

June 16, 2020

To: Hurston Nicholas, Forest Supervisor
Nantahala and Pisgah National Forests
ATTN: Plan Revision Team
160A Zillicoa Street
Asheville, NC 28801

From: Greg Warren
PO Box 2322
Frisco, CO 80443

Submittal: <https://cara.ecosystem-management.org/Public/CommentInput?Project=43545>

Your comment has been received by our system on 6/16/2020; Your letter ID is 43545-3103-2386.

The following comments are regarding the Nantahala and Pisgah National Forest Draft Revised Forest Plan and DEIS. These comments mostly address the planning and management of the Appalachian National Scenic Trail (ANST). Recreation Opportunity Spectrum (ROS) and Scenery Management System (SMS) planning frameworks are also reviewed. These comments are consistent with those sent to NCplanrevision@fs.fed.us on August 11, 2017.

Comments that are specific to the NPNF Draft Plan and DEIS are mostly found in Chapter II part F, Chapter III parts A, B, and E, and Chapter IV part G.

Comments Content

Chapter I. Introduction	3
A. Trails for America	3
B. Congressional Designated Areas.....	4
Chapter II. ANST Nature and Purposes	5
A. Trails for America	5
B. Congressional Reports	5
C. National Trails System Act	7
D. Executive Orders	8
E. Appalachian National Scenic Trail Foundation Document	9
F. Nature and Purposes	11
Chapter III. Land Management Planning	11
A. Forest Service Planning Considerations	11
(a) Appalachian National Scenic Trail Shared Stewardship	12
(b) Appalachian National Scenic Trail Plan Components	14
(c) Recreation Opportunity Spectrum Plan Components	17
B. Recreation Opportunity Spectrum and Scenery Management System	24
C. Ecosystem Integrity and Diversity	40
D. Substantial Interference	44
E. Nantahala and Pisgah National Forest Draft Forest Plan	46

(a) Recreation Settings	46
(b) Scenery.....	49
(c) Backcountry	54
(d) Appalachian National Scenic Trail.....	56
(e) Monitoring and Adaptive Management	59
(f) Timber Calculations and Suitability	60
(g) Glossary.....	60
Chapter IV. Comprehensive Planning Relationship to NEPA.....	60
A. Programmatic NEPA Reviews	62
B. National Scenic Trail Planning and NEPA.....	65
C. Establishment of the Purpose and Need for Action	68
D. Identify Proposed Action and a Reasonable Range of Alternatives.....	70
E. Affected Environment	72
F. Analyze the Effects of the Proposed Action and Alternatives	74
G. Nantahala and Pisgah National Forest DEIS	79
(a) Purpose and Need for Action.....	79
(b) Proposed Plan Components for Terrestrial Ecosystems.....	80
(c) Action Alternatives.....	80
(b) Alternatives Considered but Eliminated from Detailed Study	85
(c) Recreation Affected Environment	86
(d) Recreation Environmental Consequences.....	87
(e) Scenery Affected Environment	89
(f) Scenery Environmental Consequences.....	89
(g) Inventoried Roadless Areas Environmental Consequences	90
(h) ANST Affected Environment	90
(i) ANST Environmental Consequences.....	91
(j) ROS Analysis Methods	93
Chapter V. Legislative History and Policy Review.....	94
A. Trails for America.....	94
B. National Trails System Act	95
C. Departmental and Congressional Considerations	98
D. Executive Orders.....	101
E. Regulations and Policies.....	102
Chapter VI. Glossary.....	117

Nantahala and Pisgah National Forests

Draft Plan and DEIS Comments

Prepared by Greg Warren
NSTrail.org

Chapter I. Introduction

A. Trails for America

The Secretary of the Interior in 1965 directed the Bureau of Outdoor Recreation to take the lead in conducting a nationwide trails study. This was in response to President Johnson's "Natural Beauty" message of February in which he called for development and protection of a balanced system of trails in cooperation with state and local government and private interests. In part, the President said, "we can and should have an abundance of trails for walking, cycling, and horseback riding, in and close to our cities. In the backcountry we need to copy the great Appalachian Trail in all parts of America."

The nationwide trails study led to publication of a report in 1966 titled, "Trails for America." The report called for federal legislation to foster the creation of a nationwide system of trails. Earlier that year the Secretary of the Interior had already proposed such legislation to Congress. The report and the legislation proposed three categories of trails for the nationwide system—National Scenic Trails and two other categories that were different from what eventually came to pass. The report heavily emphasized National Scenic Trails and the role that they should play in meeting the nation's needs for trail recreation. The Appalachian Trail was to be the first National Scenic Trail. The report proposed three other National Scenic Trails—Pacific Crest, Continental Divide, and Potomac Heritage—and identified five other routes that exhibited high potential—Lewis and Clark, Oregon, Santa Fe, Natchez Trace, and North Country. Congress passed the National Trails System Act and the president signed it into law on Oct. 2, 1968. The Act created two congressionally designated areas the Appalachian National Scenic Trail and the Pacific Crest National Scenic Trail.

As envisioned in "Trails for America," National Scenic Trails are to be very special: "A standard for excellence in the routing, construction, maintenance, and marking consistent with each trail's character and purpose should distinguish all National Scenic Trails. Each should stand out in its own right as a recreation resource of superlative quality and of physical challenge." According to the National Trails System Act of 1968, National Scenic Trails "will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of nationally significant scenic, historic, natural, and cultural qualities of the area through which such trails may pass." National scenic trails are located so as

to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms, which exhibit significant characteristics of the physiographic regions of the Nation. The corridor will be normally located to avoid established uses that are incompatible with the protection of a trail in its natural condition and its use for outdoor recreation.

B. Congressional Designated Areas

Designated areas are specific areas or features within the plan area that have been given a permanent designation to maintain its unique special character or purpose. Certain purposes and restrictions are usually established for designated areas, which greatly influence management needs and opportunities associated with them.

A recurrent theme in designated area legislation has been the mandate to preserve areas for future generations and to keep the protected resource in a condition representative of the values or conditions for which it was designated. Important land conservation legislation that is relevant to land management planning includes the National Trails System Act of 1968 (PL 90-543), which states that National Scenic Trails will be established, “In order to... promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas... of the Nation... Will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass... National scenic or national historic trails may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted... To the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any national scenic trail shall be prohibited.” National Scenic Trail Comprehensive Plans must identify specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved.

Enacted on the same day as the National Trails System Act, the Wild and Scenic Rivers Act of 1968 (PL 90-542), states that designated rivers, “with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations (Section 1(b)).” Similarly, the Wilderness Act of 1964 (PL 88-577), requires managing agencies to administer wilderness areas “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character...” (Section 2(a)).

Chapter II. ANST Nature and Purposes

A. Trails for America

Trails for America (1966), a report prepared by the Bureau of Outdoor Recreation in response to President Johnson's Natural Beauty Message of February 8, 1965, describes that, "the entire length of each National Scenic Trail, together with sufficient land area on both sides to safeguard adequately and preserve its character, should be protected...." The Trails for America vision for the ANST will be achieved by providing for the "nature and purposes" qualities and values of this designated National Trail.

B. Congressional Reports

Office of the Secretary, 1967: The Departmental Recommendation discusses National Scenic Trails. "National scenic trails— A relatively small number of lengthy trails which have natural, scenic, or historic qualities that give them recreation use potential of national significance. Such trails will be several hundred miles long, may have overnight shelters at appropriate intervals, and may interconnect with other major trails to permit the enjoyment of such activities as hiking or horseback riding.... The Secretary of the Interior is authorized to select a right-of-way for, and to provide appropriate marking of, the Appalachian and Potomac Heritage Trails, and the Secretary of Agriculture is authorized to do likewise for the Continental Divide and Pacific Crest Trails. The rights-of-way for the trails will be of sufficient width to protect natural, scenic, and historic features along the trails and to provide needed public use facilities. The rights-of-way will be located to avoid established uses that are incompatible with the protection of a trail in its natural condition and its use for outdoor recreation...."

House Report No. 1631, 1968: "PURPOSE - The ultimate aim of H.R. 4865, as amended, is to lay the foundation for expanding further the opportunities for the American people to use and enjoy the natural, scenic, historic, and outdoor recreational areas of the Nation. To accomplish this objective, it establishes a national trails system composed of...National scenic trails which will be located in more remote areas having natural, scenic, and historic values of

Trails for America: Leading southeast, the ANST reaches the Tennessee-North Carolina State line in the vicinity of Hump Mountain, 5,587 feet in elevation. The State line is traced for many miles along ridgetops, across magnificent balds, and through extensive stands of rhododendron and laurel. From the crossing of the Nolichucky River to Big Pigeon River, the Bald Mountains afford spectacular grandstands for viewing sweeping panoramas at numerous points. The trail passes through Great Smoky Mountains National Park for 70 miles. As it leaves the Park, the trail drops 2,000 feet down to the Little Tennessee River at Fontana Dam, enters the Nantahala National Forest, and affords a breathtaking vista of the southern Appalachians at Cheoah Bald. For a few miles it parallels the dramatic Nantahala Gorge. Here the Appalachian Trail again dons a wilderness cloak to traverse the Nantahala crest, which includes peaks in excess of 5,000 feet elevation. Reaching a monarch of the southern Appalachian region, 5,499-foot Standing Indian Mountain, it offers views of the deeply entrenched Tallulah Gorge.

national significance....

Background and Need - The proposed national trails system is the product of a general study conducted by the Bureau of Outdoor Recreation at the direction of the President. That study, entitled "Trails for America," formed the basis for the recommended legislation. It recognizes the value of providing simple trails to meet a multitude of outdoor recreation uses and recommended the immediate authorization of the Appalachian Trail as the initial national scenic trail. It also suggested that the Pacific Crest Trail, the Potomac Heritage Trail, and the Continental Divide Trail should be studied promptly for early consideration for inclusion in the system."

H.R. 4865 proposed legislation describes the selection of Routes for National Scenic Trails – "The Secretary...shall select the rights-of-way.... Such rights-of-way shall be (1) of sufficient width and so located to provide the maximum retention of natural conditions, scenic and historic features, and primitive character of the trail area, to provide campsites, shelters, and related public-use facilities, and to provide reasonable public access; and (2) located to avoid, insofar as practicable, established highways, motor roads, mining areas, power transmission lines, existing commercial and industrial developments, range fences and improvements, private operations, and any other activities that would be incompatible with the protection of the trail in its natural condition and its use for outdoor recreation...."

Congress considered these qualitative requirements for selecting and designing the rights-of-way in HR 4865, but did not enact the specific direction in NTSA Section 7(a). Instead, the enacted legislation inserts in Section 7(a) more conceptual direction for selecting and designing the rights-of-way, including (1) "consideration of minimizing adverse effects" and (2) designing each national trail system segment "to harmonize with and complement any established multiple use plans ..." (16 U.S.C. 1246(a)(2)). The enacted legislation made other modifications to HR 4865, including (1) changing the definition of a National Scenic Trail to broaden the statement of purpose (16 U.S.C. 1242(a)) and (2) added a requirement to make efforts to avoid activities incompatible with the purpose for which such trails were established (16 U.S.C. 1246(c)). House and Senate Reports are silent on the reasons for these changes.

House Report 95-734, 1978: In 1968, Congress enacted the National Trails System Act, and designated the Appalachian Trail as one of the two initial national scenic trails within the system. The act was intended to insure that long-distance, high-quality trails with substantial recreation and scenic potential were afforded Federal recognition and protection... At the time of enactment of the National Trails System Act in 1968, Congress recognized the unique recreational opportunities afforded by extended trails of this type. It was also recognized that changing land uses and increasing pressures for development were a growing threat to maintaining a continuous trail route. The act therefore provided for a Federal responsibility to

protect the trail, including the authority to acquire a permanent right-of-way.

Senate Report No.95-636, 1978: “The Act was intended to insure that long-distance, high-quality trails with substantial recreation and scenic potential were afforded Federal recognition and protection.... The fourth amendment modifies section 7(g) of the 1968 act to modify the restriction on the use of eminent domain to provide that the secretary may acquire in fee title and lesser interest no more than an average of 125 acres per mile. Experience with the trail has demonstrated that additional authority is needed to insure the acquisition of a corridor wide enough to protect trail values.” This amendment to the NTSA was specific to the Appalachian NST, but demonstrates broader awareness of the need for a National Trail corridor even when eminent domain may be used to secure the necessary land.

House Report No. 98-28, 1983: Section 7(j) intent is described in this report, “While the new subsection would permit the appropriate secretaries to allow trail bikes and other off-the-road vehicles on portions of the National Trail System, the Committee wishes to emphasize that this provision gives authority to the secretaries to permit such uses where appropriate, but that it must also be exercised in keeping with those other provisions of the law that require the secretaries to protect the resources themselves and the users of the system. It is intended, for example, that motorized vehicles will not normally be allowed on national scenic or historical trails and will be allowed on recreational trails only at times and places where such use will not create significant on-trail or off-trail environmental damage and will not jeopardize the safety of hikers, equestrians, or other uses or conflict with the primary purposes for which the trail, or the portion of the trail, were created.” This report underscores the importance of understanding the primary purposes for which a National Trail was established.

C. National Trails System Act

The NTSA, Section 2(a), policy describes an objective as, “...to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation.”

NTSA Sec. 3. [16 U.S.C. § 1242] (a)(2). “National scenic trails, established as provided in section 5 of this Act, which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.”

NTSA Sec. 5 [16 U.S.C. § 1244] (e) ... “Within two complete fiscal years of the date of enactment of legislation designating a national scenic trail, except for the Continental Divide National Scenic Trail and the North Country National Scenic Trail, as part of the system, and within two complete fiscal years of the date of enactment of this subsection for the Pacific

Crest and Appalachian Trails, the responsible Secretary shall, after full consultation with affected Federal land managing agencies, the Governors of the affected States, the relevant advisory council established pursuant to section 5(d), and the Appalachian Trail Conference in the case of the Appalachian Trail, submit to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a comprehensive plan for the acquisition, management, development, and use of the trail, including but not limited to, the following items: ... specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved....”

NTSA Sec. 7. [16 U.S.C. § 1246] (c). “National scenic... may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted... To the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any National Scenic Trail shall be prohibited....”

D. Executive Orders

Executive Order 13195 – Trails for America in the 21st Century: “By the authority vested in me as President by the Constitution and the laws of the United States of America, and in furtherance of purposes of the National Trails System Act of 1968...and to achieve the common goal of better establishing and operating America's national system of trails, it is hereby ordered as follows: Section 1... Federal agencies will, to the extent permitted by law and where practicable ... protect, connect, promote, and assist trails of all types throughout the United States. This will be accomplished by: ... (b) Protecting the trail corridors associated with national scenic trails...to the degrees

National Scenic Trail Values – (1) visitor experience opportunities and settings, and (2) the conservation/protection of scenic, natural, historical, and cultural qualities of the corridor. Primitive and Semi-Primitive Non-Motorized ROS settings provide for desired experiences, but only if the allowed non-motorized activities reflect the purposes for which the National Trail was established. Furthermore, the NTSA goes beyond ROS descriptors requiring the protection of significant resources and qualities along the National Trail corridor. The ROS planning framework, NTSA Comprehensive Plan (Section 5(e)/(f)) components, NTSA rights-of-way (Section 7(a)), and E.O. 13195 requirements point to the need for land management plans to map the extent of the corridor and apply to the described corridor appropriate plan components (desired conditions, objectives, standards, guidelines, and suitability of lands) to protect National Trail values (nature and purposes).

necessary to ensure that the values for which each trail was established remain intact....”

E. Appalachian National Scenic Trail Foundation Document

The National Park Service the administrating agency for the ANST describes that, “The nature and purposes statement identifies the specific reason(s) for establishment of a particular national scenic trail and its predominant characteristics. The nature and purposes statement for the Trail was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The Trail was established when the enabling legislation adopted by Congress was signed into law on October 2, 1968. The nature and purpose statement lays the foundation for understanding what is most important about the Trail. *“The Appalachian Trail is a way, continuous from Katahdin in Maine to Springer Mountain in Georgia, for travel on foot through the wild, scenic, wooded, pastoral, and culturally significant landscapes of the Appalachian Mountains. It is a means of sojourning among these lands, such that the visitors may experience them by their own unaided efforts. The Trail is preserved for the conservation, public use, enjoyment, and appreciation of the nationally significant scenic, historic, natural and cultural quality of the areas through which the trail passes. Purposeful in direction and concept, favoring the heights of land, and located for minimum reliance on construction for protecting the resource, the body of the Trail is provided by the lands it traverses, and its soul is the living stewardship of the volunteers and workers of the Appalachian Trail community”* (ANST Foundation Document, March 23, 2015).

The following significance statements and descriptions of fundamental resources and values have been identified by the National Park Service for the ANST, which contribute to defining the nature and purposes of this National Scenic Trail:

- “Traversing 14 states through wildlands and communities, the more than 2,100-mile world-renowned hiking trail and its extensive protected landscape protects the most readily accessible, long-distance footpath in the United States. The Appalachian National Scenic Trail offers healthy outdoor opportunities for self-reliant foot travel through wild, scenic, natural, and culturally and historically significant lands. It provides a range of

The Appalachian Trailway Agreement signed by the U.S. Forest Service and the National Park Service on October 15, 1938, was perhaps the most important step taken by the Appalachian Trail Conference in protecting the Appalachian Trail for the use of future generations. The Federal agencies agreed to designate a zone with a minimum width of one mile on each side of the Appalachian Trail within their respective jurisdictions, except where the trail descends into the main valleys. Within the zone no new paralleling routes for the passage of motorized transportation or developments which, in the judgment of the administering agency, are incompatible, will be constructed.

experiences for people of all ages and abilities to seek enjoyment, inspiration, learning, challenge, adventure, volunteer stewardship, and self-fulfillment, either in solitude or with others...

- The Trail's varied topography, ecosystem diversity, and numerous viewpoints offer a visual showcase including wild, natural, wooded, pastoral, and historic environments. The Trail offers opportunities for scenic enjoyment, ranging from the subtle beauty of a trillium to tranquil ponds and streams to the grand view of mighty Katahdin.
- The north-south corridor of the Trail, traversing the highest and lowest elevations and myriad microclimates of the ancient Appalachian Mountains, helps protect one of the richest assemblages of temperate zone species in the world and anchors the headwaters of critical watersheds that sustain more than 10% of the population of the United States...
- The Trail offers opportunities to view stunning scenery in proximity to the most populated areas of the United States. Within the boundaries of the protected trail corridor, visitors may see native wildlife and flowers, rustic cultural features, seasonal variations, and dynamic weather patterns in environments such as southern balds, pastoral lands, diverse forests, wetlands, rugged outcrops, and mountainous alpine areas.
- Traversing the height of land, Trail visitors are afforded sweeping views of vast landscapes extending beyond the Trail corridor and are exposed to the splendid range of landforms and history along the Appalachian Mountains. Enjoyment of far-reaching views and deep starry nights are dependent on clean air and clear skies.
- The Trail corridor passes through eight separate ecoregions, linking extensive forest landscapes and an extraordinary variety of aquatic and terrestrial habitats over a distance of more than 2,100 miles. The Trail unifies understanding, management, and protection of representative natural resources at a scale that no other single entity can provide, while offering visitors the chance to see, hear, and feel nature all around them...
- The Appalachian National Scenic Trail threads a diverse array of habitats, such as subalpine forests, open balds, rocky outcrops, meadows, and wetlands, providing a haven for abundant flora and fauna, including rare, threatened, and endangered species. The Trail's uninterrupted north-south aspect, long length, and varied habitats provide a living laboratory that serves as an important barometer of climate change and ecological health as well as an avenue for adaptation."

F. Nature and Purposes

What is the Nantahala-Pisgah National Forest niche for protecting and contributing to the nature and purposes of the Appalachian National Scenic Trail? In consideration of the NPNF landscape, Trails for America, Legislative History, National Trails System Act, Executive Orders and the National Park Service ANST Foundation Document, the nature and purposes desired condition description for the ANST Management Area could state, “The ANST route on the NPNF is for travel on foot through wild, scenic, wooded, and culturally significant landscapes. The corridor along this route is preserved for the conservation and enjoyment of nationally significant scenic, historic, natural, and cultural qualities. Motor vehicles are not present, except those that might be on existing passenger car roadways, at existing recreation sites, or being used to preserve a mountain bald landscape.”

Chapter III. Land Management Planning

A National Scenic Trail is a continuous, long-distance trail located on the ground along the congressionally designated route. A National Scenic Trail provides maximum compatible outdoor recreation opportunity and conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural resources, qualities, values, and associated settings and the primary use or uses of the areas through which such trails may pass. National Scenic Trails include the tread, or the trail path, and the trail setting which is included within the National Trail Management Corridor.

National Scenic Trails are administered as trail corridors. Managers should establish plan components that address desired visitor experience opportunities and settings, and the conservation of scenic, natural, historical, and cultural qualities of the corridor. Supporting standards and guidelines need to be established to achieve desired conditions and objectives, and monitoring methods are to be described.

A. Forest Service Planning Considerations

Forest Service land management plans shall form one integrated plan for each unit (16 U.S.C. § 1604(f)(1) and 36 CFR § 219.10). The plan must provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area as follows: ... (b)... (1) The plan must include plan components, including standards or guidelines, to provide for: (i) Sustainable recreation; including recreation settings, opportunities, and access; and scenic character..., and (vi) appropriate management of other designated areas or recommended designated areas in the plan area...(36 CFR § 219.10(b)(i)&(vi)). The NST is a congressionally designated area (36 CFR § 219.19).

(a) Appalachian National Scenic Trail Shared Stewardship

The Secretary of Interior which is charged with ANST administration executes several requirements under the National Trails System Act, which include establishing an advisory council for each trail, completing and maintaining a Comprehensive Plan, selecting the National Scenic Trail rights-of-way, describing the nature and purposes (qualities and values) of the national trail, and ensuring that other uses do not substantially interfere with the described National Scenic Trail qualities and values. National Forest System lands within the selected rights-of-way has an overlay of management regimes where the Forest Service has the responsibilities to implement the NFMA, while being constrained by other laws including the NTSA.

The National Trails System Act not only established an ANST footpath or treadway, but also direction to protect the corridor that surrounds the travel route. Sections of the Act provide additional important guidance that is associated with the selection of the rights-of-way, planning, and management of the ANST, including direction stating: (1) Locating the National Trail corridor, “to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas;” (2) “Avoiding, to the extent possible, activities along the National Scenic Trail that would be incompatible with the purposes of the NST for which it was established;” and (3) “National scenic or national historic trails may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted by the Secretary charged with the administration of the trail.”

The National Trails System Act (Section 1244(e)) requires that the Secretary of Interior shall, after full consultation with affected Federal land managing agencies, the Governors of the affected States, the relevant advisory council established pursuant to section 5(d), and the Appalachian Trail Conference in the case of the Appalachian Trail, submit to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a comprehensive plan for the acquisition, management, development, and use of the trail. The Forest Service did not need to be signatory to the Comprehensive Plan. Specific to the ANST, substantial interference (16 U.S.C. § 1246(c)) determinations is the responsibility of the Secretary of Interior and is delegated to the National Park Service (16 U.S.C. § 1244(a)(1)).

The Forest Service and National Park Service have a shared responsibility for protecting, maintaining, and managing segments of the Appalachian National Scenic Trail. The agencies must ensure that management actions do not substantially interfere with providing for nature and purposes qualities and values of the ANST, which requires not only the protection of the

foot path, but also to manage the land for the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the areas through which such trails may pass.

The National Park Service has the responsibility to ensure that the ANST Comprehensive Plan is current and addresses the comprehensive planning requirements of the National Trails System Act, while the Forest Service is to manage each national forest traversed by the Appalachian National Scenic Trail as a coherent whole, subject to the requirements of the National Forest Management Act, National Trails System Act, and other laws to develop and implement land management plans.

Primacy of Congressional Designations – As a general rule, if the NTSA conflicts with NFMA’s multiple use mandate, the NTSA designating guidance will apply. Land management planning decisions for each unit must be consistent with the purposes and objectives of the designating Act of Congress. Where multiple Congressional designations overlap, the agency must comply with all applicable statutes. In order to do so, the more protective management requirements will likely apply. The establishment of the comprehensive plan for the NST constitutes an overlay on the management regime otherwise applicable to public areas managed by land management agencies. The NTSA (and E.O. 13195) limits the management discretion the agencies would otherwise have by mandating the delineation of the NST corridor and protection of the nature and purposes of this National Scenic Trail.

The Forest Service’s discretion to implement the general provisions of the Multiple Use and Sustained Yield Act will be curtailed by provisions of the National Trails System Act within a prescribed ANST corridor. The same is true in related contexts, such as when the Endangered Species Act of 1973, 16 U.S.C. § 1531 et seq., would prohibit otherwise permissible land uses in a national forest if the activity would destroy a listed species or its critical habitat, 16 U.S.C. § 1536(a)(2), or where the Wilderness Act, 16 U.S.C. § 1131 et seq., would prohibit roads, vehicles, and any commercial enterprise in a statutorily designated wilderness area within a National Forest, 16 U.S.C. § 1133(c). Congress aimed to promote “the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which [national scenic] trails may pass,” 16 U.S.C. § 1242(a)(2).

The National Trails System Memorandum of Understanding (2017) purposes and principles state that, “National Trails serve communities best when they integrate recreational, environmental, cultural, economic, and transportation objectives, so that National Trails showcase the rich diversity of America’s natural and cultural heritage and retain significance for all Americans and international visitors....” Shared stewardship and protection of the Appalachian National Scenic Trail qualities and values must be a common goal for the National Park Service, Forest Service, and Appalachian Trail Conservancy.

(b) Appalachian National Scenic Trail Plan Components

The following describes ANST Management Area plan components that should be part of the Nantahala-Pisgah Forest Plan:

Management Area – A land area identified within the planning area that has the same set of applicable plan components. The boundary of the ANST Management Area where there is management discretion should follow topographic features to the extent possible, while being at least one-half mile wide on each side of the established and potential locations (16 U.S.C. § 1244(e)) of the ANST travel route. This is based in part on Recreation Opportunity Spectrum (ROS) criteria that identify remoteness for a Semi-Primitive Non-Motorized setting as, "An area designated at least 1/2-mile but not further than 3 miles from all roads, railroads or trails with motorized use; can include the existence of primitive roads if closed to motorized use." The Scenery Management System identifies that the middleground begins at 1/2-mile of the travel route. Recommendations for ANST plan components as applied to a Management Area are described in the following descriptions and table.

NST LMP MA Desired Conditions – These are descriptions of specific social, economic, or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions are the vision of what you want your forest to look like, and other plan components (objectives, standards and guidelines, and suitability), would be designed to get you there. Desired conditions are the basis for the rest of the plan components; objectives, standards, guidelines and suitability determinations must be developed to help achieve the desired conditions. If forest plans contain specific, measurable desired conditions, this should focus the process of identifying locations where projects are needed, and thereby increase the efficiency of project planning.

National Scenic Trail Management Area Desired Conditions
The ANST route on the NPNF is for travel on foot through wild, scenic, wooded, and culturally significant landscapes. The corridor along this route is preserved for the conservation and enjoyment of nationally significant scenic, historic, natural, and cultural qualities. Motor vehicles are not present, except those that might be on existing passenger car roadways, at existing recreation sites, or being used to preserve a mountain bald landscape. (ANST nature and purposes for the NPNF)
Scenic character is Naturally Evolving in wilderness and Natural-Appearing in other ANST Management Area landscapes. The scenic integrity objective is Very High in wilderness and High in other management area landscapes, except in areas that are adjacent to existing roadways and developed sites.
Primitive or Semi-Primitive Non-Motorized settings are protected or restored, except in areas of existing roadways, developed sites, and mountain balds.

NST LMP MA Standards – These are mandatory constraints on project and activity decision-

making, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements. Standards must be complied with as written. Adaptive management direction may support the use of situation-dependent (if-then) or qualified (unless) standards. Guidelines – These are mandatory constraints on project and activity decision-making that provide flexibility for different situations so long as the purpose of the guideline is met. Guidelines should be written so that their intent is clear. If there is evidence that a different approach would be more or equally effective in meeting the intent, divergence can be justified. Standards and guidelines may have qualifications. For example, a standard for a wildland-urban interface area requires that vegetation management projects leave no standing dead trees or downed woody debris; the Forestwide standard requires all vegetation management projects leave a certain minimum level of dead trees or down woody debris, but also states the qualification, “except within the wildland-urban interface area.”

Scenery Management
Standard: Manage the ANST route as a concern level 1 travel route. To provide for desired Scenic Character, management actions must meet a Scenic Integrity Level of Very High or High in the immediate foreground and foreground visual zones as viewed from the ANST travel route. Accepted inconsistencies are established recreational use developed sites and facilities, established permitted facilities, and activities as allowed by ANST vegetation management and other uses considerations plan components.
Recreation Setting Management
Standard: Resource management actions and allowed uses must be compatible with maintaining or restoring Primitive or Semi-Primitive Non-Motorized ROS class settings. Accepted Semi-Primitive Non-Motorized ROS class inconsistencies include existing operational maintenance level 3 and higher roads, ¹ recreation sites, and activities as allowed by ANST vegetation management and other use considerations plan components. Existing trail shelters, tent platforms, and privies that are found along the ANST travel route are compatible with the nature and purposes of the ANST. Where the ANST passes through recommended or designated wilderness management areas, the ROS setting is Primitive.
Standard: Bicycles, horses, and pack stock may not be allowed on the ANST footpath, except at crossings.
Cultural and Historic Resources
Standard: Priority Heritage Assets must be protected, preserved, and maintained.
Standard: Cultural resources are protected from loss. National Register of Historic Places eligible and unevaluated sites are stabilized, treated, managed, and preserved for their historical,

¹ FSH 7709.59, sec. 62.32 (WO AMENDMENT 7709.59-2009-1). Other NFS roads may be allowed to pass through the Management Area as long as the road physical nature and use does not substantially interfere with the ANST nature and purposes.

traditional, public, and scientific research value.
Motor Vehicle Use by the General Public
Standard: Motor vehicle use by the general public is prohibited along the ANST travel route unless that use: <ul style="list-style-type: none"> a. Is necessary to meet emergencies; b. Is necessary to enable adjacent landowners or those with valid outstanding rights to have reasonable access to their lands or rights; c. Is for the purpose of allowing private landowners who have agreed to include their lands in the ANST by cooperative agreement to use or cross those lands or adjacent lands from time to time in accordance with Forest Service regulations; or d. Is on a motor vehicle route that crosses the ANST Management Area, as long as that use will not substantially interfere with the ANST nature and purposes.
Special Use Management
Standard: Activities, uses, and events that would require a recreation special use permit may only be authorized if the activity, use, or event is compatible with the nature and purposes of the ANST.
Minerals Management
Standard: Mineral leases are to include stipulations for no surface occupancy.
Standard: Permits for the removal of mineral materials are not to be issued.
Vegetation Management
Standard: Timber harvests may only be used for maintaining or making progress toward ANST desired conditions.
Guideline: Vegetation may be managed to enhance ANST nature and purposes qualities and values, such as to provide vistas to view surrounding landscapes including sustaining views from mountain balds, ² and to conserve natural or historic resources. The purpose of this guidance is to allow for limited active vegetation management and not solely on natural events, while providing for a natural-appearing and SPNM ROS setting.
Guideline: Vegetation may be managed to maintain or improve habitat for threatened and endangered species, proposed and candidate species, and species of conservation concern. The purpose of this guidance is to recognize the conservation purposes of the ANST.
Fire Suppression
Guideline: Fire suppression activities should apply the Minimum Impact Suppression Tactics Implementation Guidelines. The purpose of this guidance is to protect the ANST nature and purposes from suppression activities.
Other Uses Considerations
Standard: To protect the values for which the ANST was designated, resource uses and activities that could conflict with the nature and purposes of the ANST may only be allowed where there is

² Balds include Cheoah Bald, Max Patch, Mill Ridge, Streets Gap, Big Bald, Beauty Spot, Roan Mountain, Grassy Ridge, Round Bald, Little Hump Mountain, Hump Mountain, and other similar areas that total to less than 1,000 acres in the ANST Management Area.

a site-specific determination that the other use would not substantially interfere with the nature and purposes. The National Park Service, the ANST administrating agency, must be requested to concur with any Forest Service “other use” does not substantially interfere determination when made through NEPA EIS processes (42 U.S.C. § 4332(2)(C)(v); 16 U.S.C. § 1246(c); 40 CFR § 1503.2).

