommended focusing on treatments to restore characteristic dry site communities on sites currently dominated by or encroached upon by off-site pine. In order to head off potential issues that would potentially require burdensome site-specific analysis or conflict resolution, the group recommended sideboards to limit slopes where ground-disturbing harvest could occur and limit road construction in unroaded (Mountain Treasure) areas. Future site-specific decisions will look for opportunities to implement these programmatic priorities, and they will be made in concise EAs that are tiered to the programmatic document.¹³ The Goal 17 project analyzed cumulative, repeating impacts at the programmatic stage, allowing the site-specific EAs to only analyze issues unique to those sites. The project is working well: because there is so much broadly-supported work ready to move through the pipeline, the state forestry department is pitching in to help prepare sales. On the North Zone of the Cherokee National Forest, a collaborative group found a different solution to a familiar problem. After several years of conflict, a lawsuit, and cancelled timber sales, the Forest Service asked collaborative stakeholders to help find a new way forward. The CNF Landscape Restoration Initiative worked for several years on a science-based process to provide programmatic recommendations for future projects.¹⁴ The group found that treating sites dominated by consensus-identified uncharacteristic vegetation would maximize progress toward restoration goals and facilitate more high-consensus work getting done. That group helped the Forest Service apply the recommendations in a pilot project and provided input on subsequent site-specific projects. Although the Forest Service did not formally adopt the collaborative group's recommendations in a programmatic decision, it has adhered to the collaboratively supported priorities and pursued them in site-specific projects, reducing social conflict. In the course of recent stakeholder meetings, the Forest Service has highlighted other collaboratives around the county and there are many more that have not been discussed. In addition to the Goal 17 project, other collaboratives that seem applicable here are the Clearwater Basin and Southwestern Crown Collaboratives, which are part of the Montana Forest Collaborative Network, and 4FRI. Like the Pisgah National Forest's Grandfather District Collaborative, these are all funded as part of the Collaborative Forest Landscape Restoration Program (CFLR). While CFLR projects do not necessarily use the programmatic decisionmaking model proposed here, there are clear similarities. The CFLR program is tiered to a collaborative [proposal], and the forests receive funding to implement it. By law, these proposals are required to narrowly describe the kinds of treatments that are most needed to accomplish ecological restoration and fuels reduction objectives.¹⁵ CFLR projects, moreover, are subject to mandatory sideboards, such as the retention of large and old trees and limitations on roadbuilding.¹⁶ Accordingly, CFLR requires projects to pursue a narrowed focus and avoid tricky issues, just as we recommend the Forest Service should do here. The focus required by law is a major reason why these collaborative groups have been successful. If they had been asked to find consensus on contentious issues instead of commonly supported priorities, the task would have been much more difficult, if not impossible. Throughout the recent round of stakeholder meetings for the planned Foothills Collaborative Group, recurring questions have been how and when input from the Collaborative will be incorporated into the Foothills Project. Will the Collaborative be given a role in defining the scope of the project, or will its role be limited to reviewing particular implementation proposals? Looking to the success of the Goal 17 Project and the CNF Landscape Restoration Initiative, we believe strongly that the Forest Service should use the programmatic review as an opportunity to task the Collaborative Group with helping identify priorities (and sideboards) for treatments that have broad support, are ecologically beneficial, maximize benefits for the greatest number of resources, and can be accomplished within the agency's fiscal constraints. Identifying these priorities and sideboards may not be easy, but it is the kind of task well-suited for the collaborative setting. One common feature shared among all of the successful collaboratives described above is the need to find a consensus strategy that can meet each participants' needs better than the status quo. Another common feature is the fact that certain issues will not be resolved through collaborative discussions alone, no matter how well facilitated or intentioned. The risk of

third rail issues creating unresolvable problems for a collaborative seems greatest when the group is charged with implementing a project it did not have a role in shaping. Therefore, we believe that the Foothills Collaborative Group should be afforded the opportunity to develop a collaborative proposal that can be compared against other alternatives in the Final PEA to support a [ldquo]reasoned choice between programmatic directions.[rdquo]17

IV. Without Additional Limits, The Potential Impacts Of Activities Authorized In The Foothills Landscape Project Are Potentially Significant

As outlined in the prior letter and below, the scope of work proposed for the Foothills Landscape Project has the potential for significant environmental impacts. Unless the Forest Service adopts limits on the project to ensure that the potential environmental impacts are not significant, it must either prepare an Environmental Impact Statement ([ldquo]EIS[rdquo]) or perform sufficient analysis at the implementation stage to ensure that each and every implementation action does not itself require an EIS. CEQ regulations suggest that a programmatic document will normally be an EIS, not an EA. 40 C.F.R. [sect] 1508.28. ([ldquo]Tiering refers to the coverage of general matters in broader environmental impact statements [hellip][rdquo]) and [sect] 1502.20 ([ldquo]Agencies are encouraged to tier their environmental impact statements [hellip].[rdquo])(emphasis added to both). A programmatic EA may be used to determine whether [ldquo]a broad proposed action requires an EIS.[rdquo] FSH 1909.15 at [sect]42.1. If a programmatic EA finds that the actions authorized in the programmatic proposal are potentially significant, individually or cumulatively, then an EIS must be prepared. There is no question that the Foothills Project[rsquo]s unbounded scope has the potential for significant impacts. Therefore, the Forest Service has three choices: (i) it can adopt sufficient sideboards now to ensure against significant effects in future projects; (ii) it can prepare a programmatic EIS now; or (iii) it can prepare a programmatic EA now and potentially be required to prepare an EIS for various implementation actions.

a. Significant Impacts Under NEPA

Based on its scope, scale, duration, and lack of limits, the Foothills Project has clear potential for significant impacts on the human environment. NEPA requires federal agencies to prepare an EIS for any [ldquo]major Federal actions significantly affecting the quality of the human environment.[rdquo] 42 U.S.C. [sect] 4332(C).18 [ldquo]Human environment[rdquo] is a [ldquo]comprehensive[rdquo] term that includes [ldquo]the natural and physical environment and the relationship of people with that environment.[rdquo] 40 C.F.R. [sect] 1508.14. Nearly all actions on national forests affect the [ldquo]human environment[rdquo] to some degree. Significance is determined based on two factors: context and intensity. 40 C.F.R. [sect] 1508.27. To evaluate context, [ldquo]the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.[rdquo] 40 C.F.R. [sect] 1508.27. [ldquo]Both short- and long-term effects are relevant.[rdquo] 40 C.F.R. [sect] 1508.27. [ldquo]Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole.[rdquo] 40 C.F.R. [sect] 1508.27 and *Am. Rivers v. Fed. Energy Regulatory Comm'n*, 895 F.3d 32, 49 (D.C. Cir. 2018). [ldquo]Intensity[rdquo] [ldquo]refers to the severity of impact.[rdquo] 40 C.F.R. [sect] 1508.27(b). CEQ provided ten factors to consider when analyzing the [ldquo]intensity[rdquo] of an action. 40 C.F.R. [sect] 1508.27(b). [ldquo]Implicating any one of the factors may be sufficient to require development of an EIS.[rdquo] *Nat'l Parks Conservation Ass'n v. Semonite*, 916 F.3d 1075, 1082 (D.C. Cir.), amended in part, 925 F.3d 500 (D.C. Cir. 2019).

b. The Foothills Project[rsquo]s Unbounded Scope has the Potential for Significant Impacts

Given its sweeping scope and lack of limits, it is difficult to imagine how the Forest Service could justify a conclusion that the Foothills Project will not have significant effects. This is precisely why forest plan revisions require an EIS,¹⁹ and to the extent that the Foothills Project leaves those same broad options on the table, it will require the same. As detailed in the comments we submitted on the 2019 Draft EA, the massive scale of

proposed actions could include tens of thousands of acres of commercial timber harvest, noncommercial mechanized timber harvest, prescribed burning, herbicide application, and use of industrial masticators for vegetation grinding. January 10, 2020 Letter from P. Hunter to B. Jewett re Comments on Draft EA at 12. CEQ regulations evaluate significance based on context and intensity, and the Foothills Project has the potential for significant impacts under both. The project's goal of "landscape-scale restoration," DPEA at 29, suggests that project is designed to have significant effects (albeit beneficial ones). 40 C.F.R. [sect] 1508.27(b)(1) ("Impacts that may be both beneficial and adverse.") The changes made in the DPEA focus primarily on the process, rather than the scope of actions and potential effects. The new proposed alternative, Alternative 3, would reduce the number acres potentially subject to commercial activities by approximately 1/3, from 157,625 acres to 104,545 acres. DPEA at 55. But the areas potentially subject to noncommercial activities would remain unchanged and the areas potentially subject to commercial activities still exceeds 100,000 acres. Id. 17 CEQ regulations identify ten intensity factors to be considered in evaluating the project's intensity, and implicating any one of the factors "may be sufficient to require development of an EIS." Nat'l Parks Conservation Ass'n v. Semonite, 916 F.3d 1075, 1082 (D.C. Cir.). Without the benefit of site-specific analysis in the DPEA or limits to preclude them, all of these intensity factors are potentially triggered. The Foothills Project would impact nearly every "interest" on the national forest - recreational, logging, road building, wildlife, conservation, and restoration. Thus, all of the intensity factors are triggered for the project. The DPEA must be evaluated on its face and cannot be assumed to be limited where no restrictions are imposed.

c. The Foothills Project Includes Activities That Trigger an EIS Under Forest Service Regulations

The scope of the Foothills Project also includes actions that would require an EIS under the Forest Service's own regulations. Forest Service regulations direct that an EIS is normally required for proposals "that would substantially alter the undeveloped character of an inventoried roadless area or a potential wilderness area." 36 C.F.R. [sect] 220.5(a)(2). Among other actions, regulations state that this requirement is triggered by "constructing roads and harvesting timber in an inventoried roadless area where the proposed road and harvest units impact a substantial part of the inventoried roadless area." Id. The project includes six inventoried roadless areas, constituting 2% of the total project area. DPEA at Table 51 and 4. The project area includes 99% of the Boggs Creek Inventoried Roadless Area and 100% of the Miller Creek Inventoried Roadless Area. Id. Over the course of scoping this project, activities planned within Inventoried Roadless Areas have expanded and now include "treatment opportunities, which would meet project objectives and maintain or enhance the characteristics of those Inventoried Roadless Areas, could occur if conditions warrant action." Id. at 4. The DPEA contemplates both road construction and timber harvesting activities, and the DPEA includes no safeguards to ensure that these activities do not "impact a substantial part of the inventoried roadless area." Accordingly, the DPEA cannot support a conclusion that an EIS is not required. The assurance that these activities would be carried out in compliance with "overarching law, policy, and regulation that guide management activities permissible in roadless areas," DPEA at D4, does nothing to avoid a significance finding as these requirements apply to all agency actions in Inventoried Roadless Areas, including the actions that trigger an EIS under 36 C.F.R. [sect] 220.5(a)(2). 18

d. The Programmatic EA Should Adopt Sideboards to Help Avoid "Significance Triggers"

