

Office of Special Counsel (“OSC”)
Washington, D.C.

)	
)	Complaints and Disclosure Analysis
Disclosure of)	Division
Quentin R. Bass II,)	
)	File No. _____
Archaeologist,)	
USDA Forest Service)	
)	
)	June 13, 2003
)	
)	
)	
_____)	

STATEMENT OF QUENTIN R. BASS II
REGARDING A VIOLATION OF RULE, LAW AND/OR REGULATION

Background

On March 21, 2003, the U.S. Forest Service published a draft revision of the Cherokee Forest Land and Resource Management Plan ("Forest Plan") and a draft Environmental Impact Statement ("EIS") for this Forest Plan. Following a public comment period, this Forest Plan will become the principle guide for management of the Cherokee National Forest for the next ten to fifteen years.

The revision of the Cherokee Forest Plan coincides with the revision of forest plans in four other national forests that lie in the 70 million acre Southern Appalachian bioregion, including the Chattahoochee/Oconee, Jefferson, Sumter and Talladega/Bankhead National Forests. The Forest Service has directed that the revision of all five of these forest management plans be coordinated to reflect the ecological, social and geographical similarities in the Southern Appalachian bioregion.

[See <http://www.southernregion.fs.fed.us/planning/sap/default.shtm>].

Summary of Disclosure

For the last six years, in my position as forest archeologist and as a member of the Cherokee National Forest Land Management Plan Revision Interdisciplinary Team, I have worked to

assemble information that should be used in revising the Cherokee Forest Plan, as well as the other Southern Appalachian forest plans. To that end, I have conducted extensive analysis of the historic Forest Service records of inventory and acquisition and agency ecological studies.

These historic records for the Southern Appalachian Physiographic Province (the Southern Appalachian forests) demonstrate the following:

1. **Permanent, Uneven-Age Forests.** In general, the natural forests of the Southern Appalachians do not pass through successional stages such as early, middle, and late. To the contrary, the forests that existed prior to large-scale logging and other exploitation at the turn of the 20th century originally were a permanent, uneven-aged or “all age” forest; which reflected a state of dynamic equilibrium and maintained itself through single-tree falls or small disturbances, a process known as "gap phase reproduction;"
2. **Diverse Trees And Canopies Determined By Permanent Site Characteristics, Not By Succession.** The natural forest types of the Southern Appalachians and the resulting terrestrial and aquatic plant and animal species are determined by the permanent environmental characteristics of the land itself, not by successional changes over time. These natural forests therefore consisted of permanent canopy types that reflected the characteristics of each particular growing site, including the slope, elevation, soil, and water quality and quantity (for example, the Forest Service documented 56 natural canopy types in the Southern Appalachians). As these qualities varied from site to site, the resulting forests were composed of mixed tree species that graded into numerous permanent canopy types across the landscape; and
3. **Limited Role of Fire In The Natural Forests.** Fire, both natural and aboriginal, generally was not a dominant force in shaping the moist natural forest ecosystems of Southern Appalachian forests (the majority of the forest and the focus of most silvicultural activity where large trees occurred). Fire played a role on dry ridges and south slopes, but these fires were limited by the increasingly moist conditions as fires burned down from the slopes. The Southern Appalachians did not have the large landscape fires that are typical of western national forests.

In the course of my work on the ID Team, I submitted to the planning team and to agency leaders the extensive evidence from the Forest Service's own records of these natural forest characteristics, detailed analyses of this evidence, and comprehensive discussions of how this evidence should affect the forest plan revisions, the accompanying EISs, and the management alternatives. [Exhibit I] This evidence, analysis, and discussion from the Forest Service's own historic records was omitted almost entirely from the forest plan revisions and the draft EISs and ignored for purposes of managing these forests. The draft EIS for the Cherokee National Forest included a few pages excerpted from what I provided but omitted and ignored the vast bulk of the data and the evidence, and did not address this evidence in any meaningful or substantive manner. The draft Forest Plans and EISs for the other four National Forests undergoing revision omitted and ignored this evidence entirely. [Exhibit II]

Instead, the forest plan revisions use forest succession models based on initial forest regeneration after – and as a result of – heavy logging, farming, and intensive fire generated by slash build-up. Supporting arguments for these models included assertions that widespread forest burning by Native Americans helped shape our native forest, despite these substantial agency historical records and other records to the contrary.

Thus, the forest plan revisions are premised on a model of forest regeneration relying on forest succession, prescribed burns, and even-age management. The Forest Service represents this historically inaccurate, ecologically false, and non-Appalachian model as a “natural process.”

Not coincidentally, these draft forest plans prescribe massive burns, logging, and other even-age management that results in a higher volume of merchantable timber than would result under management that better reflected the underlying natural ecology of these forests.