Guideline: Where congressionally designated areas overlap, apply the management direction that best protects the values for which each designated area was established where the most restrictive measures control. The purpose of this guidance is to protect the values for which all congressionally designated areas are established.

Suitability of Lands – These plan components identify areas of land as suitable or not suitable for specific uses (such as timber or forage production), based on the applicable desired conditions. The identification of suitability of lands is not required for every resource or activity and does not need to be made for every acre of the plan area and the inherent capability of the land to support the use or activity.

Suitability of Lands

Lands are not suitable for timber production. Timber harvest is not an objective for the ANST Management Area.

NST LMP MA Implementation Guidance

Partnerships and volunteers are sustained or sought to lead and assist in NST programs. Appalachian Trail Conservancy volunteer and cooperative agreements are maintained for the purpose of planning, developing, maintaining, and managing the ANST in accordance with Sections 2(c), 7(h)(1), and 11 of the NTSA.

(c) Recreation Opportunity Spectrum Plan Components

The 2012 Planning Rule describes that, “A Forest Plan must contain plan components, including standards or guidelines to provide for sustainable recreation” (36 CFR § 219.10(b)). Forest Service directives describe that, “The plan must include plan components, including standards or guidelines, to provide for sustainable recreation integrated with other plan components as described in 23.21a. To meet this requirement the plan: ... (a) Must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes...” (FSH 1909.12 23.23a).

The Forest Service 1982 ROS User Guide describes that, “Managing for recreation requires different kinds of data and management concepts than does most other activities. While recreation must have a physical base of land or water, the product—recreation experience—is a personal or social phenomenon. Although the management is resource based, the actual recreational activities are a result of people, their perceptions, wants, and behavior.

While the goal of the recreation is to obtain satisfying experiences, the goal of the recreation resource manager becomes one of providing the opportunities for obtaining these experiences. By managing the natural resource settings, and the activities, which occur within it, the manager is providing the opportunities for recreation experiences to take place. Therefore, for both the manager and the recreationist, recreation opportunities can be expressed in terms of three principal components: the activities, the setting, and the experience.

For management and conceptual convenience possible mixes or combinations of activities, settings, and probable experience opportunities have been arranged along a spectrum, or continuum. This continuum is called the Recreation Opportunity Spectrum (ROS) and is divided into six classes. The six classes or portions along the continuum, and the accompanying class names have been selected and conventionalized because of their descriptiveness and utility in Land and Resource Management Planning and other management applications. The Recreation Opportunity Spectrum provides a framework for defining the types of outdoor recreation opportunities the public might desire, and identifies that portion of the spectrum a given National Forest might be able to provide.

Planning for recreation opportunities using the Recreation Opportunity Spectrum are conducted as part of Land and Resource Management Planning. The recreation input includes factors such as supply and demand, issues and identification of alternative responses to those issues, which the planner must assess in order to develop management area prescriptions designed to assure the appropriate recreation experience through setting and activity management on the Forest...

Land and Resource Management Planning assure that National Forest System lands provide a variety of appropriate opportunities for outdoor recreation... Each prescription should contain minimum guidelines and standards to be met as well as directions concerning the type of activities, settings, and experience opportunities to be managed for during the planning time periods... The land and water areas of the Forest are inventoried and mapped by Recreation Opportunity Spectrum class to identify which areas are currently providing what kinds of recreation opportunities. This is done by analyzing the physical, social, and managerial setting components for each area. The characteristics of each of these three components of the setting affect the kind of experience the recreationist most probably realizes from using the area.

- Physical Setting – The physical setting is defined by the absence or presence of human sights and sounds, size, and the amount of environmental modification caused by human activity.
- Size of Area - Size of area is used as an indicator of the opportunity to experience self-

sufficiency as related to the sense of vastness of a relatively undeveloped area. In some settings, application of the remoteness criteria assures the existence of these experience opportunities; in other settings, the remoteness criteria alone do not. Therefore, apply the size criteria to the map or overlay developed using the remoteness criteria to ensure that the appropriate experience opportunities are available.

- Evidence of Humans – Evidence of Humans is used as an indicator of the opportunity to recreate in environmental settings having varying degrees of human influence or modification.
- Social Setting – The social setting reflects the amount and type of contact between individuals or groups. It indicates opportunities for solitude, for interactions with a few selected individuals, or for large group interactions.
- Managerial Setting – The managerial setting reflects the amount and kind of restrictions placed on people's actions by the administering agency or private landowner which affect recreation opportunities.”

The Forest Service Planning Handbook (FSH 1909.12 – Part 23.23a) addresses recreation resources. “The Forest Plan must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes. This mapping may be based on management areas, geographic areas, designated areas, independent overlay mapping, or any combination of these approaches. The plan should include specific standards or guidelines where restrictions are needed to ensure the achievement or movement toward the desired recreation opportunity spectrum classes.” Forest Service planning regulations define recreation opportunity as, “An opportunity to participate in a specific recreation activity in a particular recreation setting to enjoy desired recreation experiences and other benefits that accrue....” Recreation setting is defined as, “The social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity spectrum to define recreation settings....”

To meet the Planning Rule analysis requirements of using the Best Available Scientific Information and to ensure CEQ requirements for Methodology and Scientific Accuracy, ROS plan components with desired conditions, standards, guidelines, and suitability must be described in the plan. The following descriptions present plan components that link specific ROS characteristics to the appropriate ROS class.

The plan must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes (36 CFR § 219.10(a); FSH 1909.12 23.23a). The following describes ROS setting plan components that represent each ROS class desired characteristics with supporting standards, guidelines, and suitability determinations. Standards and guidelines may have qualifications or allowed ROS class inconsistencies.

Primitive ROS Setting

Primitive ROS Class Desired Conditions
Setting: The area is essentially an unmodified natural environment. Interaction between users is very low and evidence of other users is minimal.
Experience: Very high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of outdoor skill in an environment that offers a high degree of challenge and risk.
Evidence of Humans: Evidence of humans would be un-noticed by an observer wandering through the area. Natural ecological processes such as fire, insects, and disease exist. The area may provide for wildlife connectivity across landscapes. Primitive ROS settings contain no motorized and mechanized vehicles and there is little probability of seeing other groups. They provide quiet solitude away from roads and people or other parties, are generally free of human development, and facilitate self-reliance and discovery. Signing, and other infrastructure is minimal and constructed of rustic, native materials.
Primitive ROS Class Standards and Guidelines
Standards: (1) Motor vehicles are not allowed unless the use is mandated by Federal law and regulation; and (2) Management actions must result in Very High Scenic Integrity.
Guidelines: (1) No new permanent structures should be constructed, since structures may degrade the unmodified character of these landscapes; (2) Less than 6 parties per day encountered on trails and less than 3 parties visible at campsite since an increase in the number of groups may lead to a sense of crowding; (3) Party size limits range between 6 and 12; and (4) No roads, timber harvest, or mineral extraction are allowed in order to protect the remoteness and naturalness of the area.
Primitive ROS Class Suitability of Lands
Suitability: (1) Motorized and mechanized recreation travel are not suitable; and (2) lands are not suitable for timber production.

Semi-Primitive Non-Motorized ROS Setting

Semi-Primitive Non-Motorized ROS Class Desired Conditions
Setting: The area is predominantly a Natural-Appearing environment where natural ecological processes such as fire, insects, and disease exist. Interaction between users is low, but there is often evidence of other users.
Experience: High probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of outdoor skill in an environment that offers a high degree of challenge and risk.
Evidence of Humans: Natural setting may have subtle modifications that would be noticed

but not draw the attention of an observer wandering through the area. The area provides opportunities for exploration, challenge, and self-reliance. The area may contribute to wildlife connectivity corridors. Closed roads may be present, but are managed to not dominate the landscape or detract from the naturalness of the area. Rustic structures such as signs and footbridges are occasionally present to direct use and protect the setting's natural and cultural resources.

Semi-Primitive Non-Motorized ROS Class Standards and Guidelines

Standards: (1) Motor vehicle use is not allowed unless the use is mandated by Federal law and regulation; and (2) Management actions must result in a High or Very High Scenic Integrity level; and (3) Roads may not be constructed.

Guidelines: (1) The development scale of recreation facilities should be 0-1 to protect the undeveloped character of desired SPM settings; (2) Less than 15 parties per day encountered on trails and less than 6 parties visible at campsite, since an increased in the number of groups may lead to a sense of crowding;³ (3) Party size limits range between 12 and 18; (4) Vegetation management may range from prescribed fire to very limited and restricted timber harvest for the purpose of maintaining or restoring a natural setting; and (5) To protect resources, any existing road should be decommissioned, obliterated, and recontoured with natural slopes.

Semi-Primitive Non-Motorized ROS Class Suitability of Lands

Suitability: (1) Motorized recreation travel is not suitable; and (2) Lands are not suitable for timber production.

Semi-Primitive Motorized ROS Setting

Semi-Primitive Motorized ROS Class Desired Conditions

Setting: The area is predominantly Natural-Appearing environment. Concentration of users is low, but there is often evidence of other users.

Experience: Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of outdoor skill in an environment that offers a high degree of challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment.

Evidence of Humans: Natural setting may have moderately alterations, but would not draw the attention of motorized observers on trails and primitive roads within the area. The area provides for motorized recreation opportunities in backcountry settings. Vegetation management does not dominate the landscape or detract from the experience of visitors. Visitors challenge themselves as they explore rugged landscapes.

³ Parties encounter levels do not apply where associated with ANST shelters and developed sites.

Semi-Primitive Motorized ROS Class Standards and Guidelines
Standard: Management actions must result in at least a Moderate Scenic Integrity level.
Guidelines: (1) The development scale of recreation facilities should be 0-1 to protect the undeveloped character of desired SPM settings; (2) Low to moderate contact between parties to protect the social setting; and (3) Vegetation management may range from prescribed fire to very limited and restricted timber harvest for the purpose of maintaining or restoring a natural setting.
Semi-Primitive Motorized ROS Class Suitability of Lands
Suitability: Lands are not suitable for timber production.

Roaded Natural ROS Setting

Roaded Natural ROS Class Desired Conditions
Setting: The area is predominantly Natural-Appearing environments with moderate evidences of the sights and sounds of human activities. Such evidences usually harmonize with the natural environment Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.
Experience: About equal probability to experience affiliation with other user groups and for isolation from sights and sound of humans. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with a more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible.
Evidence of Humans: Natural settings may have modifications, which range from being easily noticed to strongly dominant to observers within the area. However, from sensitive travel routes and use areas these alternations would remain unnoticed or visually subordinate. The landscape is generally natural with modifications moderately evident. Concentration of users is low to moderate, but facilities for group activities may be present. Challenge and risk opportunities are generally not important in this class. Opportunities for both motorized and non-motorized activities are present. Construction standards and facility design incorporate conventional motorized uses.
The Roaded Modified subclass includes areas that exhibit evidence of extensive forest management activities that are dominant on the landscape, including having high road densities, heavily logged areas, highly visible mining, oil and gas, wind energy, or other similar uses and activities.
Roaded Natural ROS Class Standards and Guidelines

Standard: Management actions must result in at least a Low Scenic Integrity level.
Roaded Natural ROS Class Suitability of Lands
Suitability: Lands may be suitable for timber production.

Rural ROS Setting

Rural ROS Class Desired Conditions
Setting: Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available.
Experience: Probability for experiencing affiliation with individuals and groups is prevalent as is the convenience of sites and opportunities. These factors are generally more important than the setting of the physical environment. Opportunities for wildland challenges, risk-taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important elements.
Evidence of Humans: Natural setting is culturally modified to the point that it is dominant to the sensitive travel route observer. May include intensively managed wildland resource landscapes. Pedestrian or other slow-moving observers are constantly within view of the culturally changed landscape.

How are ROS setting inconsistencies addressed in providing for desired settings along the National Scenic Trail? An inconsistency is defined as a situation in which the condition of an indicator exceeds the range defined as acceptable by the management guidelines. For example, the condition of the indicators for the National Trail corridor may all be consistent with its management as a semi-primitive non-motorized area with the exception of the presence of a trailhead and access road. In such a case, what are the implications of the inconsistency? Does the inconsistency benefit or interfere with the nature and purposes of the National Trail? What should be done about the inconsistency? Three general kinds of actions are possible. First, perhaps nothing can or should be done. It may be concluded that the inconsistency will have little or no effect on the area's general character. Alternatively, the agency may lack jurisdiction over the source of the inconsistency. A second response is to direct management action at the inconsistency to bring it back in line with the guidelines established for the desired ROS class. The main point to be understood with regard to inconsistencies is that they might be managed. The presence of one does not necessarily automatically lead to a change in ROS class. By analyzing its cause, implications, and possible solutions, an inconsistency may be handled in a

logical and systematic fashion. Recognize that where there is no management discretion the ANST will intermittently pass through more developed settings in order to provide for continuous National Trail Management Corridor.

ROS and the Roadless Rule

The Roadless Rule was enacted in 2001 with many Roadless Areas being traversed by the ANST. Land Management Plans are developed pursuant to the final rule must comply with all applicable laws and regulations” (36 CFR § 219.1(f), 77 FR 21206). The Planning Rule provides no direct guidance for integrating IRAs designated by the Roadless Rule into the forest planning process; however, the Planning Rule and directives do require that Land Management Plans establish desired ROS classes.

To be consistent with the planning rule and directives, 2001 Roadless Area prohibitions and restrictions would dictate that the Land Management Plan must establish Primitive, Semi-Primitive Non-Motorized, or Semi-Primitive Motorized ROS settings for Roadless Areas if their values are to be protected. These ROS settings are not suitable for timber production and associated developments, since timber production and related developments are contrary to the physical attributes for “Evidence of Humans,” “Non-Recreation Uses,” and “Naturalness.”

B. Recreation Opportunity Spectrum and Scenery Management System

Recreation Opportunity Spectrum: The Recreation Opportunity Spectrum is a system, by which existing and desired recreation settings are defined, classified, inventoried, established, and monitored. A recreation opportunity is a chance to participate in a specific recreation activity in a particular recreation setting to enjoy desired recreation experiences and other benefits that accrue. Recreation opportunities include non-motorized, motorized, developed, and dispersed recreation on land, water, and in the air. The recreation setting is the social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity spectrum to define recreation settings and categorize them into six distinct classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban.

McCool, Clark, and Stankey in An Assessment of Frameworks Useful for Public Land Recreation Planning, General Technical Report PNW-GTR-705, described that, “Beginning in 1978, the concepts of an opportunity setting and spectrum of recreation opportunities were formalized as a planning framework in a series of significant papers involving two groups of researchers working with public land managers: (1) Roger Clark and George Stankey (Clark and Stankey 1979) and (2) Perry Brown and Bev Driver (Brown et al. 1978, Driver and Brown 1978, Driver et al. 1987). The series of papers that evolved described the rationale, criteria, and linkages that could be made to other resource uses. The goal of these papers was to articulate

the concept of an opportunity spectrum and to translate it into a planning framework; today they serve to archive the fundamental rationale behind the ROS concept and planning framework. The ROS framework as a planning framework was oriented toward integrating recreation into the NFMA required forest management plans. Both the BLM and the Forest Service eventually developed procedures and user guides to do this (e.g., USDA FS 1982).”⁴

McCool, Clark, and Stankey further describe that, “The fundamental premise of ROS is that quality recreational experiences are best assured by providing a range or diversity of opportunities: by allowing visitors to make decisions about the settings they seek, there will be a closer match between the expectations and preferences visitors hold and the experiences they realize (Stankey 1999). Thus, underlying the ROS idea is the notion of a spectrum or diversity of opportunities that can be described as a continuum, roughly from developed to undeveloped. Such opportunities are described by the setting. A setting is defined as the combination of attributes of a real place that gives it recreational value...

As both managers and scientists gained experience with ROS, and as collaboration continued, the efficacy of implementation also increased. The arrival of computer-based geographic information systems at about the same time as the implementation of ROS also enhanced its use as a framework for examining interactions between recreation and other resource uses and values. A major output of ROS was a map of a planning area displaying the spatial distribution of recreation opportunities. This was a distinct advance in resource management and enhanced the move away from reliance on tabular displays of data...

The ROS planning framework has become an important tool for public land recreation managers. Undoubtedly, its intuitive appeal and ease of integration with other resource uses and values are responsible for its widespread adoption and modification. Its strong science foundation, and the collaborative nature of its initial development are probably also primary reasons why it has endured over a quarter century of natural resource planning. As a planning framework, ROS forces management to explicate fundamental assumptions, but in the process of moving through the framework, it allows reviewers to follow and understand results.”

Roger Clark and George Stankey in the Recreation Opportunity Spectrum – A Framework for Planning, Management, and Research, General Technical Report PNW-98⁵ described that,

⁴ “An Assessment of Frameworks Useful for Public Land Recreation Planning by Stephen F. McCool, Roger N. Clark, and George H. Stankey (PNW-GTR-705) compares recreation planning frameworks. ROS is discussed on pages 43-66. ROS is the preferred recreation planning framework for addressing Forest Service Planning Rule requirements: 36 CFR 219.6(b)(9), 219.8(b)(2), 219.10(a)(1) & (b)(1), and 219.19 definitions for Recreation Opportunity and Setting. In addition, using ROS could lead to meeting the NEPA requirement for Methodology and Scientific Accuracy (40 CFR 1502.24).

⁵ http://nstrail.org/carrying_capacity/gtr098.pdf

“The end product of recreation management is a diverse range of opportunities from which people can derive various experiences. This paper offers a framework for managing recreation opportunities based on six physical, biological, social, and managerial factors that, when combined, can be utilized by recreationists to obtain diverse experiences...

We define a recreation opportunity setting as the combination of physical, biological, social, and managerial conditions that give value to a place. Thus, an opportunity includes qualities provided by-nature (vegetation; landscape, topography, scenery), qualities associated with recreational use (levels and types of use), and conditions provided by management (developments, roads, regulations). By combining variations of these qualities and conditions, management can provide a variety of opportunities for recreationists.”

Opportunity settings are described using six factors: Access, Nonrecreational Resources Uses, Onsite Management, Social Interaction, Acceptability of Visitor Impacts, and Acceptable Level of Regimentation. The factor that is most closely related to the Scenery Management System is Nonrecreational Resources Uses describing that, “This factor considers the extent to which nonrecreational resource uses (grazing, mining, logging) are compatible with various opportunities for outdoor recreation. Other uses can severely conflict with opportunities for primitive experiences. In other cases, a variety of resource management activities that might even contribute to visitor enjoyment can be found in conjunction with outdoor recreation... Planners and managers must consider the lasting effects of a resource activity (mines, clearcuts), as well as short-term effects (logging trucks, noise from a mine) to determine the impacts on the recreational opportunity...

The recreation opportunity setting is composed of other natural features in addition to the six factors. Landform types, vegetation, scenery, water, wildlife, etc., are all important elements of recreation environments; they influence where people go and the kinds of activities possible. Considerable work has gone into developing procedures for measuring and managing visual resources.”

This technical report further states that, “The recreation opportunity spectrum provides a framework for integrating recreational opportunities and nonrecreational activities. The central notion of the spectrum is to offer recreationists alternative settings in which they can derive a variety of experiences. Because the management factors that give recreational value to a site are interdependent, management must strive to maintain consistency among these factors so that unplanned or undesired changes in the opportunities do not occur.”

The 1986 ROS Red Book, describes that, “Much of the success in managing vegetation to achieve desired visual character and meet visual quality objectives in Roaded Natural and Rural areas is tied to control of viewing positions primarily on roads, highways, and use areas. When

the recreation user is traveling on trails or cross-country in Primitive or Semi-Primitive areas, near view becomes very evident. Recreation experience opportunities, which are not as available in Roaded Natural and Rural settings should become a primary goal. Some of these may include:

- a. Obtaining privacy, solitude, and tranquility in an outdoor setting.
- b. Experiencing natural ecosystems in environments which are largely unmodified by human activity.
- c. Gaining a new mental perspective in a tranquil outdoor setting.
- d. Self-testing and risk-taking for self-development and sense of accomplishment.
- e. Learning more about nature, especially natural processes, human dependence on them, and how to live in greater harmony with nature. To the extent practical, these opportunities should be goals in all ROS settings on the National Forest System.

Any vegetative management must be quite subtle and for the purposes of creating and maintaining an attractive recreation setting that will offer these types of experience opportunities. Details such as the attributes of an old growth Forest (rotting logs with conks, large trees with distinctive bark, etc.,) become even more important in Primitive and Semi-Primitive than in Roaded Natural and Rural. Providing human scale or created openings generally means they must be quite small with Natural-Appearing forest floor, edge, shape, and disbursement.”

The Forest Service ROS Users Guide describes that, “For management and conceptual convenience possible mixes or combinations of activities, settings, and probable experience opportunities have been arranged along a spectrum, or continuum. This continuum is called the Recreation Opportunity Spectrum (ROS) and is divided into six classes (Table 1). The six classes, or portions along the continuum, and the accompanying class names have been selected and conventionalized because of their descriptiveness and utility in Land and Resource Management Planning and other management applications.” (Table 1 is found in the 1982 ROS Users Guide on pages 7 and 8 and in the 1986 ROS Red Book on pages II-32 and II-33)

Table 1

Recreation Opportunity Spectrum					
Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Setting Characterization					
Area is characterized by essentially	Areas is characterized by a predominantly	Areas is characterized by a predominantly	Area is characterized by	Area is characterized by substantially	Area is characterized by a

<p>unmodified natural environment of fairly large size. Interaction between user is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human induced restrictions and controls. Motorized use within the area is not permitted.</p>	<p>natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.</p>	<p>natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.</p>	<p>predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.</p>	<p>modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities....</p>	<p>substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans, on-site, are predominant. Large numbers of users can be expected, both on-site and in nearby areas....</p>
---	---	--	---	--	---

Experience Characterization

<p>Extremely high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and</p>	<p>High, but not extremely high, probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of</p>	<p>Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and</p>	<p>About equal probability to experience affiliation with other user groups and for isolation from sights and sound of humans. Opportunity to have a high degree of interaction with the natural</p>	<p>Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the setting of</p>	<p>Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Experiencing natural environments. Having challenges and</p>
---	---	---	--	--	--

<p>outdoor skills in an environment that offers a high degree of challenge and risk.</p>	<p>woodsman and outdoor skills in an environment that offers challenge and risk.</p>	<p>outdoor skills in an environment that offers challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment while in the area.</p>	<p>environment. Challenge and risk opportunities associated with more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible.</p>	<p>the physical environment. Opportunities for wildland challenges, risk-taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important element.</p>	<p>risks afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses of highly human-influenced parks and open spaces are common.</p>
--	--	--	--	--	--

The Forest Service 1982 ROS Users Guide further describes in part 21.23 that, “Evidence of Humans is used as an indicator of the opportunity to recreate in environmental settings having varying degrees of human influence or modification. Apply the Evidence of Humans criteria given in Table 5 (repeated below) to determine whether the impact of human modification on the landscape is appropriate for each class designation on the inventory overlay. If the Evidence of Humans is more dominant than indicated for the designated Recreation Opportunity Spectrum class, adjust the class boundaries on the overlay so the designations accurately reflect the situation... The Evidence of Humans criteria for each Recreation Opportunity Spectrum class is primarily based on the visual impact and effect of modifications on the recreation experience, as distinguished from only the physical existence of modifications. The criteria take into account the variation in visual absorption capacity of different landscapes.”

The Forest Service 1986 ROS Book (aka the ROS Red Book) repeats information that is found in the 1982 ROS User Guide and provides ROS background information, reviews research, and adds land management planning guidance. The 1986 ROS Book describes that, “Settings are composed of three primary elements: The physical setting, the social setting, and the management setting. These three elements exist in various combination and are subject to managerial control so that diverse opportunity settings can be provided. These settings, however, are not ends in themselves. Providing settings is a means of meeting the third aspect

of demand, desired experiences. Settings are used for providing opportunities to realize specific experiences that are satisfying to the participant. In offering diverse settings where participants can pursue various activities, the broadest range of experiences can be realized. The task of the recreation planner and manager, then, is to formulate various combinations of activity and setting opportunities to facilitate the widest possible achievements of desired experiences--or to preserve options for various types of recreation opportunities...

The physical setting is defined by the absence or presence of human sights and sounds, size, and the amount of environmental modification caused by human activity. The physical setting is documented on an overlay by combining these three criteria as described below. Physical Setting - The physical setting is best defined by an area's degree of remoteness from the sights and sounds of humans, by its size, and by the amount of environmental change caused by human activity... The apparent naturalness of an area is highly influenced by the evidence of human developments. If the landscape is obviously altered by roads, railroads, reservoirs, power lines, pipe lines, or even by highly visual vegetative manipulations, such as clearcuttings, the area will not be perceived as being predominately natural. Even if the total acres of modified land are relatively small, "out of scale" modifications can have a negative impact...

Management prescriptions⁶ are the building blocks for formulating planning alternatives, and for providing site specific management. Each prescription describes a set of compatible multiple-use management practices that will produce a particular mix of resource outputs. For example, one management area prescription might allow grazing and provide for primitive recreation opportunities, but permit only minimal water development structures and place strict controls on timber harvesting and mineral development. Another prescription for the same type of land might also permit grazing, but provide for roaded-natural recreation opportunities and allow for clearcutting and strip mining...

Possibly one of the most important roles of the ROS is in providing managers and planners a framework within which they can consider the role of recreation within a complex human and resource system. It can facilitate purposeful thinking about the kinds of recreation provided, the location and relationship of these opportunities, and the kinds of complementarities and conflicts that exist among different opportunities as well as with different resource uses. The ROS also helps focus our attention on the fact that recreation is concerned primarily with producing experiences for people.

⁶ Management prescription (1982 Planning Rule): Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives. Similarly, the 2012 Planning Rule requires the establishment of plan components indicating where those components apply.

The ROS helps planners identify different allocations of recreation, specifying where and what types of recreational opportunities might be offered and the implications and consequences associated with these different allocations. Because the ROS requires explicit definitions of different recreation opportunities, it facilitates comparisons between different alternatives. It also helps identify what specific actions might be needed in order to achieve certain allocations in the future.

The explicit nature of the ROS assists managers in identifying and mitigating conflict. Because the ROS identifies appropriate uses within different recreation opportunities, it is possible to separate potentially incompatible uses. It also helps separate those uses that yield experiences that might conflict, such as solitude and socialization. The explicit nature of the ROS helps pinpoint where conflicts might occur and their specific nature.

The ROS also helps identify potential conflicts between recreation and non-recreation resource uses. It does this in several ways. First, it can specify the overall compatibility between a given recreation opportunity and other resource management activities. Second, it can suggest how the activities, setting quality, or likely experiences might be impacted by other non-recreation activities. Third, it can indicate how future land use changes might impact the present pattern of recreation opportunity provision.”

Consistent with the 1986 ROS Red Book, a handbook titled Recreation Opportunity Setting as a Management Tool (**Attachment A**) describes that, “A recreation opportunity setting is defined as the combination of physical, biological, social, and managerial conditions that give value to a place... The seven indicators include access, remoteness, non-recreation uses, onsite management, visitor management, social encounters, and visitor impacts:

1. Access - Includes the type of transportation used by the recreationists within the area and the level of access development, such as trails and roads.
2. Remoteness - The distance of an area from the nearest road, access point, or center of human habitation or development.
3. Non-recreation uses or evidence of humans - Refers to the type and extent of non-recreation uses present in the area, such as timber harvesting, grazing, and mining.
4. On-site management - The on-site management indicator refers to modifications such as facilities, vegetation management, and site design.
5. Visitor management – Includes the management actions undertaken to maintain conditions and enhance visitor experiences within an ROS class.
6. Social encounters - The number, type, and character of other recreationists met in the area, along travel ways, or camped within sight or sound.
7. Visitor impacts - Includes those impacts caused by recreation use and affecting resources such as soil, vegetation, air, water, and wildlife....”

The Recreation Opportunity Setting as a Management Tool paper reviews Road

Modified ROS setting considerations on pages 22-24, which is not addressed in the 1982 and 1986 ROS User Guides.⁷ Setting indicators are describe in part as, “Roads are an integral part of these classes and provide a range of opportunities for users of high clearance vehicles on dirt roads to passenger cars on pavement. Roads may be closed to recreational use to meet other resource management objectives. In addition to roads, a full range of trail types and difficulty levels can be present in order to meet recreation objectives... The natural setting is often heavily altered as this environment and access throughout are often the result of intensive commodity production. Timber harvest, for example, is constrained primarily by the NFMA regulation of shaping and blending harvest units with the terrain to the degree practicable. Harvest activities should protect user-established sites from alteration and provide access to them. It should be used to meet other recreation needs such as provide trailhead access, parking areas, and a diversity of travelway opportunities....”

The Recreation Opportunity Spectrum provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into six classes: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban. Non-recreation uses conflict with opportunities at the primitive end of the spectrum and their associated experiences, such as solitude and naturalness. The lasting effects of an activity (e.g., roads, mines, timber production) as well as short-term effects (e.g., logging trucks, noise) are also important. Impacts on wildlife habitat are a major concern. These impacts can stem from physical alteration of wildlife habitat or from habitat modification caused by recreationists that leads to species displacement. At the primitive end of the ROS, where naturalness is a key part of the setting, maintaining the natural behavior and existence of fish and wildlife populations is important.

Plans must contain plan components, including standards or guidelines, that maintain or restore the composition, structure, ecological processes, and connectivity of plan area ecosystems in a manner that promotes their ecological integrity. Established Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized ROS settings should include plan components that protect the naturalness of the setting, while limiting management actions to only those activities that do not increase the evidence of humans within the area.

Where setting characteristics are not completely aligned with a specific ROS class, a determination should be made as to which class best represents the current specific setting. As a general rule, the physical characteristics take precedent over social and managerial

⁷ http://nstrail.org/carrying_capacity/ros_tool_1986.pdf

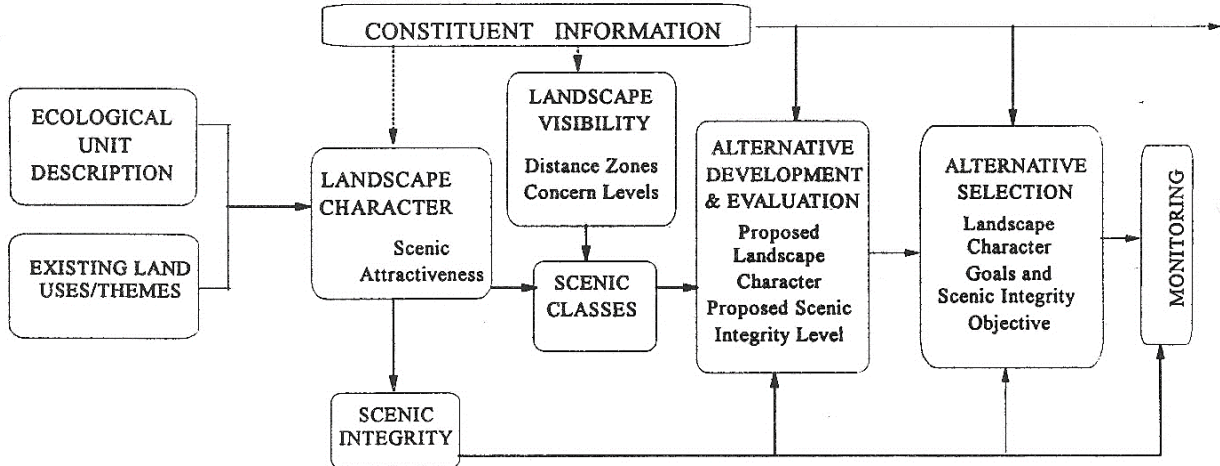
characteristics. This is because social and managerial characteristics can often be altered through visitor use management techniques (permits, closures, etc.) whereas the physical characteristics (size, remoteness, and others) are more permanent.