Limiting the amount of road construction and timber harvest in Inventoried Roadless Areas is one example of how the Forest Service can limit the project's scope to avoid "significance triggers" — actions that have the potential for significant effects unless they are expressly limited or prohibited. Caselaw clarifies the issues and circumstances frequently found to trigger a finding of significance in Forest Service decisions: [middot] Type/intensity of harvest;²⁰ [middot] Economic cost of harvest;²¹ [middot] Old-growth characteristics;²² [middot] Presence within an area potentially suitable for future protection as wilderness;²³ [middot] Proximity to a unique area such as designated wilderness;²⁴ [middot] Risk factors for soil impacts and erosion;²⁵ [middot] Sensitivity of receiving waters and fisheries;²⁶ [middot] Impacts to wetlands;²⁷ [middot]

Efficacy of site-specific BMPs;28 [middot] Recreational values and uses;29 [middot] Scenic and aesthetic qualities of the site;30 [middot] Geology of the particular area;31 [middot] The presence of rare species (e.g., sensitive, forest concern, regional forest concern, species of conservation concern);32 [middot] Impacts to quality of wildlife habitat;33 [middot] Impacts to connectivity of wildlife habitat;34 [middot] Condition and location of access roads;35 [middot] The likelihood that the action will cause an increase of use on a particular road associated with the project;36 [middot] The history of similar activities at the particular site;37 [middot] Foreseeable future activities at the particular site;38 [middot] The degree of scientific certainty that activities or mitigation measures will have the predicted effect given a site's unique characteristics;39 [middot] Absence of data about the ecological importance of the site;40 and [middot] Recency of data that are subject to change over time (e.g., wildlife population data).41 Imposing sideboards on the Foothills Project to minimize these significance triggers will help the Forest Service justify FONSI's, both at the programmatic and project implementation phases. This would also track the recommendation in CEQ's Programmatic Guidance: [ldquo]identifying potential adverse impacts early during the broad programmatic planning, programmatic NEPA reviews provide a unique opportunity to modify aspects of the proposal and subsequent tiered proposals to avoid or otherwise mitigate those impacts.[rdquo] CEQ Programmatic Guidance at 34.

e. Proceeding With a Programmatic EA Risks Deferring Substantial Environmental Review

Until the Implementation Phase As discussed previously, a programmatic approach alters the timing but not the rigor of analysis required for NEPA review. But limits adopted on the scope of the project in the programmatic review can reduce the amount of subsequent review required, including by limiting the potential for significant impacts. If the Forest Service's programmatic review is limited to an EA and does not adopt limits to preclude significant effects in the future, it will defer a substantial portion of the required NEPA analysis until the implementation phase. This may leave the Forest Service in the strange position of preparing a programmatic EA but being required to prepare an EIS for individual projects at the implementation phase. EISs and EAs serve two different purposes. An EA is intended to [ldquo]provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement.[rdquo] 40 C.F.R. [sect] 1508.9(a). An EA also allows an agency to consider alternatives whenever there are unresolved conflicts in the use of its resources[mdash]meaning that different choices (such as choices of locations) will have different environmental consequences. 42 U.S.C. [sect] 102(2)(E). An EIS, in contrast, provides a more rigorous look at the impacts of a project known to have potentially significant impacts. An EIS must [ldquo]provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.[rdquo] 40 C.F.R. [sect] 1502.1. An EIS requires more detailed review and investigation of environmental risks and alternatives. *N. Idaho Cmty. Action Network v. U.S. Dep't of Transp.*, 545 F. 3d 1147, 1153 (9th Cir. 2008). There are two ways the Forest Service can avoid deferring the bulk of NEPA review until the project implementation phase. Without substantially narrowing the focus of the project, the agency could prepare a programmatic EIS, evaluating the full range of environmental impacts that could result from the activities potentially authorized as part of the project. Having fully evaluated the range of impacts at the programmatic stage, the agency would only need to refer back to the programmatic document and apply that analysis to the site-specific conditions. But, for a project as broad and unbounded as the Foothills Project, the amount of analysis required to reach this level of detail would be enormous and would likely require an investment of resources similar to the preparation of a forest plan. Alternatively, the Forest Service could expressly limit the activities, locations, and context of proposed actions to avoid circumstances with the potential to trigger significant effects. Excluding [ldquo]significance triggers[rdquo] [ndash] actions, locations, and potential impacts that are likely to result in significant environmental impacts - would substantially reduce the likelihood that future actions would require in-depth environmental review. Further, capping the total number of activities that could be undertaken as part of the project (i.e., a limit on the number of acres commercially harvested) and distributing those caps by type of harvest, timing of harvest, watershed, and/or implementation area would further reduced potential for significant impacts. 21

V. The Forest Service Should Revise The Statement Of Purpose And Need To Narrow The Scope, Avoid Problematic Issues, And Focus The Project

The sweeping and unbounded scope of the Foothills Project risks losing the potential efficiencies of the programmatic NEPA review and will complicate the implementation of future projects. But adopting a more focused statement of purpose and need in the programmatic document will limit the amount of environmental review required at the implementation phase. NEPA requires a statement of purpose and need to [ldquo]briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.[rdquo] 40 C.F.R. [sect] 1502.13; FSH 1909.15 [sect] 11.21. This statement is necessary to inform the public of exactly what the agency intends to do. [ldquo]NEPA forces agencies to explain what it is they seek to do, why they seek to do it, what the environmental impacts may be of their proposed action, and what alternatives might be available to the agency that might lessen environmental impact. Without a clear [lsquo]what and why[rsquo] statement, the public is kept in the dark.[rdquo] Soda Mountain Wilderness Council v. Norton, 424 F. Supp. 2d 1241, 1262 (E.D. Cal. 2006). Coherent purpose and need statements are critical because [ldquo]the available reasonable alternatives are dictated by the underlying purpose of the proposed action.[rdquo] Wilderness Soc. v. U.S. Forest Serv., 850 F. Supp. 2d 1144, 1163 (D. Idaho 2012). [ldquo][A] purpose can [] be unreasonable if the agency draws it so broadly that an infinite number of alternatives would accomplish [it] and the project would collapse under the weight of the possibilities.[rdquo] Webster v. U.S. Dep't of Agric., 685 F.3d 411, 422 (4th Cir. 2012). The need for a cogent statement of purpose and need applies the same in a programmatic document. [ldquo]The purpose and need sets the tone for the scoping process and the course for conducting the NEPA review.[rdquo] CEQ Programmatic Guidance at 19. A statement of purpose and need must be [ldquo]focused enough for the agency to conduct a rational analysis of the impacts and allow for the public to provide meaningful comment on the programmatic proposal.[rdquo] Id. If the statement of need is too vague and over-broad, the programmatic review risks spinning into abstraction with too many potential alternatives or alternatives so broad as to be meaningless. The DPEA certainly toes that line. The Foothills Project[rsquo]s purpose is to [ldquo]create, restore, and maintain resilient ecosystems through active management.[rdquo] DPEA at 35. But as the Forest Service knows, [ldquo]restoration[rdquo] and [ldquo]resilience[rdquo] are not self-applying concepts. Restoration for what dimensions of ecological integrity? And at what scales? The project[rsquo]s goal is further explained through eleven bullet points, such as [ldquo]Improve forest composition and structure;[rdquo] [ldquo]Reduce risks to forest health;[rdquo] and [ldquo]Enhance and provide sustainable recreation opportunities.[rdquo] Id. These eleven bullets are expanded further into twenty-seven sets of [ldquo]Existing and Desired Conditions.[rdquo] Id. at Table 16. The project[rsquo]s [ldquo]Implementation Framework[rdquo] goes on to describe [ldquo]more than 30 management actions (or [lsquo]tools[rsquo]) are proposed to meet the restoration needs throughout the landscape.[rdquo] Id. at B56. 22 This shifting and ever-expanding statement of purpose and need has consequences for the quality of the NEPA review. A project[rsquo]s [ldquo]reasonable alternatives are dictated by the underlying purpose of the proposed action.[rdquo] Wilderness Soc. v. U.S. Forest Serv., 850 F. Supp. 2d 1144, 1163 (D. Idaho 2012). Each of the DPEA[rsquo]s eleven bullets could stand alone as a statement of purpose and need. By seeking to accomplish them all, at the same time and across the entire Foothills Project area, the project[rsquo]s underlying purpose becomes so broad as to be nearly meaningless. There are an infinite number of reasonable alternatives that could satisfy this purpose, because it includes so many different objectives that can be combined in so many different ways. CEQ encourages the opposite approach [ndash] the statement of purpose and need should be [ldquo]focused enough for the agency to conduct a rational analysis of the impacts and allow for the public to provide meaningful comment on the programmatic proposal.[rdquo] CEQ Programmatic Guidance at 19. Once again, the solution to this problem remains the same. The Forest Service should focus on a narrower or more constrained list of activities. Doing so will improve the quality of the NEPA analysis, allow the public to better understand the actions contemplated by the agency, and will ultimately result in a more successful project. The Forest Service adopted this approach with respect to the Goal 17 Project, and we strongly encourage the same to be done here.

VI. The Forest Service Should Consider Additional Alternatives To Focus The Project And Limit Its Potential

Environmental Effects

The alternatives analysis is the [Idquo]heart[rdquo] of the NEPA review. 40 C.F.R. [sect] 1502.14. NEPA requires federal agencies to [Idquo]study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.[rdquo] 42 U.S.C. [sect] 4332(2)(E). Agencies must [Idquo][u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.[rdquo] 40 C.F.R. [sect] 1500.2(e); see also 40 C.F.R. [sect] 1508.9(b) (EAs must discuss alternatives); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1229 (9th Cir. 1988) (federal action involving unresolved conflicts as to proper use of resources triggers NEPA's alternatives requirement, whether or not an EIS is also required). Accordingly, [Idquo][a]n agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, and sufficient to permit a reasoned choice.[rdquo] *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir. 1992) (internal citations omitted); see also *Methow Valley Citizens Council v. Regional Forester*, 833 F.2d 810, 816 (9th Cir. 1988), rev'd on other grounds, 490 U.S. 332 (1989) (reasonable range of alternatives framed by purposes of project). The failure to consider a [Idquo]viable but unexamined alternative[rdquo] will render the analysis inadequate. *Dubois v USDA*, 102 F.3d 1273, 1289 (1st Cir. 1996); and 40 C.F.R. [sect] 1502.14. 23 CEQ[rsquo]s guidance advises that programmatic alternatives be focused enough to permit comparison of different programmatic directions. CEQ Programmatic Guidance at 31. Agencies should use a meaningful comparison of alternatives [Idquo]at the programmatic level to support focusing future decisions and eliminating certain alternatives from detailed study in subsequent NEPA reviews.[rdquo] *Id.* Only by [Idquo]articulating the reasoned choice between alternatives, with a discussion of why considered alternatives were not chosen, [can] the range of alternatives in tiered NEPA reviews can be appropriately narrowed.[rdquo] *Id.* Here, the DPEA considers two action alternatives and one no-action alternative. DPEA at 55. The two action alternatives differ only in geographic scope. Alternative 2 would authorize the full range of proposed management activities within the entire 157,625-acre project area. Alternative 3 is identical to Alternative 2, except that commercial activities would be prohibited in 53,000 acres designated unsuitable for timber production. *Id.* The two action alternatives demonstrate both the problem with the Forest Service[rsquo]s current approach, and the solution. First, the problem: Foothills Landscape Project seeks to authorize [Idquo]more than 30 management actions[rdquo] across over 150,000 acres. DPEA at B56. These thirty actions could be combined in a virtually infinite number of potential alternatives, and any attempt to compare the environmental impacts of so many different alternatives would quickly become impossible. Courts have cautioned against this exact situation, where a project[rsquo]s purpose is so broadly defined that an [Idquo]infinite number of alternatives would accomplish [it] and the project would collapse under the weight of the possibilities.[rdquo] *Webster v. U.S. Dep't of Agric.*, 685 F.3d 411, 422 (4th Cir. 2012) (citation omitted). Currently, the agency has a programmatic analysis, but it is not proposing to make a programmatic decision. Instead, it is explicitly leaving all its options on the table. As a result, the DPEA does not make a detailed comparison of different programmatic directions that might be pursued. But the Forest Service knows how to fix this problem: the difference between Alternatives 2 and 3 is a limitation on where commercial harvesting activities can be conducted. The additional limit imposed in Alternative 3 is an example of the sideboards that have been discussed throughout these comments and can help narrow the universe of potential effects. By excluding commercial activities in unsuitable areas, Alternative 3 allows the Forest Service to better quantify the potential impacts of its actions and avoid an issue that could be problematic at the implementation phase (conducting commercial harvests in areas designated unsuitable). Implementing limits like this one would serve multiple purposes by avoiding [Idquo]significance triggers[rdquo] and reducing the amount of site-specific review required by precluding certain categories of potential impacts. Other useful sideboards have been proposed previously but were dismissed without adequate consideration. See, *Foothills Landscape Project Scoping Summary Report* (May 2018) at 8-13. For example, Alternative D (limiting time frame of project) and Alternative G (exclude treatments in Inventoried Roadless Area) would all be useful sideboards for this project. A more complete list of potential sideboards is set forth below in Section XIII. 24 Developing potential sideboards is a task uniquely well-suited for the planned Foothills Collaborative Group. Therefore, we encourage the Forest Service to afford the Collaborative Group the opportunity to develop an additional alternative with