Violations of Law and Policy

The Forest Service's failure to disclose and address the evidence, analyses, and discussion of their own historical inventory, acquisition and ecological records violates both federal law and agency policy:

1. **National Environmental Policy Act (NEPA).** The National Environmental Policy Act (NEPA) requires that the Forest Service take a hard look at the impacts of its management plans, including the "ecological, ...historic, cultural, economic [and] social" effects, whether direct, indirect, or cumulative. 40 C.F.R. § 1508.8(b). The failure of the Forest Service to disclose and address the evidence and analysis described above violates NEPA in numerous ways:

A. Failure To Provide A Full, Fair Discussion Of Significant Information

An EIS must provide a full and fair discussion of significant environmental information and impacts to foster informed decisionmaking and public participation. 40 C.F.R. § 1502.1; Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992). Thus, an EIS must give a reasoned analysis of the evidence before the agency and make that evidence available to all concerned. Friends of Endangered Species, Inc. v. Jantzen, 760 F. 2d 976, 986 (9th Cir. 1985); Seattle Audubon Soc'y v. Moseley, 798 F. Supp. 1473, 1479 (W.D. Wash. 1992), aff'd, 998 F. 2d 699 (9th Cir. 1993). Rather than fostering informed decisions and public participation, the Cherokee draft forest plan revision and draft EIS, and the other four plan revisions and draft EISs, avoided the significant issues raised by the agency's own historic records by omitting this evidence and by failing to present a full and fair discussion of this evidence and its impacts on forest management. These draft EISs are violating NEPA by sweeping complex and troublesome issues under the rug. Seattle Audubon Soc'y, 798 F. Supp. at 1479.

B. The Agency Failed To Address The Uncertainties And Risks Of Its Succession Based Approach To Management Of These Forests.

NEPA requires that the Forest Service address the uncertainties surrounding the evidence on which its management strategies rest and disclose the risks posed by the agency's proposed action. Otherwise, the EIS cannot serve its purpose of informing the decisionmaker and the public. Seattle Audubon Soc'y v. Espy, 998 F. 2d 699, 704 (9th Cir. 1993); Seattle Audubon Soc'y v. Moseley, 798 F. Supp. at 1478-79. In the case of these five Southern Appalachian forest plan revisions and their draft EISs, not only is the Forest Service not addressing the uncertainties surrounding its management approach, the agency is failing even to disclose these uncertainties and the contrary facts found in the agency's own historic records.

C. The Draft EISs Failed To Disclose Or Respond To The Opposing Evidence and Analysis Of The Agency's Own Expert.

NEPA requires the Forest Service to disclose and respond to the full range of responsible expert analysis of environmental effects. Seattle Audubon Soc'y v. Moseley, 798 F. Supp. at 1479. While the agency ultimately may choose among expert views, it violates NEPA if it ignores reputable scientific criticism and analysis. Seattle Audubon Soc'y v. Espy, 998 F.2d at 704. The Forest Service is violating NEPA because it is ignoring the evidence and analysis submitted by its own archeological expert, drawn from the agency's own historic records.

D. The Forest Service Failed To Develop A Reasonable Range Of Alternatives Based On Its Own Historic Records And Internal Analyses Of These Records.

NEPA requires the Forest Service to "[r]igorously explore and objectively evaluate all reasonable alternatives" to the agency's proposed action. 40 C.F.R. § 1502.14(a). Adequate evaluation of alternatives "is the heart of the environmental impact statement." 40 C.F.R. § 1502.14; 42 U.S.C. § 4332(2)(C). In this instance, the Forest Service's own historical records outline reasonable alternative management regimes that are quite different than those presented in the proposed plans. By ignoring the evidence of the historically insignificant role of burning and the historic dominance of permanent, uneven-aged canopies, the Forest Service has failed to address reasonable alternatives to the agency's prescribed burns and even-age management. Since this information and alternatives drawn from it represent the best practices based on the agency's own historic records, by any measure they represent reasonable alternatives that must be explicitly considered under NEPA.

- 2. The National Forest Management Act.** The National Forest Management Act (NFMA) requires that, in the development of land management plans, the Forest Service must "use a systematic interdisciplinary approach" which integrates consideration of "physical, biological, economic, and other sciences." 16 U.S.C. § 1604(b). Further, NFMA regulation requires that the interdisciplinary team must have access to and use "the best available data" on these scientific matters. 36 C.F.R. § 219.12(d). For the reasons set forth above, the failure of the Forest Service adequately to disclose, analyze, and address their own historical inventory, acquisition and ecological records violated NFMA as well as NEPA.