How are ROS setting inconsistencies addressed in providing for desired settings along a National Scenic Trail? An inconsistency is defined as a situation in which the condition of an indicator exceeds the range defined as acceptable by the management guidelines. For example, the condition of the indicators for a National Scenic Trail corridor may all be consistent with its management as a semi-primitive non-motorized area with the exception of the presence of a trailhead and access road. In such a case, what are the implications of the inconsistency? Does the inconsistency benefit or interfere with the nature and purposes of the National Trail? What should be done about the inconsistency? Three general kinds of actions are possible. First, perhaps nothing can or should be done. It may be concluded that the inconsistency will have little or no effect on the area's general character. Alternatively, the agency may lack jurisdiction over the source of the inconsistency. A second response is to direct management action at the inconsistency to bring it back in line with the guidelines established for the desired ROS class. The main point to be understood with regard to inconsistencies is that they might be managed. The presence of one does not necessarily automatically lead to a change in ROS class. By analyzing its cause, implications, and possible solutions, an inconsistency may be handled in a logical and systematic fashion.

In areas established for a Primitive or Semi-Primitive ROS setting, remoteness inconsistencies will become more prevalent over time due to adjacent Roaded Natural ROS settings being developed, which is uncontrollable if land management plan direction is to be realized. With this in mind, Primitive or Semi-Primitive ROS settings to be established should not have plan components that relate to remoteness. Although, remoteness will continue to be important for ROS setting inventories when plans are revised.

FSM 2310 (WO Amendment 2300-2020-1) – Sustainable Recreation Planning, approved on April 23, 2020, is reviewed in [Chapter V](#) part E of these comments.

Scenery Management System: The Scenery Management System (SMS) provides a systematic approach to inventory, assess, define, and monitor both existing and desired scenic resource conditions. Specific components of the SMS include Scenic Character, the degree of scenic diversity (scenic attractiveness), how and where people view the scenery (distance zones), the importance of scenery to those viewing it (concern levels), and the desired degree of intactness (scenic integrity objectives). The flow chart below outlines the Scenery Management System processes as presented in the Landscape Aesthetics Handbook 701 on page 6 of the summary.



There are several over-arching concepts of the SMS that facilitate the inclusion and integration of scenery resources with planning efforts. The SMS is grounded in an ecological context; recognizes valued aspects of the built environment; and incorporates constituent input about valued features (biophysical and human-made) of settings.

Scenic Attractiveness (ISA) classes are developed to determine the relative scenic value of lands within a particular Landscape Character. The three ISA classes are: Class A, Distinctive; Class B, Typical; Class C, Indistinctive. The landscape elements of landform, vegetation, rocks, cultural features, and water features are described in terms of their line, form, color, texture, and composition for each of these classes. The classes and their breakdown are generally displayed in a chart format. A map delineating the ISA classes is prepared.

The Scenic Character (aka Landscape Character) description is used as a reference for the Scenic Integrity of all lands. Scenic Integrity indicates the degree of intactness and wholeness of the Landscape Character; conversely, Scenic Integrity is a measure of the degree of visible disruption of the Landscape Character. A landscape with very minimal visual disruption is considered to have high Scenic Integrity. Those landscapes having increasingly discordant relationships among scenic attributes are viewed as having diminished Scenic Integrity. Scenic Integrity is expressed and mapped in terms of Very High, High, Moderate, Low, Very Low, and Unacceptably Low.

Constituent Analysis serves as a guide to perceptions of attractiveness, helps identify special places, and helps to define the meaning people give to the subject landscape. Constituent analysis leads to a determination of the relative importance of aesthetics to the public; this importance is expressed as a Concern Level. Sites, travelways, special places, and other areas are assigned a Concern Level value of 1, 2, or 3 to reflect the relatively High,

Medium, or Low importance of aesthetics.

During the alternative development portion of the planning process, the potential and historical aspects of the Landscape Character Description are used to develop achievable Landscape Character Options concert with other resource and social demands. Landscape Character Descriptions and associated Scenic Integrity levels, long- and short-term, are identified for each option and alternative. The desired Scenic Character and Scenic Integrity are included within the descriptions of the management area and geographic area desired conditions and standards and guidelines. Generally, a Very High or High Scenic Integrity level is assigned to Wilderness and other congressionally designated areas.

Natural Scenic Character originates from natural disturbances, succession of plants, or indirect activities of humans. The existing Scenic Character continues to change gradually over time by natural processes unless affected by drastic natural forces or indirect human activities. In a Natural-Appearing landscape, the existing landscape character has resulted from both direct and indirect human activities. Scenic character may have changed gradually over decades or centuries by plant succession unless a concerted effort was made to preserve and maintain cultural elements through processes such as prescribed fires.

Scenic integrity is defined as the degree of direct human-caused deviation in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as a landscape created by human suppression of the natural role of fire, are not included in scenic integrity evaluations. Natural occurring incidents, such as insects and disease infestations, are not defined as human-caused deviations in the landscape.

Scenic integrity objectives in the context of the forest plan are equivalent to desired conditions. Scenic integrity describes the state of naturalness or a measure of the degree to which a landscape is visually perceived to be "complete." The highest scenic integrity ratings are given to those landscapes that have little or no deviation from the landscape character valued by constituents for its aesthetic quality. Scenic integrity is the state of naturalness or, conversely, the state of disturbance created by human activities or alteration.

The frame of reference for measuring achievement of scenic integrity levels is the valued attributes of the "existing" landscape character "being viewed." In Natural or Natural-Appearing character this is limited to natural or natural appearing vegetative patterns and features, water, rock and landforms. Direct human alterations may be included if they have become accepted over time as positive landscape character attributes.

A constituent assessment should yield information useful in developing statements about desired or preferred landscape character and scenic integrity. Ideally, the constituent assessment also produces information useful for delineating important travel routes and use

areas, viewsheds, and special places in the scenic inventory. Finding out how constituents envision and value landscape character, the kinds of scenic integrity they prefer, may involve studying user behavior, talking directly with users, conducting a survey or public involvement workshop, utilizing personal observations of Forest Service personnel, and the perusal of other information sources, including information from previous scenic analyses, recreation and broader forest planning activities. Management decisions on desired Scenic Character should be made by utilizing public input in some selective and systematic manner. An approach suggested by Frissell and Stankey (1972)⁸ is to relate visitor objectives to management objectives. For National Scenic Trails, the opinions visitors seeking Very High or High Scenic Integrity levels and Primitive or Semi-Primitive Non-Motorized ROS settings should be valued more than the general public that may not be supportive of the purposes from which a National Scenic Trail was designated.

A recent study in Rocky Mountain National Park looked at park visitor perceptions of tree mortality in a protected area in a selective and systematic manner. This study describes, “Bark beetle and other natural disturbances will continue to occur in forests across the globe. It is important to understand how these disturbances impact forest visitor perceptions and behaviors to inform environmental education in attempts to mitigate negative impacts... Overall, visitors continued to regard the park positively (e.g., beautiful, interesting, satisfying) despite observed bark beetle disturbance, in contrast to previous preference studies. Visitors also perceived the forest as alive and healthy despite evidence of tree mortality and awareness of bark beetle activity... Overall, knowledge about bark beetles in the forest did not influence aesthetic perceptions. All of the participants rated the forest as beautiful regardless of the amount of knowledge they possessed...” (Christa Cooper Sumner and Jeffrey A. Lockwood).⁹

Scenery Management System and the Recreation Opportunity Spectrum

Relationships: The relationship between the Scenery Management System and the Recreation Opportunity Spectrum systems is discussed in the 1982 and 1986 ROS Users Guides. The FSM 2310 (WO Amendment 2300-90-1) policy guidance informed and was foundational for the recreation planning direction that is found in the 2012 Planning Rule and 2015 Planning directives. The Landscape Aesthetics Handbook. Landscape Aesthetics - A Handbook for Scenery Management (Agricultural Handbook Number 701); Appendix F - 1 - Recreation Opportunity Spectrum describes that:

⁸http://nstrail.org/carrying_capacity/wilderness_environmental_quality_search_for_social_ecological_harmony_frissell_stankey_1972.pdf

⁹ http://nstrail.org/insect_disease_fire/Visitor_Perceptions_of_Bark_Beetle_Impacted_Forests_in_Rocky_Mountain_National_Park_2020.pdf

“Recreation planners, landscape architects, and other Forest Service resource managers are interested in providing high quality recreation settings, experiences, and benefits for their constituents. This is accomplished, in part, by linking the Scenery Management System and the Recreation Opportunity Spectrum (ROS) System. In addition, providing a single constituent inventory and analysis for both systems is helpful in coordinating management practices.

Esthetic value is an important consideration in the management of recreation settings. This is especially so in National Forest settings where most people expect a Natural-Appearing landscape with limited evidence of ‘unnatural’ disturbance of landscape features... Although the ROS User’s Guide mentions the need for establishing a value for different landscapes and recreation opportunities within a single ROS class in the attractiveness overlay, there is currently no systematic approach to do so. For instance, in most ROS inventories, all lands that are classified semi-primitive non-motorized are valued equally. Some semi-primitive non-motorized lands are more valuable than other lands because of existing scenic integrity or scenic attractiveness. The Scenery Management System provides indicators of importance for these in all ROS settings. Attractiveness for outdoor recreation also varies by the variety and type of activities, experiences, and benefits possible in each setting...

In the past, there have been apparent conflicts between The Visual Management System sensitivity levels and ROS primitive or semi-primitive classes. One apparent conflict has been where an undeveloped area, having little existing recreation use and seldom seen from sensitive travel routes, was inventoried using The Visual Management System. The inventory led to a ‘sensitivity level 3 classification, and thus apparently contradicted ROS inventory classes of primitive or semi-primitive non-motorized or semi-primitive motorized. Using criteria in The Visual Management System, in a variety class B landscape with a sensitivity level 3, the initial visual quality objective is ‘modification’ or ‘maximum modification,’ depending on surrounding land classification. However, because of factors such as few social encounters, lack of managerial regimentation and control, and feelings of remoteness, the same area having little existing recreation use may establish an ROS primitive, semi-primitive non-motorized, or semi-primitive motorized inventory classification. There have been concerns over the premise of The Visual Management System that the visual impact of management activities becomes more important as the number of viewers increases; yet, the ROS System emphasizes solitude, infrequent social encounters, and naturalness at the primitive end of the spectrum, with frequent social encounters and more evident management activities at the urban end. Value or importance is dependent on more than the number of viewers or users, and the key is that both the Scenery Management System and ROS are first used as inventory tools. Land management objectives are established during, not before, development of alternatives. Where there does appear to be a conflict in setting objectives for alternative forest plans, the

most restrictive criteria should apply. An example might be an undeveloped land area in a viewshed managed for both middleground partial retention and semi-primitive non-motorized opportunities. Semi-primitive non-motorized criteria are usually the more restrictive.

The Scenery Management System and ROS serve related, but different, purposes that affect management of landscape settings. In some cases, ROS provides stronger protection for landscape settings than does the Scenery Management System. This is similar to landscape setting protection provided by management of other resources, such as cultural resource management, wildlife management, and old-growth management. In all these examples, there may be management directions for other resources that actually provide higher scenic integrity standards than those reached by the Scenery Management System. Different resource values and systems (the Scenery Management System, the ROS System...) are developed for differing needs, but they are all systems that work harmoniously if properly utilized. In all these examples, there are management decisions made for other resources that result in protection and enhancement of landscape settings...

Evidence of Humans Criteria and the Visual Management System – While in some ways it seems possible to equate Visual Quality Objectives, or a range of objectives, with each Recreation Opportunity Spectrum class the function of the Evidence of Humans Criteria in the Recreation Opportunity Spectrum is not the same as Visual Quality Objectives in the Visual Management System and equating the two is not recommended. For example, middle and background Visual Management System areas are often where Primitive and Semi-Primitive Recreation Opportunity Spectrum classes occur. A retention or partial retention Visual Quality Objective given to such an area for management direction could have a vastly different meaning than the delineated Recreation Opportunity Spectrum class. Thus, identify the Recreation Opportunity Spectrum classes through the setting descriptions in the Evidence of Humans Criteria—Table 5... To assist in this, the Evidence of Humans Criteria are purposely worded differently than the definitions of Visual Quality Objectives.” (Table 5 is found in the 1982 ROS Users Guide on page 22 and in the 1986 ROS Red Book on page IV-10.)

Table 5

Evidence of Humans Criteria					
Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Setting is essentially an Unmodified natural environment.	Natural setting may have subtle modifications that would be noticed, but not	Natural setting may have moderately dominant alterations, but	Natural setting may have modifications which range from being	Natural setting is culturally modified to the point that	Setting is strongly structure dominated. Natural or

Evidence of humans would be unnoticed by an observer wandering through the area.	draw the attention of an observer wandering through the area.	would not draw the attention of motorized observers on trails and primitive roads ¹⁰ within the area.	easily noticed to strongly dominant to observers within the area. However, from sensitive travel routes and use areas these alterations would remain unnoticed or visually subordinate.	it is dominant to the sensitive travel route observer. May include pastoral, agricultural, intensively managed wildland resource landscapes, or utility corridors....	natural-appearing elements may play an important role but be visually subordinate....
Evidence of trails is acceptable, but should not exceed standard to carry expected use.	Little or no evidence of primitive roads and the motorized use of trails and primitive roads.	Strong evidence of primitive roads and the motorized use of trails and primitive roads.	There is strong evidence of designed roads and/or highways.	There is strong evidence of designed roads and/or highways.	There is strong evidence of designed roads and/or highways and streets.
Structures are extremely rare.	Structures are rare and isolated.	Structures are rare and isolated.	Structures are generally scattered, remaining visually subordinate or unnoticed to the sensitive travel route observer....	Structures are readily apparent and may range from scattered to small dominant clusters....	Structures and structure complexes are dominant....

The following exhibit displays the relationship between ROS class and Scenic Integrity Objectives (Landscape Aesthetics Handbook).

Scenic Integrity Objectives					
ROS Class	Very High	High	Moderate	Low	Very Low
Primitive	Norm	Inconsistent	Unacceptable	Unacceptable	Unacceptable
Semi-Primitive Non-Motorized	Fully Compatible	Norm	Inconsistent	Unacceptable	Unacceptable
Semi-Primitive Motorized	Fully Compatible	Fully Compatible	Norm ¹¹	Inconsistent	Unacceptable

¹⁰ "Primitive roads" are not constructed or maintained, and are used by vehicles not primarily intended for highway use (1982 User Guide and 1986 ROS Red Book).

¹¹ Norm from sensitive roads and trails.

Roaded Natural-Appearing	Fully Compatible	Norm	Norm	Norm ¹²	Inconsistent ¹³
Rural	Fully Compatible	Fully Compatible	Norm	Norm ¹²	Inconsistent ¹³
Urban	Fully Compatible	Fully Compatible	Fully Compatible	Fully Compatible	Not Applicable

C. Ecosystem Integrity and Diversity

The Planning Rule describes that, “The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity...” (36 CFR § 219.8(a)(1)). Ecological integrity is defined as, “The quality or condition of an ecosystem when its dominant ecological characteristics (for example, composition, structure, function, connectivity, and species composition and diversity) occur within the natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human influence” (36 CFR § 219.19).

The Forest Service describes that the, “Agency intent is to promote ecosystem integrity in the plan area. However, it may not be possible or appropriate to strive for returning key characteristics to past conditions throughout the plan area... Understanding the natural range of variation is fundamental in strategic thinking and planning, even if restoration to historical conditions is not the management goal or possible on parts of the plan area. Understanding the natural range of variation of an ecosystem provides an understanding of how ecosystems are dynamic and change over time. The natural range of variation is useful for understanding each specific ecosystem, for understanding its existing ecological conditions, and for understanding its likely future character, based on projections of climate regimes” (FSH 1909.12 23.11a). “Plans must contain plan components, including standards or guidelines, that maintain or restore the composition, structure, ecological processes, and connectivity of plan area ecosystems in a manner that promotes their ecological integrity” (23.11b). “Desired conditions should define and identify fire’s role in the ecosystem” (23.11c).

The Scenic Character and recreation settings of the planning area must be addressed in the context of ecosystem integrity and diversity. It is important to understand the spatial extent and distribution of ecosystems and habitat types and spatial relationships to the natural range of variation. Understanding these relationships is critical to addressing Scenic Character and

¹² Norm only in middleground-concern level 2, where Roaded Modified subclass is used.

¹³ Unacceptable in Roaded Natural-Appearing and Rural where Roaded Modified subclass is used. It may be the norm in a Roaded Modified subclass.

recreation setting stability along the ANST corridor.

Scenic stability and sustainable recreation in an ecological context are the degree to which the Scenic Character and recreation settings can be sustained through time with ecological progression. Scenic and setting stability may be at risk if the landscape vegetation is outside the natural range of variation. Older forested areas may be at risk from large intense wildfires and be subject to land clearing from timber harvest, road construction, and other developments in Roaded Natural/Roaded Modified ROS settings.¹⁴ The Land Management Plan and related EIS should describe how much land could be devoted to “timber production” and associated actions and activities, while still meeting requirements for ecological integrity.

Departures in fire regime, extensive insect outbreaks, excessive timber production and road construction, and other disturbances from the natural range of variation and the rate of seral-stage change may affect scenic stability and sustainable recreation. The natural range of variation analyses can be used to assess the scenic and setting stability of forest landscapes. This can be measured in terms of the landscape’s departure from the natural range of variation and rate of seral-stage change. Seral-stage communities consist of vegetation types that are adapted to the site’s particular set of physical and biotic conditions. In the unmanaged forested landscape, various natural disturbance agents (such as fire, wind-throw, landslides, and insects) are responsible for creating forests containing a full range of stand ages. Insufficient fire or too much timber harvest on the landscape can determine the level of departure from the natural range of variation or rate of progression between seral-stages.

Scenic integrity is defined as the degree of direct human-caused deviation in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as a landscape created by human suppression of the natural role of fire and insect and disease infestations are not included in scenic integrity evaluations. Sustainable recreation is the set of recreation settings and opportunities on the National Forest System that is ecologically, economically, and socially sustainable for present and future generations. In congressionally designated areas such as the ANST corridor, limited prescribed fire or non-intervention policies are often the desired approach in order to promote natural processes and natural rejuvenation. Outside of protected areas and in Roaded Natural and Roaded Modified settings, interventions may include removal of infected and dead trees or clear cuts, associated road construction, and then followed by artificial reforestation.

“Early-successional forest ecosystems that develop after stand-replacing or partial disturbances are diverse in species, processes, and structure. Post-disturbance ecosystems are

¹⁴ In addition, Semi-Primitive Motorized ROS settings are not suitable for timber production.

also often rich in biological legacies, including surviving organisms and organically derived structures, such as woody debris. These legacies and post-disturbance plant communities provide resources that attract and sustain high species diversity, including numerous early-successional obligates, such as certain woodpeckers and arthropods. Early succession is the only period when tree canopies do not dominate the forest site, and so this stage can be characterized by high productivity of plant species (including herbs and shrubs), complex food webs, large nutrient fluxes, and high structural and spatial complexity. Different disturbances contrast markedly in terms of biological legacies, and this will influence the resultant physical and biological conditions, thus affecting successional pathways. Management activities, such as post-disturbance logging and dense tree planting, can reduce the richness within and the duration of early-successional ecosystems. Where maintenance of biodiversity is an objective, the importance and value of these natural early-successional ecosystems are underappreciated.

Naturally occurring, early-successional ecosystems on forest sites have distinctive characteristics, including high species diversity, as well as complex food webs and ecosystem processes. This high species diversity is made up of survivors, opportunists, and habitat specialists that require the distinctive conditions present there. Organic structures, such as live and dead trees, create habitat for surviving and colonizing organisms on many types of recently disturbed sites. Traditional forestry activities (e.g., clearcutting or post-disturbance logging) reduce the species richness and key ecological processes associated with early-successional ecosystems; other activities, such as tree planting, can limit the duration (e.g., by plantation establishment) of this important successional stage.”¹⁵

“Complex early seral forests, or snag forests, are ecosystems that occupy potentially forested sites after a stand-replacement disturbance and before re-establishment of a closed forest canopy. They are generated by natural disturbances such as wildfire or insect outbreaks that reset ecological succession processes and follow a pathway that is influenced by biological legacies (e.g., large live trees and snags, downed logs, seed banks, re-sprout tissue, fungi, and other live and dead biomass) that were not removed during the initial disturbance. Complex early seral forests develop with rich biodiversity because the remaining biomass provides resources to many life forms and because of habitat heterogeneity provided by the disturbances that generated them. In this and other ways, complex early seral forests differ from simplified early successional forests created by logging. Complex early seral forest habitat is threatened from fire suppression, thinning, and post-fire or post-insect outbreak logging.

Complex early seral forests are structurally more complex, contain more large trees and

¹⁵ http://nstrail.org/insect_disease_fire/forgotten_stage_of_forest_succession_mark_swanson_others_2010.pdf

snags, and have more diverse understories, more functional ecosystem processes, and more diverse gene pools than areas of timber harvest. These characteristics provide greater resilience in the face of climate change than that provided by the simplified early seral forests produced by logging. Complex early seral forest attributes promote a high level of species richness, particularly bird communities that utilize these forests extensively.

The residual biomass of snags reduces disturbance stress and provides for the rapid proliferation of new life. For example, seed banks and live vegetation tissue gives rise to dense forb cover, abundant grasses, and shrubs – especially nitrogen fixers...and ectomycorrhizal associates...that facilitate conifer growth. Closed cone conifers like giant sequoia also do well in these forests. Other plants that can abundantly colonize burns, such as conifers and fireweed, arrive by wind or animal dispersed seed. Plant species richness of snag forests can be much higher than in unburned forests.

Bird and small mammal communities that utilize complex early seral forests forage on the abundant insects and increased abundance of seeds in the post-fire flora... These species, in turn, support an increase in raptors. [Many] bird species...achieve highest abundances in complex early seral forests. Bats...also use complex early seral forests because of greater insect prey as well as suitable roosts. Stand-replacing fires stimulate an increased flow of aquatic prey to terrestrial habitats, driving increases in riparian consumers. The trees killed by fire are beneficial to the ecological integrity of stream communities because they are a main source of large woody debris inputs. There is also reproduction by some forest fungi species that are restricted to burns...and the dead wood provides substrate for fungal growth that supports many arthropod species, including unique fire-following native beetles. Beetles, in general, colonize fire-killed trees in complex early seral forests and their abundant larvae support [many wildlife] species.”¹⁶

Complex early seral forests are common along the NST after years of natural disturbances such as wildfires and insect outbreaks that reset ecological succession processes. To provide for the nature and purposes of the NST over time, scenic and recreation setting stability must be considered when addressing fire, insect, and disease concerns. Managing for Naturally Evolving or Natural-Appearing, Scenic Integrity Levels of Very High or High, and Primitive or Semi-Primitive Non-Motorized settings could accommodate many management practices, such as prescribed fire, and in limited situations timber harvest, to sustain ecosystem integrity and diversity. However, in most cases complex early seral forest ecosystems that result from fire and insect events fully support or are compatible with the nature and purposes

¹⁶ https://en.wikipedia.org/wiki/Complex_early_seral_forest

of the NST.

Forest ecological integrity assessments must clearly describe the quality or condition of an ecosystem that may need to be restored if desired conditions are to be achieved. Forest restoration is a range of actions that strive to manage a forest in a way that reflects its historical ecological state in a certain place. This can include replanting or reintroducing native plants and animals, mechanical thinning and prescribed burning to replicate historical tree densities, removal of invasive species, or returning physical processes, including fire behavior, functioning streams and floodplains to a more natural and resilient state. The goal of restoration is not to recreate a specific appearance, but to reduce the effects of past human activities, such as clearcutting, fire suppression and road construction. Proposed actions to enhance forest resiliency and improve ecological integrity should clearly explain how management actions will increase age class, structural, and vegetation diversity across the landscape. Restoration actions may be limited by natural resource and designated area management constraints.

D. Substantial Interference

Black's law dictionary defines substantial evidence as the amount of evidence which a reasoning mind would accept as sufficient to support a particular conclusion and consists of more than a mere scintilla. BLM directive MS-6280 define substantial interference in relation to nature and purposes:

- *Substantial Interference.* Determination that an activity or use affects (hinders or obstructs) the nature and purposes of a designated National Trail.
- *Nature and Purposes.* The term used to describe the character, characteristics, and congressional intent for a designated National Trail, including the resources, qualities, values, and associated settings of the areas through which such trails may pass; the primary use or uses of a National Trail; and activities promoting the preservation of, public access to, travel within, and enjoyment and appreciation of National Trails.

The NST rights-of-way corridor may contain campsites, shelters, and related-public-use facilities. Other uses that could conflict with the nature and purposes of the NST may be allowed only where there is a determination that the other use would not substantially interfere with the nature and purposes of the NST. To protect NST values, the extent of the established NST Management Area or National Trail Management Corridor must be based on compatible Scenic Integrity and Recreation Opportunity Spectrum allocations along the existing NST travel route and high potential route segments.

Scenic Integrity indicates the degree of intactness and wholeness of the Landscape Character; conversely, Scenic Integrity is a measure of the degree of visible disruption of the Landscape Character. A landscape with minimal visual disruption is considered to have very high Scenic Integrity. Those landscapes having increasingly discordant relationships among

scenic attributes are viewed as having diminished Scenic Integrity. Scenic Integrity is expressed and mapped in terms of Scenic Integrity levels: Very High, High, Moderate, Low, Very Low, and Unacceptably Low. Scenic Integrity is used to describe an existing landscape condition, a standard for management, or a desired future condition. Scenic Integrity Levels of Very High and High contribute to the nature and purposes of the NST. Scenic Integrity Level of Moderate may degrade NST values. Scenic Integrity Levels of Low and Very Low are inconsistent with NST values and landscapes along the NST at these levels of integrity need rehabilitation.

Where the allowed non-motorized activities reflect the purposes for which the National Trail was established, the establishment of Primitive and Semi-Primitive Non-Motorized ROS classes and high and very high scenic integrity allocations would normally protect the nature and purposes (values) of the NST. Management direction for Semi-Primitive Motorized, Roaded Natural, Rural, and Urban ROS classes allow uses that would substantially interfere with the nature and purposes of the NST if the allocation desired conditions are realized.

This assessment is based in part on recreation research and handbooks including information found in (1) The Recreation Opportunity Spectrum: A Framework for Planning, Management, and Research, General Technical Report PNW-98 by Roger Clark and George Stankey; (2) ROS Users Guide (U.S. Department of Agriculture, Forest Service. ROS Users Guide. 1982, Washington, DC: U.S. Department of Agriculture, Forest Service; (3) Recreation Opportunity Setting as a Management Tool Technical Guide by Warren Bacon, George Stankey, and Greg Warren;¹⁷ and (4) Landscape Aesthetics, A Handbook for Scenery Management, Agricultural Handbook Number 701.

Land management plans must establish desired conditions, standards, and guidelines that preserve and promote the nature and purposes of the ANST. Specific interference thresholds should be established during the development of a land management plan. Further, the determination of carrying capacity is integral to protecting NST values. Substantial interference analyses and determinations need to be rigorous and be addressed as part of the cumulative impact (40 CFR § 1508.7) and effects (40 CFR § 1508.8) analyses and disclosure.

¹⁷ http://nstrail.org/carrying_capacity/ros_tool_1986.pdf

E. Nantahala and Pisgah National Forest Draft Forest Plan

Comment: Plan components that are found in the Draft Plan often deviate from the direction that is described in FSH 1909.12 part 22.1. I recommend that the planning team review planning directives definitions for desired conditions, standards, guideline, and suitability of lands and ensure that direction in the plan is consistent with the Planning Rule and directives guidance.

(a) Recreation Settings

Comment: The revised Forest Plan should adopt the Recreation Opportunity Spectrum plan component recommendations that are presented in Chapter III part A of this document.

These recommended components are consistent with the Planning Rule, Planning Rule PEIS, and Planning Directives.

The Planning Rule (36 CFR § 219.10(a)) requires that a plan include plan components including standards or guidelines for integrated resource management to provide for ecosystem services and multiple use [including outdoor recreation]; and plan components including standards or guidelines to provide for: (1) Aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses... (b) Requirements for plan components for a new plan or plan revision.

(1) The plan must include plan components, including standards or guidelines, to provide for: (i) Sustainable recreation; including recreation settings, opportunities, and access; and scenic character. Recreation opportunities may include non-motorized, motorized, developed, and dispersed recreation on land, water, and in the air. (36 CFR § 219.10 (b)(1)(i)).

FSH 1909.12 23.23a - 2. The plan must include plan components, including standards or guidelines, to provide for sustainable recreation integrated with other plan components as described in 23.21a. To meet this requirement the plan:

a. Must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes. This mapping may be based on management areas, geographic areas, designated areas, independent overlay mapping, or any combination of these approaches...

g. Should include specific standards or guidelines where restrictions are needed to ensure the achievement or movement toward the desired recreation opportunity spectrum classes....

Draft Plan: The Draft Plan establishes multiple ROS classes to various management areas as described in part in the following table.

Matrix	MAT-DC-10	Roaded Natural to Semi-Primitive Motorized and Semi-Primitive Non-Motorized
Appalachian National Scenic Trail Corridor	AT-DC-04	Recreation opportunities are predominately in Semi-Primitive Non-Motorized ROS settings. However, where the ANST crosses roads or passes by developed sites, the setting may be Semi-Primitive Motorized, Roaded Natural or Rural. Where the ANST passes through recommended or designated wilderness management areas, the ROS setting is Primitive...
Roam Mountain	RM-DC-05	The desired recreation setting is predominantly Semi-Primitive Non-Motorized and Roaded Natural along and around the access roads and developed recreation areas.

Comment: The established ROS allocations must be mapped displaying each ROS class uniquely (individually). The Forest Service uses the recreation opportunity spectrum to define recreation settings and categorizes them into six distinct classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban. A Semi-Primitive Non-Motorized ROS setting provides for appropriate ANST qualities and values. However, allowing all activities that could occur in a Roaded Natural or Rural ROS setting does not protect the ANST nature and purposes. The ANST MA should establish Primitive and Semi-Primitive Non-Motorized ROS settings, while allowing for some ROS setting inconsistencies. An example of establishing and mapping desired ROS classes is found in the proposed revised Helena-Lewis and Clark Forest Plan which is displayed in **Appendix A**.

Draft Plan: The Draft Forest Plan on page 98 discusses transportation and access describing that, “The NFS road system components that provide this access are highly diverse, ranging from double lane paved roads to single lane gravel or native material surface high clearance roads that may not be usable by passenger cars. Forest roads are currently classified using Road Management Objectives and Maintenance Levels (ML).” Transportation and access plan components are also described.