more robust sideboards and consider this new alternative in the Final Programmatic EA. Doing so will allow for the Forest Service to make a more meaningful comparison of alternatives [Idquo]at the programmatic level to support focusing future decisions and eliminating certain alternatives from detailed study in subsequent NEPA reviews.[rdquo] CEQ Programmatic Guidance at 22.

a. The No-Action Alternative Must Assume That Forest Service Activities Will Continue at the Current Rate

The Forest Service should also clarify the extent to which the No Action Alternative reflects the agency[rsquo]s current ability to undertake projects within the Foothills Project region. [Idquo][In] situations where there is an existing program, plan, or policy, CEQ expects that the no[1]action alternative in an EIS would typically be the continuation of the present course of action until a new program, plan, or policy is developed and decided upon.[rdquo] CEQ Programmatic Guidance at 22. Both in the statement of alternatives and in its comparison of environmental effects, it is unclear the extent to which the No Action Alternative reflects the Forest Service[rsquo]s current number and frequency of actions within the Foothills Project area. For example, the discussion of alternatives states that the No Action Alternative reflects [Idquo]ongoing management in which individual NEPA analysis is completed for actions tiered to the Forest Plan.[rdquo] DPEA at 55. But it also states that the No Action Alternative [Idquo]forecasts potential effects should the responsible official choose not to proceed with any management activities proposed for the Foothills Landscape[rdquo] and that [Idquo]each resource would continue in its present state.[rdquo] Id. (emphasis added). At a minimum, the DPEA[rsquo]s [Idquo]Assumptions for Analysis[rdquo] Appendix D should include an assumption regarding the type, frequency, and impacts of actions assumed as part of the No Action Alternative. As currently drafted, the DPEA seemingly includes two different versions of [Idquo]no action.[rdquo] The current [Idquo]no action[rdquo] alternative assumes no action whatsoever, which, as noted above, is not what CEQ guidance requires. Alternative 2 may actually be closer to what CEQ defines as the [Idquo]no action[rdquo] alternative for a programmatic analysis. Alternative 2 doesn[rsquo]t narrow the decision space from the forest plan; it instead provides a landscape assessment of all options but not a proposed decision to choose one direction for future management from among all the options. See CEQ Programmatic Guidance at 9 (differentiating NEPA decisions from non-NEPA assessments). In effect, Alternative 2 proposes to continue implementing all the options from the forest plan, just as the Forest Service currently can do and is doing. To properly contrast with this open-ended alternative, the Forest Service should further develop Alternative 3 (and perhaps other action alternatives) to explore the pros and cons of different directions for future management. 25

VII. NEPA Requires That The Proposed Action[rsquo]s Environmental Impacts Be Given A [Idquo]Hard Look[rdquo]

NEPA declares a broad national commitment to protecting and promoting environmental quality. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). That commitment is [Idquo]realized through a set of [lsquo]action-forcing[rsquo] procedures that require that agencies take a [lsquo]hard look[rsquo] at environmental consequences, and that provide for broad dissemination of relevant environmental information.[rdquo] Id. at 350 (citations omitted). This [Idquo]hard look[rdquo] must include [Idquo]some quantified or detailed information[rdquo] supporting the conclusions of an EA. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004). An [Idquo]agency has satisfied the [lsquo]hard look[rsquo] requirement if it has examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.[rdquo] *Black Warrior Riverkeeper, Inc. v. U.S. Army Corps of Engineers*, 833 F.3d 1274, 1285 (11th Cir. 2016) (citation omitted). The [Idquo]hard look[rdquo] requirement is violated when [Idquo]the agency failed entirely to consider an important aspect of the problem.[rdquo] *Sierra Club v. U.S. Army Corps of Engineers*, 295 F.3d 1209, 1216 (11th Cir. 2002).

a. The Hard Look Standard and Programmatic Review

The Forest Service must decide whether it intends to conduct this [Idquo]hard look[rdquo] now or later. The

DPEA, as currently written, does not contain sufficient site-specific analysis to satisfy NEPA's hard look standard without additional site-specific review at the implementation phase. Although additional information has been provided compared to the prior Draft EA, much of this information is high level data regarding general conditions throughout the geographic range of the Foothills Project and does not allow for site-specific impacts of future actions to be evaluated. *Or. Nat. Res. Council Fund v. Goodman*, 505 F.3d 884, 892 (9th Cir. 2007) (Merely disclosing the existence of particular geographic or biological features is inadequate—agencies must discuss their importance and substantiate their findings as to the impacts.) The comments we previously submitted regarding the Draft EA illustrated in detail the type of site-specific analysis required to satisfy NEPA's hard look standard. See, January 10, 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 124-190. In those prior comments, we noted that all forest stands are not created equal. They vary by too many factors to capture with a few "design elements," including the different habitat values, different spatial relationships to other habitats, different proximity to communities, different elevations, different slopes and aspects, different hydrology, different soil types, different past management, and different use by people. In short, each patch of forest is unique. *Hoffman on behalf of NLRB v. Cement Masons Union Local 337*, 468 F.2d 1187, 1192 (9th Cir. 1972) (holding that "each parcel of real property is unique" and that each parcel "serves a unique public interest because of its location and other intangible factors").²⁶ Therefore, the Forest Service has three options with respect to its evaluation of the Foothills project's potential impacts: (i) it can add an enormous amount of new analysis to the programmatic document; (ii) it proceeds based on the expectation that the bulk of this analysis will be deferred until the project implementation stage; or (iii) it can adopt project sideboards at the programmatic stage to reduce the number of issues and analysis required at the implementation stage. Currently, the Forest Service appears to be pursuing the second option, deferring the bulk of analysis to the future, but we are concerned it may not realize how inefficient that will be in practice. As we stated before, we believe the third option is clearly the best one.

b. Analysis of Site-Specific Impacts is Required Under the Hard Look Standard

The unique characteristics of each site proposed for treatment, as well as the particular treatment itself, determines the issues that NEPA analysis must address before the agency may act. The broader the set of issues (including issues for which the impacts may be cumulative), the more complex the analysis. At this stage, where particular sites have not been identified and priorities have not been narrowed or sideboards adopted, there is a clear limit to the analysis that the Forest Service is able to do. This leaves most of the "hard look" to the future. The DPEA proposes to use a series of "indicators" and "measures" to evaluate the potential impacts to different resources. DPEA at 58-105. These metrics seek to quantify the impact of proposed actions on specific environmental impacts. But they accomplish this goal to varying degrees and ultimately provide no site-specific information. The Forest Service can rely on this level of analysis in a programmatic document, but only if it intends to conduct additional site-specific analysis at implementation. But the Forest Service cannot rely on this information alone to satisfy NEPA's hard look requirement. Further, the Forest Service must anticipate that particular actions and sites may present environmental impacts that do not fall squarely within the framework of Indicators and Measures contained in the DPEA. The DPEA only provides a minimum framework for considering potential impacts and will necessitate site-specific analysis at the implementation phase.

c. Implementation Area Versus Stand-Level Review

At this point in Foothills Project development, the agency's plans for the scale of future site-specific analysis remain unclear but we note, out of an abundance of caution, that consideration of site-specific impacts at the implementation phase must be more granular and at a smaller scale than the Implementation Areas described in the DPEA. The DPEA identifies sixteen "Implementation Areas" ("IA") that were "identified for logical and operational functionality in order to strategically plan the sequence of work across the landscape." DPEA at 5. The DPEA suggests that concentrating "implementation

efforts at these smaller scales within the greater context of the Foothills Landscape logistically allows for efficient planning and distribution of time and resources driven by need and operational feasibility. Id. at 6. NEPA's hard look requirement necessitates more detailed, granular information than the IA-level data contained in the DPEA. Yet at several locations, the document suggests that the IA-level analysis is sufficient to satisfy NEPA's site-specific analysis requirement. For example, the DPEA asserts that its maps have been modified to show "site specific conditions per IA for all resources or issues." DPEA at Table 15 (emphasis in original). Appendix F is titled "Site Specific Conditions" and contains IA-level data, and DPEA elsewhere refers back to Appendix F for "site-specific conditions [that] are shown per resource." Id. at 57. If anything, the information in Appendix F demonstrates the need for further site-specific analysis. The maps in Appendix F demonstrate the great diversity and heterogeneity in conditions found across different IAs, and within the same IAs. Compliance with NFMA and NEPA turns on taking these differences into account. Moreover, Appendix F includes no commitments regarding what specific activities will take place in a specific area. Regeneration logging on highly erosive soils with low T-factors has different effects than prescribed burning on those same soils. Designation of implementation areas does not help resolve these differences; site-specific analysis considering specific activities in specific locations does. That is why the site-specific evaluation required under NEPA requires more detailed review than IA-level information. It is perfectly appropriate for the Forest Service to use this IA-level data for planning purposes and to help identify areas potentially eligible for action based on existing and desired conditions. DPEA at 29. Further, IAs may be helpful to cap the cumulative activities within a geographic sub-region of the project and avoid concentrating actions in a way that would lead to significant impacts. But most of the Indicators and Measures identified in the DPEA cannot, and should not, be evaluated at the IA level and instead must be analyzed using more granular, stand-level data.

d. The Programmatic Document's Failure to Meaningfully Compare Alternatives is a Missed Opportunity