3. **The Data Quality Act.** The Data Quality Act provides that federal agencies utilize information meeting the highest standards of “quality, objectivity, utility and integrity” in all documents the agency disseminates or relies upon in its decision-making. See Treasury and General Government Appropriation Act for Fiscal Year 2001, Pub. L. No. 106-554, § 515 Appendix C, 114 Stat. 2763A-153 (2000) at § 515 B(2)(a).

The U.S. Office of Management and Budget published the Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies (Guidelines)(Feb. 22, 2002), which requires the U.S. Forest Service to have, in place by October 1, 2002, regulations to implement the Data Quality Act of 2002 (“DQA”). See *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; Republication*, 67 F.R. 8452, 8452 (Feb. 22, 2002). The U.S. Forest Service has implemented such rules, which are located at: http://www.ocio.usda.gov/irm/qi_guide/index.html.

By excluding alternatives to large-scale controlled burning of the ecosystems and historical information bearing on other forestry management practices, the draft FLRMPs issued regarding the Southern Appalachians are in violation of the DQA's provisions safeguarding the quality, objectivity, utility, and integrity of information issued by agencies. See DQA, B(2)(a).

4. **Forest Service Policy.** Despite the fact that the region had access to the data I provided, it was not used. This data, information, and evidence from the agency's own historical records on forest and species composition before large-scale logging would be invaluable in supplementing and providing context for other information presented in the draft EISs and in formulating appropriate ecosystem management. The failure to present this information and evidence fundamentally changed the analysis and the options presented.

A. Inconsistent Plans

The Forest Service has directed a coordinated and consistent approach to the five proposed Forest Plan revisions, centered on the implementation of ecosystem management. According to a 1995 memo from the Regional Forester for the Southern Region, “the goal of managing the National Forests is to maintain or restore the sustainability of ecosystems, thereby providing multiple benefits to present and future generations.” [Exhibit III] Ecosystem management places a priority on the role of science and sound biological models and understanding to determine management practices.

The Federal Register Notice for the Southern Appalachian Assessment stated: “The Assessment will facilitate an interagency ecological approach to management in the Southern Appalachian area by collecting and analyzing broad-scale biological, physical, social and economic data to serve as a foundation for more local natural resource management decisions.” The Notice further specified how the forests would carry out revisions in coordination. The Notice of Intent for a Coordinated revision of plans [Federal Register: August 1, 1996 (Volume 61, Number 149)] states that plan revision for all the forests will be performed in a coordinated manner that uses “an ecological approach to management.” The

notice states, “Information from these analyses that cross State boundaries and involve multiple National Forests, along with the individual National Forests efforts to update their ‘analysis of the management situation’ (AMS), are now being used by these National Forests to determine what decisions in their Land and Resource Management Plans (LRMP) should be re-analyzed or changed in revising their LRMPs.”

The region has continued to direct a coordinated and consistent approach to revision in the Southern Appalachian national forests currently undergoing revision. This has consisted of data developed and relied on during the SAA as well as data developed during the revision process. This coordinated and consistent approach has been guided by the regional office through a number of regional guidance documents, regional provision of analysis models, and regional supervision of the planning effort. This regionally coordinated effort is reflected in the plan documents themselves. This statement from the Jefferson DEIS is similar to statements in all the plans: “In an effort to have a consistent approach to the development of revised forest plans across the forests of the Southern Appalachians, various teams were assembled and tasks assigned. In addition to the Jefferson Interdisciplinary Team, individual resource specialists from the Regional Forester’s office, Cherokee National Forest, Chattahoochee/Oconee National Forests, Sumter National Forest, and National Forests in Alabama worked together in developing and analyzing forest plan alternatives and coordinated a consistent approach to these Forest Plans.” (Jefferson DEIS Chapter 2 p 2-1).

I provided information to both the Cherokee National Forest and regional planners related to the condition and dynamics of the Southern Appalachian forests prior to large-scale human disturbances. This information was critical to formulating guidance in all the forests for providing habitat to native species, viability of native species, modeling of future forest conditions, and for formulating goals, objectives, and standards relating to forest conditions (e.g. amount of early succession forest to be generated; amount of forest to be burned). The region required consistency in the analysis and creation of the draft management plans on these issues.

This information was also critical to implementing ecosystem management in the forests undergoing revision. Southern Region Guidance that was issued to all the forests by the regional office ignored the information, data, and analysis supplied and failed to address or analyze the alternative management models that this data suggested. Despite the fact that the region had access to the data I provided, it was not used. Information provided on the archeological record and on species/forest composition before large-scale logging would have provided invaluable information to supplement and provide context for other information presented in the draft Environmental Impact Statements. The fact that the information was not presented fundamentally changed the analysis and the options presented.