Comment: Desired conditions should restate important road system management requirements of 36 CFR § 212.5. A forest-wide desired condition for roads is, “A minimum road system is provided to allow for safe and efficient travel and for administration, utilization, and protection of National Forest System lands. The minimum system is the road system determined to be needed to meet resource and other management objectives identified in the plan.”

Draft Plan: The Draft Forest Plan on page 105 discusses recreation describing that, “The Nantahala and Pisgah National Forests are among the most visited forests in the country and provide visitors with unique opportunities for a wide range of recreational activities and experiences that provide economic support to surrounding communities. The Recreation Opportunity Spectrum (ROS) is a method used to categorize, evaluate, and monitor settings and opportunities based on the natural, managerial, and social environment. The desired ROS classifications for each management area are mapped based on a combination of the National ROS Inventory Mapping protocol and management intent for the specific management areas...

REC-DC-01 Forest settings reflect healthy and resilient landscapes, provide a diverse sense of place for community residents and visitors and connect people to the land through high-quality and safe sustainable recreation opportunities and valuable outdoor experiences...

REC-DC-02 A full range of recreation settings and opportunities are available across the Forests, from highly developed to remote, as described in the following ROS classifications: ...

2. The Semi-Primitive classes are characterized by predominantly natural or natural-appearing landscapes of moderate-to-large size where visitors engage in a variety of more primitive recreation activities and can experience a strong feeling of remoteness and solitude. Within these settings there are ample opportunities to practice wildland skills and to achieve feelings of self-reliance.

i. Semi-Primitive Non-Motorized (SPNM) areas provide recreational opportunities in remote areas. Visitors have a feeling that they are removed, or at least distanced, from the sights and sounds of human activity. Public access is by human-powered or animal means. Visitors can find solitude and serenity as well as opportunities for self-discovery, challenge, and risk-taking. Visitors rely on their own backcountry skills and abilities. Interaction between users is low, but there is often evidence of other users. Other than trails, no facilities are provided for the comfort and convenience of visitors. The area has a high degree of naturalness, though an occasional road, powerline, or evidence of vegetation management may be seen.

ii. For Semi-Primitive Motorized (SPM) areas, motorized public access is compatible but may be limited or nonexistent. The public typically accesses these areas by foot, mountain bike, or horse. There is a moderate degree of challenge, risk, and self-reliance. Concentration of users is low, but there is often evidence of other users. Recreation facilities are rare, unobtrusive, and are in place for resource protection. The area can have a high degree of naturalness, though an occasional road, powerline, or evidence of vegetation management may be seen.”

Comment: The ROS setting characteristics descriptions are inconsistent with established definitions as used for the planning rule. The descriptions must be supplemented to address established definitions and protocols, especially for semi-primitive ROS settings. For example, the description must address *evidence of humans* in SPNM settings by describing that, “Natural setting may have subtle modifications that would be noticed, but not draw the attention of an observer wandering through the area. Little or no evidence of primitive roads and the motorized use of trails and primitive roads.” In addition, the Plan needs to add descriptions of ROS Class Desired Conditions, Standards, Guidelines, and Suitability as described in Chapter III part A of these comments. The ROS planning framework is reviewed in Chapter III part B of this document.

The NPNF should consider establishing a Scenic Character of Rural Forested with a Low Scenic Integrity Objective and a Roaded Modified ROS setting for locations where permissions are being sought to build roads and mechanically treat vegetation on a reoccurring basis with heavy equipment such as feller-buncher.

Several Management Areas provide for a broad range of ROS class allocations with no spatial designation, which is inconsistent with planning requirements. The Draft Plan does not contain sufficient information to foster informed decision-making and informed public participation. The Draft Plan should be reissued as a revised Draft Plan after addressing planning rule and planning directive recreation planning process omissions.

Draft Plan: The DEIS on page 113 describes that, “Dispersed recreation occurs in all management areas and geographic areas and is managed to provide for a variety of opportunities and activities across all recreation settings...”

Comment: A standard should be added that states, “Dispersed recreation activities and uses must be compatible with established ROS setting plan components.”

(b) Scenery

Comment: The Planning Rule (§ 219.10(a)) requires that a plan include plan components including standards or guidelines for integrated resource management to provide for ecosystem services and multiple use [including outdoor recreation]; and plan components including standards or guidelines to provide for: (1) Aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses... (b) Requirements for plan components for a new plan or plan revision.

(1) The plan must include plan components, including standards or guidelines, to provide for: (i) Sustainable recreation; including recreation settings, opportunities, and access;

and scenic character...

FSH 1909.12 23.23f – Scenery, Aesthetic Values, Viewsheds, and Geologic Features

The Planning Rule requires that the plan must include plan components, including standards or guidelines, to provide for scenic character (§ 219.10(b)(1)(i)).

When developing plan components, the Responsible Official shall take into account scenic character (36 CFR § 219.8(b)(2)) and consider aesthetic values, geologic features, scenery, and viewsheds (36 CFR § 219.10 (a)(1)). The scenery management system (SMS) is the framework for developing plan components related to scenic character. This framework for scenery management is described in Landscape Aesthetics - A Handbook for Scenery Management (Agriculture Handbook 701). Note that the term “scenic character” has replaced the term “landscape character.” In addition to this Handbook, FSM 2380 contains additional information on the Scenery Management System...

2. The plan must include plan components including standards or guidelines to provide for scenic character integrated with other plan components as described in 23.21a. To meet this requirement the plan:

a. Must include a description of desired scenic character based on the scenery management system... Desired scenic character may be different from existing or potential scenic character identified in the assessment. Depending on the biophysical and cultural attributes of the plan area’s landscape, there may be multiple desired scenic character descriptions associated with specific areas.

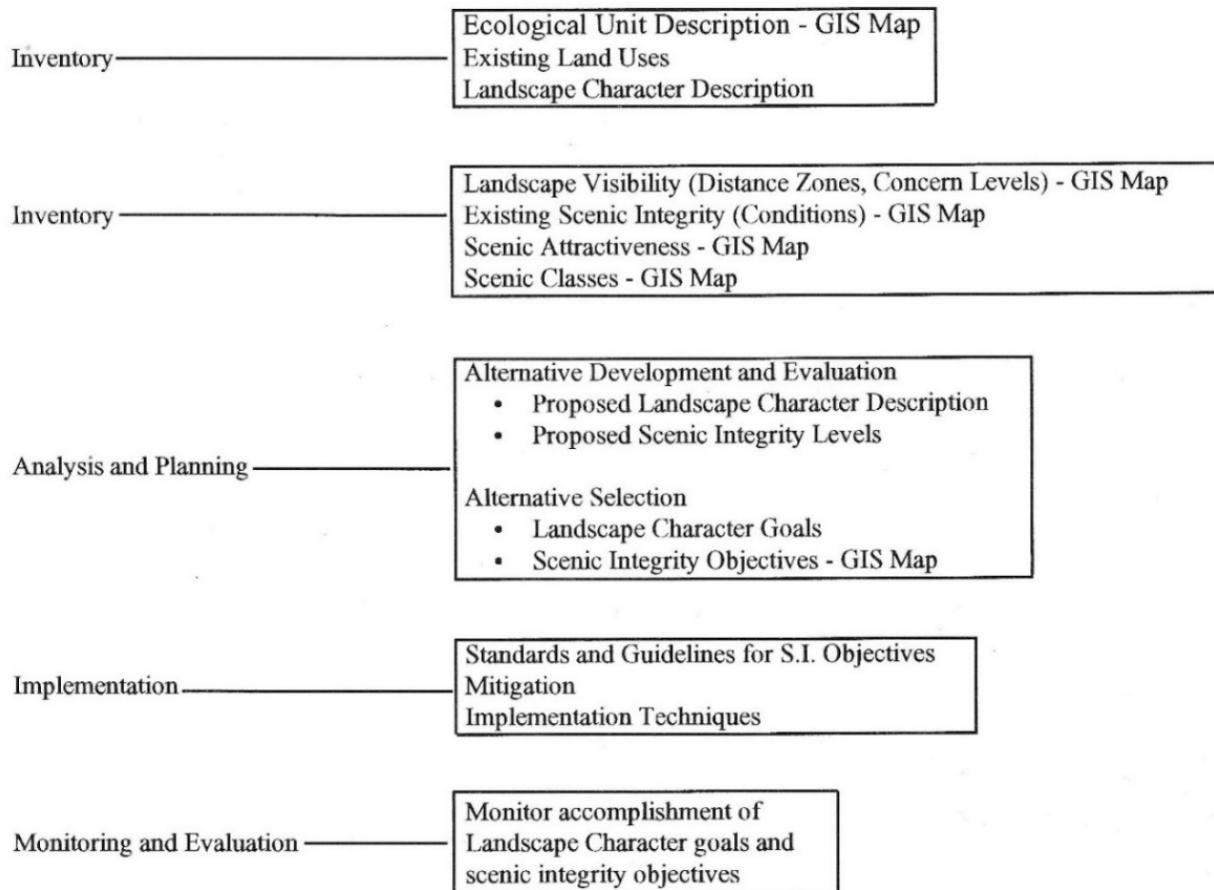
(1) Desired conditions describing scenic character should include scenic integrity objectives that describe the degree to which desired attributes of the scenic character are to remain. Scenic integrity objectives should be assigned throughout the plan area. (Note that scenery integrity objectives are not the same as plan component “objectives” under the Planning Rule) ...

b. Should contain standards or guidelines as needed to avoid or mitigate undesirable effects incompatible with desired scenery conditions. Standards or guidelines can also apply to specific scenic integrity objectives, management areas, geographic areas, designated areas or other identified special areas or places. Standards and guidelines can be applied at multiple scales to specific management activities such as timber harvest, utility corridors, trail construction, facility development, or road construction.

The application of the Scenery Management System to the forest planning process is described in the Landscape Aesthetics Handbook 701 on page 5-2.

Forest Planning Process

Scenery Management System



Draft Plan: The Draft Plan on page 118 describes that, “Highly valued scenic landscapes on these Forests also include lands visible from heavily used state, Forest Service, and National Scenic Byways; state parks and Forest Service recreation areas; popular reservoirs and rivers; and nationally designated trails, including the Appalachian National Scenic Trail... The scenic and aesthetic values of the Forests were assessed using processes described in Agriculture Handbook Number 701, Landscape Aesthetics: A Handbook for Scenery Management (aka: the “Scenery Management System” or SMS). This process included creating an inventory of Scenic Classes derived from a combination of Scenic Attractiveness, viewer Concern Levels, and viewing Distance Zones. These Scenic Classes were then associated with desired Scenic Integrity Objectives (SIOs) for each management area. Scenic and aesthetic values are maintained or achieved by meeting these desired Scenic Integrity Objectives which are classified as “Very High,” “High,” “Moderate,” or “Low.”

The Draft Plan describes: “SC-DC-04 – Landscape Character of the Nantahala and Pisgah National Forests fall within the following themes:

- i. Natural Evolving landscapes exist where the natural evolution of biophysical features and processes occur with very limited human intervention.
- ii. Natural-Appearing landscapes exist where the character is expressed predominantly by natural evolution, but there is also evidence of human intervention, including cultural features and processes.
- iii. Rural Forested landscapes exist where a mixture of land uses occur in a predominately forested setting, but human alterations complement and blend with the natural environment. The built environment appears subordinate to and harmonious with the surrounding landscape and desired setting.
- iv. Rural Pastoral landscapes exist where human created or maintained pastures, “meadows,” “balds,” and possibly associated structures, reflect valued historic land uses and ecological conditions.
- v. Cultural/Historic landscapes exist where the built environment and landscape features display the dominant attitudes and beliefs of specific human cultures and valued historic features represent events and periods of human activity.”

SC-DC-09 states, “Management activities visible in the Foreground (FG) or Middleground (MG) from the Appalachian National Scenic Trail, National Historic Trails, National Recreation Trails, Blue Ridge Parkway, or National Scenic Byways meet or exceed a Moderate Scenic Integrity Objective, regardless of Scenic Class or management area in which the activity is proposed.”

Standards – SC-S-04 states, “Alteration of existing or construction of new recreation or administrative facilities or access routes may temporarily deviate from the desired Scenic Integrity Objectives or the timeframe required to meet them. However, project design must be appropriate for the desired ROS setting and consistent with guidance of the Built Environment Image Guide.”

SC-S-05, “Unless project proposed actions clearly demonstrate a compelling need or benefit related to public health or safety, short or long-term changes to desired SIOs or timeframes to meet them may not occur. If such a compelling need or benefit related to public health and safety is essential to the project, desired SIOs may be adjusted or time frames to meet them extended to achieve the project purpose. However, project design must seek to blend activities with the natural environment by repeating elements of form, line, color, texture, pattern, and scale found within the characteristic landscape and must be approved by a scenery management specialist.”

Guidelines – SC-G-01 through SC-G-03 describe management approaches.

SC-G-04 describe in part that, “As the Scenic Class Inventory is updated, desired Scenic Integrity Objectives in management area direction will then be determined by the updated Scenic Class.”

SC-G-05 describes that, “Restoration activities and salvage operations resulting from uncontrollable natural occurrences (such as insect infestations, disease, or weather events) should be planned and implemented with consideration of desired Scenic Integrity Objectives identified for the associated management area and Scenic Class. Project design should seek to blend activities with the natural environment by repeating elements of form, line, color, texture, pattern, and scale found within the characteristic landscape.”

Comment: Scenic Character is not a theme, but instead a required plan component to be addressed through the revision process. For the ANST corridor, the revised plan should establish a desired Scenic Character of Naturally Evolving and Natural-Appearing landscapes, where Naturally Evolving would be found in recommended and designated wilderness. Existing balds should be described as desired features of Natural-Appearing landscapes.

Scenic character to be established must be mapped as independent allocations and not be a generalized allocation within a Management Area. The separation of Scenic Character allocations would allow for a clear understanding of intent and for an adequate DEIS analysis of effects. An example of establishing and mapping Scenic Integrity Objectives is found in the proposed revised Helena-Lewis and Clark Forest Plan which is displayed here in **Appendix B**.

Matrix	MAT-DC-13	Desired Landscape Character is Natural-Appearing, Rural Forested, Rural Pastoral, or Cultural/Historic.
Backcountry	BAC-DC-16	Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Forested, or Cultural/Historic
Appalachian National Scenic Trail Corridor	AT-DC-08	Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Pastoral, or Cultural/Historic.
Roam Mountain	RM-DC-10	Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Pastoral, or Cultural/Historic.

SC-S-05 exemption for public health or safety is too broad and should be constrained by only those public health or safety concerns that are associated with trails, roads, facilities, and develop recreation sites. It would be inappropriate to apply the safety exemption throughout Primitive and Semi-Primitive ROS settings. This standard is inconsistent with planning direction that states that, “A standard differs from a guideline in that a standard is a strict constraint, allowing no variation... Standards are used when the requirement is absolute such as to ensure projects will not prevent achievement of a desired condition, or to ensure compliance with laws such as the timber requirements, ... to protect aesthetics, fish, recreation, soil, watershed, and wildlife....”

Scenic Integrity Levels are not affected by natural events such as wildfire and insect infestations and must not be waived due to “uncontrollable natural disturbances,” especially in established Primitive and Semi-Primitive Non-Motorized ROS settings. A threshold of a “compelling reason” is subjective and must be modified if retained in some manner to identify an objective evaluation process.

(c) Backcountry

Draft Plan: The Draft Plan on page 208 describes that, “The Backcountry management area contains large blocks of remote and unroaded forest primarily shaped by natural processes, except where active management is utilized to restore ecosystem composition, structure, function, and to provide resiliency against insects and disease. Sections of the Forests within this management area are generally 2,500 acres or greater in size; however, some areas may be smaller if they are adjacent to other Semi-Primitive Non-Motorized management. These areas are primarily shaped by natural processes such as floods, storms, insects, diseases, and fires. Fire is present on the landscape and is managed to benefit natural resources and reach desired conditions. Needed existing system roads are maintained, but new road construction and reconstruction are limited. Unneeded system roads are prioritized for decommissioning, while unauthorized roads are prioritized for obliteration....”

Comment: Plan components for this Management Area need to be reconstructed with modifications that emphasize providing for Naturally Evolving or Natural-Appearing Scenic Character and a Semi-Primitive Non-Motorized ROS setting with limited and focused ROS setting inconsistency exemptions. The following consolidated desired conditions could be adopted for the proposed for Backcountry MA allocation:

- BAC-DC-01 (new) - The desired recreation setting in Backcountry is Semi-Primitive Non-Motorized. Large blocks of remote and unroaded forest appear to be primarily shaped by natural processes, where mid to late-successional communities and old growth forests predominate.
- BAC-DC-02 (new) - Desired Scenic Character is Natural-Appearing with a High Scenic Integrity Objective.
- BAC-DC-03 (new) - Within Inventoried Roadless Areas, Roadless Area Characteristics are retained as defined in the 2001 Roadless Rule.
- BAC-DC-04 (new) - Wildlife habitat conditions reflect large contiguous blocks, core, and interior forest conditions. Wildlife habitat conditions support rare and game species. Existing natural appearing wildlife fields and linear wildlife habitats are managed through non-motorized practices.
- BAC-DC-05 (new) - The role of native pests as natural disturbances persists.
- BAC-DC-06 (new) - Fire plays an important role in maintaining or restoring fire-associated forested communities and reduces fuel buildups.

Other proposed Backcountry desired conditions should be described as standards, guidelines, and implementation strategies. Some of the existing desired condition descriptions should be deleted, since they do not meet the Planning Rule definition of a desired condition.

Following are a few specific concerns with the Backcountry proposed standards and guidelines:

- BAC-S-01: I agree that the Management Area should not be suitable for timber production, which should be addressed as a suitability determination.
- BAC-S-02: The standard needs to clearly state that vegetation management within Inventoried Roadless Areas must be consistent with the Roadless Rule. To “consider” is not a standard in the context of a Forest Plan.
- BAC-G-01: Control of native insect and disease must be excluded from this guideline, since such control would be inconsistent with SPNM desired conditions. Hazard trees should be addressed through regular travel route maintenance programs, while recognizing that trees are not hazards in general dispersed recreation areas. To “consider” is not a guideline in the context of a Forest Plan.
- BAC-S-09: The transportation and Access standard inappropriately describes Forest Service delegation of approval policy that suggests eight exemptions. These exemptions apply to the existing plan, but do not dictate nor should they be a mandate for allowing for the development of roadless areas in the revised plan. The direction is inconsistent with desired ROS setting conditions and must be deleted. The standard should succinctly state that system roads may not be constructed or reconstructed in the Backcountry Management Area.
- BAC-S-10 and BAC-S-11: Transportation and access development permissions should be deleted. The direction are not constraints to assure that desired backcountry conditions are maintained or realized.
- BAC-DC-12 and 13: These recreation standards are redundant.
- BAC-DC-16: Scenic character desired conditions do not clearly relate to the described desired scenic integrity objectives or desired ROS settings and should be deleted.
- BAC-S-10: The guidance that, “Outside of Inventoried Roadless Areas, ecological restoration desired conditions and objectives can be achieved through use of existing roads or construction of temporary roads or equipment trails...” is inconsistent with desired ROS setting conditions. This direction is inconsistent with the definition of a standard and must be deleted. If the plan was to retain permissions to build roads, then the direction should be clear that the best method for rehabilitating any road, system or temporary, is through full recontouring in order to completely remove it from the landscape.
- BAC-S-11: The guidance that, “Outside of Inventoried Roadless Areas, along roads that form the boundary of Backcountry, the following activities are allowed within 100 feet of the road: minor road relocation; vegetation management for road maintenance and wildlife habitat enhancement; and vegetation management to facilitate project implementation in adjacent management areas, such as cutting of trees for auxiliary

facilities such as landings, cable yarding corridors, etc., associated with timber harvesting on acres in adjacent management areas...” is inconsistent with desired ROS setting conditions and with the definition of a standard and must be deleted.

(d) Appalachian National Scenic Trail

Comment: The revised Forest Plan should include the ANST plan component recommendations that are presented in Chapter III part A of these comments. These recommended plan components are consistent with the National Trails System Act planning requirements and the Planning Rule and Planning Rule PEIS. Other plan components could be added, where not conflicting, to capture the traditional ANST management approaches, especially those that reinforce a continued strong partnership with the Appalachian Trail Conservancy.

Draft Plan: The Draft Plan on page 227 describes that, “Along with the FS, the NPS and ATC plan for and carry out management actions and programs to protect, enhance, and ensure the continued viability of natural, cultural, and aesthetic resources along the Appalachian Trail in accordance with the National Trails System Act and the ANST Comprehensive Plan utilizing the Cooperative Management System... Except where it passes through areas of special designation, this corridor management area consists of those lands mapped as the foreground from the ANST footpath and associated features such as shelter and privy sites, designated overnight use sites, water sources, vistas and spur trails connecting these features.”

Comment: Managing for only “viability” is not adequate and is not the legal requirement. The National Park Service and Forest Service must ensure that uses and activities do not substantially interfere with the nature and purposes of the ANST.

Recognizing the foreground along the ANST footpath for the ANST MA is important for protection of the recreation (scenery) resource. However, to provide for the conservation of ANST qualities and values, a corridor with an extent of one-half mile on each side of the ANST needs to be established and managed for a Primitive or Semi-Primitive Non-Motorized ROS setting with limited inconsistency exemptions.

Draft Plan: The Draft Plan on page 227 describes Desired Conditions.

Comment: A foundational ANST desired condition is to maintain or achieve the nature and purposes of this National Scenic Trail. Desired conditions should capture a vision for the ANST with supporting recreation and scenery characterizations, by describing that, “The ANST route on the NPNF is for travel on foot through wild, scenic, wooded, and culturally significant landscapes. The corridor along this route is preserved for the conservation and enjoyment of nationally significant scenic, historic, natural, and cultural qualities. Motor vehicles are not present, except those that might be on existing passenger car roadways, at existing recreation

sites, or being used to preserve a mountain bald landscape.”

Roam Mountain (RM-DC-08) describes in part that, “Within the foreground of the Appalachian Trail, the Roan Mountain area ... provides for the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the land through which the Appalachian Trail passes....” This element of the desired condition is fundamental to all of the ANST Management Area.

Draft Plan: The Draft Plan on page 228 describes that, “AT-DC-05 – Roads, utility transmission corridors, and/or communication facilities exist or may be seen within the corridor, although the goal is to avoid these types of facilities and land uses to the greatest extent possible and blend facilities which cannot be avoided into the landscape so that they remain visually subordinate within the surrounding characteristic landscape.”

Comment: The statement is not an ANST desired condition. Possibly reword to describe that, “Roads, utility transmission corridors, and communication facilities are visually subordinate within the surrounding characteristic landscape.”

Draft Plan: The Draft Plan on page 228 describes that, “The ANST corridor emphasizes retention of natural, forested, or pastoral characteristics shaped by both natural processes and humans. Management activities are designed to recognize the nationally-significant aesthetic and recreational values of the ANST. Stands of old growth continue to develop throughout the area.”

Comment: The description is overly complex and suggests competing visions for the ANST corridor. For NFS lands, an element of the ANST desired conditions could describe that, “Management programs provide for the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the ANST.” (Paraphrased from the NTSA, Section 3(a)(2)).

Draft Plan: The Draft Plan on page 228 describes that, “AT-DC-08 – Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Pastoral, or Cultural/Historic; and AT-DC-08 - Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Pastoral, or Cultural/Historic.”

Comment: Naturally Evolving and Natural-Appearing Scenic Character allocations would provide for the nature and purposes of the ANST on the Nantahala-Pisgah NFs. The Forest Plan Scenic Character allocations need to be distinct and not apply to same locations within the ANST corridor. The biophysical and cultural attributes of the ANST corridor does not allow for multiple desired Scenic Character descriptions to be associated with the same specific area. In addition, it is not rational to have Naturally Evolving and Rural Pastoral Scenic Character allocations assigned to the same land area. Balds that are to be managed need to be mapped

and displayed in the revised plan and used in the FEIS effects analysis.

The Draft Plan without mapped Scenic Character and Scenic Integrity Objectives does not contain sufficient information to foster informed decision-making and informed public participation. The scenery management direction in FSH 1909.12 23.23f must be followed when assigning Scenic Character and Scenic Integrity Objectives along the ANST travel route. Scenic character locations to be established need to be displayed in the revised Forest Plan and the location information used in the FEIS analysis of effects.

Draft Plan: The Draft Plan on page 228 describes: “AT-S-01 – The ANST corridor is unsuitable for timber production.”

Comment: The direction is appropriate, but should be described as a suitability plan component.

Draft Plan: The Draft Plan on page 229 describes: “AT-S-02 – Vegetation management in the ANST corridor may be used to maintain or enhance the ANST environment or user experience for the following purposes....”

Comment: A standard should clearly state that “vegetation management actions must be consistent with Primitive or Semi-Primitive Non-Motorized ROS setting characteristics,” while allowing for limited inconsistencies such as maintaining select balds. Providing for public safety should be limited to only hazard tree removal along travel routes and adjacent to facilities—avoid wording that would allow for timber harvests for public safety in general dispersed recreation areas (Primitive, SPNM, and SPM ROS settings).

Draft Plan: The Draft Plan on page 229 describes: “AT-S-03 – Vegetation management for reasons other than maintaining or enhancing the ANST environment or user experience are permitted within the Appalachian Trail Corridor provided they are not visible from the footpath or associated features.”

Comment: Vegetation management must be consistent with Primitive or Semi-Primitive Non-Motorized ROS setting characteristics, with limited exceptions, if the nature and purposes of the ANST is to be realized.

Draft Plan: The Draft Plan on page 229 describes: “AT-S-06 – Prohibit hauling or skidding along or across the ANST footpath or using the footpath for a landing or temporary road. Hauling or skidding in other locations within the Corridor Management Area is allowed only if site-specific analysis indicates that it is the only feasible and prudent alternative and that the desired SIO can be met.”

Comment: The Draft Plan correctly identifies the Management Area as being not suitable for timber production. As such, any timber management activities must be for resource benefit.

Possibly, replace the direction with: “Hauling and skidding along or across the ANST footpath and using the footpath for a landing or temporary road is prohibited unless the use is determined to not substantially interfere with the ANST nature and purposes as assessed through NEPA EA or EIS site-specific processes.” However, this proposed standard should be deleted, since such actions as using the ANST travel route as a commercial road would always substantially interfere with the nature and purposes of the Appalachian National Scenic Trail.

Draft Plan: The Draft Plan on page 230 describes: “AT-G-01 – New roads should not be authorized within the ANST management area unless the route is proven to be the only viable option determined via site specific analysis and coordination with the ATC.”

Comment: Roads should not be constructed within the ANST Management Area unless consistent with the nature and purposes of the ANST. Possibly, this guideline could describe that, “Roads should not be constructed within the ANST Management Area, unless allowed by a valid existing right. The purpose of this guideline is to protect the nature and purposes of the ANST by avoiding the construction of roads.” If the plan was to error and retain permissions to build roads, then the direction should be clear that the best method for rehabilitating any road, system or temporary, is through full recontouring in order to completely remove it from the landscape.

Draft Plan: The Draft Plan on page 261 states: “CDW-G-07 - Locate planned and approved long distance trails outside of Wilderness unless there is no other feasible route.”

Comment: This guideline implies that National Scenic Trails are incompatible with the wilderness resource and that wilderness takes legal precedent. Instead, where congressional designations overlap, the most protective measures of the legislative mandates must control. Providing for solitude and addressing carrying capacity must be implemented through actions that affect all visitors and not just long-distance trail users. This guideline is inconsistent with the National Trails System Act and needs to be deleted.

(e) Monitoring and Adaptive Management

Draft Plan: The Draft Plan on page 272 describes that, “Monitoring and evaluation are continuous learning tools that form the backbone of adaptive management. The plan monitoring program provides information necessary to evaluate whether plan direction and management are effective in maintaining or achieving progress toward the desired conditions and objectives for the plan area. The monitoring program includes the specific monitoring questions and associated indicators that are to be used for forest plan evaluations, feedback for adaptive responses, and reporting. Monitoring questions and associated indicators are based on one or more plan components, but not every component has a corresponding monitoring

question....”

Comment: Land Management Plans must monitor progress toward meeting desired conditions and objectives for National Scenic Trails. For the ANST, has plan components provided for desired Naturally Evolving or Natural-Appearing landscapes? Indicator: Acres meeting the high or very high scenic integrity levels over time. Are the current recreation settings providing for or moving toward desired ROS classes? Indicator: ROS indicators consistency with desired ROS class, including ANST carrying capacity in wilderness. Have natural ecological processes persisted or been restored? Indicator: Acres of fires managed for resource objectives within the ANST corridor. Is the ANST travel route maintained to standard? Indicator: Miles of trails maintained annually. Have the effects from any uses or activities been as predicted that were allowed due to a not likely to substantially interfere with the nature and purposes determination (NTSA, Section 7(c))? Indicator: Monitoring plan as described in the other uses or activities approving decision document.

(f) Timber Calculations and Suitability

Comment: The Plan should recognize that timber production and associated actions and activities are inconsistent with Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized ROS classes. The purpose of timber production is the purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. Regulated forest structure conditions maintained by periodic forest harvest and regeneration is inconsistent with and unnecessary for achieving Primitive and Semi-Primitive ROS class desired conditions; these areas must not be classified as suitable for timber production, and harvest quantity projections must not be included in projected wood sale quantity and projected timber sale quantity calculations. Timber harvest is not an objective for the ANST and Backcountry Management Areas.

(g) Glossary

Comment: I recommend that the Forest Plan include a glossary of terms that inform the understanding of the Forest Plan and FEIS. I recommend that Forest Plan contain National Trail, Recreation, and Scenery definitions that are found in the glossary of these comments.

Chapter IV. Comprehensive Planning Relationship to NEPA

This section reviews several aspects of the 2005 CEQ regulations for implementing NEPA (40 CFR §§ 1500-1508) for addressing National Scenic Trails in land management planning. NEPA processes are reviewed in Forest Service Handbook 1909.15 and NPS Handbook Director Order #12. Fundamental NEPA process considerations are described in a CEQ document titled,

“Major Cases Interpreting the National Environmental Policy Act.”¹⁸

Agencies should recognize the need for robust scientific and technical analyses. Agencies should establish NEPA documents that effectively address issues that are summarized by Feldman and Nichols of Holland and Hart:¹⁹

“Litigation arguments regarding or even conclusory judicial statements about “deference” to an agency’s NEPA decision making on scientific or technical issues oversimplify the complex balancing and inquiries which courts are directed to undertake in reviewing both the process and substantive issues inherent in evaluating agency use of scientific and technical information under NEPA. A reviewing court at best must struggle to comprehend the agencies’ assessments and conclusions regarding environmental effects and to judge their compliance with NEPA in light of the rule of reason, hard look, and arbitrary or capricious formulations of the standard of review.

Where agency NEPA documents are unartfully drawn, incomplete, or otherwise lacking in clarity and comprehensibility, a reviewing court may have little choice but to delve more deeply into the substantive subject matter underlying agency conclusions in an attempt to discern whether, or to what degree, the agency has failed to meet those standards. At the least, less clearly drafted and supported NEPA documents will offer an invitation to conscientious judges to venture into the realm of agency expertise in an effort diligently to review agency action and ensure the agency’s implementation of NEPA’s twin goals of informed decision making and informed public disclosure.

As the law of NEPA continues to evolve, and agency reliance upon more complex and technical scientific methodologies and information in natural resource management and decision making continues to grow, federal agencies, NEPA practitioners, and stakeholders must recognize and adapt to the shifting standards for scientific information and analysis under NEPA.