The DPEA's comparison of Alternatives 2 and 3 is an example of a missed opportunity to use the programmatic document to expedite future site-specific reviews. The DPEA's two action alternatives are different in one key respect — whether they authorize commercial activities in areas deemed unsuitable for timber production under NFMA. DPEA at 55. CEQ regulations direct that the alternatives analysis should be presented in "comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. [sect] 1502.14. But instead of meaningfully comparing the environmental effects of the two action alternatives, the DPEA repeatedly describes the effects of the two alternatives as similar, with Alternative 3's having effects on a "lesser scale" or to a "lesser degree." DPEA at 61-62; 68; 70; 75; 77; and 88-89. 28 Setting aside whether this analysis is sufficient to satisfy the regulation (it is not), this cursory comparison is a critical missed opportunity for the Forest Service to get more mileage out of its programmatic review. The exclusion of commercial harvest from unsuitable areas is a perfect example of how sideboards can be used at the programmatic stage to avoid potential impacts or difficult issues at the implementation stage. But it is not enough for the agency to include this limit; it must explain how the sideboard serves to curtail the project's potential future environmental impacts. By doing this work at the programmatic phase, the Forest Service can leverage it later to expedite the environmental review at the implementation stage and incorporate the programmatic analysis by reference. Relating back to prior analysis is one of the key potential efficiencies afforded by the programmatic approach, but is only available if that comparative analysis is actually performed at the outset. 42 This type of explanation would be relatively easy regarding the removal of unsuitable areas from consideration for commercial timber harvest in Alternative 3. Areas are set aside as unsuitable for specific reasons and the Forest Plan assumes that commercial logging will not be focused in these areas. By excluding them in project proposals, the agency avoids having to assess under NEPA the tradeoffs between logging in these areas and protecting their other values, as well as the need to explain how proposed activities meet the limited exceptions under NFMA for timber production in unsuitable areas. Unfortunately, the DPEA's explanation that Alternative 3's effects will be "the same but less" provides little meaningful analysis to leverage in the future. The Forest Service should not only add an additional alternative with more robust sideboards, but it must also explain how those sideboards serve to

curtail the potential for environmental effects of the action.

e. The DPEA's Discussion of Cumulative and Connected Actions Defers Much of Necessary Review to the Project Implementation Stage

If a programmatic proposal is not limited enough to allow for cumulative impact analysis, then such analysis can be deferred. *Salmon River Concerned Citizens v. Robertson*, 798 F. Supp. 1434, 1440 (E.D. Cal. 1992), *aff'd*, 32 F.3d 1346 (9th Cir. 1994); *Northern Alaska Environmental Center v. Lujan*, 961 F.2d 886 (9th Cir.1992) (holding that an EIS's deferral of consideration of certain potential cumulative and synergistic effects is proper tiering and does not foreclose later analysis of these factors in a future EA).

The DPEA's discussion of environmental impacts includes a section for cumulative impacts, but once again this analysis is insufficiently detailed to satisfy NEPA without substantial additional analysis. The DPEA's cumulative effects analysis is organized based on the same Indicators and Measures outlined above, but includes a brief statement regarding the potential for the cumulative impact under these measures. DPEA at 57-105. Despite the Foothills Project's lack of limits on the number, location, and types of activities involved, the DPEA largely concludes that projects authorized under the DPEA have little potential for cumulative effects. *Id.* For example, the DPEA's discussion of cumulative effects on aquatic resources illustrates how this approach falls short. First, the DPEA's Indicators and Measures identify what will be measured but do not quantify or limit how much of that effect may occur. Further, NEPA requires conclusions to be supported by necessary analysis and there is no analysis to support the conclusion that aquatic effects would be [quoting]short term and small scale.[rdquo] The DPEA states that disturbance [quoting]is not expected to exceed 10% of any watershed,[rdquo] but this limit appears to be aspirational and nonbinding. Further, the conclusion that disturbances [quoting]would not appreciably increase the level of effects on aquatic resources[rdquo] is also unsupported. Again, the programmatic review is most useful when it links project sideboards with potential for environmental impacts. With the benefit of this analysis, the agency can refer back to this discussion and expedite its review at the implementation stage. But when the programmatic document contains little analysis of how sideboards impact the potential for environmental impacts [ndash] and particularly the potential for cumulative impacts [ndash] this analysis does little work to streamline the review at the implementation stage. Although not a perfect example,⁴³ the 10% disturbance limit at least illustrates, at a conceptual level, how sideboards can be used to facilitate the consideration of cumulative effects. If the programmatic document adopted this limit as an binding parameter of the project and explained how the disturbance limit would prevent cumulative impacts on aquatic resources, then the sidebar and discussion would provide a basis for narrower review at the implementation stage.

VIII. Technical Recommendations To Improve The Foothills Project

In the comments submitted on the prior Draft EA, we identified a variety of measures that the Forest Service should adopt to improve the Foothills Landscape Project. See, January 10, 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 61-91. These include recommendations to: improve vegetation management actions; better disclose impacts to the recreation system; improve the use of prescribed fire; minimize impact to soils; and minimize impacts to aquatic resources. These comments remain largely applicable here, and are incorporated by reference. Further, these recommendations illustrate the type of technical discussion that should be considered through the Collaborative Group to define the scope of the project, prioritize actions, identify appropriate locations, and mitigate the effects of actions. As previously discussed, these considerations are intertwined with the Forest Service's NEPA review and should be considered at both the programmatic phase and the implementation phase. To stimulate further discussion and lay the foundation for future action by the Collaborative Group, we submit additional comments on the broader concepts underlying actions proposed for the Foothills Project. We also clarify our previous comments by highlighting where additional information is still needed to address previous comments.

a. Aquatic Resources

The July 2021 revision to the Foothills Project Aquatic Resources Report has some minor wording shifts, and rearrangement of paragraphs and tables. However, none of our January 10, 2020 comments to the September 2019 Foothills Project Aquatic Resources Report have been resolved. In summary, our comments requested (including but not limited to): [middot] Modeling of mass erosion and sedimentation per year and per decade, including activities throughout the watershed, not just the riparian corridor; [middot] Inclusion of larger riparian corridors to accommodate activities in steeper slopes; [middot] Consideration of impacts a minimum of 3 miles downstream of the CNF; [middot] Addressing all stream biota, including benthic; [middot] Site specific evaluation of trout impacts; [middot] Inclusion of ephemeral stream impacts; [middot] Commitment for no mesic hardwood gap creation or new wildlife openings in the riparian corridor; [middot] Realistic BMP effectiveness, including long term failures; [middot] Disclose baseline conditions; [middot] Do not average stream ratings; [middot] Address two watershed that are not currently meeting designated uses; [middot] Evaluate stream impact from prescribed fire; 31 [middot] Commit to specific changes in recreation and fish passage structures or do not include them as mitigation strategies; [middot] Correctly calculate impervious percentage of watershed; [middot] Use all twelve stream indicators instead of only one; and [middot] Evaluate stream impacts locally instead of only watershed wide.

b. Fire and Fuels

The DPEA does not contain sufficient information to assess the impacts of the proposed use of prescribed fire. The issue is that the impacts of prescribed fire come not only from the logistics of its implementation (e.g., fire lines and connected actions) but also from the fire regime itself. As fire managers know, fire behavior can change dramatically depending on conditions. Fire is not like a light-switch, [ldquo]on[rdquo] or [ldquo]off[rdquo]. The DPEA explains there will be an implementation plan for each burn unit, but does not describe the frequency, intensity, seasonality, location or size of burn units. Some of that information is scattered in descriptions of other treatments, but there is no complete description. DPEA at B19. While the fire and fuels analysis uses several valid assumptions, it also relies on the hidden assumption that dry forests that do not burn become more flammable. A corollary of that assumption is: prescribed fires will reduce the intensity and extent of wildfires. A study in Mississippi pine-hardwood forests calls that assumption into question because researchers found that prescribed fire did not reduce the incidence, size, or intensity of wildfires.⁴⁴ Other researchers have found that prescribed fire can reduce wildfire hazard, but those results come from low productivity ecosystems where fuels accumulate slowly and fuel continuity is easily disrupted by prescribed fire. The Mississippi researchers explain their findings by postulating that fire suppression had converted the landscape from more flammable forests types to less flammable. Indeed, Nowacki and Abrams, who have been leaders in pointing out the importance of fire in Appalachian forests, argue that a lack of fire can inhibit future fires by allowing less flammable species to dominate.⁴⁵ For instance, an increase in understory maples may reduce litter flammability and raise humidity levels in the understory. In the DPEA, multiple proposed treatments aim to increase grass cover, which is easier to ignite than much of the existing groundcover. Thinning has also been used in the region to facilitate prescribed fires, and multiple thinning treatments in the DPEA would likely dry fuels, making them more likely to carry fire.

For these reasons, prescribed fire may not reduce wildfire risk in the Foothills, and other treatments may actively raise wildfire risk. This is not to say that prescribed fire cannot be used to reduce wildfire risk, only that it will not necessary do so. Additional analysis is needed to determine under what circumstances actions proposed in the DPEA would reduce wildfire risk.

c. Soils

The July 2021 revision to the Foothills Project Soil Resources Report was expanded by 92 (electronic version)

pages (from 91 pages in the 9/19 version to 183 pages in the 7/21). The changes and additions seem to consist completely of organizational changes: minor wording shifts, quoting USFS guidance and NRCS soil classification, and rearrangement of paragraphs and tables. However, none of our comments to the September 2019 Foothills Project Soil Resources Report have been resolved. In summary, our comments requested (including but not limited to): [middot] Calculate site specific T-Factors for soil loss, and remove good, fair, and poor subjective and vague ratings; [middot] Site specific timelines showing cumulative effects; [middot] Define acreage to be impacted per watershed; [middot] Commit to not exceed assumptions used to estimate soil loss and compaction; [middot] Include erosion control measures for moderate risk soils; [middot] Exclude heavy equipment on unsuitable or severe rut hazard soils; [middot] Show timeline for nutrient availability from soil weathering; [middot] Define natural inputs for plant available phosphorus; [middot] Commit to distribute slash; [middot] Provide baseline soil conditions for each specific location based on current field review; [middot] Consider impacts from old temporary roads that will be reused; and [middot] Include compaction from mastication.

d. Recreation and Transportation

We are pleased to read in the DPEA plans to permanently close some of the many failing roads on the CONF and to restrict others to administrative use only. Additional funding through programs such as Legacy Roads and Trails may help to make these aspirations a reality, and we share your hope that such funds will be available soon. The Forest Service certainly has an obligation to take these steps, as they created many of these roads to begin with. It is sobering to read of the many roads currently being used illegally, but the report is consistent with our own observations. 33 It is imperative that the Foothills Project include sideboards on any new roads, including temporary roads, to ensure that they are returned to resource production quickly after use, and to ensure that they do not become additional vectors for illegal use.