B. Not “Best Available Information”

Instead, the Forest Service relied heavily on its “Southern Appalachian Assessment” (SAA), an interagency document developed in 1996 to evaluate the “...best available knowledge about land, air, water and people of the region.” My work on the IDT Team was just beginning at that time and is not reflected at all in the SAA. Accordingly, in these respects

the SAA no longer incorporates the "best available knowledge" about the region's forests, and incorporates erroneous ecological premises concerning the role of fire and succession in the Southern Appalachian forests. The plan revisions' heavy reliance on the SAA as a source of information means that these plans also are based on erroneous ecological premises and fail to implement ecosystem management.

Despite the fact that the region had access to the data I provided, it was not used. This data, information, and evidence from the agency's own historical records on forest and species composition before the occurrence of large-scale logging would be invaluable in supplementing and providing context for other information presented in the draft EISs and in formulating appropriate ecosystem management. The failure to present this information and evidence fundamentally changed the analysis and the options presented.

Significance of the Violations

As a result of ignoring the evidence found in historic inventory, acquisition and ecological records, and the detailed analyses of this evidence, all national forests in the Southern Appalachians (e.g., the Cumberland Plateau, the Ridge-and-Valley Province and the Southern Appalachian Mountains presently are managed under the paradigm that a cycle of succession is the process that governs the regeneration of the forest. The proposed revised forest plans and their draft EISs perpetuate this erroneous management paradigm.

This paradigm is based on events occurring only during one recent, narrow window in time, specifically, the 20th Century. During this period virtually the entire accessible forest canopy was commercially logged and subjected to a prolonged, institutionalized program of burning, grazing, timber culling, and other significant disturbances on the landscape level.

In the areas where the forest has been allowed to regenerate, the process of re-growth of the forest that has occurred following these massive disturbances and the effects of the subsequent program of forest management (i.e., even-aged management for the production of merchantable timber) has been perceived as a succession process and has become translated into the accepted "natural" process of forest regeneration. As a consequence of these past and present management activities, the forests of the Southern Appalachians are managed as forests that regenerate through a cycle of succession. By ignoring the great weight of the past prior to the 20th century, our use of the forest and the effects of this use has become confused as a "natural" process, and the effects of this use have become the governing management paradigm.

However, examination of the Forest Service's own historic records, including acquisition records, forest inventories and descriptions, site type mapping, and ecological studies in the Southern Appalachians, provides a very different picture. The official record of inventory and acquisition and ecological studies illustrate that the Southern Appalachians generally are not a successional forest ecosystem, as are some of our western national forests, and therefore should not be managed under a "one size fits all" program based on succession. Different site types permanently are associated with different trees and canopy types as well as characteristic patterns of reproduction, growth rate, and maximum attained size. This ranges from a slower reproduction and turnover regime for the trees that grow in denser stands (and therefore a closed

canopy) which are nourished by better soils found in coves and riparian areas, to a relatively more rapid reproduction and turnover regime for the trees that grow in open stands (and open canopy) provided by the poorer, drier soils found on exposed ridge crests. While the maximum height reached by trees in coves is much greater than that reached on ridges, trees approach their maximum height much more quickly on ridges than in coves.

Subsequent land use from the early 19th Century to the present has been a cyclical program of prescribed burns, livestock grazing, forest fallowing, farming, widespread commercial logging, tree farming, urban sprawl, and subsequent even-aged management of the regrown forest. This use pattern has removed the natural forest and, in the areas under even-age management, has promoted the regeneration of an even-age canopy that discriminates in favor of rapidly growing, prolifically seeding and/or light-demanding canopy species.

The Proposed Revised Land and Resource Management Plans for all Southern Appalachian national forests as currently written have failed to incorporate highly germane and relevant data that I have submitted. It should be noted that the historical information is consistent with ecological research and models that establish most Southern Appalachian forests are naturally uneven-aged with composition and structure dependent primarily on slope, aspect, elevation, soil, and water regimes. Therefore, forest planners have based management plans for these forests on outdated models and erroneous conclusions regarding guidance for protecting native biological diversity, sustained yield, and multiple use requirements under the National Forest Management Act. They also have failed to incorporate the best science available in decision-making and have denied the public access to pertinent documents and information upon which to participate in national forest management. Irreparable harm to our Southern Appalachian national forest is inevitable as a result of these omissions and violations of law.

Dan Meyer, General Counsel
Public Employees for Environmental Responsibility (PEER)
2001 S Street, NW Suite 570
Washington, D.C. 20009
Tele: (202) 265-7337
Facs: (202) 265-4192
E/ml: dmeyer@peer.org

Doug Ruley, Esq.
Southern Environmental Law Center
Tele: (828) 285-91125

Michael Myers, Columbia University Law School
Environmental Law Clerk, Summer 2003