In particular, those charged with the development and use of NEPA documents need to ensure that the use of scientific information and analyses in NEPA documentation is clear, transparent, and understandable to both the lay public and the lay judiciary. Accomplishing this requires careful attention to:

1. Using the most up-to-date information available;
2. Identifying limitations in models, methodologies, and information and disclosing them in

¹⁸ https://ceq.doe.gov/docs/laws-regulations/Major_NEPA_Cases.pdf

¹⁹ Murray D. Feldman & Kristin A. Nichols, “NEPA’s Scientific and Information Standards— Taking the Harder Look,” National Environmental Policy Act 6-1 (Rocky Mt. Min. L. Fdn. 2017).

- the National Environmental Policy Act document;
3. Where multiple and conflicting data sets, models, or other methodologies for impact assessment exists, comparing and contrasting their strengths and weaknesses, and explaining in the National Environmental Policy Act document the basis for selecting one data set or methodology over another, or for considering multiple methods and data sets in the analysis;
 4. Documenting the source and basis for key assumptions, standards, and data used in the National Environmental Policy Act document;
 5. Erring on the side of transparency and, in the language of one early NEPA case, ensuring that stubborn problems are not “otherwise swept . . . under the rug”;
 6. Considering and addressing responsible opposing scientific views; and
 7. Where data gaps exist, either filling the gaps or explaining why doing so would be too costly or infeasible.

These and related efforts will produce improved environmental analyses and NEPA documents, and ultimately better agency decisions, thus meeting the underlying goals of the National Environmental Policy Act process. Greater awareness of the types of impact assessment and scientific issues being encountered by the agencies and reviewed by the courts can guide NEPA practitioners, agencies, and stakeholders in meeting NEPA’s requirements for high-quality information and accurate scientific analysis.”

A. Programmatic NEPA Reviews

The Council on Environmental Quality (CEQ) issued guidance in 2014 on effective use of programmatic National Environmental Policy Act (NEPA) reviews. The guidance provided CEQ’s interpretation of existing regulations promulgated under NEPA, but did not change agency obligations with regard to NEPA and the CEQ Regulations. The guidance is not a rule or regulation, and the recommendations it contains may not apply to a particular situation based upon the individual facts and circumstances. This guidance does not change or substitute for any law, regulation, or any other legally binding requirement and is not legally enforceable.

CEQ states that, “NEPA requires Federal agencies to consider the effects of a proposed action and any reasonable alternatives on the human environment. Those effects include, among others, impacts on social, cultural, economic, and natural resources. To implement NEPA, agencies undertake an assessment of the environmental effects of their proposed actions prior to making decisions. The NEPA review process is an integral and valuable tool for public engagement and thoughtful decisionmaking, a process that often produces more sound analysis and information that the federal government might otherwise overlook...

A well-crafted programmatic NEPA review provides the basis for decisions to approve such broad or high-level decisions such as identifying geographically bounded areas within which future proposed activities can be taken or identifying broad mitigation and conservation

measures that can be applied to subsequent tiered reviews. Effective programmatic NEPA should present document reviewers with the agency's anticipated timing and sequence of decisions, 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... A programmatic NEPA review can also be an effective means to narrow the consideration of alternatives and impact discussions in a subsequent tiered NEPA review. For example, a land management plan PEIS for "zoning" certain uses can narrow future alternatives to specific uses...

A programmatic NEPA review may be appropriate when the action being considered is subject to NEPA requirements and falls into one of the four major categories of actions to which NEPA can apply (40 CFR § 1508.18(b)): ... Decision to adopt formal plans, such as documents that guide or constrain alternative uses of Federal resources, upon which future agency actions will be based. For example, setting priorities, options, and measures for future resource allocation according to resource suitability and availability."

Forest Plan geographic bounded areas include a National Forest as a whole, Geographic Areas, Management Areas, and the extent of designated areas such as the area within a Wild and Scenic River established boundary (16 U.S.C. § 1274(b)) and a selected right-of-way (or defined National Trail Management Corridor) for National Scenic and Historic Trails (16 U.S.C. § 1246(a)(2)). BLM Resource Management Plans geographic boundary areas include the BLM Field Office and Special Designations. Each agency zoned area has unique desired conditions and standards and guidelines that constraint use so that desired conditions are not degraded.

CEQ describes that, "Agencies should carefully consider, as early as practicable, the benefits of making the initial broad decisions and the amount of effort required to perform a programmatic NEPA review to ensure that it facilitates decision-making and merits the investment of time and effort..."

Purpose and Need: The purpose and need for a PEA or a PEIS should be written to avoid eliminating reasonable alternatives and 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. The purpose and need sets the tone for the scoping process and the course for conducting the NEPA review...

Scope of Analysis: The scope consists of the range of actions, the alternatives, and the associated impacts to be considered in a NEPA review. A programmatic NEPA review, like project- or site-specific NEPA reviews, must address the potentially significant environmental impacts of a proposed Federal action. Consequently, the nature of the pending decision drives the scope of the environmental analyses and documentation. A programmatic document should not narrow or otherwise restrict decision(s) that will be addressed in subsequent NEPA

review(s)...

Alternatives: Alternatives in a programmatic NEPA review are expected to reflect the level of the Federal action being proposed and the standard NEPA requirements for alternatives apply. 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...

Impacts: All NEPA reviews are concerned with three types of reasonably foreseeable impacts: direct, indirect, and cumulative. The contrast between a programmatic and a project- or site-specific NEPA review is most strongly reflected in how these environmental impacts are analyzed. Because impacts in a programmatic NEPA review typically concern environmental effects over a large geographic and/or time horizon, the depth and detail in programmatic analyses will reflect the major broad and general impacts that might result from making broad programmatic decisions. Programmatic NEPA reviews address the broad environmental consequences relevant at the programmatic level....”

NEPA related geographic areas for land and resource management plans include a National Forest as a whole, Geographic Areas, Management Areas, and the extent of designated areas such as Wild and Scenic River corridors and National Scenic and Historic Trails corridors. BLM Resource Management Plans geographic boundary areas include the BLM Field Office and Special Designations. Programmatic NEPA reviews must be performed at the scale of each of the NEPA defined geographic areas. For designated areas, the extent of the boundaries of each area would control assessment of direct and indirect effects.

CEQ describes that, “The agency is obligated to conduct a meaningful impact analysis in accordance with NEPA, and that analysis should be commensurate with the nature and extent of potential impacts of the decision being made. A programmatic NEPA review should contain sufficient discussion of the relevant issues and opposing viewpoints to enable the decisionmaker to take a “hard look” at the environmental effects and make a reasoned choice among alternatives. There should be enough detail to enable those who did not have a part in its compilation to understand and meaningfully consider the factors involved.”

For each NEPA defined geographic area, NEPA reviews should describe the desired conditions for each area and how related standards and guidelines would constrain actions and prevent degradation. The BLM has similar planning requirements for the NEPA defined geographic areas, including identifying objectives, resource determinations, and management actions.

A NEPA document must contain sufficient information to foster informed decision-making and informed public participation. Otherwise, the decision would not be in

conformance with 42 U.S.C. § 4332(2)(C) and would therefore not be in accordance with law under 5 U.S.C. § 706(2)(A) and not in be in observance of procedure required by law under 5 U.S.C. § 706(2)(D).

B. National Scenic Trail Planning and NEPA

Most federal agency actions, unless specifically exempted, are subject to the procedural requirements of NEPA. These requirements are articulated in NEPA CEQ regulations, and in each agency's supplemental implementing policies.²⁰ Supplemental agency policies often include specific procedural direction or guidance on preparation of appropriate NEPA documents (i.e., Environmental Impact Statements (EIS), Environmental Assessments (EA), and Categorical Exclusions (CE)). Because agency guidance varies widely, this section will generally not address agency specific regulation, policy, or procedure.

NEPA is "our basic national charter for protection of the environment" (40 C.F.R. 1500.1(a)). Better analysis and decisions are the ultimate goal of the NEPA process (40 CFR § 1500.1(c)). NEPA's twin aims are to ensure that federal agencies take a hard look at the environmental impacts of their proposed actions before taking an action and to ensure that agencies provide relevant information to the public so the public can play a role in both the decision-making process and the implementation of the decision (40 C.F.R. 1502.1). By focusing the agency's attention on the environmental consequences of its proposed action, NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after an agency has committed resources (42 U.S.C. § 4332(2)(C)).

NEPA is designed to promote consideration of potential effects on the human environment (40 CFR § 1508.14) that would result from proposed Federal agency actions, to provide the public and decision makers with useful information regarding reasonable alternatives (40 CFR § 1508.25(b)), and mitigation measures to improve the environmental outcomes of Federal agency actions. NEPA ensures that the environmental effects of proposed actions are taken into account before decisions are made and informs the public of significant environmental effects of proposed Federal agency actions, promoting transparency and accountability concerning Federal actions that may significantly affect the quality of the human environment. NEPA reviews should identify measures to avoid, minimize, or mitigate adverse effects of Federal agency actions. Environmental impact statements shall be prepared using an inter-disciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act). The disciplines of the

²⁰ 36 CFR Part 220 and 43 CFR Part 46 does not lessen the applicability of the CEQ 40 CFR Part 1500 regulations on National Forest System lands (36 CFR 220.1(b)).

preparers shall be appropriate to the scope and issues identified in the scoping process (40 CFR § 1502.6).

The CEQ regulations require that NEPA decision-making processes provide for thoughtful, rigorous evaluation of reasonable options within the scope of the proposed decisions. The decision process involves interested and affected individuals, groups, and governments. The “early and often” interactions that the NEPA suggests in establishing the scope of the proposed actions considered in a Comprehensive Plan are especially important when identifying significant natural, historical, and cultural resources to be preserved; selecting the rights-of-way; and establishing scenic integrity levels, ROS class settings, and capacities for the management corridor.

NEPA document(s) that support a Comprehensive Plan will analyze the effects of a range of alternatives, including but not limited to effects on visual quality, ROS settings, carrying capacities and natural, historical, and cultural resources to be preserved. A Comprehensive Plan and supporting NEPA decision documents will typically establish goals, desired conditions, allowable uses, standards (thresholds), guidelines, and the conditions under which uses are allowed for a discreet geographic area or linear landscape. NEPA decision documents should provide additional information and support the thought process used to implement, revise, or amend a Comprehensive Plan.

When a federal agency does not make an “overt act,” no NEPA requirement to prepare an Environmental Impact Statement (EIS) attaches. However, if some agency action was mandated under a separate statute in relation to that activity but the action was not taken, NEPA does attach and the Administrative Procedure Act applies (40 CFR § 1508.18 and 5 U.S.C. § 706). The NTSA presents an independent planning requirement to prepare and implement a comprehensive plan including identifying carrying capacity, select the rights-of-way, and in general establish management direction that provides for the nature and purposes qualities and values of this National Scenic Trail.

The Forest Service describes that, “the NEPA and Forest planning processes must be integrated. The Responsible Official should provide direction to the Interdisciplinary team in a project initiation letter to ensure that the Interdisciplinary Team develops a strategic approach for coordinating planning and NEPA procedures” (FSH 1909.12 part 21.13). Forest Service Handbook 1909.12 part 21.13 states, “The NEPA and Forest planning processes must be integrated. The Responsible Official should provide direction to the Interdisciplinary team in a project initiation letter to ensure that the Interdisciplinary Team develops a strategic approach for coordinating planning and NEPA procedures. The Forest Service NEPA directives are found in FSM 1950 – Environmental Policy and Procedures and in FSH 1909.15 – National Environmental Policy Act Handbook... Careful coordination of planning and NEPA procedures,

particularly public participation, allows the Interdisciplinary Team to be more efficient by aligning planning tasks with the requirements of NEPA. Important opportunities to integrate planning and NEPA requirements include the following:

1. Using the results of the assessment to describe the affected environment in the environmental impact statement. If information gaps were identified during or subsequent to the assessment, additional information might be needed to describe effectively the affected environment, consistent with NEPA requirements.
2. Using the need to change the plan identified during the planning process to write the purpose and need statement for the environmental impact statement. Early in the planning phase, a preliminary need to change the plan is identified and public comment is sought to help develop the need to change the plan, which in turn helps focus plan development or revision.
3. Including both planning and NEPA requirements in the public participation strategy (FSH 1909.12 part 40.42).
4. Integrating NEPA scoping, where appropriate, into public engagement activities used to support development of plan components and other plan content. Scoping includes refining the proposed action, determining cooperating agencies, identifying preliminary issues, and identifying interested and affected persons (FSH 1909.15 part 10.11.) Early public engagement during the planning process can help to identify goals and concerns for the plan area. This phase provides the opportunity for the Interdisciplinary Team to meet NEPA scoping requirements (40 CFR § 1501.7) and, therefore, gain an understanding of the following elements that will be important during the NEPA analysis:
 - a. Significant issues that will frame alternatives for considerations,
 - b. Potential alternatives for analysis, and
 - c. Potential effects of alternatives.

The U.S. Forest Service described that, "...recreation planning and management tools that shape the recreation program include the Recreation opportunity spectrum (ROS) [and] Scenery management system... These tools are used to define existing conditions, describe desired conditions, and monitor change. These tools, along with overarching guidance at the national, Department, and Agency levels, serve as the context by which individual national forests and grasslands engage with their communities. In doing so, the unit's recreation-related and amenity-based assets are considered and integrated with a vision for the future that is sustainable and that the unit is uniquely poised to provide. As the current planning rule procedures related to recreation are quite general, these tools contribute to consistency in recreation planning across NFS units.

"The recreation opportunity spectrum has been an effective land management planning tool since 1982. The recreation opportunity spectrum is a framework for identifying, classifying, planning, and managing a range of recreation settings. The setting, activity, and opportunity for

obtaining experience are arranged along a spectrum of classes from primitive to urban. In each setting, a range of activities is accommodated. For example, primitive settings accommodate primarily non-motorized uses, such as backpacking and hiking; whereas roaded settings (such as roaded natural) or rural settings accommodate motorized uses, such as driving for scenery or access for hunting. Through this framework, planners compare the relative tradeoffs of how different patterns of settings across the landscape would accommodate (or not accommodate) recreational preferences, opportunities, and impacts (programmatic indirect environmental effects) with other multiple uses. The scenery management system provides a vocabulary for managing scenery and a systematic approach for determining the relative value and importance of scenery in an NFS unit. The system is used in the context of ecosystem management to inventory and analyze scenery, to assist in establishment of overall resource goals and objectives, to monitor the scenic resource, and to ensure high-quality scenery for future generations” (Forest Service Planning Rule, PEIS, page 209).

C. Establishment of the Purpose and Need for Action

The Purpose and Need for Action section of the DEIS (40 CFR § 1502.13) should describe the need to provide integrated resource management, including providing for the purposes for which Congressional designated areas are established such as protecting the nature and purposes and related values of National Scenic and Historic Trails.

A land management plan NEPA document must provide the framework for the purpose and need for action and for the decisions to be made of identifying the management corridor and establishing scenic integrity levels, ROS class settings, and carrying capacities. A land management plan should establish desired conditions, including the nature and purposes of a National Trail as well as key resource indicators and thresholds that prevent degradation.

The described underlying purpose and need for action for programmatic and site-specific NEPA analyses must be consistent with all land use laws, Presidential proclamations, and regulations that prohibit or restrict actions. To the extent practicable avoid activities incompatible with the purposes for which National Scenic Trails are established. Actions that would substantially interfere with the nature and purposes of a National Scenic Trail are to be eliminated from detailed study in NEPA analyzes.

The “need for action” (or change) is based upon a comparison of the baseline conditions and desired conditions. This comparison establishes both the “scope” of and the “need” for action. The “scope” of and the “need” for the proposed actions establish the basis for determining the reasonable range of alternatives. The purpose and need description represent the “problem to be solved.” Defining the scope appropriately (and refining as necessary through the early steps of the NEPA process) improves the overall efficacy of the NEPA

document. How broadly or narrowly the scope is described affects the range of reasonable alternatives that can meet the need, which in turn affects how well the range of alternatives and the selected alternative respond to this need. There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action (40 CFR § 1501.7).

Identifying conditions that are within federal control and those that require action by entities not within the decision-making agency's control is helpful in the early stages of NEPA. A federal agency cannot necessarily eliminate options or alternatives outside of its jurisdiction from consideration in the NEPA process if the options present reasonable alternatives to meet the need.²¹ However, an agency may only take actions that are within the agency's legal authority (40 CFR § 1508.15). Clarifying who is responsible for achieving desired conditions will

The Healthy Forests Restoration Act (HFRA), 16 U.S.C. 6511 to 6518, as amended through P.L. 115-141, authorizes management actions to address certain vegetation issues.

Section 104(a) describes that except as otherwise provided in this title, the Secretary shall conduct authorized hazardous fuel reduction projects in accordance with—(1) the National Environmental Policy Act of 1969; and (2) other applicable laws.

Section 603 states that an insect and disease project may be categorically excluded from documentation in an environmental assessment or an environmental impact statement and exempt from pre-decisional objections. However, section 603 CE may not be used in areas where vegetation removal is restricted.

WILDFIRE RESILIENCE PROJECTS, Section 605(c) Limitations part (4) describes that, "EXTRAORDINARY CIRCUMSTANCES—The Secretary shall apply the extraordinary circumstances procedures under section 220.6 of title 36, code of Federal regulations (or successor regulations), when using the categorical exclusion under this section.

Section 605(d) Exclusions— This section does not apply to—

- (1) A component of the National Wilderness Preservation System;
- (2) Any Federal land on which, by Act of Congress or Presidential proclamation, the removal of vegetation is restricted or prohibited;
[The NTSA, Section 7(c), restricts the removal of vegetation to only those actions that would not substantially interfere with the nature and purposes of a National Scenic or Historic Trail.]
- (3) A congressionally designated wilderness study area; or
- (4) An area in which activities under subsection (a) would be inconsistent with the applicable land and resource management plan.

Section 605(e). FOREST MANAGEMENT PLANS—All projects and activities carried out under this section shall be consistent with the land and resource management plan established under section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1604) for the unit of the National Forest System containing the projects and activities.

²¹ See CEQ 40 Questions

help to establish early in the process the key authorities or participation by others needed to achieve the overall desired conditions.

D. Identify Proposed Action and a Reasonable Range of Alternatives

NEPA requires federal agencies to include alternatives to the proposed action within an EIS (42 U.S.C. § 4332(2)(C)). The alternatives analysis is the heart of a NEPA document, and NEPA's implementing regulations direct agencies to "rigorously explore and objectively evaluate all reasonable alternatives (40 CFR § 1502.14).

Forest Service land management plans shall form one integrated plan for each unit (16 U.S.C. § 1604(f)(1) and 36 CFR § 219.10). The plan and developed NEPA alternatives must provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area as follows: ... (b)... (1) The plan must include plan components, including standards or guidelines, to provide for: (i) Sustainable recreation; including recreation settings, opportunities, and access; and scenic character..., and (vi) appropriate management of other designated areas or recommended designated areas in the plan area...(36 CFR § 219.10(b)(i)&(vi)). The NST is a congressionally designated area (36 CFR § 219.19).

The identification and evaluation of alternative ways of meeting the purpose and need of the proposed action is critical to the NEPA analysis. Elements of a reasonable proposed action or alternative for the ANST corridor are presented in Chapter III part A of these comments. The lead agency or agencies must, objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for them being eliminated. Reasonable alternatives are those that substantially meet the agency's purpose and need. If the agency is considering an application for a permit or other federal approval, the agency must still consider all reasonable alternatives. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. Agencies are obligated to evaluate all reasonable alternatives or a range of reasonable alternatives in enough detail so that a reader can compare and contrast the environmental effects of the various alternatives.

Components of a proposed action in land management planning may include the selection of the rights-of-way and/or identification of the management corridor, and will likely include the establishment of scenic character, scenic integrity levels, ROS class, and carrying capacities for the National Scenic Trail. The conditions under which a variety of uses is allowed may be labeled as thresholds, standards and guidelines, or other terminology. In regards to addressing scenic integrity, recreation opportunities, and carrying capacities, this step requires

that these use conditions be expressed in terms of thresholds that will prevent degradation of National Scenic Trail qualities and values.

Distinguish early in the process the importance of certain allowable uses or the conditions of those uses in protecting NST values (avoiding, reducing, or eliminating degradation), and/or enhancing values. Besides providing a clear logic track for the decisions made regarding scenic integrity, recreation opportunities, and carrying capacities, this will also help to identify elements that may need monitoring.

Managed and allowable uses and conditions of use may be either common to all alternatives or may vary by alternative. Managed and allowable uses or conditions of use that would be the same for all alternatives should be identified early in the NEPA process, along with a clear rationale for why those uses or conditions of use would be common to all alternatives. For example, conditions of use could protect Threatened and Endangered Species or cultural resources. Commonalities may also include existing uses or conditions not shown to have an adverse effect on NST qualities and values or that otherwise already meet the purpose and need for action (40 CFR § 1502.14(a)).

CEQ regulations also provide guidance regarding the agency's scope of actions. Aspects of an action that are inter-related (e.g., the kinds and amounts of use and the facilities that support that use) should be considered during this process (40 CFR § 1508.23 and 40 CFR § 1508.25). If the purpose and need for action suggest a change from the existing condition, or if there are unresolved conflicts regarding alternative uses of resources, then a "hard look" at a reasonable range of alternatives will be needed (40 CFR § 1508.25).

NEPA documents should explain the timeframe within which future actions would be taken. Be clear about whether NEPA decisions are being made to authorize certain actions when the Comprehensive Plan is completed without further decision process needed, or whether decisions about actions contemplated within the life of the Comprehensive Plan would be authorized at a later time. The latter approach is typically used in broad "programmatic" NEPA documents and subsequent site-specific documents that may be tiered to the larger document (40 CFR § 1500.4(i); 1502.20).

Consider the following when determining whether visual quality, recreation setting, or carrying capacity actions identified in the Comprehensive Plan are also NEPA decisions (1) made upon Comprehensive Plan completion or (2) authorized later in time:

- Whether the action is part of an "adaptive management" decision. The term "adaptive management" is sometimes used by agencies to describe a range of different actions that managers may take resulting from one NEPA decision to respond to changing conditions during implementation or uncertain outcomes of implementing the decision.

To authorize future adaptive action, the NEPA document describes when, where and how an action would take place, and when, where, and how the decision might be adapted or changed to accommodate changes in conditions or actual outcomes of the original action.

- Whether the action is ripe for decision. Actions are considered “ripe for decision” when the agency has identified a proposal it is prepared to make a decision on and the effects can be meaningfully analyzed (40 CFR § 1508.22). However, NEPA processes allow for emergency actions where substantially degradation is probable or occurring.
- If all or parts of the future “adaptive” actions identified in a Comprehensive Plan are not ripe for a NEPA decision, the NEPA document should discuss why they are not ripe for a decision at this time. Additionally, the NEPA document should describe the why adaptive action is needed, and the expected process used to make a final decision on those future actions.

“Adaptive Management”

Adaptive management is an “if this... then that” approach. If “this” condition exists (in this example for two consecutive years), then “that” action would be taken (in this case a suite of actions, with an ultimate limit on group sizes and campsite closures). To authorize automatically one or more of the actions proposed to reduce the effects of human use, the environmental impacts of those actions must be addressed in the authorizing NEPA document. The Forest Service describes, “The proposed action and one or more alternatives to the proposed action may include adaptive management. An adaptive management proposal or alternative must clearly identify the adjustment(s) that may be made when monitoring during project implementation indicates that the action is not having its intended effect, or is causing unintended and undesirable effects. The EIS [or EA] must disclose not only the effects of the proposed action or alternative but also the effect of the adjustment. Such proposal or alternative must also describe the monitoring that would take place to inform the responsible official during implementation whether the action is having its intended effect.”

E. Affected Environment

The affected environment consists of “the environment of the area(s) to be affected or created by the alternatives under consideration” (1502.15). Put another way, the affected environment describes the existing condition of the resources that could be impacted by implementing any of the alternatives. When applicable, the affected environment should discuss resource condition trends and identify contributing factors. Such information can provide a basis for considering how a changing, dynamic environment could affect conclusions that are reached regarding the environmental consequences of implementing any of the alternatives under consideration.

The affected environment serves as the baseline for predicting changes to the human environment that could occur if any of the alternatives under consideration, including the no-

action alternative, are implemented. The affected environment is separate and distinct from the no-action alternative, which describes current management rather than the current state of affected resources, and discloses how the current condition of affected resources would change, if current management were to continue.

The Interdisciplinary Team should identify and evaluate available information about designated areas including:

1. Types, purposes, and locations of established designated areas within the plan area. The Responsible Official should use a map to identify these locations.
2. Range of uses, management activities, or management restrictions associated with the established designated areas in the plan area.
3. Existing plans for the management of established designated areas within the plan area, such as comprehensive plans for national scenic or historic trails.

The affected environment must describe the environment of the area to be affected by the alternatives under consideration. The affected environment section must describe the degree to which NST qualities and values are being protected, including the protection of desired cultural landscapes, recreation settings, scenic integrity, and providing for conservation purposes along the existing NST travel route (16 U.S.C. § 1244(e)). In addition, the status of the rights-of-way is to be described (16 U.S.C. § 1246(a)(2)). Furthermore, the quality or condition of the ecological characteristics of the National Scenic Trail management corridor should be described.

The NTSA states that, “National Scenic Trails, established as provided in section 5 of this Act, which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass (16 U.S.C. § 1242(a)(2), and specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved...(16 U.S.C. § 1244(e)).” Examples of conservation and preservation attributes that should be discussed in the Affected Environment section may include the presence of designated and recommended wilderness, roadless areas, and important wildlife habitat along the NST travel route.

The NEPA affected environment description, as related to forest planning, would normally be consistent with the revision assessment reports and findings that resulted from FSH 1909.12 Chapter 10 Best Available Scientific Information and other processes. However, a Forest Plan revision Environmental Impact Statement analysis would always require describing current conditions and would likely be more robust than that found in the Forest Plan revision assessment due to specific NEPA processes such as the requirement for methodology and

scientific accuracy (40 CFR § 1502.24).

The spatial and temporal boundaries of the affected environment must be defined for the cumulative analysis. The components of the affected environment considered in a cumulative analysis are the same resources, ecosystems, and human communities that could be affected by the proposal. However, the spatial limits of a National Scenic Trail cumulative analysis are normally broader than the analysis of the proposal because the cumulative analysis must consider all activities that affect those environmental components, even outside the area affected by the proposal.

F. Analyze the Effects of the Proposed Action and Alternatives

As related to Forest Plans and RMPs, the No Action alternative should describe how the NST rights-of-way, travel route, and high-potential route segments are being protected until such time that the Forest Plan or RMP is amended or revised to address the amended Comprehensive Plan and directives guidance.

The No Action alternative must explain how or if the requirements of the National Trails System Act will be addressed if No Action is the selected alternative. The National Scenic Trail rights-of-way that encompasses existing and high potential route segments, which is also known as the National Trail Management Corridor (16 U.S.C. § 1246(a)(2)) is the primary area for addressing the effects analysis. Effects on scenic integrity, ROS class conditions, and carrying capacities will generally be based on analysis of the effects of the allowable uses and conditions of use on NST qualities and values that are included in the proposed action and each alternative in the NEPA document. This outcome is also a specific decision aspect of the proposed action or alternatives. Utilizing ROS and Scenery Management system will help ensure that NEPA assessments are systematic and accurately describe the affected environment and expected outcomes from each alternative. The level of precision or certainty of the effects can be guided by the CEQ regulations regarding the use of “methodology and scientific accuracy” (40 CFR § 1502.24) and the information needed to support a reasoned choice among alternatives (40 CFR § 1502.22). Clearly document how the final decision is based on the best available science (36 CFR § 219.3), scientific accuracy, and other relevant information needed to understand the reasonably foreseeable adverse effects of a choice between alternatives, the gaps in that information, and the rationale for why a reasoned choice between alternatives can be made at this time. In addition, substantial interference analyses and determinations need to be rigorous and be addressed as part of the cumulative impact (40 CFR § 1508.7) and effects (40 CFR § 1508.8) analyses and disclosure.

Specific to National Scenic Trails, the NTSA states that, “National Scenic Trails, established as provided in section 5 of this Act, which will be extended trails so located as to

provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass (16 U.S.C. § 1242(a)(2), and that comprehensive planning will describe specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved...(16 U.S.C. § 1244(e)).”

Management direction for Semi-Primitive Motorized, Roaded Natural, Rural, and Urban ROS classes allow uses that would substantially interfere with the nature and purposes of an NST if the allocation desired conditions are realized. Where the allowed non-motorized activities reflect the purposes for which the National Trail was established, the establishment of Primitive and Semi-Primitive Non-Motorized ROS classes and high and very high scenic integrity allocations would normally protect the nature and purposes (values) of an NST.

Wilderness evaluations (FSM 1923.03) and NEPA assessments should describe the positive NST benefits if roadless areas along the NST corridor are recommended for wilderness designation. Protecting wilderness values would include establishing plan components that identifies recommended wilderness as not being suitable for motor vehicle use and mechanized transport. Management of recommended wilderness to protect wilderness characteristics support the conservation purposes of this National Scenic Trail and is harmonious with providing for the NST nature and purposes. Another example of conservation and preservation benefits of establishing an NST management corridor may include the protection of important wildlife connectivity areas through establishing the extent of the NST corridor to reflect this conservation need. Forest plans are expected to provide for ecological conditions to contribute to the recovery of threatened and endangered species and to conserve species that have been proposed for listing under the Endangered Species Act.

One of the strongest combinations of conservation protection for undeveloped federal public lands is overlapping Wilderness, Wild and Scenic River, and National Scenic Trail designations. Each congressional designation offers protections that the other does not. Overlapping designations within roadless areas would help ensure National Forest System lands are protected for current and future generations by protecting wilderness characteristics, outstandingly remarkable values of eligible wild and scenic rivers, and the nature and purposes of National Scenic Trails. These overlapping designations provide a complimentary framework for a high-level of protection from overuse and development of federal lands.

NEPA reviews must take a “hard look” at impacts that alternatives under consideration would have on the human environment if implemented. This means that there must be evidence that the agency considered all foreseeable direct, indirect, and cumulative impacts, used sound science and best available information, and made a logical, rational connection

between the facts presented and the conclusions drawn. Analyzing impacts means considering how the condition of a resource would change, either negatively or positively, as a result of implementing each of the alternatives under consideration. A written impact analysis that focuses on significant issues should be included in the environmental consequences section of a NEPA document. A written impact analysis should: (1) describe the impacts that each of the alternatives under consideration would have on affected resources; (2) use quantitative data to the extent practicable; (3) discuss the importance of impacts through consideration of their context and intensity; and (4) provide a clear, rational link between the facts presented and the conclusions drawn.

Direct Impacts - Direct impacts are impacts “which are caused by the action and occur at the same time and place” (1508.8(a)). Indirect Impacts - Indirect impacts are impacts “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable” (1508.8(b)). Cumulative Impacts - In addition to direct and indirect impacts, the agency is required to analyze the cumulative impacts of each alternative (1508.25(c)). A cumulative impact is an “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (1508.7). A cumulative impact analysis must consider the overall effects of the direct and indirect impacts of the proposed action, when added to the impacts of past, present, and reasonably foreseeable actions on a given resource.

To assess cumulative impacts, the assessment will need to identify past, present, and reasonably foreseeable future actions that affect the same resources as the proposed action or alternatives. Past, present, and reasonably foreseeable future actions are not limited to agency actions, but could be actions taken or proposed by any federal, state, or local government or a private entity, and are actions that are not included in the proposal or alternatives under consideration. To be considered under the cumulative analysis section of the EA or EIS, past actions should have ongoing impacts that are presently occurring. Reasonably foreseeable future actions include those federal and non-federal activities not yet undertaken, but sufficiently likely to occur, that a decision maker should take such activities into consideration in reaching a decision. This includes, but is not limited to, activities for which there are existing decisions, funding, or proposals. Reasonably foreseeable future actions do not include those actions that are highly speculative or indefinite. It is important to note that past, present, and reasonably foreseeable future actions are limited to human actions, meaning they are attributable to specific individuals or entities. Naturally occurring incidents, such as insects and disease infestations, are not actions per se and therefore the effects of these types of incidents should be considered as part of the affected environment rather than as part of a cumulative

impact analysis.