e. Vegetation

An implicit assumption in the DPEA appears to be that the landscape consists of patches of even-aged forest of different age classes, which remain in a stable proportion over time even as the location of different ages shifts across the landscape. For instance, one treatment seeks to [ldquo]establish areas of young oak forests to create a more balanced and resilient age-class distribution.[rdquo] DPEA at B8. The idea of a [ldquo]balanced[rdquo] age class distribution assumes even-aged stands and a relatively stable age distribution across the landscape. Those traits accurately describe some forested landscapes, but not the Foothills. This model better describes the forests of the Upper Midwest at the edge of the boreal forest⁴⁶. The age structure of Foothills forests differ from those of Upper Midwest because the disturbance regimes differ. Disturbance in the para-boreal forests of the Upper Midwest is dominated by large fire and straight-line wind (derecho) events, which can individually flatten over 100,00 acres of forest.⁴⁷ Forests of the Southern and Central Appalachians are typically uneven-aged with trees of many different ages occupying any given stand simultaneously.⁴⁸ This finding applies to oak forests⁴⁹, southern yellow pine forests, and mesic deciduous forests⁵⁰. Even trees with specific adaptations to high-intensity disturbance such as Table Mountain pine often form uneven-aged stands.⁵¹ Uneven-age stands are the norm in the Southern and Central Appalachians because fine scale disturbances predominate over large, intense disturbances.⁵² For southern yellow pine regeneration, these findings do not support the plan that [ldquo][a] follow up harvest to remove residual sheltering trees would occur once the site has been adequately regenerated to the target species and adequately stocked.[rdquo] DPEA at B5. Dominant trees in these uneven-aged forests reach much greater ages than currently common in the Foothills Landscape. Our research in old-growth forests of the Chattahoochee National forest produced a median age of 189 for chestnut oaks and 213.5 years for white oak, the two most common species. That longevity means that in 80 years, the threshold for [ldquo]late successional[rdquo] stands, is equivalent to a person being in their 30s. These ages are likely underestimates of the typical longevity of these species because core samples from still living trees missed the pith and were taken at roughly 4.5[rsquo] above ground, so the first several years did not appear in the core samples. These ages are also consistent with ages found by other species for trees common in the region.^{53,54} These general traits of Foothills forests have many implications for management and specific treatments. For instance, efforts to

regenerate southern yellow pines often assume that they require fully open canopies and that at any one-time conditions are favorable for their regeneration throughout most of the stand. The dominance of fine-scale disturbances raises the possibility that they may require favorable seedbed conditions, but not ascend to the canopy until a fine-scale disturbance increases light levels above those typical of the stand. In fact, researchers studying an old-growth stand in the Georgia Ridge and Valley found that "[o]f the 32 pines, 31 experienced release events, with 166 release events occurring overall. Per tree, an average of 5.18 release events occurred."⁵⁵ McEwan and others studying another Appalachian old-growth forest [l]posit that [fire and gap dynamics] may have a synergistic effect on long-term dynamics, wherein fire [l]filters[r] the seedling pool and gap openings provide canopy accession opportunities.⁵⁶ In mesic deciduous forests, studies consistently find diverse and complex forests. Runkle found that canopy gaps cover 3.2% to 24.2% of old-growth stands.⁵⁷ While the research supports canopy gaps as a natural part of mesic forests, it also suggests that plans for [l]intermediate thinning between gaps, retaining 70-80 ft² /ac basal area in the thinned portion of the stand[r] would exceed natural levels of canopy openness. DPEA at B15. The research suggests the canopy is closed between gaps, and retaining 70-80 ft²/ac basal area would remove a third to a half of the canopy, more opening than even the most open reference site. Potential connected actions for the treatment include [l]herbicide use for release and/or mid-story reduction.⁵⁸ DPEA at 49. Understory saplings play a critical role in responding to canopy gaps in mesic deciduous forests.⁵⁸ The best available science does not appear to support either the thinning outside of gaps or herbicide use to remove understory or midstory vegetation.

IX. The Foothills Project's Climate Change Impacts Must Be Properly Considered

[l]It is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible.⁵⁹ Executive Order 13,990 (Jan. 20, 2021). To meet the hard look requirement under NEPA, the Forest Service must revise its analysis to more accurately disclose the effect of the Foothills Project on climate change. Recently, CEQ instructed federal agencies to [l]consider all available tools and resources in assessing [greenhouse gas] emissions and climate change effects of their proposed actions, including, as appropriate and relevant, [CEQ's] 2016 Greenhouse Gas Guidance.⁶⁰ 86 Fed. Reg. 10252 (Feb. 19, 2021). That guidance cautions that [l]a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA.⁶¹ 2016 CEQ Greenhouse Gas Guidance at 11. Instead, agencies should [l]quantify a proposed agency action's projected direct and indirect [greenhouse gas] emissions, taking into account available data and [greenhouse gas] quantification tools that are suitable for the proposed agency action.⁶² Id. at 4. The guidance specifically notes the advantages of considering climate change effects in programmatic NEPA documents like the DPEA. Id. at 31-32. a. The Forest Service Must Reevaluate the Assumptions Underlying Its Climate Change Analysis While no assumptions are listed for climate change in Appendix D, the assessment of climate change impacts appears to rest on a few major assumptions. DPEA at D3. As discussed more below, the analysis is flawed because it focuses overwhelmingly on carbon sequestration rate but largely ignores carbon storage and the release of carbon through the Foothills Project activities. Regarding sequestration rates, the conclusion that the Foothills Project will positively influence carbon sequestration appears to rely heavily on the assumptions that climate change

will drive broad scale tree mortality and wildfire in the Foothills, and that a combination of logging and prescribed fire is able to prevent that mortality. While climate change will produce novel conditions that stress ecosystems, species may replace each other gradually rather than in large die-off events. If replacement is gradual, the broad scale die-off assumption may not hold. While climate change is expected to generally increase the risk of wildfire, mesophication [dash] succession to less flammable vegetation types [dash] may also be occurring in the region.⁶³ Indeed, our region is predicted to become wetter overall due to climate change.⁶⁴ For that reason, the assumption about future wildfires may not hold. On the other side, climate change could produce such dramatic ecosystem stress that silvicultural and prescribed fire interventions will be overwhelmed, so the assumption of mitigation may not be valid. The analysis also appears to assume that fuels that would accumulate

in the absence of the Foothills Project, and would be converted to atmospheric CO₂ in the coming decades via wildfire. However, wildfires only consume a small percentage of available fuels. Tree boles do not burn well and, even under extreme wildfire conditions, a large amount of surface fuel remains after fires. Fuels remaining after wildfire need to be included in the analysis. Finally, the analysis appears to assume that fire will have a dominant influence on greenhouse gas emissions in the Foothills Project area. While fire has the potential to both release CO₂ and strongly influence sequestration, it is not the only influence process. For example, vegetation growth and decay processes also have strong impacts and will also be influenced by the Foothills Project. Analyses are needed to determine the relative strengths of these different influences. Beyond these assumptions, the relationship between fuels and carbon storage needs to be clarified or reanalyzed. Greenhouse gas emissions under Alternative 1 are described as “[fuel] loading and lower carbon sequestration, with a higher carbon release over the long-term as fuel loading increases within forests.” DPEA at 70. Fuel is, by definition, made out of carbon compounds. The fire triangle that is basic to wildland fire training includes oxygen, heat, and fuel because heat triggers a chemical reaction between the fuel and the oxygen that produces CO₂ and H₂O. Fire is literally a process of converting stored carbon into greenhouse gases. Taking this basic understanding that fuel-loading is literally carbon sequestration and applying it to the Alternative 1 greenhouse gas emissions, we get “[carbon sequestration] and lower carbon sequestration, with a higher carbon release over the long-term as [carbon sequestration] increases within forests.” DPEA at 70. That conclusion does not make sense. Considering fuel accumulation now and carbon release in a wildfire later does not resolve the conundrum because, as discussed above, wildfires would release only part of the accumulated

fuel. Alternatives 2 and 3 have similarly contradictory impact statements, only with the direction of changes reversed. Similarly, the conclusion that “[t]he long-term effects would last as long as treatments are being maintained to reduce the fuel loading” does not make sense. DPEA at 71. The presumed effect in this case is carbon sequestration, which is in fact accomplished by fuel loading. Reducing fuel loading would reduce carbon storage. Using prescribed fire to consume fuels now will prevent a future wildfire from releasing those same fuels as CO₂ in the future, but only because the current prescribed fire would release those fuels as CO₂ now. The influence of prescribed fire on carbon sequestration is an area of active research. Studies using different scales and assumptions in different ecosystems have produced a variety of results. However, a recent full ecosystem carbon modeling that accounts for the potential of prescribed fires to prevent wildfires found that whether prescribed fires increase or decrease net emissions depends on their frequency and how much they can reduce the risk of severe wildfires.⁶² b. The Forest Service Must Evaluate Carbon Storage, Not Just Carbon Sequestration Critically, the DPEA falls short of the mark by ignoring the project’s largest single contribution to climate change effects: harvesting thousands of acres of trees. According to a 2015 Forest Service analysis, the CONF stores approximately 65 megatons of carbon.⁶³ The disturbance leading to the greatest reduction in carbon storage—by far—is timber harvest which, between 1990 and 2011, accounted for 83% of the disturbances affecting carbon storage on the forest.⁶⁴ The second highest disturbance was wind events, which accounted for 11% of disturbances affecting carbon storage, followed by fire and insects at 3% each.⁶⁵ Nationally, carbon losses from timber harvests are five times higher than those from all other disturbances combined, including wildfire.⁶⁶ Simply put, the greatest source of greenhouse gas emissions on the CONF and forests nationwide is timber harvest.

Harvesting trees

immediately releases significant amounts of accumulated carbon back into the atmosphere with only a fraction of live-tree carbon stored in wood products long-term.⁶⁷ One study estimates that harvesting, primary processing, and secondary processing may leave as little as 18% of live-tree volume to be converted into harvested wood products.⁶⁸ Another estimates that of the wood delivered to mills—which excludes significant amounts of wood discarded at the harvesting site—only 67.5% of softwoods are converted to harvested wood products, and 56.8% of hardwoods, “[with the balance of carbon assumed to be immediately emitted to the atmosphere.]”⁶⁹ These and other studies indicate that conservatively at least 50% of the carbon stored in a live tree is emitted to the atmosphere at the time of harvest. The DPEA sidesteps this impact by focusing on carbon sequestration instead of storage. But these concepts are not interchangeable. Carbon sequestration refers to the rate at which carbon is removed from the atmosphere and sequestered in trees. For example, Forest Service data indicate that an oak/pine stand on the CONF increases its rate of carbon sequestration from harvest until approximately thirty years of age, peaking at a net annual primary productivity of 8.5 tons of carbon per

hectare.⁷⁰ The rate of sequestration subsequently decreases slightly through approximately age 100 but then maintains a primary productivity of 5 tons per hectare.⁷¹ We agree with the agency that these older trees likely sequester carbon at a lower overall rate. See Foothills 2021 Climate Change Specialist Report at 4. But that is only a piece of the puzzle. Carbon storage is the amount of carbon stored in a living tree. Using the sequestration rates provided by the Forest Service, an 80-year old pine/oak stand is predicted to store over 450 tons of carbon.⁷² Harvesting that stand will release at least 225 tons of carbon into the atmosphere almost immediately. A new stand will not re[1]sequester that lost carbon for nearly 40 years[mdash]and that does not take into account the carbon that would have continually been sequestered in the 80-year old stand had it not been harvested which would extend the amount of time to re-sequester the carbon emitted at harvest by decades. This is the point: while younger trees may sequester carbon at higher rates, harvesting

older trees emits carbon to the atmosphere that, in the best case scenario, will not be recoverable for decades to centuries. Net emissions matter in the short term, while we still have a rapidly-closing opportunity to limit catastrophic climate change. The agency should not approach this issue with blinders on. The agency[rsquo]s suggestions that [ldquo]effects occurring within 10 to 15 years following each treatment are considered short-term and are considered recoverable by natural processes[rdquo] is therefore misplaced. Foothills 2021 Climate Change Specialist Report at 2. The carbon emission effects associated with timber harvests proposed under the Foothills Project are irrecoverable on any timescale relevant to avoiding the worst impacts of climate change. This is not disclosed anywhere in the DPEA. The agency has tools available to help it [ldquo]quantify [the Foothills Project[rsquo]s] direct and indirect [greenhouse gas] emissions.[rdquo] The agency has already estimated baseline carbon stocks on the CONF. Based on the ecotypes and stand ages targeted by specific activities in the Foothills Project, the agency can make basic predictions about the amount of carbon released via harvesting. With additional information about harvested timber end uses, the agency can make additional estimates regarding carbon emissions over the life of the harvested wood product. Some of this information and the tools necessary to complete this analysis are available on the agency[rsquo]s website where it has compiled [ldquo]a toolbox of calculation tools to help quantify forest carbon for planning and reporting.[rdquo]⁷³ Assessing carbon storage also requires accounting for belowground carbon because soils can be a major carbon pool in temperate forests. Timber harvests typically decrease soil carbon, and soil carbon characteristically takes several decades to return to pre-harvest levels.⁷⁴ In temperate forests, timber harvests reduce soil carbon by an average of 8%.⁷⁵ These effects may vary by the intensity of harvest.⁷⁶ c. The Forest Service Should Evaluate the Social Cost of Carbon Emissions One specific tool the agency should use is the social cost of carbon protocol. That tool is designed to [ldquo]allow agencies to incorporate the social benefits of reducing emissions of . . . greenhouse gases, or the social costs of increasing such emissions, in decision making.[rdquo] Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990, 9 (Feb. 2021). The federal government recently announced new dollar estimates of the social cost of carbon per metric ton of CO₂ to [ldquo]enable Federal agencies to immediately and more appropriately account for climate impacts in their decision-making.[rdquo]⁷⁷ With the tool available, the Forest Service must use it or explain why its application is inappropriate here. *Vecinos para el Bienestar de la Comunidad Costera, et al., v. FERC*, No. 20-1045, 2021 WL 3354747, at *4 (D.C. Cir. Aug. 3, 2021) (remanding agency decision for failure to apply social cost of carbon protocol or explain why its application was unnecessary). We agree with the agency that the end product of harvested wood can affect a timber sale[rsquo]s carbon impact and the social cost associated with emitting carbon into the atmosphere. In that regard, the Forest Service points to the possibility that [ldquo][w]ood products can be used in place of other, more emission intensive materials, like steel or concrete, and wood-based energy can displace fossil fuel energy.[rdquo] Foothills 2021 Climate Change Specialist Report at 3. The agency uses the statement to downplay the overall climate effects of the Foothills Project but it falls flat for two reasons. First, we are aware of no information suggesting that wood harvested as part of the Foothills Project will be used to replace steel, concrete, or fossil fuel energy. Without supporting information, the agency cannot suggest that the climate effects of its timber harvest will be mitigated based on potential, unconfirmed end uses of the wood product. Second, burning wood instead of fossil fuels to generate energy is not beneficial from a climate standpoint. Combustion of forest biomass emits more CO₂ per unit of energy generated than fossil fuels like coal or natural gas.⁷⁸ And as

discussed above, new forests grown to replace those harvested for bioenergy will not re-sequester the carbon emitted at harvest for decades to centuries—a timescale inapplicable to addressing climate change's most serious and immediate threats. In summary, to properly consider the Foothills Project's impacts on climate change and meet NEPA's hard look standard, the agency must analyze and disclose the amount of carbon emitted through timber harvesting. These emissions should be placed into context by using the social cost of carbon protocol. Proper accounting of the project's carbon effects is not just a paper exercise; the severity of the climate crisis could lead the agency to develop a new action alternative with fewer climate change effects or forego the harvesting of older trees that are currently storing the highest amounts of carbon.

X. Precluding Activities and Locations Likely To Trigger Significant Environmental Effects Is The Logical Extension Of The Draft Programmatic EA's Decision Framework In Appendix B, the DPEA describes a Decision Framework that would guide implementation of the Foothills Project. This decision framework is structured around a series of proposed actions, followed by [Idquo]Existing Condition (need),[rdquo] [Idquo]Desired Conditions,[rdquo] [Idquo]Known Conditions That Trigger Restoration Actions,[rdquo] and [Idquo]How to Implement Change.[rdquo] DPEA at B2 - B38. This Decision Framework is the perfect location for the Forest Service to implement sideboards, and is the obvious and logical extension of the decision process that the agency already proposes. Just as the Decision Framework explains the conditions that would trigger certain actions, it should also use sideboards to limit or preclude the activity in certain areas. In other words, context can be used to define both when an action would be taken and when it would not be taken. Without expressly defining such limits, the DPEA must assume that the action can and would be used in all circumstances that otherwise meet the [Idquo]Existing Conditions[rdquo] and [Idquo]Known Conditions that Trigger Restoration Actions[rdquo] in the Decision Framework. The use of sideboards also fits neatly into the decision trees for the project. DPEA at B59 - B62. These decision trees guide the Forest Service's treatment activities in the four identified conditions (Immature Pine, Mature Pine, Mesic, Non-Mesic) through a series of yes/no questions. But beyond identifying the suitable activity, the same decision tree of yes/no questions could be used to apply project sideboards and identify areas where the actions would be inappropriate.

XI. Evaluating The Effectiveness Of The Project Design Features Will Reduce The Amount Of Mitigation Analysis Required At The Implementation Phase CEQ regulations require the alternatives analysis to consider [Idquo]appropriate mitigation measures not already included in the proposed action or alternatives.[rdquo] 40 C.F.R. [sect] 1502.14(f) and 40 C.F.R. [sect] [sect] 1508.20. The DPEA's discussion of mitigation appears to be through the requirements listed in the [Idquo]Project Design Features, Best Management Practices, and Standards.[rdquo] DPEA at B50-B55. These Project Design Features [Idquo]must be implemented, depending on the triggering activities of the treatment, for all proposed actions.[rdquo] Id. at 45. These requirements are derived from sources including [Idquo]Georgia's Best Management Practices for Forestry Practices, USFS Southern Regional guidance or Foothills Landscape-specific design features and are in addition to Forest Plan standards and BMPs.[rdquo] Id. 42 Mitigation is an inherently site-specific inquiry, so courts have sanctioned the use of an [Idquo]adaptive mitigation[rdquo] approach in programmatic documents. *Wilderness Soc'y v. U.S. Bureau of Land Mgmt.*, 822 F. Supp. 2d 933, 941 (D. Ariz. 2011), *aff'd sub nom. Wilderness Soc. v. Bureau of Land Mgmt.*, 526 F. App'x 790 (9th Cir. 2013). This approach allows the agency to tailor the mitigation measures based on site-specific analysis, monitoring, and other factors. But, an adaptive mitigation approach that lacks [Idquo]at least some evaluation of effectiveness is useless in making that determination.[rdquo] Id. at 941 (emphasis in original). [Idquo]Without analytical data to support . . . proposed mitigation measures,[rdquo] they do not [Idquo]amount to anything more than a [Isquo]mere listing[rsquo] of good management practices[rdquo] that is insufficient for NEPA purposes. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1151 (9th Cir. 1998), overruled on other grounds by *Lands Council v. McNair*, 537 F.3d 981 (9th Cir. 2008). Thus, the Forest Service is not required to identify with specificity the mitigation measures that will be used in each future project at this point. However, the review of mitigation in a programmatic document must discuss existing conditions, potential environmental impacts, and the effectiveness of potential mitigation measures in addressing these impacts. *Wilderness Soc'y v. U.S. Bureau of Land Mgmt.*, 822 F. Supp. 2d at 943-4 (Noting that programmatic FEIS discussed the [Idquo]effectiveness[rdquo] of mitigation measures applicable to travel, livestock grazing, environmental justice, and special status species.) And, as in any [Idquo]mitigated FONSI,[rdquo] the Forest Service must ensure that the mitigation measures needed to avoid significant impacts

are binding commitments, not just possible options. This is where the DPEA's discussion of Project Design Features falls short. The Project Design Features are identified only by broad categories (e.g., "Soil and Water", "Non-Native Invasive Species" and "Vegetation Management") and include no discussion linking a specific Project Design Feature to the specific environmental impact that would be mitigated. And there is no information regarding the measure's potential effectiveness. Without some information regarding a Project Design Feature's effectiveness, it is impossible to understand the extent to which they could be effective in mitigating the environmental effects of a proposed action. This discussion of effectiveness can and should be addressed at the programmatic level. Even if the list of Project Design Features was sufficient to pass muster at the programmatic stage, its lack of detail will be a problem at the project implementation stage. Without information regarding the effectiveness of a specific Project Design Feature in mitigating an environmental effect, this analysis will do little work in addressing the mitigation analysis required at a specific site. Conducting this additional level of review at the programmatic stage will allow the Forest Service to refer back to the analysis and expedite its review at the implementation stage. Further, the DPEA relies on this same discussion to dismiss the potential cumulative effects to Biological Resources and Terrestrial Wildlife. DPEA at 68 and 88. It is not possible to validate this statement (or any other assumptions regarding the impact of design features and 43 mitigation measures) without analysis discussing the measure's effectiveness. Past monitoring data, to the extent it is available, could help the Forest Service overcome this hurdle. For this same reason, the Foothills Project should include a robust monitoring program to evaluate the success and effects of covered actions over time. Once again, the use of sideboards can assist the agency here. Under CEQ regulations, mitigation includes "avoiding the impact altogether by not taking a certain action or parts of an action." 40 C.F.R. [sect] [sect] 1508.20(a). Precluding certain actions at the programmatic phase allows the agency to incorporate mitigation into the project's design by excluding potential impacts from the outset. Avoiding environmental impacts altogether is not only environmentally preferable, but is also the most efficient approach for the agency because it avoids the need for site-specific application of mitigation to impacts at the implementation phase. XII. Future Tiered Actions Must Demonstrate Compliance With The National Forest Management Act In our January 10, 2020 comments on the Draft EA, we raised several concerns related to compliance with the National Forest Management Act. See 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 95-115. The DPEA does not resolve several of those concerns so we reincorporate those earlier comments here. However, we understand that the agency plans to tier future site-specific environmental reviews to the current programmatic EA, and many of our concerns could potentially be resolved through that future tiering process. As a result, we reiterate our concerns only briefly. First, the CONF Forest Plan requires site-specific activities, such as timber sales, to be supported by site-specific analysis. The Forest Plan Record of Decision commits that "final decisions on proposed projects will be made on a site-specific basis using appropriate analysis and documentation." Forest Service, Record of Decision for the Final Environmental Impact Statement of the Land and Resource Management Plan Revision for the Chattahoochee-Oconee National Forests (Jan. 2004) at 28. The Forest Plan also includes the requirement: "Any decisions on projects to implement the Plan are based on site-specific analysis." Forest Service, Land and Resource Management Plan: Chattahoochee-Oconee National Forests (2004) at 2-2. The analysis prepared to date in the DPEA does not meet this site-specificity requirement. Instead, "treatments . . . will be determined based on the conditions on the ground and the desired conditions for the landscape" later. DPEA at 29. To be clear, we support a tiered approach. But we want to underscore that the agency cannot implement most of the proposed actions with no further analysis without running afoul of its Forest Plan and NFMA. Future site-specific analysis is additionally necessary to show that on-the-ground actions are consistent with the various requirements of the Forest Plan. See 2020 Letter from P. Hunter to B. Jewett re Foothills Landscape Project Draft EA Comments at 110-114. Second, we support the sideboard adopted in Alternative 3, which removes management prescriptions designated as unsuitable for timber production from consideration for commercial logging activities. Timber production activities are generally prohibited on unsuitable lands with some minor exceptions. 16 U.S.C. [sect] 1604(i). Removing unsuitable management prescriptions from consideration for commercial timber harvest is a logical step to streamline future tiered analyses, avoid conflict over whether certain activities meet the limited exceptions to timber production in those areas under NFMA, and allow the agency to implement on-the-ground activities