When describing cumulative impacts, it is generally not necessary to individually list and analyze the effects of each past cumulative action. Rather, it is appropriate to discuss them in sum. When describing cumulative impacts in an EA or EIS, you should separate the cumulative impact analysis from the analysis of direct and indirect impacts. While the cumulative impact analysis should include the same elements of a written impact analysis discussed above, in many cases due to the nature of available information, the description of cumulative impacts may be less detailed than description of direct and indirect impacts.

Forest Plans and other programmatic planning decisions must constrain reasonable and foreseeable site-specific actions so that future actions are consistent with the requirements of the National Trails System Act and other land and resource protective laws. Otherwise, projects may be deemed consistent with a Forest Plan or RMP, but still be inconsistent with protected area legislation (e.g., National Trails System Act, Wilderness Act, and Wild and Scenic Rivers Act). A Land Management Plan must establish standard and guideline constraints providing a framework and scope for the subsequent tiered analysis of environmental impacts. For example, National Scenic Trails are potentially good candidates for programmatic NEPA documents that support the Comprehensive Plan for the National Scenic or Historic Trail. Any revised National Trail Comprehensive Plan EIS would include an assessment of how the programs would contribute to or reduce protections that provide for the nature and purposes of the National Trail. Discussions of effects on recreation opportunities, visual resources, and natural resources could then be incorporated by reference in subsequent tiered NEPA analyses. By identifying potential program impacts early, particularly cumulative and indirect impacts, programmatic NEPA reviews provide opportunities to modify program components in order to avoid or mitigate adverse impacts when developing subsequent proposals. The cumulative effects of establishing the Regional Foresters' non-protective NST plan components on National Forest System lands has and will continue to lead to actions that degrade and substantially interfere with the nature and purposes of this National Scenic Trail.

Land management planning NEPA related maps, along with associated geospatial data, may assist with the understanding of the relationships between providing for NST corridor and other resources values. As such, public participation in the review and assessment of a land management plan NEPA proposed action and alternatives would be advanced through the public availability of the following geospatial data layers:

- Administrative Boundaries (FSH 1909.12 part 22.2)
- Land Ownership (FSH 1909.12 part 22.2)
- Designated Areas, including Recommended Wilderness, Wilderness Study Areas, Suitable and Eligible Wild & Scenic Rivers, Inventoried Roadless Areas, and the extent of

the NST management corridor/rights-of-way to be established (acres) (FSH 1909.12 parts 22.2 and 24)

- Recreation Opportunity Spectrum Classes to be established – Summer and Winter (FSH 1909.12 parts 22.2 and 23.23a)
- Scenic Integrity Objectives to be established (FSH 1909.12 parts 22.2 and 23.23f)
- Lands that May be Suitable for Timber Production (FSH 1909.12 Chapter 60)
- NST travel route as an independent data layer (FSH 1909.12 part 23.23I)
- NFS roads and trails with attribute data, including existing road maintenance levels and trail travel route fundamentals such as Designed Use, Managed Use, and Trail Class (FSH 1909.12 part 23.23I)

The effects analysis for the development of the revised Forest Plan NEPA proposed action and alternatives should include cross-tabular tables that explore and disclose the relationship between (1) the proposed NST travel route location and management corridor/rights-of-way extent, and (2) the intersection and overlap with the proposed ROS Classes and Scenic Integrity Objectives allocations. In addition, the analyses need to describe the effects the establishment of an NST management corridor and associated plan components on outdoor recreation, range, timber, watershed, and wildlife and fish resources. The following specific resource relationships should be described:

- Effects on NST nature and purposes from Timber Harvest, Vegetation Management, Livestock Grazing, Roads, Designated Motor Vehicle Use Trails, Fire Management, and Mineral Resource Activities.
- Effects of managing the NST corridor (aka rights-of-way) to provide for the nature and purposes of this National Scenic Trail on timber production, vegetation management, range management, recreation management, wildlife management, wilderness, recommended wilderness, and fire management.

For each alternative, the analysis of environmental effects needs to address how the land management planning decisions will achieve or contribute to:

- Providing for the nature and purposes of the National Trail, including protecting the National Trail resources, qualities, values, and associated settings;
- The quality or condition of the ecological characteristics that would occur within the National Scenic Trail management corridor;
- Ensuring carrying capacity is not exceeded; and
- Preventing other uses from substantially interfering with the nature and purposes of the National Trail.

The Record of Decision that accompanies the approved plan and NEPA selected alternative needs to clearly describe the planning decisions for the National Trail travel route and the National Trail Management Corridor. In addition, the ROD must document how the best available scientific information was used for recreation and scenery assessments to inform

planning, the plan components, and other plan content, including the monitoring program.

G. Nantahala and Pisgah National Forest DEIS

(a) Purpose and Need for Action

DEIS: The DEIS on pages 5 - 8 states that, “The 2014 Need for Change identified that there is a need to achieve the following in the revised plan:

- Manage, maintain, or restore ecosystems, watersheds and rare habitats to better control nonnative invasive species and to reconsider riparian area management...
- Clarify and update plan direction regarding designated areas including Special Interest Areas, Roan Mountain, the Appalachian Trail, and Experimental Forests...
- Manage a sustainable road system that includes road construction and reconstruction as well as direction for closing out unneeded roads.

Using the above Need for Change that was defined in 2014, and extensive additional public involvement, the Forest Service established parameters for the development of the forest plan in 2016, such that all alternatives would do the following:

- Provide for multiple uses that include a balanced level of timber harvest, recreation, wildlife, water, and wilderness in compliance with the Multiple Use Sustained Yield Act and NFMA.
- Manage existing administrative and congressionally designated areas which will not be changed during revision. These areas include: ... Inventoried Roadless Areas ... National Scenic and Historic Trails such as the Appalachian Trail and the Trail of Tears....”

Comment: The revised plan must manage ecosystems, protect Inventoried Roadless Areas, and protect congressionally established designated areas for the purposes for which they were established. In this regard, I support closing and restoring most of the roads that are found in Inventoried Roadless Areas, Backcountry Areas, and along the ANST.

I agree that plan direction for the ANST must change to provide for management that provides for the nature and purposes for which this National Scenic Trail was designated. However, the proposed plan and alternatives do not provide for the nature and purposes of this National Scenic Trail as discussed in these comments. Comments provided in 2017 and now in these comments identify plan components that would protect ANST nature and purposes qualities and values.

Inventoried Roadless Areas must have plan components that provide for Roadless Characteristics and not solely rest on the language and interpretations of the Roadless Rule for project implementation.

The Planning Rule requires that one integrated plan be developed for each unit of the National Forest System (16 U.S.C. § 1604(f)). Plans must comply with all applicable laws and regulations, including NFMA, MUSYA, the Clean Air Act, the Clean Water Act, the Wilderness Act, Wild and Scenic Rivers Act, National Trails System Act, and the Endangered Species Act.

(b) Proposed Plan Components for Terrestrial Ecosystems

DEIS: The DEIS on page 157 list the ANST as being in MA Group 2. The DEIS describes that, “In this management area group, active management is allowed consistent with the desired conditions of the management area... This management area group is not suitable for timber production. Timber harvest is typically only allowed when it contributes to the recognized features of the area... Road building is also limited to specific circumstances that are compatible with the unique features of the management areas.”

Comment: MA Groups 3 and 4 more accurately reflects the desired conservation purposes of the ANST. MA Group 3 states in part that, “MA Group 3 involves primarily passive management where natural processes such as floods, storms, insects, disease, and fire shape the landscape. Prescribed fire is assumed to be the primary method of active restoration, occurring over large landscapes where possible and at varying intensities.” MA Group 4 states in part that, “MA Group 4 is dominated by passive management, except for minor instances where active management using prescribed burning would be desired for specific fire-adapted restoration priorities... Although it is possible to employ active management methods in this group, the tools that would be used are limited, such as restrictions on motorized equipment.” “Old growth patches are connected to each other with the most continuous connector being the Appalachian Trail (AT) which traverses south in the Nantahala NF through the Great Smoky Mountains National Park” (page 366). These characteristics of MA Groups 3 and 4 best reflect the nature and purposes of the ANST that states in part: The corridor along this route is preserved for the conservation and enjoyment of nationally significant scenic, historic, natural, and cultural qualities. The NPNF ANST Management Area should be in Group 3 or 4, which more accurately reflects the National Trails System Act for National Scenic Trails and desired Primitive and Semi-Primitive Non-Motorized ROS settings.

(c) Action Alternatives

DEIS: The DEIS on page 19 describes that, “The following management area allocations are consistent across alternatives... Exceptions to consistency occur only when more restrictive management is specified in an alternative, such as when a Research Natural Area is recommended for Wilderness. In those cases, the more restrictive management area is shown on the map....”

Comment: The Draft Plan and most DEIS alternatives may not protect Roadless Area Characteristics along the ANST segments that intersect Bald Mountain (Alternatives C & D), Cheoah Bald (Alternatives B, C, and D), and Wesser Bald (Alternatives C and D) Roadless Areas, since the proposed ANST plan components do not clearly protect Primitive and Semi-Primitive Non-Motorized settings along these segments of the ANST corridor. Wilderness evaluations should describe positive ANST benefits if roadless areas are recommended for wilderness designation. Management of recommended wilderness to protect wilderness characteristics support the conservation purposes of this National Scenic Trail and is harmonious with providing for the ANST nature and purposes.

The proposed action and alternatives do not provide necessary protections for the ANST corridor when associated with the Coweeta Experimental Forest Management Area. The ANST MA should extend one-half mile into and overlay the Experimental Forest MA. Management actions would then be constrained by the most restrictive management direction of the two MAs. At minimum, the Experimental Forest MA should have a standard that roads may not be constructed within one-half mile of the ANST travel route.

The proposed action and alternatives provide limited protection for the ANST corridor when associated with the Roan Mountain Management Area. The Roan Mountain MA desired condition describes that, “Within the foreground of the Appalachian Trail, the Roan Mountain area supports high quality outdoor recreation experiences and provides for the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the land through which the Appalachian Trail passes...” To provide for the conservation of the nationally significant scenic, historic, natural and cultural qualities, the ANST corridor should extend to at least one-half mile from the ANST travel route regardless of the actual foreground visible distance. The ANST and Roan Mountain MAs should overlap where the most restrictive direction controls. At a minimum, the Roan Mountain MA should have a standard that roads may not be constructed within one-half mile of the ANST travel route.

One of the strongest combinations of conservation protection for undeveloped federal lands is overlapping Wilderness, Wild and Scenic River, National Scenic Trails, and Roadless Areas. Each congressional designation offers protections that the other does not. Overlapping designations within designated areas would help ensure National Forest System lands are protected for current and future generations by protecting wilderness characteristics, outstandingly remarkable values of eligible wild and scenic rivers, and the nature and purposes of National Scenic Trails. These overlapping designations provide a complimentary framework for a high-level of protection from overuse and development of federal lands.

DEIS: The DEIS on pages 20-21 describes that, “Access: The opportunity for seasonally open roads in Interface and Matrix and decommissioned roads in Backcountry varies as the size of

these areas varies by alternative. Where Matrix is larger, there is more land available for increasing roaded access; where Backcountry is larger, there are more acres where decommissioning unneeded roads is prioritized and permanent road building is restricted. The different management area allocations of Interface, Ecological Interest Areas and Recommended Wilderness by alternative would also have an impact on road building....”

Comment: The set of plan components should integrate social, economic, cultural, and ecological considerations. For example, the desired condition for a sustainable landscape must be developed in the context of the desired multiple uses for the landscape. When providing for desired multiple uses for an area, the plan must at the same time ensure that the uses will be managed sustainably, while providing for ecological sustainability.

The most important restoration need on the NPNF is to address environmental and economic issues that are associated road miles on the forest. The DEIS on page 461 states that, “Overall, motorized access to the Forests would remain relatively consistent with existing access, and road maintenance issues would continue to persist on a transportation system that has a backlog of deferred maintenance.” The DEIS on page 90 describes that the NPNF has 2,349 miles of road of which 1,908 miles are located on lands with a severe erosion hazard. The DEIS on pages 437-438 describes that in the action alternatives, there is no net decrease in miles of open roads in the interface and matrix management areas over the life of the plan: Alternative B – 1,831 miles; Alternative C – 1,570 miles; and Alternative D – 1,824 miles. For perspective, it is 1,500 miles from Frisco, CO to Ashville, NC. I cannot imagine that the NPNF can maintain 1,570 miles of roads with expected CMRD budgets where most are located in highly erodible soils. I recommend that an alternative be developed that reclaims 200 miles of system roads that are located in highly erosive soils.

An effective approach to provide for ecosystem integrity is to restore roads that are located in established Semi-Primitive Non-Motorized ROS settings, which would include maintenance level 1 and 2 roads that are found in Backcountry and ANST Management Areas. Every action alternative should include an objective to decommission, obliterate, and recontour with natural slopes many of the existing roads on the forest to address the minimum road system needed to meet desired conditions.

Recognizing issues associated with a sustainable road system, I am opposed to adopting TA-0-06: “No net decrease in the miles of open roads in Interface and Matrix over the life of the plan, and increase mileage of seasonally open roads in Interface and Matrix by between 5-10 percent over the life of the plan, prioritizing recreational access, such as hunting and fishing. Determine the amount of unneeded roads in backcountry and decommission 10 percent over the life of the plan.” It is unreasonable to commit to no net decrease in open roads and to increase seasonally open roads when expected CMRD budgets cannot sustain the road system.

Open roads in the Backcountry MA is (or least should be) inconsistent with desired conditions. Roads within these MAs should be closed with blocked entrances as soon as possible and then be obliterated and recontoured with natural slopes restored. Decommissioning should not be limited to 10 percent, since in part total miles are yet to be described.

DEIS: The DEIS on pages 21-22 describes that, “Alternative B responds to those who desire more flexibility for managing vegetation patterns, wildlife habitats, recreation, and access... Alternative C is intended to be responsive to those who desire more certainty defined in the forest plan and less project level flexibility for managing vegetation patterns, wildlife habitats, recreation and access... Alternative D is an intermediate approach between Alternatives B and C in terms of plan restrictions versus project flexibility in managing for vegetation patterns, wildlife habitat, recreation, and access....”

Comment: Plan components guide future project and activity decisionmaking. The plan must indicate whether specific plan components apply to the entire plan area, to specific management areas or geographic areas, or to other areas as identified in the plan. The plan must include plan components, including standards or guidelines, for integrated resource management to provide for ecosystem services and multiple uses in the plan area. The public, governmental entities and Forest Service employees need to know where plan components apply. The plan must indicate which plan components apply unit-wide, which apply to specific parcels of land, and which apply to land of specific character. Plans use management areas or geographic areas to apply plan components to specific mapped parcels of land.

The Forest Plan must include plan components, including standards or guidelines, to provide for sustainable recreation integrated with other plan components. To meet this requirement the plan must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes. The Draft Plan establishes multiple ROS class plan components to various management areas as described in part in the following table.

Matrix	MAT-DC-10	Roaded Natural to Semi-Primitive Motorized and Semi-Primitive Non-Motorized
Appalachian National Scenic Trail Corridor	AT-DC-04	Recreation opportunities are predominately in Semi-Primitive Non-Motorized ROS settings. However, where the ANST crosses roads or passes by developed sites, the setting may be Semi-Primitive Motorized, Roaded Natural or Rural. Where the ANST passes through recommended or designated wilderness management areas, the ROS setting is Primitive...
Roam Mountain	RM-DC-05	The desired recreation setting is predominantly Semi-Primitive Non-Motorized and Roaded Natural along and around the access roads and developed recreation

		areas.
--	--	--------

The plan must include plan components including standards or guidelines to provide for Scenic Character integrated with other plan components. To meet this requirement the plan must include a description of desired Scenic Character based on the scenery management system. Desired conditions describing Scenic Character should include scenic integrity objectives that describe the degree to which desired attributes of the Scenic Character are to remain. The Draft Plan establishes multiple Scenic Character plan components to various management areas as described in part in the following table.

Matrix	MAT-DC-13	Desired Landscape Character is Natural-Appearing, Rural Forested, Rural Pastoral, or Cultural/Historic.
Backcountry	BAC-DC-16	Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Forested, or Cultural/Historic
Appalachian National Scenic Trail Corridor	AT-DC-08	Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Pastoral, or Cultural/Historic.
Roam Mountain	RM-DC-10	Desired Landscape Character is Natural Evolving, Natural-Appearing, Rural Pastoral, or Cultural/Historic.

The Draft Forest Plan fails to provide for the integration of the recreation resource and scenery conditions. The overlapping and combinations of desired Scenic Character and ROS classes that are to be located somewhere within a Management Area do not meet the integration requirements of the NFMA (16 U.S.C. § 1604(f); 36 CFR §§ 219.1, 219.10; FSH 1909.12 part 22). The recreation setting is the social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities. Naturally Evolving, Natural-Appearing, and Rural Pastoral Scenic Character depictions are also distinct and provide a frame of reference from which to determine scenic attractiveness and to measure scenic integrity.

The integration of plan components means that all plan components work together toward achieving or maintaining desired conditions. The plan components must be internally consistent. One plan component must not directly conflict with another plan component or prevent its accomplishment. Not only must unit-wide plan components fit together, but also unit-wide and area-specific plan components must fit together. Fitting unit-wide and area-specific plan components together may require qualification to eliminate conflicts in direction.

Flexibility themes for the alternatives do not result in plan direction that addresses the integrated resource management requirements of NFMA and do not provide a sound basis for the decisions to be made. To foster informed decision-making and public participation a Supplemental DEIS and the FEIS must include desired conditions for sustainable recreation

using mapped desired recreation opportunity spectrum classes. Due to the structure of the proposed Management Areas, this mapping must be based on an independent ROS class overlay. Desired conditions describing Scenic Character should include scenic integrity objectives that describe the degree to which desired attributes of the Scenic Character are to remain. Scenic integrity objectives should be assigned throughout the plan area. **Appendices A and B** demonstrate this mapping process.

To address ANST corridor protection and ecosystem integrity issues, I recommend that the selected alternative for the revised Forest Plan (1) include an ANST Management Area with a corridor extent of one-mile where located on the NPNF, (2) recommend wilderness as described in Alternative B, and (3) provide for Backcountry Areas as identified in Alternative C. This allocation is depicted on the maps in **Appendix C**. Furthermore, I recommend that the Cheoah Bald Inventoried Roadless Area be recommended for wilderness.

(b) Alternatives Considered but Eliminated from Detailed Study

DEIS: The DEIS on page 28 describes Alternatives Considered but Eliminated from Detailed Study.

Comment: The Draft Plan ANST plan components do not protect the nature and purposes of the ANST from incompatible uses such as timber harvest, road construction, and other development actions. The described plan components do not address the National Trails System Act requirements to provide for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass (16 U.S.C. § 1242(a)(2)) in a non-motorized setting (16 U.S.C. § 1246(c)). The proposed ANST plan components need to be modified as described in Chapter III part A, and many of the Draft Plan proposed incompatible components eliminated from any further detailed study.

The FEIS must eliminate DEIS described standards and guidelines that do not constrain project and activity decision-making to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements. For example, RM-S-03 states, “Restore and maintain openings and grassy and alder balds that species depend on using techniques such as prescribed burning, managed natural fire, mechanical treatment, herbicides, and browsers.” This standard does not constrain actions, which does not meet the definition of a standard.

In addition, the FEIS must only include guidelines where their intent is clear. Guidelines are mandatory constraints on project and activity decision-making that provide flexibility for different situations so long as the purpose of the guideline is met. For example, CDW-G-07

states that, “Locate planned and approved long distance trails outside of Wilderness unless there is no other feasible route.” The intent of this guideline is unclear. However, it suggests that National Scenic Trails are incompatible with the wilderness resource and that wilderness takes legal precedent. Instead, where congressional designations overlap, the most protective measures of the legislative mandates must control. This guideline is inconsistent with the National Trails System Act and needs to be deleted.

(c) Recreation Affected Environment

DEIS: The DEIS on pages 420-426 describes that, “Dispersed recreation are those uses which occur outside of developed recreation settings. They may occur in Primitive, Semi-Primitive, or Roaded Natural Recreation Opportunity Spectrum (ROS) settings. There are many types of dispersed recreation that occur on the Nantahala and Pisgah NFs, including hunting, fishing, primitive camping, backpacking, paddling, rock hounding, motorized and non-motorized trail uses, etc.... Sustainable Recreation – A Framework for Sustainable Recreation in 2010, an agency- wide emphasis was placed on managing recreation to meet the environmental, social, and economic needs of present and future generations.”

Comment: A Supplemental DEIS affected environment should restate the Sustainable Recreation description as found in FSH 1909.12 parts 13.4 and 23.23a, and briefly describe how each ROS setting or class is defined by desired conditions and indicators. The description should include a discussion of changes to the inventoried ROS classes, since the existing Forest Plan was approved. The discussion regarding *A Framework for Sustainable Recreation* should detail any guidance that may relate to a Forest Plan, since the guidance in this framework address administrative considerations and is only loosely related to the requirement to address sustainable recreation resources. Possibly, describe that, “Recreation settings that have been impacted by declining ecosystem health, wildfire, and inappropriate use will be restored to improve the quality of outdoor experiences. Unmanaged recreation will be resolved through a planned and properly designed network of roads, trails, and facilities, combined with educated citizen stewardship and partnerships, as well as field presence to provide quality recreation experiences while reducing the impacts of visitor use on the landscape.”

“The Forest Plan must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes. This mapping may be based on management areas, geographic areas, designated areas, independent overlay mapping, or any combination of these approaches. The plan should include specific standards or guidelines where restrictions are needed to ensure the achievement or movement toward the desired recreation opportunity spectrum classes.” Forest Service planning regulations define recreation opportunity as, “An opportunity to participate in a specific recreation activity in a particular

recreation setting to enjoy desired recreation experiences and other benefits that accrue....” Recreation setting is defined as, “The social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity spectrum to define recreation settings....” To meet the Planning Rule analysis requirements of using the Best Available Scientific Information and to ensure CEQ requirements for Methodology and Scientific Accuracy, ROS plan components with desired conditions, standards, and guidelines must be described in the plan. ROS classes may not be combined for the purpose of meeting ROS Planning Rule and directives allocation and mapping requirements.

The NEPA affected environment description, as related to forest planning, would normally be consistent with the revision assessment reports and findings that resulted from FSH 1909.12 Chapter 10 Best Available Scientific Information and other processes. However, a Forest Plan revision Environmental Impact Statement analysis would also require describing current conditions and would likely be more robust than that found in the Forest Plan revision assessment due to specific NEPA processes such as the requirement for methodology and scientific accuracy (40 CFR § 1502.24).

The spatial and temporal boundaries of the affected environment must be defined for the cumulative effect analysis. The components of the affected environment considered in a cumulative analysis are the same resources, ecosystems, and human communities that could be affected by the proposal.

(d) Recreation Environmental Consequences

DEIS: The DEIS on page 429-435 discusses Sustainable Recreation Environmental Consequences describing that, “Alternatives B, C, and D all include geographic areas as part of the revised plan as a way of identifying goals and emphasizing priorities on distinct landscapes across the forest. There are twelve geographic areas which are divided by landscape features and defined by Landscape Character, types and concentration of recreation use, and sense of place. Sense of place is the cultural and physical attributes of an area that provide meaning or value to communities and visitors; it characterizes the connection people have with specific landscapes. The experience visitors have is based upon the sense of place they feel while they are recreating with a given set of expectations. Generally speaking, the combination of recreation setting and activity (opportunity) creates an experience. Each of the geographic areas identified in the forest plan have defined goals that highlight key recreation opportunities (activity) and Landscape Character (setting) that will guide recreation management within geographic areas to provide a range of recreation experiences.

Alternatives B, C, and D also include the Interface Management Area which is defined as

areas with the most concentrated recreation use on the Forests. It includes developed and dispersed recreation sites, trail heads, scenic overlooks, waterfalls, etc. The Interface Management Area includes access corridors and recreation hubs areas where the public accesses the forest and recreates. While recreation on the Forests is not confined to the Interface, this management area includes places where the public first engages with the national forest and also includes the majority of developed recreation infrastructure. Plan components for the Interface MA emphasize scenic values to retain desired Landscape Characteristics or settings for the recreation experiences (INT-DC-10, INT-DC-11). ...”

Comment: This lengthy Forest Plan background implementation discussion should be deleted from the EIS or included in the appendix, since it only vaguely addresses environmental consequences.

DEIS: The DEIS on pages 435-438 discusses the Recreation Opportunity Spectrum describing that, “The Recreation Opportunity Spectrum (ROS) provides planners a way to divide outdoor recreation settings, activities, and experience opportunities into several categories: Primitive, Semi-Primitive Non- Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban.” The DEIS provides a table with inventoried ROS percentages across the forests.

Comment: Each unique ROS class to be established for each alternative needs to be mapped, which did not occur for the DEIS. As such, the DEIS does not contain sufficient information to foster informed decision-making and informed public participation. The DEIS does not describe recreation effects following established ROS protocols as reviewed in Chapter III part B of these comments. In addition, the EIS must disclose effects of the proposed action and alternatives on ROS class conditions. Utilizing the ROS planning framework will help ensure that NEPA assessments are systematic and accurately describe the affected environment and expected outcomes from each alternative.

The following specific resource relationships should be described:

- Effects on the recreation resource for each alternative from Timber Harvest, Vegetation Management, Road Access and Infrastructure, Designated Trails, Fire and Fuels Management, and Mineral Resource Activities.
- Effects for each alternative of managing for the prescribed ROS classes on timber production, vegetation management, recreation management, wildlife management, wilderness, recommended wilderness, and fire management.

Backcountry Management Areas do not protect Semi-Primitive Non-Motorized ROS setting due to the development permissions that are granted through standards and guidelines. Plan components need to establish and protect Primitive and Semi-Primitive Non-Motorized ROS settings in this Management Area.

(e) Scenery Affected Environment

DEIS: The DEIS on pages 440-442 reviews the Scenery Management System. The DEIS on page 443 states that, “Scenic classes are then used in the land management planning process to assign SIOs to each management area. Like VQOs under the VMS, SIOs under the SMS are used to determine the degree of deviation from the existing Landscape Character, described as the state of naturalness, or conversely the state of disturbance created by human activities or alteration. A scenic class inventory GIS layer was developed for the Nantahala and Pisgah NF and is referenced in the draft Plan for use in project-level planning.”

Comment: The EIS should use the term Scenic Character instead of Landscape Character when discussing scenery. The affected environment should have followed the requirements as described in FSH 1909.12 parts 13.4 and 23.23f. The Scenery Management System process description should be moved to the appendix.

(f) Scenery Environmental Consequences

DEIS: The DEIS on pages 448-450 describes effects common to all alternatives stating that, “Each action alternative has plan components incorporating scenery management concepts, processes, direction, and terminologies from Landscape Aesthetics, A Handbook for Scenery Management (aka: Scenery Management System). As part of this direction, an updated scenic class inventory was developed with input from Forest leadership, resource specialists, and the public. This scenic class inventory is a GIS layer referenced by, but external to, the plan. All action alternatives have plan components allowing and providing guidance on updating the scenic class inventory when conditions on the ground have changed or mapping errors are identified. As an external reference, updating the scenic class inventory will not require a plan amendment...”

Utilizing this management area mapping protocol for the Appalachian National Scenic Trail corridor results in a different MA boundary in the action alternatives, correcting the management area mapping problem from the current plan. As described above, the management area acreage in Alternative A greatly underrepresents the actual visible foreground of the ANST corridor. Alternative A maps a smaller area in the plan, but requires a larger area to be analyzed at the project level. Under the action alternatives, the entire potentially visible foreground zone of the ANST, side trails, vistas, and shelters have been mapped and reflected in management area boundaries. Vegetation management within the revised management area would be allowed where project-level analysis shows the proposed actions would not be visible from the ANST or associated amenities, similarly to the way projects near the AT are currently managed. Ultimately, this change in mapping will not result in an effect on the ground, but will correct a plan to project consistency problem that had

resulted from previously inaccurate mapping...

Standard SC-S-04 in the action alternatives states: Management activities visible in the foreground (FG) and middleground (MG) from the Appalachian National Scenic Trail, National Historic Trails, National Recreation Trails, Blue Ridge Parkway, and National Scenic Byways must meet or exceed a moderate Scenic Integrity objective, regardless of management area or scenic class.”

Comment: The DEIS does not identify and map Scenic Character and Scenic Integrity Objectives to be assigned for each alternative. As such, the DEIS does not contain sufficient information to foster informed decision-making and informed public participation. To provide for the nature and purposes of the ANST, Scenic Character should be Naturally Evolving or Natural-Appearing for the vast majority of the ANST landscape. Established Scenic Integrity Objective should be Very High or High. Table 150 appropriately describes the ANST as having a High SIO objective.

The following specific resource relationships should be described:

- Effects for each alternative on scenery from Timber Harvest, Vegetation Management, Road Access and Infrastructure, Designated Trails, Fire and Fuels Management, and Mineral Resource Activities.
- Effects for each alternative of managing for prescribed desired Scenic Character on timber production, vegetation management, recreation management, wildlife management, wilderness, recommended wilderness, and fire management.

(g) Inventoried Roadless Areas Environmental Consequences

DEIS: The DEIS on page 480 states that, “In the action alternatives, the Inventoried Roadless Areas are managed as Backcountry, except where some IRAs fall within more restrictive management, such as the Appalachian Trail Corridor or Heritage Corridors.”

Comment: The Draft Plan and DEIS do not establish plan components that demonstrate that the Appalachian Trail corridor [ANST MA] management is more restrictive. The ANST Management Area needs to establish a desired Scenic Character as Naturally Evolving or Natural-Appearing with an established Primitive or Semi-Primitive Non-Motorized ROS setting. The ANST Management Area should overlap with the Backcountry Management Area where the more restrictive plan components would control.

(h) ANST Affected Environment

DEIS: The DEIS does not review the ANST affected environment including describing the status of providing for the nature and purposes qualities and values of this National Scenic Trail. The

ANST discussion should have been similar to that presented for Wild and Scenic Rivers in section 3.4.9.

Comment: The DEIS does not address the ANST Affected Environment. For example, basic information is omitted: What is the length of the ANST travel route on the NPNF? How many acres are included in the ANST Management Area by alternative?

The ANST corridor description should address not only the extent of the proposed ANST Management Area, but also a corridor with an extent of one-half mile on each side of the ANST travel route. This affected environment description would be supportive of the ANST Management Area extent that is proposed in Chapter III part A of these comments.

How are the mountain balds currently being managed along the ANST? The affected environment should describe that the NPNF does not have any range or pasture permits making the forest not amenable to offering rural pastoral scenic character landscapes.

How many miles of roads are there in the ANST Management Area? How are the roads being managed?

A Supplemental DEIS must address the ANST affected environment following processes described in Chapter IV part E of these comments. For example, the maps that are displayed in **Appendix D** may depict that many sections of the ANST are not currently being protected by either a Primitive or SPNM ROS setting allocation. National Forest System lands are normally managed for Naturally Evolving and Natural-Appearing landscapes. Are these conditions being realized in the ANST corridor?