more efficiently. Further, we anticipate that avoiding commercial activities in unsuitable prescriptions will not meaningfully detract from the agency's ability to pursue its objectives in the Foothills landscape as it still leaves over 104,000 [ldquo]suitable[rdquo] acres available for commercial timbering activities. DPEA at 55. Third, the DPEA continues to fail to demonstrate [ldquo]that timber will be harvested . . . only where . . . soil, slope, or other watershed conditions will not be irreversibly damaged.[rdquo] 16 U.S.C. [sect] 1604(g)(3)(E)(i). Again, this concern can be resolved through future, site-specific analysis. We commend the Forest Service for providing additional information in the DPEA and for presenting the information more clearly. But the Implementation Area-level information is still insufficient to show compliance with NFMA's substantive standards related to soils, slopes, and watershed conditions. That analysis can only be completed when the agency is considering specific actions in specific places; now, the agency's proposal remains too high-level. For example, to demonstrate a lack of significance under NEPA, and consistency with NFMA's substantive requirements, the agency relies on keeping soil loss below certain thresholds for specific soils. See, e.g., Foothills 2021 Soil Report at 80-84. This threshold is referred to as the T-factor. Id. at 16-17 (providing T-factors for various soil types). These T-factors can vary significantly across implementation areas. For instance, approximately 1/3 of the Tiger Implementation Area cannot withstand soil loss of greater than 2 tons/acre/year, while 2/3 can withstand losses of up to 5 tons/acre/year. Id. at 17. This is a significant difference that must be considered as the agency plans site-specific actions in this Implementation Area. If regeneration logging may cause the loss of 2 or more tons of soil per acre annually, it cannot be allowed in 1/3 of this Implementation Area without potentially running afoul of NEPA and NFMA. Because there are no site-specific (i.e., activity-specific and location-specific) proposals before the agency right now, it cannot meaningfully gauge compliance with this requirement. The best the agency offers is that literature reviews suggest erosion rates can be kept [ldquo]below what NRCS has rated the T-Factor for more than 99% of the soils.[rdquo] Id. at 40. This is insufficient. We do not have access to the cited studies but we doubt they stand for the proposition that site-specific considerations are not necessary because past actors have successfully limited soil loss. If anything, we suspect these past actors kept soil loss below various threshold specifically by taking site-specific considerations into account[mdash]something the agency is deferring in the DPEA. 45 More to the point, past analyses by the CONF demonstrate why this site-specific analysis is necessary. The agency completed site-specific T-factor analysis as part of its Union County Target Range Project. That analysis showed the project would cause a loss of 3.9 tons/acre/year which was just below the applicable threshold of 4 tons/acre/year. See Soil and Water Resources Report For the Proposed Union County Target Range Project at 8 (Aug. 2019). That level of soil loss would exceed the T-factor for nearly half of the acreage open to logging under Alternative 3 of the Foothills Project. See Foothills 2021 Soil Report at 17. The potential to exceed the T-factor is real and must be taken into account in site-specific analysis and design to ensure compliance with NEPA and NFMA. While our comments focus on T-factor analysis as an example to explain why future, site-specific analysis is necessary to demonstrate compliance with NFMA's requirements, our concerns are not limited to T-factor considerations only. Similar points could be made regarding the need for site-specific planning and analysis on soils with [ldquo]very severe[rdquo] erosion hazard ratings. The point is the information currently before the agency is insufficient to demonstrate NFMA compliance. We support the agency's proposal to tier site-specific reviews to the current DPEA and look forward to engaging with the agency in that process. XIII. Example Sideboards For The Foothills Project's Programmatic Review The recurring theme throughout these comments is the need to focus and limit the potential scope of the Foothills Project. The tension here is obvious. On one hand, the Forest Service seeks to avoid limiting its ability to undertake future actions that it may seek to pursue as part of this project. On the other hand, proceeding with the project's current unlimited menu of options risks losing the potential efficiencies of the programmatic approach and may limit the usefulness of the Foothills Collaborative Group. But, as the Goal 17 Project illustrates, there is a better way forward. The Forest Service can find a middle ground by crafting a programmatic project that allows it to achieve most of its objectives, implement a more flexible and efficient NEPA review, and improve project support through the Collaborative Group. This result can be achieved through the use of carefully crafted project sideboards. To that end, below is a list of potential sideboard topics that the Forest Service could use to focus and streamline the Foothills Project. These would allow the Forest Service to pursue many (or even most) of the actions currently contemplated as part of the Foothills Project. But, by better defining the project's outer bounds and addressing third rail issues, the Forest Service can avoid

entangling the vast majority of uncontroversial projects with the few controversial ones. And, as stated previously, excluding a project now does not prevent the Forest Service from pursuing it later. Therefore, we suggest that the Collaborative Group should be afforded the opportunity to develop sideboards regarding topics including the following: 46 [middot] Habitat of threatened and endangered species; [middot] Areas containing Section 106 resources; [middot] Commercial timber harvest in Georgia Mountain Treasure Areas; [middot] Commercial timber harvest in existing old growth stands; [middot] Actions in Inventoried Roadless Areas; [middot] The duration of the project; [middot] Activities within a half mile from an existing road; [middot] Ecological integrity, including species composition and fine scale structure. [middot] Soil types and erosion hazard areas; [middot] Total acres of commercial timber harvest; [middot] Total acres of noncommercial timber harvest; [middot] Total number of miles of new roads; and [middot] Tree thinning activities in mesic areas. These are intended for illustrative purposes only, and we believe that the Collaborative Group should discuss and formally recommend specific sideboards for the project. These collaborative recommendations, in turn, should be incorporated as part of a new alternative in the Final Programmatic EA. XIV. Conclusion We appreciate the Forest Service's willingness to revisit its approach to the Foothills Landscape Project, the Foothills Collaborative Group, and the NEPA review of this project. If properly employed, the combination of the programmatic NEPA review and the Collaborative Group have the potential to help the Forest Service implement the project with greater flexibility, efficiency, and stakeholder support. But doing so will require focusing the scope of the project, adopting sideboards to avoid potentially divisive issues, and sharing decision space with the Collaborative Group throughout the decision-making process. We look forward to working with the Forest Service to develop these sideboards, develop a more focused alternative, and put the Foothills Project on a course for success. We are happy to discuss any of these matters further and look forward to continued participation in the Foothills Collaborative stakeholder group.

Sincerely, Nicole Hayler Executive Director Chattooga Conservancy 867 Chattooga Ridge Road Ben Prater Director, Southeast Program Defenders of Wildlife Rankin Ave., 2nd Floor 47 Mountain Rest SC 29664 (864) 647-9849 info@chattoogariver.org Asheville, NC 28801 (828) 412-0981 bprater@defenders.org Anne Heikkila Board Chair Georgia ForestWatch 81 Crown Mountain Place Bldg. C, Suite 200 Dahlonega, GA 30533 (706) 782-6097 director@gafw.org Larry Winslett Wildlands and Wildlife Comm. Chair Sierra Club, Georgia Chapter 743 E. College Ave., Suite B 1 Decatur, GA 30030 (404) 607-1262 winfog@windstream.net Brian L. Gist Senior Attorney Southern Environmental Law Center Ten 10th Street NE Suite 1050 Atlanta, GA 30309 404-521-9900 bgist@selcga.org Hugh Irwin Senior Conservation Specialist The Wilderness Society P.O. Box 817 Black Mountain, NC 28711 828-820-2885 Hugh_irwin@twc.org CC: Stephanie Israel (CONF)

1 The Council on Environmental Quality is currently in the process of reevaluating the 2020 revisions to its NEPA regulations, citing serious concerns with the legality of those regulations. Further, the 2020 CEQ NEPA Regulations are the subject of ongoing legal challenges. Therefore, all citations to the CEQ NEPA regulations in this comment letter will refer to the 1978 version of these regulations unless stated otherwise.

<https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol37/pdf/CFR-2019-title40-vol37.pdf#page=474>

2 Memorandum on Effective Use of Programmatic NEPA Reviews, Council on Environmental Quality (December 18, 2014) https://www.energy.gov/sites/default/files/2014/12/f19/effective_use_of_programmatic_nepa_reviews_18dec2014.pdf

3 Project implementation requires a site-specific decision, and site-specific decisions require site-specific analysis. [quotation]Ilo[quotation]ulaokalani Coalition v. Rumsfeld, 464 F.3d 1083, 1095-97 (9th Cir. 2006). The actual [quotation]location of development greatly influences the likelihood and extent of habitat preservation. Disturbances on the same total surface area may produce wildly different impacts on plants and wildlife depending on the

amount of contiguous habitat between them.” New Mexico ex rel Richardson, 565 F.3d at 706. Stein v. Barton, 740 F. Supp. 743, 749 (D. Ak. 1990) (NEPA requires site-specificity to ensure that agencies are making informed decisions prior to acting and that the public is given a meaningful opportunity to participate in those decisionmaking processes); City of Tenakee Springs v. Block, 778 F.2d at 1407 (reasoning that an EIS must give decisionmakers sufficient data); New Mexico ex rel Richardson v. Bureau of Land Management, 565 F.3d 683, 718-19 (10th Cir. 2009) (requiring site-specific NEPA analysis when agency did not propose to undertake a future NEPA process).

4 Klamath-Siskiyou Wildlands Ctr. v. BLM, 387 F.3d 989, 995 (9th Cir. 2004) (holding numeration of logging acres and road miles insufficient to describe actual environmental effects).

5 Or. Natural Res. Council Fund v. Goodman, 505 F.3d 884, 892 (9th Cir. 2007) (holding the Forest Service’s failure to discuss the importance of maintaining a biological corridor violated NEPA, explaining that “[m]erely disclosing the existence of a biological corridor is inadequate” and that the agency must “meaningfully substantiate [its] finding”).

6 For comparison, see Decision Notice for the Cherokee National Forest’s Goal 17 project at 2-3. https://www.fs.usda.gov/nfs/11558/www/nepa/110674_FSPLT3_4840187.pdf 11

7 https://www.fs.usda.gov/nfs/11558/www/nepa/107667_FSPLT3_5112645.pdf

8 <https://www.fs.usda.gov/main/planningrule/committee> 13

9 <https://www.fs.usda.gov/detail/gwj/news-events/?cid=FSEPRD488746>

10 <https://npforestpartnership.org/>

11 <https://clearwaterbasincollaborative.org/subcommittees/forest-plan-revision/>

12 https://www.fs.usda.gov/nfs/11558/www/nepa/110674_FSPLT3_4660332.pdf

13 E.g., https://www.fs.usda.gov/nfs/11558/www/nepa/113680_FSPLT3_5359354.pdf; <https://www.fs.usda.gov/project/?project=59945>

14 <http://www.communityplan.net/cherokee/>

15 PL 111-11 [sect] 4003(c) (2009).

16 Id.

17 CEQ Programmatic Guidance at 31.

18 The adjective “major” for purposes of NEPA does not have a meaning independent of significantly.” 40 C.F.R. [sect] 1508.18. 16

19 36 C.F.R. [sect] 219.16(a)(2).

20 Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997); House v. Forest Service, 974 F. Supp. 1022 (E.D. Ky. 1997).

21 Kettle Range Cons. Group v. Forest Service, 148 F. Supp. 2d 1107 (E.D. Wash. 2001).

22 Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997); Lands Council v. Cottrell, 731 F. Supp. 2d 1028 (D. Idaho) (R&R adopted 731 F. Supp. 2d 1074); Neighbors of Cuddy Mountain v. Forest Service, 137 F.3d 1372 (9th Cir. 1998); Idaho Sporting Cong. v. Alexander, 222 F.3d 562 (9th Cir. 2000) (overruled on other grounds); Wildwest Inst. v. Austin, 2006 WL 8435846, at *1 (D. Mont. 2006).

23 Lands Council v. Martin, 529 F.3d 1219 (9th Cir. 2008); Mountaineers v. Forest Service, 445 F. Supp. 2d 1235 (W.D. Wash. 2006). 24 Sierra Club v. Bosworth, 352 F. Supp. 2d 909 (D. Minn. 2005).

25 Cowpasture River Pres. Ass'n, 911 F.3d 150, 177 (4th Cir. 2018); Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Kettle Range Cons. Group v. Forest Service, 148 F. Supp. 2d 1107 (E.D. Wash. 2001); Blue Mountain Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998); Wildwest Inst. v. Austin, 2006 WL 8435846, at *1 (D. Mont. 2006).

26 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); League of Wilderness Defenders v. Forest Service, 2005 WL 3307087, at *1 (D. Or. 2005).

27 Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009).

28 Colorado Env't Coalition v. Dombeck, 185 F.3d 1162, 1173 (10th Cir. 1999); Ohio Valley Env'tl. Coalition v. Hurst, 604 F. Supp. 2d 860, 889 (S.D.W.Va. 2009); Hells Canyon Pres. Council v. Connaughton, 2012 WL 13047991 (D. Or. 2012) (R&R adopted 2013 WL 665134 (2013)).

29 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Sierra Club v. Bosworth, 352 F. Supp. 2d 909 (D. Minn. 2005). 19

30 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997).

31 House v. Forest Service, 974 F. Supp. 1022 (E.D. Ky. 1997).

32 Lands Council v. Cottrell, 731 F. Supp. 2d 1028 (D. Idaho)(species viability).

33 Found. for N. Am. Wild Sheep v. Dep't of Ag., 681 F.2d 1172 (9th Cir. 1982).

34 Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009).

35 Or. Nat. Desert Ass'n v. Rose, 921 F.3d 1185, 1189 (9th Cir. 2019); Klamath-Siskiyou Wildlands Ctr. v. BLM, 387 F.3d 989 (9th Cir. 2004).

36 Found. for N. Am. Wild Sheep v. Dep't of Ag., 681 F.2d 1172 (9th Cir. 1982).

37 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988); Curry v. Forest Service, 988 F. Supp. 541 (W.D. Pa. 1997); Conservation Congress v. Forest Service, 2013 WL 4829320, at *1 (E.D. Cal. 2013).

38 Sierra Club v. Forest Service, 843 F.2d 1190 (9th Cir. 1988).

39 Blue Mountain Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998); Cascadia Wildlands v. Forest Service, 937 F. Supp. 2d 1271 (D. Or. 2013).

40 Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009).

41 Klamath-Siskiyou Wildlands Ctr. v. Forest Service, 373 F. Supp. 2d 1069 (E.D. Cal. 2004)

42 [ldquo]For example, in the absence of certainty regarding the environmental consequences of future proposed actions, agencies may be able to make broad program decisions and establish parameters for subsequent analyses based on a programmatic review that adequately examines the reasonably foreseeable consequences of a proposed program, policy, plan, or suite of projects.[rdquo] CEQ Programmatic Guidance at 11. 29

43 A 10% limit on a disturbance across an entire watershed could still allow appreciable cumulative effects if all of the disturbances are concentrated in a specific location, in a limited timeframe, and depending on intensity. Once again, more explanation is necessary to ensure that this limit achieves the intended results.

44 Brewer, Stephen, and Corey Rogers. "Relationships between prescribed burning and wildfire occurrence and intensity in pine[ndash]hardwood forests in north Mississippi, USA." *International Journal of Wildland Fire* 15, no. 2 (2006): 203-211.

45 Nowacki, G.J. and Abrams, M.D., 2008. The demise of fire and [ldquo]mesophication[rdquo] of forests in the eastern United States. *BioScience*, 58(2), pp.123-138. 32 the

46 Heinselman, M.L., 1973. Fire in the virgin forests of the Boundary Waters Canoe Area, Minnesota. *Quaternary research*, 3(3), pp.329-382.

47 Frelich, L.E., 2002. *Forest dynamics and disturbance regimes: studies from temperate evergreen-deciduous forests*. Cambridge University Press.

48 Abrams, M.D., Orwig, D.A. and Demeo, T.E., 1995. Dendroecological analysis of successional dynamics for a presettlement-origin white-pine-mixed-oak forest in the southern Appalachians, USA. *Journal of Ecology*, pp.123-133.

49 McEwan, R.W., Hutchinson, T.F., Ford, R.D. and McCarthy, B.C., 2007. An experimental evaluation of fire history reconstruction using dendrochronology in white oak (*Quercus alba*). *Canadian Journal of Forest Research*, 37(4), pp.806-816.

50 Lorimer, C.G., 1980. Age structure and disturbance history of a southern Appalachian virgin forest. *Ecology*, 61(5), pp.1169-1184.

51 Brose, P.H. and Waldrop, T.A., 2006. Fire and the origin of Table Mountain pine pitch pine communities in the southern Appalachian Mountains, USA. *Canadian Journal of Forest Research*, 36(3), pp.710-718. 52 Runkle, J.R., 1982. Patterns of disturbance in some old-growth mesic forests of eastern North America. *Ecology*, 63(5), pp.1533-1546. 34

53 Johnson, K.E., Smith, L.G. and Brosi, S.L., 2017. How old is the old-growth? Dendrochronological Assessments to Protect Unique Appalachian Forest.

54 Speer, J.H., Grissino-Mayer, H.D., Orvis, K.H. and Greenberg, C.H., 2009. Climate response of five oak species in the eastern deciduous forest of the southern Appalachian Mountains, USA. *Canadian Journal of Forest Research*, 39(3), pp.507-518.

55 Petrucelli, C.A., Sakulich, J., Harley, G.L. and Grissino-Mayer, H.D., 2014. Structure and dynamics of an old-growth pine-oak community in the southern Appalachian mountains, Georgia, USA. *southeastern geographer*, 54(2), pp.161-182.

56 McEwan, R.W., Pederson, N., Cooper, A., Taylor, J., Watts, R. and Hruska, A., 2014. Fire and gap dynamics over 300 years in an old-growth temperate forest. *Applied Vegetation Science*, 17(2), pp.312-322.

57 Runkle, J.R., 1982. Patterns of disturbance in some old-growth mesic forests of eastern North America. *Ecology*, 63(5), pp.1533-1546. 35

58 Lorimer, C.G., 1980. Age structure and disturbance history of a southern Appalachian virgin forest. *Ecology*, 61(5), pp.1169-1184.

59 [https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order\[1\]protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order[1]protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/) 36

60 Nowacki, G.J. and Abrams, M.D., 2008. The demise of fire and [ldquo]mesophication[rdquo] of forests in the eastern United States. *BioScience*, 58(2), pp.123-138.

61 See 6th IPCC Report (2021) (available at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter_12.pdf). 37

62 Volkova, L., Roxburgh, S.H. and Weston, C.J., 2021. Effects of prescribed fire frequency on wildfire emissions and carbon sequestration in a fire adapted ecosystem using a comprehensive carbon model. *Journal of Environmental Management*, 290, p.112673.

63 <https://www.fs.fed.us/climatechange/documents/SouthernRegionCarbonAssessment.pdf>

64 [https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment\[1\]Southern-Region.pdf](https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment[1]Southern-Region.pdf)

65 Id.

66 N.L. Harris et al., Attribution of net carbon change by disturbance type across forest lands of the conterminous United States, 11 *Carbon Balance Mgmt.* 24 (2016), <https://cbmjournal.biomedcentral.com/articles/10.1186/s13021-016-0066-5>. 38

67 James E. Smith et al., Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States, Gen. Tech. Rep. NE-343, Northern Research Station: U.S. Department of Agriculture, Forest Service, https://www.nrs.fs.fed.us/pubs/gtr/ne_gtr343.pdf.

68 Ingerson, Ann, [ldquo]Wood Products and Carbon Storage: Can Increased Production Help Solve the Climate Crisis?,[rdquo] *The Wilderness Society* (2009).

69 Stockman et al., Estimates of carbon stored in harvested wood products from the United States forest service northern region, 1906-2010, *Carbon Balance and Management* 7:1 (2012).

70 [https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment\[1\]Southern-Region.pdf](https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment[1]Southern-Region.pdf)

71 Id.

72 [https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment\[1\]Southern-Region.pdf](https://www.fs.usda.gov/sites/default/files/Appendix-4-NFS-Disturbance-Carbon-Assessment[1]Southern-Region.pdf) 39

73 <https://www.fs.usda.gov/managing-land/sc/carbon>

74 James, J. and Harrison, R., 2016. The effect of harvest on forest soil carbon: A meta-analysis. *Forests* 7: 308.

75 Nave, L.E., Vance, E.D., Swanston, C.W. and Curtis, P.S., 2010. Harvest impacts on soil carbon storage in temperate forests. *Forest Ecology and Management*, 259(5), pp.857-866.

76 Zhang, X., Guan, D., Li, W., Sun, D., Jin, C., Yuan, F., Wang, A. and Wu, J., 2018. The effects of forest thinning on soil carbon stocks and dynamics: A meta-analysis. *Forest Ecology and Management*, 429, pp.36-43.
40

77 [https://www.whitehouse.gov/cea/blog/2021/02/26/a-return-to-science-evidence-based\[1\]estimates-of-the-benefits-of-reducing-climate-pollution/](https://www.whitehouse.gov/cea/blog/2021/02/26/a-return-to-science-evidence-based[1]estimates-of-the-benefits-of-reducing-climate-pollution/)

78 U.S. Env'tl. Protection Agency, Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520 (July 8, 2019), <https://www.govinfo.gov/content/pkg/FR-2019-07-08/pdf/2019-13507.pdf>. Specifically, burning wood-based biomass emits 65% and 285% more CO₂ per unit of energy generated than coal and natural gas, respectively. Rachel Carson Council, Wood Pellet Production, the Destruction of Forests, and the Case for Environmental Justice at 5 (2019), <https://rachelcarsoncouncil.org/clear-cut/>. 41