(i) ANST Environmental Consequences

DEIS: The DEIS does not review the environmental consequences of the proposed action and alternatives on the ANST nature and purposes qualities and values. However, in a footnote on page 31 the DEIS states, “The Appalachian Trail National Scenic Trail Historic Corridor will be managed comparably under all alternatives. Under alternative A, a smaller area was mapped in the forest plan than the area that is regularly considered in project design. The proposed plan in the action alternatives has been updated to incorporate the potential foreground acreage that is reviewed at the project level.” The acreage for Alternative A is 16,100 and Alternative B is 45,290.

Comment: The proposed action should be modified or an alternative developed where the ANST Management Area corridor extends to one-half mile on each side of the ANST route with revised plan components that are recommended in Chapter III part A of these comments.

The EIS must disclose the competing nature of Natural-Appearing and Rural Pastoral

Scenic Character allocations as proposed in the DEIS, and how these allocations are related to desired Primitive and Semi-Primitive Non-Motorized ROS settings along the ANST corridor. To understand effects, it is critical to see where ROS setting allocations are distributed throughout the ANST Management Area. It does not suffice to simply suggest that somewhere in the Management Area there are:

- Desired Landscape Character of Natural Evolving, Natural-Appearing, Rural Pastoral, and Cultural/Historic areas, and
- That recreation opportunities are predominately in Semi-Primitive Non-Motorized ROS settings. However, where the ANST crosses roads or passes by developed sites, the setting may be Semi-Primitive Motorized, Roaded Natural or Rural.

The ANST discussion should be similar to that presented for Wild and Scenic Rivers in section 3.4.9. The following specific resource relationships should be described:

- Effects for each alternative on the ANST nature and purposes from Recreation, Vegetation Management, Road Access and Infrastructure, Fire and Fuels Management, and Mineral Resource Activities.
- Effects for each alternative of providing for the ANST nature and purposes on timber production, vegetation management, recreation management, wildlife management, wilderness, recommended wilderness, roadless areas, and fire management.

Cumulative Effects - The cumulative effects analysis area should include the federally managed lands along the ANST in the Southern Region of the Forest Service and describe the degree to which Forest Plans have protected ANST nature and purposes qualities and values.

The DEIS failed to address the ANST environmental consequences of the proposed action and alternatives. The DEIS does not contain sufficient information to foster informed decision-making and informed public participation. A Supplemental DEIS needs to address the ANST environmental consequences following processes described in Chapter IV part F of these comments. It appears that the ANST nature and purposes are not protected by current and proposed plan components.

ANST Summary Comment: The Draft Plan ANST plan components do not adequately protect the nature and purposes of the ANST from incompatible uses such as timber harvest, road construction, and other uses and developments. The described plan components do not address the National Trails System Act requirements to provide for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass (16 U.S.C. § 1242(a)(2)) in a non-motorized setting (16 U.S.C.

§ 1246(c)). The proposed ANST plan components, as addressed through NEPA alternatives, need to be modified to provide for the ANST qualities and values.

Providing for the nature and purposes of the ANST normally includes providing for Primitive and Semi-Primitive Non-Motorized ROS settings and Scenic Character that is Naturally Evolving and Natural-Appearing. However, integrated resource management that addresses other resource needs can often occur if the use or activity does not substantially interfere with the nature and purposes of the ANST. These allowances can be described as allowed or unavoidable inconsistencies. Any recognized inconsistency adopted for the ANST Management Area should be reviewed in the Environmental Impact Statement documenting as appropriate that the inconsistency, “will not substantially interfere with the nature and purposes of the ANST.”

The FEIS does not contain sufficient recreation and scenery information to foster informed decision-making or informed public participation. A supplemental DEIS must be prepared to address the requirements of the CEQ NEPA regulations as found in 40 CFR Parts 1500-1508 (2005). Land use planning associated NEPA must (1) rigorously explore and objectively evaluate all reasonable alternatives, and (2) take a hard look at the effects of the alternatives.

(j) ROS Analysis Methods

DEIS: The DEIS on page B-16 states that, “The desired Recreation Opportunity Settings for each management area was calculated through the use of GIS analysis. The foundation of this work started with the Nantahala and Pisgah National Forests ROS Inventory, which was completed in 2014 and followed the National ROS Inventory Mapping Protocol. As the ROS Inventory was mapped based on the physical, social, and managerial settings prior to the completion of management area mapping under the new Nantahala-Pisgah Forest Plan Revision, this data needed to be updated to reflect the desired conditions for the new management areas.

The first step to create the ROS desired conditions map was to update the Inventory to reflect land that was acquired after the Inventory was completed. Following this, the updated ROS Inventory was intersected with the management areas mapped across each alternative and new acreage counts were calculated; this was performed using the Intersect tool in GIS, which calculates the geometric intersection of multiple feature classes. The output dataset calculated the number of acres of each ROS setting by management area, which was used to describe the ROS desired conditions across all management areas.”

Comment: Recreation Opportunity Spectrum classes to be established must be informed by the best available ROS inventory data. However, the ROS class desired conditions to be established

is not bound by the inventory information. For example, the inventory along the ANST may indicate a Roaded Natural condition; however, to provide for the nature and purposes of the ANST the established ROS class should be a Semi-Primitive Non-Motorized ROS setting. Any ROS inconsistency could then be managed to minimize the influence of the nonconforming ROS indicator on the desired ROS setting. GIS data for ROS classes to be established is unavailable as confirmed through a recent FOIA request (FOIA Request #2020-FS-R8-02650-F), so the analysis description does not appear to match the reality of the actual planning analyses.

Recreation Opportunity Spectrum and Scenery Management System planning relationships are reviewed in Chapter III part B of these comments. Processes that are consistent with the Planning Rule and associated PEIS.

Designated Area Comment: Designated wilderness, Wild and Scenic Rivers, and National Scenic Trails established for many purposes that not only includes the social environment as described in Chapter 3 part 4, but also for the purposes of the conservation and preservation of natural resources. The EIS must described those purposes in the Affected Environment and disclose the effects of the alternatives on the purposes for which each designated area was established. The following effects relationships should be described for each designated area:

- Effects for each alternative on each designated area from Timber Harvest, Vegetation Management, Road Access and Infrastructure, Recreation Activities, Fire and Fuels Management, and Mineral Resource Activities.
- Effects for each alternative from designated areas on vegetation management, recreation management, wildlife management, wilderness, recommended wilderness, and fire management.

Chapter V. Legislative History and Policy Review

A. Trails for America

Trails for America, a 1966 report prepared by the Bureau of Outdoor Recreation in response to President Johnson’s Natural Beauty Message of February 8, 1965, describe that the, “Administration of national scenic trails is complicated by the linear nature of the trails and the complex pattern of land ownership along them. Most existing or potential national scenic trails extend through or into several States. Typically, they cross some lands that are administered by Federal, State, and local public agencies, and other lands that are privately owned. In the West, the trails cross lands administered largely by Federal agencies—the Forest Service, National Park Service, [and] Bureau of Land Management... In view of these considerations, administration of national scenic trails should be governed by the following principles...

4. The entire length of each national scenic trail, together with sufficient land area on both sides to safeguard adequately and preserve its character, should be protected in some form of public control..., and

9. The responsible Secretary, after agreement with the other Federal agencies involved and consultation with appropriate States, local governments, private organizations, and advisory councils, should:

a. Locate and designate the route and width of right-of-way of each trail assigned him. The right-of-way should be wide enough to protect adequately the natural and scenic character of the lands through which the trail passes and the historic features along and near along the trail, and to provide campsites, shelters, and related public-use facilities as necessary. It should avoid, insofar as practicable, established highways, motor roads, mining areas, power transmission lines, private recreational developments, public recreational developments not related to the trail, existing commercial and industrial developments, range fences and improvements, private operations, and any other activities that would be incompatible with the protection of the trail in its natural condition and its use for outdoor recreation. Formal designation should be accomplished by publishing notice of the route and right-of-way in the Federal Register, together with appropriate maps and descriptions. Minor changes in route and right-of-way should be handled in the same manner.

b. Define the kinds of recreation use that are appropriate on the trail and in keeping with its objectives, and define the kinds of non-recreation uses, if any, that may be permitted within the right-of-way; issue the necessary regulations; and provide enforcement.

c. Establish construction and maintenance standards including standards for related facilities that will adequately protect trail values and provide for optimum public use.”

B. National Trails System Act

The National Trails System Act (NTSA), P.L. 90-543, was passed by Congress on October 2, 1968. It established policies and procedures for a nationwide system of trails including National Scenic Trails. The Appalachian Trail and the Pacific Crest Trail were designated as the nation's first National Scenic Trails. “The Act was intended to insure that long-distance, high-quality trails with substantial recreation and scenic potential were afforded Federal recognition and



protection” (S.R. 95-636).

The National Parks and Recreation Act of November 10, 1978 authorized and designated the National Scenic Trail (NST) (Pub. L. No. 95-625, 92 Stat. 3467), which amended the NTSA of 1968 (16 U.S.C. §§ 1241-1251). The “Background” for H.R. 12536 states that, “Title V establishes new units of the National Park and National Trail Systems which the committee believes to be essential additions to these national programs. Timely action to preserve portions of our heritage, both historical and natural, within the states and insular areas is needed to assure these resources are not lost through adverse actions by special interest groups” (H.R. 95-1165).

Statement of Policy – Sec. 2 (16 U.S.C. § 1241(a))

“In order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation, trails should be established...within scenic areas and along historic travel routes of the Nation which are often more remotely located.”

National Trails System – Sec. 3 (16 U.S.C. § 1242(a)(2)) –

“National scenic trails, established as provided in section 5 of this Act, which will be extended trails **so located** (*emphasis added*) as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails may be located so as to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation.”

National Scenic and Historic Trails –

NTSA Sec. 5(a) (16 U.S.C. § 1244(5)(a)) – National scenic and national historic trails shall be authorized and designated only by Act of Congress. There are hereby established [and designated] the following National Scenic and National Historic Trails...”

NTSA Section 5(e) (16 U.S.C. § 1244(e)) – “...The responsible Secretary shall...submit...a comprehensive plan for the acquisition, management, development, and use of the trail, including but not limited to, the following items:

- (1) specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved, ... details of any anticipated cooperative agreements to be consummated with other entities, and an identified carrying capacity of the trail and a plan for its implementation;

- (2) an acquisition or protection plan, by fiscal year for all lands to be acquired by fee title or lesser interest, along with detailed explanation of anticipated necessary cooperative agreements for any lands not to be acquired; and
- (3) general and site-specific development plans including anticipated costs.”

Administration and Development – Sec. 7 (16 U.S.C. § 1246) –

The Secretary of Agriculture is charged with the overall administration of the NST. Pursuant to Section 5(a), the NST was authorized and designated on November 10, 1978. Section 7(a)(2) states that the, “...Secretary shall select the rights-of-way for national scenic and national historic trails and shall publish notice thereof of the availability of appropriate maps or descriptions in the Federal Register; Provided, That in selecting the rights-of-way full consideration shall be given to minimizing the adverse effects upon the adjacent landowner or user and his operation. Development and management of each segment of the National Trails System [i.e., National Recreation Trails, National Scenic Trails, National Historic Trails, and Connecting and Side Trails] shall be designed to harmonize with and complement any established multiple-use plans for the specific area in order to insure continued maximum benefits from the land....” The legislative requirement for the Secretary of Agriculture to take action and select the NST rights-of-way should be addressed by establishing NST Management Area (MA) corridors in Land Management Plans. The establishment of NST MAs and NTMCs could facilitate NST comprehensive planning (16 U.S.C. § 1244(e)), selecting and publishing the NST rights-of-way in the Federal Register (16 U.S.C. § 1246(a)(2)), and meet attached NEPA requirements.

NTSA Sec. 7(c) (16 U.S.C. §1246(c)) – “National scenic or national historic trails may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted by the Secretary charged with the administration of the trail. Reasonable efforts shall be made to provide sufficient access

A National Scenic Trail optimum location assessment may find that designing the NST rights-of-way corridor to pass through inventoried Primitive and Semi-Primitive Recreation Opportunity Spectrum (ROS) settings would assure continued benefits of the land that best meet the needs of the American people. This would include the recreation and conservation benefits resulting from: (1) locating the National Trail corridor “to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas...” (16 U.S.C. 1242(a)(2)); (2) avoiding, to the extent possible, activities along the NST that would be incompatible with the purposes of the NST for which it was established (16 U.S.C. 1246(c)); and (3) contributing to achieving outdoor recreation, watershed, and wildlife and fish multiple-use benefits (16 U.S.C. 528). The rights-of-way requirement of 16 U.S.C. 1246(a)(2) is directed at selecting the 5-state NST rights-of-way corridor and does not diminish or modify the nature and purposes qualities and values of the NST (16 U.S.C. 1246(c)).

opportunities to such trails and, to the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any National Scenic Trail shall be prohibited... [Other uses include recreational and resource uses that may be incompatible with the nature and purposes for which the NST was established and designated.] Other uses along the historic trails and the National Scenic Trail, which will not substantially interfere with the nature and purposes of the trail, and which, at the time of designation, are allowed by administrative regulations, including the use of motorized vehicles, shall be permitted by the Secretary charged with administration of the trail.”

NTSA Sec. 7(j) (16 U.S.C. § 1246(j)). This section does not modify the nature and purposes for which the NST was established and created. It describes that, “the provisions of this subsection shall not supersede any other provisions of this Act or other Federal laws, or any State or local laws.”

NTSA Sec. 7(k) (16 U.S.C. § 1246(k)). “For the conservation purpose of preserving or enhancing the recreational, scenic, natural, or historical values of components of the national trails system, and environs thereof as determined by the appropriate Secretary, landowners are authorized to donate or otherwise convey qualified real property interests to qualified organizations consistent with section 170(h)(3) of the Internal Revenue Code of 1954, including, but not limited to, right-of-way, open space, scenic, or conservation easements....”

NTSA Sec. 7(i) (16 U.S.C. § 1246(i)). The appropriate Secretary...may issue regulations, which may be revised from time to time, governing the use, protection, management, development, and administration of trails of the national trails system. In order to maintain good conduct on and along the trails located within federally administered areas and to provide for the proper government and protection of such trails, the Secretary of the Interior and the Secretary of Agriculture shall prescribe and publish such uniform regulations as they deem necessary....

Overlay of Management Regime – The NTSA establishment and designation of the NST provides for the Secretaries of the Agriculture and Interior to manage the NST under existing agencies authorities, but subject to the overriding direction of providing for the nature and purposes of this NST. The establishment of the NST thus constitutes an overlay on the management regime otherwise applicable to public areas managed by land management agencies. The NTSA (and E.O. 13195 - Trails for America in the 21st Century) limits the management discretion the agencies would otherwise have by mandating the delineation and protection of the NST corridor.

C. Departmental and Congressional Considerations

Office of the Secretary, 1967: The Departmental Recommendation discusses National

Scenic Trails. “National scenic trails—A relatively small number of lengthy trails which have natural, scenic, or historic qualities that give them recreation use potential of national significance. Such trails will be several hundred miles long, may have overnight shelters at appropriate intervals, and may interconnect with other major trails to permit the enjoyment of such activities as hiking or horseback riding.... The Secretary of the Interior is authorized to select a right-of-way for, and to provide appropriate marking of, the Appalachian and Potomac Heritage Trails, and the Secretary of Agriculture is authorized to do likewise for the Continental Divide and Pacific Crest Trails. The rights-of-way for the trails will be of sufficient width to protect natural, scenic, and historic features along the trails and to provide needed public use facilities. The rights-of-way will be located to avoid established uses that are incompatible with the protection of a trail in its natural condition and its use for outdoor recreation....”

House Report No. 1631, 1968: “PURPOSE - The ultimate aim of H.R. 4865, as amended, is to lay the foundation for expanding further the opportunities for the American people to use and enjoy the natural, scenic, historic, and outdoor recreational areas of the Nation. To accomplish this objective, it establishes a national trails system composed of...National scenic trails, which will be located in more remote areas having natural, scenic, and historic values of national significance....

BACKGROUND AND NEED - The proposed national trails system is the product of a general study conducted by the Bureau of Outdoor Recreation at the direction of the President. That study, entitled "Trails for America," formed the basis for the recommended legislation. It recognizes the value of providing simple trails to meet a multitude of outdoor recreation uses and recommended the immediate authorization of the Appalachian Trail as the initial national scenic trail. It also suggested that the Pacific Crest Trail, the Potomac Heritage Trail, and the Continental Divide Trail should be studied promptly for early consideration for inclusion in the system.

H.R. 4865 proposed legislation describes the selection of Routes for National Scenic Trails – “The Secretary...shall select the rights-of-way.... Such rights-of-way shall be (1) of sufficient width and so located to provide the maximum retention of natural conditions, scenic and historic features, and primitive character of the trail area, to provide campsites, shelters, and related public-use facilities, and to provide reasonable public access; and (2) located to avoid, insofar as practicable, established highways, motor roads, mining areas, power transmission lines, existing commercial and industrial developments, range fences and improvements, private operations, and any other activities that would be incompatible with the protection of the trail in its natural condition and its use for outdoor recreation....”

Congress considered these qualitative requirements for selecting and designing the rights-of-way in HR 4865, but did not enact the specific direction in NTSA Section 7(a). Instead,

the enacted legislation inserts in Section 7(a) more conceptual direction for selecting and designing the rights-of-way, including (1) “consideration of minimizing adverse effects” and (2) designing each national trail system segment “to harmonize with and complement any established multiple use plans²²...” (16 U.S.C. § 1246(a)(2)). The enacted legislation made other modifications to HR 4865, including (1) changing the definition of a National Scenic Trail to broaden the statement of purpose (16 U.S.C. § 1242(a)), (2) identification of all significant natural, historical, and cultural resources to be preserved (16 U.S.C. § 1344(f)(1)), and (3) added a requirement to make efforts to avoid activities incompatible with the purpose for which such trails were established (16 U.S.C. § 1246(c)). House and Senate Reports are silent on the reasons for these changes.

House Report 95-734, 1978: In 1968, Congress enacted the National Trails System Act, and designated the Appalachian Trail as one of the two initial National Scenic Trails within the system. The act was intended to insure that long-distance, high-quality trails with substantial recreation and scenic potential were afforded Federal recognition and protection... At the time of enactment of the National Trails System Act in 1968, Congress recognized the unique recreational opportunities afforded by extended trails of this type. It was also recognized that changing land uses and increasing pressures for development were a growing threat to maintaining a continuous trail route. The act therefore provided for a Federal responsibility to protect the trail, including the authority to acquire a permanent right-of-way.

Senate Report No.95-636, 1978: “The Act was intended to insure that long-distance, high-quality trails with substantial recreation and scenic potential were afforded Federal recognition and protection.... The fourth amendment modifies section 7(g) of the 1968 act to modify the restriction on the use of eminent domain to provide that the secretary may acquire in fee title and lesser interest no more than an average of 125 acres per mile. Experience with the trail has demonstrated that additional authority is needed to insure the acquisition of a corridor wide enough to protect trail values.” This amendment to the NTSA was specific to the Appalachian NST, but demonstrates awareness of the need for a National Trail corridor even when eminent domain may be used to secure the necessary land.

House Report No.95-1165, 1978: “Title V establishes new units of the National Park and National Trail Systems which the committee believes to be essential additions to these national programs. Timely action to preserve portions of our heritage, both historical and natural, within the states and insular areas is needed to assure these resources are not lost through adverse

²² NTSA Section 7(a)(2) is reviewed in the, “Development and Management” section of this paper.

actions by special interest groups.”

House Report No. 98-28, 1983: Section 7(j) intent is described in this report, “While the new subsection would permit the appropriate secretaries to allow trail bikes and other off-the-road vehicles on portions of the National Trail System, the Committee wishes to emphasize that this provision gives authority to the secretaries to permit such uses where appropriate, but that it must also be exercised in keeping with those other provisions of the law that require the secretaries to protect the resources themselves and the users of the system. It is intended, for example, that motorized vehicles will not normally be allowed on national scenic or historical trails and will be allowed on recreational trails only at times and places where such use will not create significant on-trail or off-trail environmental damage and will not jeopardize the safety of hikers, equestrians, or other uses or conflict with the primary purposes for which the trail, or the portion of the trail, were created.” This report underscores the importance of understanding the primary purposes for which a National Trail was established.

D. Executive Orders

Executive Order 13195 – Trails for America in the 21st Century: “By the authority vested in me as President by the Constitution and the laws of the United States of America, and in furtherance of purposes of the National Trails System Act of 1968...and to achieve the common goal of better establishing and operating America's national system of trails, it is hereby ordered as follows: Section 1... Federal agencies will, to the extent permitted by law and where practicable ... protect, connect, promote, and assist trails of all types throughout the United States. This will be accomplished by: ... (b) Protecting the trail corridors associated with national scenic trails...to the degrees necessary to ensure that the values for which each trail was established remain intact...”

National Scenic Trail Values – (1) visitor experience opportunities and settings, and (2) the conservation/ protection of scenic, natural, historical, and cultural qualities of the corridor. Primitive and Semi-Primitive Non-Motorized ROS settings provide for desired experiences, but only if the allowed non-motorized activities reflect the purposes for which the National Trail was established. Furthermore, the NTSA goes beyond ROS descriptors requiring the protection of significant resources and qualities along the National Trail corridor. The ROS planning framework, NTSA Comprehensive Plan (Section 5(e)) components, NTSA rights-of-way (Section 7(a)), and E.O. 13195 requirements point to the need for land management plans to map the extent of the corridor and apply to the described corridor appropriate plan components (desired conditions, objectives, standards, guidelines, and suitability of lands) to protect National Trail values (nature and

Executive Order 11644 and 11989 – Use of off-road [motorized] vehicles on the public lands: “...By virtue of the authority vested in me as President of the United States by the Constitution of the United States and in furtherance of the purpose and policy of the National Environmental Policy Act of 1969 (42 U.S.C. § 4321), it is hereby ordered as follows: Section 1.

Purpose. It is the purpose of this order to establish policies and provide for procedures that will ensure that the use of off-road [motorized] vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands....” (Related: 36 CFR § 212.55 and 43 CFR § 8351.1)

E. Regulations and Policies

Forest Service, Regulations and Policy

36 CFR § 219.10 Multiple use.

While meeting the requirements of 36 CFR § 219.8 and § 219.9, the plan must provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area as follows:

(a) *Integrated resource management for multiple use.* The plan must include plan components, including standards or guidelines, for integrated resource management to provide for ecosystem services and multiple uses in the plan area. When developing plan components for integrated resource management, to the extent relevant to the plan area and the public participation process and the requirements of 36 CFR §§ 219.7, 219.8, 219.9, and 219.11, the responsible official shall consider:

(1) Aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses...

(3) Appropriate placement and sustainable management of infrastructure, such as recreational facilities and transportation and utility corridors...

(6) Land status and ownership, use, and access patterns relevant to the plan area.

(7) Reasonably foreseeable risks to ecological, social, and economic sustainability...

(10) Opportunities to connect people with nature.

(b) *Requirements for plan components for a new plan or plan revision.*

(1) The plan must include plan components, including standards or guidelines, to provide for:

(i) Sustainable recreation; including recreation settings, opportunities, and access; and scenic character. Recreation opportunities may include nonmotorized, motorized, developed, and dispersed recreation on land, water, and in the air.

- (ii) Protection of cultural and historic resources.
- (iii) Management of areas of tribal importance.
- (iv) Protection of congressionally designated wilderness areas as well as management of areas recommended for wilderness designation to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation.
- (v) Protection of designated wild and scenic rivers as well as management of rivers found eligible or determined suitable for the National Wild and Scenic River system to protect the values that provide the basis for their suitability for inclusion in the system.
- (vi) Appropriate management of other designated areas or recommended designated areas in the plan area, including research natural areas.²³

FSM 1923.03 – Policy.

1. Unless otherwise provided by law, all areas that may be suitable for inclusion in the National Wilderness Preservation System must be inventoried and evaluated for recommendation as designated wilderness areas during plan development or revision. Responsible Officials shall follow policy direction stated in FSH 1909.12, chapter 70, for this inventory and evaluation process.

FSH 1909.12, Part 74.1 – Management of Recommended Wilderness Areas

When developing plan components for recommended wilderness areas, the Responsible

²³ This section of the Planning Rule is further detailed in the Forest Service planning directive FSH 1909.12 part 24.43, which strives to address Planning Rule omissions where direction for wilderness and wild and scenic rivers were given more attention than National Scenic Trails as explained in the following Planning Rule Federal Register Notice response to comments: “A comment was received on the preferred alternative, asking if the lists in the definition of designated areas were exhaustive. Response: The Department clarified the definition of designated areas in the final rule.... The final rule provides direction for wilderness and wild and scenic rivers in § 219.10(b) separately from other designated or recommended areas because their associated legislation contains specific requirements for the Secretary of Agriculture. The final rule in § 219.10(b)(vi) provides for appropriate management of other designated or recommended areas, which would include areas such as congressionally designated national historic trails” (77 FR 21244). The explanation that, “wilderness and wild and scenic rivers in § 219.10(b) separately from other designated or recommended areas because their associated legislation contains specific requirements for the Secretary of Agriculture” should have led to a similar treatment of National Scenic and Historic Trails, which requires the Secretary to address more planning complexities than either wilderness or wild and scenic rivers. The Secretary must address several NTSA requirements including: (1) developing comprehensive plans for a National Trails (16 USC 1244(e) or (f)), (2) selecting the rights-of-way (16 USC 1246(a)(2)), and (3) determining the nature and purposes of the designated National Trail (16 USC 1246(c)). In addition, the Secretary may issue regulations, which may be revised from time to time, governing the use, protection, management, development, and administration of trails of the national trails system (16 USC 1246(i)). The direction in FSH 1909.12 part 24.43 strives to remedy National Scenic and Historic Trail Planning Rule 36 CFR 219 omissions. The final planning directives provide affirmative direction that may lead to the integration of National Scenic and Historic Trail planning requirements in land management plans.

Official has discretion to implement a range of management options. All plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation. In addition, the plan may include one or more plan components for a recommended wilderness area that:

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

FSM 2310 (2300-2020-1) – Sustainable Recreation Planning, approved by Tina Terrell, Associate Deputy Chief on April 23, 2020.

The amended policy makes substantial changes to the recreation planning direction without the benefit of 36 CFR § 216 public involvement processes. This policy replaces FSM 2310 (WO Amendment 2300-90-1) that required the use of the ROS planning framework: “FSM 2311.1 - Recreation Opportunity Spectrum (ROS). Use the Recreation Opportunity Spectrum (ROS) system and the ROS Users Guide (U.S. Department of Agriculture, Forest Service. ROS Users Guide. Washington, DC: U.S. Department of Agriculture, Forest Service; 1982. 37p.) to delineate, define, and integrate outdoor recreation opportunities in land and resource management planning.”

Amended **FSM 2310.2** objectives state that, “The overarching objective of sustainable recreation planning is to inform decisions that result in sustainable recreation outcomes. To be sustainable, recreation settings, opportunities, and benefits must: ... 1. Be compatible with other multiple uses....”

Observation: The intent of this objective is unclear; however, a literal reading of the guidance would indicate that the objective is inconsistent with “multiple use” as defined by the Multiple Use Sustained Yield Act of 1960 (16 U.S.C. § 531). The Multiple-Use Sustained-Yield Act makes that principle clear by explaining that “multiple use” means management to make “judicious use of the land for some or all” of the renewable resources thereon, with some land “used for less than all of the resources.” NFMA integration requirements are reviewed in FSH 1909.12 part 22. Clearly, the recreation resource is not subservient to other multiple use resources. For example, Forest Plan allocations of Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized ROS settings without a timber resource purpose would be consistent with the Multiple Use and Sustained Yield Act. This objective should be deleted, but

could be restated describing that, “Be derived through integrated planning processes” (36 CFR § 219.10(a)).

Amended **FSM 2310.2** also describes, “These ecological and socio-economic outcomes are not only important to the sustainability of recreation, but also contribute to the sustainability of the unit and Agency as a whole....”

Observation: The direction in parts 1 through 7 improves on the prior FSM 2310 direction and provides for important integration considerations that are also found in the planning directives (FSH 1909.12). The statement, “contribute to the sustainability of the unit and Agency as a whole” should be deleted.

Amended **FSM 2310.2 part 8** describes that, “Resource program plans (such as, travel management plans, and so forth), area plans (for example, Comprehensive River Management Plans, and so forth) and project decisions implement, support, and are consistent with relevant land management plan(s) decisions. FSH 1909.12, sec. 24.”

Observation: Comprehensive River Management Plans and National Scenic and Historic Trail Comprehensive Plans should be consistent with the relevant Forest Plan, but this statement would suggest that designated area plan decisions are subordinate to Forest Plan decisions regardless of the Forest Plan direction. FSM 2310.2 part 8 should be redrafted plainly stating that NFMA, W&SR, and National Scenic and Historic Trail plan decisions must provide for the purposes for which an area is designated. In addition, FSM 2310 should clearly state that, “Comprehensive Plans developed in response to the requirements of the National Trails System Act (16 U.S.C. §§ 1244(e), 1244(f)), and the Wild and Scenic Rivers Act (16 U.S. Code § 1274(d)) are not resource plans as defined by the NFMA (16 U.S.C. §1604(i) and 36 CFR §219.15(e)). The phrase, “and so forth” is not helpful and should be deleted.

Amended **FSM 2310.3** policy begins by describing that, “1. Units shall review and use relevant land management plan decisions to guide and inform smaller-scale planning decisions. To ensure attainment of sustainable recreation, all projects and activities must be consistent with the applicable plan components of the land management plan (36 CFR 219.15 (d)).”

Observation: An element that is missing from the direction is to describe policy that responsible officials are to ensure that land management plans are prepared through NEPA interdisciplinary processes that address the integration of the recreation resource in planning analyses and decisions (16 U.S.C. 1604(f), 36 CFR 219.10). In addition, Forest Plans must provide for the purposes for which designated areas are established.

Amended **FSM 2310.5** defines Resource Programs and Area Plans as, “Plans that address a specific multiple use or resource program on the forest or grassland, or portion of one or more forests or grasslands. The plan area can be delineated by ecological units (such as,

watersheds, wildlife habitat areas, riparian areas, geological formations or features, and so forth), and/or by socio-economic considerations (such as, market area, designated area, urban interface area, administrative units such as a ranger district, and so forth). Common examples of recreation-related resource program plans include: facilities plans, travel management plans, interpretive plans, etc. Area-specific plans include: National Scenic or Historic Trail Plans, National Monument Plans, Comprehensive River Management Plans, National Recreation Area Plans, etc. Resource program and area plans must be consistent with land management plan direction. Reference 36 CFR 219.15.”

Observation: Again, FSM 2310 needs to describe that planning processes must provide for the purposes for which an area was designated. FSM 2310 should clearly state that, “Comprehensive Plans developed in response to the requirements of the National Trails System Act (16 U.S.C. §§ 1244(e)), 1244(f)) and the Wild and Scenic Rivers Act (16 U.S. Code § 1274(d)) are not resource plans as defined by the NFMA (16 U.S.C. §1604(i) and 36 CFR §219.15(e)).

Amended **FSM 2310.5** defines Recreation Opportunity Spectrum classes. The characterizations of ROS classes are a significant deviation from established Physical Setting descriptions. “Evidence of Humans,” “Non-Recreation Uses,” and “Naturalness” setting indicators are improperly omitted in the narratives for Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized ROS settings.

Following are a few specific *observations*:

- Primitive settings allow for mechanized use outside of wilderness in the amended FSM 2310 direction. Bicycles should not be allowed in Primitive ROS settings. Asymmetric impacts between bicyclists and traditional nonmotorized users will tend to displace hikers and equestrians from non-wilderness trails. FSM 2310 should describe that the trail class norm is Pack and Saddle Stock Class 2 and 3 (FSH 2309.18 23.12 – Exhibit 01).
- Semi-Primitive Non-Motorized settings exempts open roads stating that, “occasional administrative use occurs on these roads for the purpose of natural and cultural resource protection and management.” This ROS setting does not allow for new administrative or public use roads except in very limited situations – closed roads may be present, but are managed to not dominate the landscape or detract from the naturalness of the area. The statement that, “vehicular use is infrequent” should be deleted or refer to non-motorized vehicles.
 - Exhibit 01, Vegetation states that, “Treatments enhance forest health and mimic natural vegetation patterns.” This is a significant change from the original intent of this ROS class. Desired conditions must stress the need to reflect the constraints described for “Evidence of Humans,” “Non-Recreation Uses,” and “Naturalness” setting indicators for this ROS class. Specifically, the statement that treatments are to enhance forest health is vague and could lead to actions that benefit timber programs over allowing for natural processes to unfold. Treatments are to mimic

- natural vegetation patterns is also vague and should be deleted. Forest health is an increasingly important concept in natural resource management. The definition of forest health is difficult and dependent on desired conditions. From an ecosystem-centered perspective, forest health has been defined by resilience, recurrence, persistence and biophysical processes which lead to sustainable ecological conditions. Most important, so as to minimize the evidence of humans, vegetation management actions need to avoid restoration actions that require the construction of roads within SPNM areas.
- Exhibit 01, Scenic Integrity states that, “Typically High.” The desired Scenic Integrity Objective should be simply described as High.
 - Semi-Primitive Motorized settings allows for maintenance level 2 roads, which are not primitive roads as described in the 1982 ROS direction. Many revised forest plans are establishing SPM settings for timber production areas, which is inconsistent with the intent of this ROS class as used in the Planning Rule. Possibly, FSM 2310 could describe that in SPM settings, “Motorized routes are typically designed as motorized trails (FSH 2309.18 part 23.21, Trail Class 2, No Double Lane) and Four-Wheel Drive Vehicles routes (FSH 2309.18 part 23.23, Trail Class 2, No Double Lane), offering a high degree of self-reliance, challenge, and risk in exploring these backcountry settings.” These trail classes would provide for desired motorized experiences, while protecting soil and water resources through design parameters.

FSM 2310.5 defines ROS Class Characteristics as, “The physical, social, and managerial features that function collectively to define a specific recreation opportunity spectrum setting (ROS class) ... Both summer and winter setting characteristics for each of the six primary ROS classes are summarized in section 2311, exhibit 01.”

Observation: Exhibit 01 describes ROS characteristics as “themes,” which is not defined nor recognized as a plan component in forest planning processes (36 CFR § 219 and FSH 1909.12 directives). Failing to identify desired conditions and other plan components in the definition reduces the importance and effectiveness of the planning directives requirement that states, “The plan must include plan components, including standards or guidelines, to provide for sustainable recreation integrated with other plan components as described in 23.21a. To meet this requirement the plan: ... (a) Must include desired conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes...” (FSH 1909.12 23.23a).

Background: Desired conditions are the basis for the rest of the plan components; objectives, standards, guidelines and suitability determinations must be developed to help achieve the desired conditions. If forest plans contain specific, measurable desired conditions, this should focus the process of identifying locations where projects are needed, and thereby increase the efficiency of project planning.

General Technical Report PNW-98 December 1979 describes that, “The ROS is a helpful concept for determining the types of recreational opportunities that should be provided. And after a basic decision has been made about the opportunity desirable in an area, the ROS provides guidance about appropriate planning approaches—standards by which each factor should be managed.”

The 1986 ROS Red Book describes that, “The physical setting is defined by the absence or presence of human sights and sounds, size, and the amount of environmental modification caused by human activity. The physical setting is documented on an overlay by combining these three criteria as described below. Physical Setting - The physical setting is best defined by an area's degree of remoteness from the sights and sounds of humans, by its size, and by the amount of environmental change caused by human activity. Human Developments – The apparent naturalness of an area is highly influenced by the evidence of human developments. If the landscape is obviously altered by roads, railroads, reservoirs, power lines, pipe lines, or even by highly visual vegetative manipulations, such as clearcuttings, the area will not be perceived as being predominately natural. Even if the total acres of modified land are relatively small, "out of scale" modifications can have a negative impact.”

The 2012 Planning Rule Programmatic Environmental Impact Statement describes that the analysis of the recreation resource is based on the 1986 ROS Red Book, Scenery Management System, and Recreation facility analysis. Furthermore, the Planning Rule PEIS states that, “These tools are used to define existing conditions, describe desired conditions, and monitor change. These tools, along with overarching guidance at the national, Department, and Agency levels, serve as the context by which individual national forests and grasslands engage with their communities. In doing so, the unit’s recreation-related and amenity-based assets are considered and integrated with a vision for the future that is sustainable and that the unit is uniquely poised to provide. As the current planning rule procedures related to recreation are quite general, these tools contribute to consistency in recreation planning across NFS units.

The recreation opportunity spectrum has been an effective land management planning tool since 1982. The recreation opportunity spectrum is a framework for identifying, classifying, planning, and managing a range of recreation settings. The setting, activity, and opportunity for obtaining experience are arranged along a spectrum of classes from primitive to urban. In each setting, a range of activities is accommodated. For example, primitive settings accommodate primarily non-motorized uses, such as backpacking and hiking; whereas roaded settings (such as roaded natural) or rural settings accommodate motorized uses, such as driving for scenery or access for hunting. Through this framework, planners compare the relative tradeoffs of how different patterns of settings across the landscape would accommodate (or not accommodate) recreational preferences, opportunities, and impacts (programmatic indirect environmental

effects) with other multiple uses. The scenery management system provides a vocabulary for managing scenery and a systematic approach for determining the relative value and importance of scenery in an NFS unit. The system is used in the context of ecosystem management to inventory and analyze scenery, to assist in establishment of overall resource goals and objectives, to monitor the scenic resource, and to ensure high-quality scenery for future generations” (Forest Service Planning Rule, PEIS, page 209).

The formulation and issuance of FSM 2310 (2300-2020-1) is not in compliance with the Public Participation requirement of FRRRPA and the Public Notice and Comment for Standards, Criteria, and Guidance Applicable to Forest Service Programs (16 U.S.C. § 1612(a), 36 CFR § 216). The amended policy (2300-2020-1) is inconsistent with the 36 CFR § 219 forest planning regulations and the Planning Rule PEIS. FSM 2310 (2300-2020-1) policy should be reissued through a Federal Register Notice following 36 CFR § 216 public involvement processes to define the ROS classes as desired conditions, to include ROS Class Characteristics descriptors that address, in part, “Evidence of Humans,” “Non-Recreation Uses,” and “Naturalness” characteristics, and to make other changes that support providing for the integration of the recreation resource in natural resources planning processes. In addition, the formulation and issuance of any Recreation Planning Handbook should also follow 36 CFR § 216 public involvement processes.

Sustainable Recreation Planning directives must be consistent with the 1986 ROS User Guide and related research, which informed the Planning Rule. Forest Service directives must be consistent with the USDA Departmental Regulation 1074-001 scientific integrity policy that relates to the development, analysis, and use of data for decision-making. This DR is intended to instill public confidence in USDA research and science-based public policymaking by articulating the principles of scientific integrity, including reflecting scientific information appropriately and accurately.

FSM 2350 – Approved by Christopher French, NFS, Deputy Chief

FSM 2353.01 – Authority. FSM 2353.01d - Other Authorities...

5. The amended National Scenic Trail Comprehensive Plan.

FSM 2353.04b - Chief of the Forest Service. The Chief of the Forest Service is responsible for: ...

2. Approving and submitting National Scenic and National Historic Trail comprehensive management plans to Congress (16 U.S.C. § 1244(e)).

3. When in the public interest, entering into an agreement with the Secretary of the Interior that transfers management responsibilities for segments of National Scenic or National Historic Trails (16 U.S.C. § 1246(a)(1)(B)).

4. Selecting the corridor for National Scenic and National Historic Trails and publishing

notice of availability of required maps and descriptions in the Federal Register (16 U.S.C. § 1246(a)(2)).

FSM 2353.04g - Regional Foresters. Regional Foresters are responsible for: ...

3. National Scenic and National Historic Trails...

b. For trails administered by the Secretary of Agriculture: ...

(2) Approving the location of these trails within the applicable corridor and signing notices for the Federal Register of availability of maps and descriptions of the location of these trails (16 U.S.C. §§ 1246(a)(2), 1246(b)). For trails that traverse multiple regions, the lead Regional Forester has this responsibility...

(6) Approving non-substantial relocations of National Scenic and National Historic Trails, publishing required notices in the Federal Register, and referring recommendations for substantial relocations to the Chief (16 U.S.C. § 1246(b)). For trails that traverse multiple regions, the lead regional forester has this responsibility.

FSM 2353.11 – Relationship between National Recreation, National Scenic, and National Historic Trails and NFS Trails

Manage National Recreation, National Scenic, and National Historic Trails as NFS trails. Administer each National Recreation, National Scenic, and National Historic Trail corridor to meet the intended nature and purposes of the corresponding trail (FSM 2353.31).

FSM 2353.31 – Policy

1. The National Trails System (16 U.S.C. § 1242(a)) includes: ... b. National Scenic Trails. These extended trails are located so as to provide for maximum outdoor recreation potential and for conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which these trails pass (16 U.S.C. § 1242(a)(2)) ...

2. Ensure that management of each trail in the National Trails System addresses the nature and purposes of the trail and is consistent with the applicable land management plan (16 U.S.C. § 1246(a)(2)).²⁴

3. TMOs for a National Recreation, National Scenic, or National Historic Trail should reflect the nature and purposes for which the trail was established.

FSM 2353.4 – Administration of National Scenic and National Historic Trails

²⁴ A land management plan amendment may be necessary in order to provide for the nature and purposes of the NST. See the discussions under Administration and Development and Land Management Plan Considerations.

FSM 2353.41 – Objectives

Develop and administer National Scenic and National Historic Trails to ensure protection of the purposes for which the trails were established and to maximize benefits from the land.

FSM 2353.42 – Policy

Administer National Scenic and National Historic Trail corridors to be compatible with the nature and purposes of the corresponding trail.

FSH 1909.12 – Part 11.3 of the planning handbook describes the assessment report. The assessment report must be a concise public document that supports the development of a new plan or plan revision. In part, summarizes how the best available scientific information and other information informs the assessment. ROS and SMS Scenic Integrity inventories are the principle tools for obtaining the best scientific information for the condition of the recreation resource.

FSH 1909.12 – Part 13.4 of the planning handbook describes the, “focus of the assessment for recreation is to identify and evaluate available information about existing conditions, trends and sustainability of recreation settings, opportunities, uses, preferences, access, and scenic character. Conditions and trends are assessed within the plan area as well as in relation to the broader landscape... The Interdisciplinary Team shall identify and evaluate available information about recreational settings and opportunities, including seasonal variation, using the Recreation Opportunity Spectrum (ROS). The Team shall also identify and evaluate available information about the existing and potential scenic character of the plan area based on maps and other information using the Scenery Management System.”

FSH 1909.12 – Part 14 of the planning handbook describes that designated areas are specific areas or features within the plan area that have been given a permanent designation to maintain its unique special character or purpose. Some categories of designated areas may be established only by statute (statutorily designated areas or often called congressionally designated areas)... Certain purposes and restrictions are usually established for designated areas, which greatly influence management needs and opportunities associated with them.

The Interdisciplinary Team should identify and evaluate available information about designated areas including:

1. Types, purposes, and locations of established designated areas within the plan area. The Responsible Official should use a map to identify these locations.
2. Range of uses, management activities, or management restrictions associated with the established designated areas in the plan area.
3. Existing plans for the management of established designated areas within the plan area, such as comprehensive plans for national scenic or historic trails.

4. In addition, the assessment report should describe the status of selecting the NST rights-of-way (16 U.S.C. § 1246(a)(2)).

FSH 1909.12 – Part 22.1 of the planning handbook describes each of the categories of plan components in greater detail and explains how the components should be expressed in the plan. Plan components guide future project and activity decisionmaking. The plan must indicate whether specific plan components apply to the entire plan area, to specific management areas or geographic areas, or to other areas as identified in the plan. Must be informed by the best available scientific information.

FSH 1909.12 – Part 22.2 deals with the identification of management areas and geographic areas. (Designated areas may be identified as MAs or GAs. However, a combination of GA and MA approaches may be useful. Above all, the approach must be clear about where plan components apply. The MA or GA guidance can constrain an activity to a greater degree than the unit-wide direction does.

FSH 1909.12 – Part 22.32 addresses distinctive roles and contributions of the planning area. Describe the recreation opportunities provided and the conservation area protected within the National Scenic Trail rights-of-way and management corridor.

FSH 1909.12 – Part 22.34 calls for the plan to include a list of types of possible projects for the next 3 to 5 years to move toward the desired conditions and objectives. The possible actions may be displayed in an appendix as a brief summary of the types of possible projects expected but such information is not a commitment to take any action.

FSH 1909.12 – Part 23.21b reviews ecosystem services. The Planning Rule (36 CFR §§ 219.10, 219.10(a)(1), and 219.8(b)(3) requires that a plan include plan components including standards or guidelines, for integrated resource management to provide for ecosystem services and multiple use. The plan should describe the desired conditions for the key ecosystem services to be achieved from the National Scenic Trail management corridor.

FSH 1909.12 – Part 23.23a addresses recreation resources. The Interdisciplinary Team uses the recreation opportunity spectrum to define recreation settings and categorize them into the six distinct classes as the structure to describe recreational settings. At the forest scale, sustainable recreation is derived through the integrated planning process and emerges as the resultant set of desired recreation opportunity spectrum classes. Each setting provides opportunities to engage in activities (motorized, nonmotorized, developed, or dispersed on land, water, and in the air) that result in different experiences and outcomes. The Interdisciplinary Team may create desired recreation opportunity spectrum subclasses. For example, the subclass “roaded modified” was first defined in the Pacific Northwest to distinguish those settings significantly altered by past timber harvest from other roaded natural settings. Must include desired

conditions for sustainable recreation using mapped desired recreation opportunity spectrum classes. This mapping may be based on management areas, geographic areas, designated areas, independent overlay mapping, or any combination of these approaches. Should include specific standards or guidelines where restrictions are needed to ensure the achievement or movement toward the desired recreation opportunity spectrum classes.

FSH 1909.12 – Part 23.23f is concerned with scenery, aesthetic values, viewsheds and geologic features. (The framework for scenery management is described in Landscape Aesthetics – A Handbook for Scenery Management. Viewsheds are specific elements to be considered because they describe areas seen from certain view locations such as trails (and, implicitly, from National Scenic Trails). The plan should contain standards or guidelines as needed to avoid or mitigate undesirable effects incompatible with desired scenery conditions. ... Standards and guidelines can be applied at multiple scales to specific management activities such as timber harvest, utility corridors, trail construction, facility development, or road construction.

FSH 1909.12 – Part 23.23g addresses cultural and historic resources. The plan must include plan components including standards or guidelines for protection of cultural and historic resources integrated with other plan components. To meet this requirement the plan may include, in part, desired conditions describing the cultural or historic resources in the plan area. For cultural landscapes, a special set of desired conditions may be appropriate for the protection, management, and use of the resource.

FSH 1909.12 – Part 23.23i deals with infrastructure, roads and trails. As related to roads, the plan should include the desired condition for the road system based on the desired uses for the plan area. As related to recreational trails, the plan should include desired conditions. The desired condition may describe nationally designated trails and distribution and types of trails for various uses such as hiking, off-road vehicles, mountain bikes, equestrian use, or winter uses such as skiing or snowmobiling. The plan may identify the types of trails and recreational use that are suitable or not suitable in a management or geographic area, aligned with the desired recreational settings and opportunities.

FSH 1909.12 – 24.2 – Plan Components for Designated Areas...

1. When developing plan components:

- b. The Responsible Official shall include plan components that will provide for appropriate management of designated areas based on the applicable authorities and the specific purposes for which each area was designated or recommended for designation. Uses and management activities are allowed in designated areas to the extent that these uses are in harmony with the purpose for which the area was designated. For recommended designated areas, the uses and activities allowed should be compatible with the basis of the recommendation.

FSH 1909.12 – 24.3 - Designated Area Plans

Planning for designated areas may be met through the land management plan, unless the authorities for the designation require a separate plan. Specific plans for designated areas must be consistent with the plan components (36 CFR § 219.15(e)).²⁵ The designated area authorities may require specific plans (such as wild and scenic river plans or national scenic and historic trail plans) for a designated area with additional requirements than those of the Planning Rule. Any parts of a designated area plan that meet the requirements for land management plan components must be included in the land management plan. The entire area plan does not need to be included in the land management plan. The land management plans must also be compatible with these designated area plans or either the land management plan or the designated area plan must be amended to achieve this compatibility.

Designated Area – The ANST designated area extent may be defined by the selected NST Section 7 rights-of-way. The NST Management Area (FS) and National Trail Management Corridor (BLM) resides within these selected rights-of-way. The MA or NTMC extent and associated plan components must provide for the nature and purposes of this NST.

FSH 1909.12 Part 24.43 – National Scenic and Historic Trails.²³

1. “When developing plan components for national scenic and historic trails:
 - a. The Interdisciplinary Team should review the assessment for relevant information about existing national scenic and historic trails in the plan area, including established rights-of-way pursuant to 16 U.S.C 1246(a)(2) and direction contained in comprehensive plans (CPs) pursuant to 16 U.S.C. §§ 1244(e). For existing or study national scenic and historic trails that do not have such information published, assessments identify and evaluate other information pertinent to the location and management of national scenic and historic trails.
 - b. The Interdisciplinary Team shall identify Congressionally designated national scenic and historic trails and plan components must provide for the management of rights-of-ways (16 U.S.C 1246(a)(2)) consistent with applicable laws, regulations, and Executive Orders. Plan components must provide for the nature and purposes of existing national scenic and historic trails and for the potential rights-of-way of those trails designated for study (16 U.S.C. § 1244(b)).
 - c. The Interdisciplinary Team shall use the national scenic and historic trails rights-of-way maps required by 16 U.S.C. § 1246(a)(2) to map the location of the trails. Where national trail rights-of-way have not yet been selected, the Interdisciplinary Team

²⁵ Comprehensive Plans developed in response to the requirements of the National Trails System Act and Wild and Scenic Rivers Act are not resource plans as defined by the NFMA (16 U.S.C. 1604(i) and 36 CFR 219.15(e)).

shall reference the establishing legislation (16 U.S.C. § 1244(a)) as the primary source for identifying and mapping the national scenic and historic trails right-of-way. If the right-of-way has not been selected, either through legislation or publication in the Federal Register, the Interdisciplinary Team should use other information to delineate a national scenic and historic trails corridor that protects the resource values for which the trail was designated or is being proposed for designation (16 U.S.C. § 1244(b)).

d. The Responsible Official shall consult with neighboring Responsible Officials when developing plan components for national scenic and historic trails that cross unit boundaries and shall strive to maintain or establish compatible management approaches while recognizing diverse resource conditions and needs in the different plan areas.

e. Plan components must be compatible with the objectives and practices identified in the comprehensive plan for the management of the national scenic and historic trail. The objectives and practices include the identification of resources to be preserved and the trail's carrying capacity.

f. The Responsible Official shall include plan components that provide for the nature and purposes of national scenic and historic trails in the plan area. In doing so, the Responsible Official should take into consideration other aspects of the plan related to the trail such as access, cultural and historic resources, recreational settings, scenic character, and valid existing rights.

2. The plan must include plan components including standards or guidelines for a designated area as described in part 24.2 of this Handbook. To meet this requirement the plan.

a. Should include desired conditions that describe the national scenic and historic trail and the recreational, scenic, historic, and other resource values for which the trail was designated.

b. May include objectives for national scenic and historic trails where existing conditions (settings, opportunities, scenic character, cultural and other resources values) are different from desired conditions. These objectives can identify intended activities to improve national scenic and historic trail conditions, mitigate or enhance associated resource values, create or improve connections with communities and visitors, or other desired and measurable outcomes that will improve the national scenic and historic trail experience.

c. May include standards or guidelines to place limits or conditions on projects or activities to protect the trail and associated resource values.

d. May include suitability plan components to limit or prevent incompatible uses and activities.

e. Must identify and map National scenic and historic trails per #1c above.

f. May, to apply plan components unique to the National and Scenic Historic Trail: provide one or more management or geographic areas for a national scenic and

historic trail; reference the identified national scenic and historic trail right-of-way, place a corridor around the trail, or use other means to clearly identify where the plan components apply in reference to the trail.

FSM 2350 has more information about national scenic and historic trails.²⁶

FSH 1909.12 – Part 24.44 requires plan components to be compatible with restrictions of road rules applicable to inventoried roadless areas.

FS-EM-7700-30 - Guidelines for Engineering Analysis of Motorized Mixed Use on Roads

Normally, the NST travel route is not to be located on a road unless permanently closed to motor vehicle use. However, in a situation where the NST travel route is to be located on an open National Forest System road, an analysis should be completed which documents that mixed use on the road allows for the safe travel of pedestrians and equestrians. Modify the mixed-use analysis that is described in EM-7700-30²⁷ to assess both motorized and nonmotorized use along the route. In addition, Forest Supervisors are required to identify the minimum road system (MRS) needed for safe and efficient travel and for administration, utilization, and protection of NFS lands.

National Park Service

The National Park Service Director should revise or amend the unit General Management Plan to recognize the NST as a congressionally designated area. The GMP must be in compliance with the National Park System Development Program regulations (16 U.S.C. § 1a-7) and the National Trails System Act as implemented through direction in the NST Comprehensive Plan if current. Foundation Documents for NPS units should also address the significance of the NST, as applicable. Once programmatic direction is established in the General Management Plan, NST site-specific protection and development plans should be established that provide for the values of this National Scenic Trail.

“The NPS will prepare appropriate planning documents to protect the resources and attributes and to provide for public use and appreciation of the national scenic and historic

²⁶ FSM 1920.3 - 6, states, “Provide all Service-wide direction necessary for planning assessments, plan development, plan revision, plan amendment, and plan monitoring is contained or referenced in this chapter, and supplements, or handbooks thereto.” National Scenic Trail policy and direction is found in comprehensive plans for National Trails, FSM 2353.4 (referenced in the Planning Handbook as FSM 2350), FSH 1909.12 section 14, and FSH 1909.12 section 24.43, which in total provides the necessary policy and management direction for implementing the requirements of the NTSA. Fortuitously, FSM 2350 is clearly referenced in FSH 1909.12 section 24.43 for the Forest Service Planning Handbook in itself does not contain substantive specialized guidance and instruction for addressing the NTSA in an integrated land management plan. FSM 1110.3, FSM 1110.8, and FSM 1112.02 has more information about the formulation of directives.

²⁷ http://www.nstrail.org/pdf_documents/fs_guidelines_for_road_mixed_use_analysis_EM-7700-30_2005.pdf

trails authorized by Congress and assigned to it for administration. Each trail's comprehensive management plan (CMP) will include, at a minimum, those provisions stipulated in 16 USC 1244(e) or (f) that outline trail comprehensive plan requirements. Each CMP will also identify the minimum level of regulation necessary to protect the resources and attributes that warranted the trail's designation by Congress. CMPs may also include such other provisions as may be needed to satisfy the intent of chapter 2, "Park System Planning," of Management Policies 2006 and the unique circumstances of the trail. Each trail will then operate according to the CMP." (Director's Order #45, 3.11 – Planning)

Chapter VI. Glossary

The following presents key definitions that provide context for many of the discussions in these comments:

- Conservation (Forest Service). The protection, preservation, management, or restoration of natural environments, ecological communities, and species. (36 CFR § 219.19)
- National Scenic Trail (NST). The National Parks and Recreation Act of November 10, 1978 authorized and designated the National Scenic Trail (NST) (Pub. L. No. 95-625, 92 Stat. 3467), which amended the NTSA of 1968 (16 U.S.C. § 1241-1251). [See National Scenic Trail.]:
 - Comprehensive Plan. Statutorily required plan providing direction and guidance for the administration and management of a congressionally designated National Scenic Trail or National Historic Trail. The plan includes the identification of the nature and purposes, goals and objectives, all significant natural, historical, and cultural resources to be preserved, carrying capacity, and high potential segments for the national trail management corridor.
 - Conserve. For the purposes of National Scenic Trails (36 CFR § 219.10(b)(vi)) conserve is the protection, preservation, management, or restoration of natural environments, ecological communities and species as informed by 16 U.S.C. §§ 1242(a)(2), 1246(k); 16 U.S.C. § 1246(i); and 16 U.S.C. §§ 1241(a), 1244(e)(1).
 - Designated Area. The NST designated area is the extent of the selected rights-of-way. Land management plans may describe the NST designated area as that of a management area or national trail management corridor. [See National Trail Right(s)-of-Way and National Trail Management Corridor.]
 - Nature and Purposes. The nature and purposes of the NST are to provide for high-quality scenic, hiking and other pedestrian recreation opportunities and to conserve natural, historic, and cultural resources along the NST corridor." [See National Trail Nature and Purposes.]
 - Travel Route. The NST travel route is normally a standard terra trail that has a surface consisting predominantly of the ground and that is designed and managed to accommodate use on that surface. A National Scenic Trail travel route is located

- within an established management area or national trail management corridor.
- Cultural Landscape. A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or esthetic values. There are four non-mutually exclusive types of cultural landscapes: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.
 - Designated area (Forest Service). An area or feature identified and managed to maintain its unique special character or purpose.
 - National Trail Corridor Segment. Corridor segment is a term used by congress to describe the management of a National Scenic Trail corridor: *“For example, the Secretary of the Interior who is responsible for administration of the Appalachian National Scenic Trail, could negotiate an agreement with the Secretary of Agriculture. This agreement might provide that a certain segment of the trail corridor, acquired by the National Park Service, would be transferred to the Forest Service for management, and would be governed by Forest Service rules and regulations, except that the agreement might specify that the transferred corridor segment would be managed with certain other constraints which would not apply to national forest land generally.*
 - National Scenic Trail. “A continuous, long-distance trail located on the ground by the land-managing agency along the congressionally designated route, in coordination with the trail administering agency. A National Scenic Trail provides maximum compatible outdoor recreation opportunity and conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural resources, qualities, values, and associated settings and the primary use or uses of the areas through which such trails may pass. National Scenic Trails represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms that exhibit significant characteristics of the physiographic regions of the Nation. National Scenic Trails include the tread, or the trail path, and the trail setting which is included within the National Trail Management Corridor. National Scenic Trails may contain water sources or structures which are designed to support and provide for the safety of travelers along the trail” (BLM MS-6280). National scenic and national historic trails may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted by the Secretary charged with the administration of the trail. Other uses include recreational and resource uses that may be incompatible with the nature and purposes for which the NST was established and designated. Reasonable efforts shall be made to provide sufficient access opportunities to such trails and, to the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any National Scenic Trail shall be prohibited.
 - National Scenic Trail Values. Executive Order 13195 – Trails for America in the 21st Century describes that that agencies will, protect the trail corridors associated with National Scenic Trails...to the degrees necessary to ensure that the values for which

each trail was established remain intact....” The values of National Scenic Trails include: (1) visitor experience opportunities and settings, and (2) the conservation and protection of scenic, natural, historical, and cultural qualities of the corridor. [See Nature and Purposes; and National Trail Resources, Qualities, and Values.]

- National Trail Associated Settings. “The geographic extent of the resources, qualities, and values or landscape elements within the surrounding environment that influence the trail experience and contribute to resource protection. Settings associated with a National Scenic or Historic Trail include scenic, historic, cultural, recreation, natural (including biological, geological, and scientific), and other landscape elements (see resources, qualities, and values).” (BLM MS-6280)
- National Trail Management Corridor. “Allocation established through the land use planning process, pursuant to Section 202 of Federal Land Policy and Management Act and Section 7(a)(2) of the National Trails System Act (“rights-of-way”) for a public land area of sufficient width within which to encompass National Trail resources, qualities, values, and associated settings and the primary use or uses that are present or to be restored.” (BLM MS-6280)
- National Trail Nature and Purposes. “The term used to describe the character, characteristics, and congressional intent for a designated National Trail, including the resources, qualities, values, and associated settings of the areas through which such trails may pass; the primary use or uses of a National Trail; and activities promoting the preservation of, public access to, travel within, and enjoyment and appreciation of National Trails.” (BLM MS-6280)
- National Trail Right(s)-of-Way. “Term used in Section 7(a)(2) of the National Trails System Act to describe the corridor selected by the National Trail administering agency in the trailwide Comprehensive Plan and which includes the area of land that is of sufficient width to encompass National Trail resources, qualities, values, and associated settings. The National Trail Right-of-Way, in the context of the National Trails System Act, differs from a Federal Land Policy and Management Act (FLPMA) Title V right-of-way, which is a grant issued pursuant to FLPMA authorities. It becomes a key consideration in establishing the National Trail Management Corridor in a Resource Management Plan” (BLM MS-6280). In addition, the selection of the rights-of-way must be consonant of the implications of guidance found in NTSA Sections 3, 5(e) and 7(b), (c), (d), (e), (f), (i) and (f).
- National Trail Resources, Qualities, and Values. “The significant scenic, historic, cultural, recreation, natural (including biological, geological, and scientific), and other landscape areas through which such trails may pass as identified in the National Trails System Act.” (BLM MS-6280)
- Recreation opportunity. An opportunity to participate in a specific recreation activity in a particular recreation setting to enjoy desired recreation experiences and other benefits that accrue. Recreation opportunities include non-motorized, motorized, developed, and dispersed recreation on land, water, and in the air.
- Recreation Opportunity Spectrum (Forest Service). The Recreation Opportunity

Spectrum planning framework is the recognized framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities through land management planning. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into six classes. The definition of each ROS class describes six setting characteristics: Access, Remoteness, Naturalness, Non-Recreation Uses, On-Site Management, Visitor Management, Social Encounters, and Visitor Impacts. The following ROS class characteristic or desired condition descriptions are consistent with the Forest Service Planning Rule and supporting Programmatic EIS. The terms “recreation opportunity spectrum setting” and “recreation opportunity spectrum class” are synonymous and used interchangeably. Each of the six primary ROS settings/classes is defined below:

- Primitive – The area is essentially an unmodified natural environment. Interaction between users is very low and evidence of other users is minimal. Very high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skill in an environment that offers a high degree of challenge and risk. Evidence of humans would be un-noticed by an observer wandering through the area. Natural ecological processes such as fire, insects, and disease exist. The area may provide for wildlife connectivity across landscapes. Primitive ROS settings contain no motorized and mechanized vehicles and there is little probability of seeing other groups. They provide quiet solitude away from roads and people or other parties, are generally free of human development, and facilitate self-reliance and discovery. Signing, and other infrastructure is minimal and constructed of rustic, native materials.
- Semi-Primitive Non-Motorized (SPNM) – The area is predominantly a Natural-Appearing environment where natural ecological processes such as fire, insects, and disease exist. Interaction between users is low, but there is often evidence of other users. High probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skill in an environment that offers a high degree of challenge and risk. Natural setting may have subtle modifications that would be noticed but not draw the attention of an observer wandering through the area. The area provides opportunities for exploration, challenge, and self-reliance. The area may contribute to wildlife connectivity corridors. Closed roads may be present, but are managed to not dominate the landscape or detract from the naturalness of the area. Rustic structures such as signs and footbridges are occasionally present to direct use and/or protect the setting’s natural and cultural resources.
- Semi-Primitive Motorized (SPM) – The area is predominantly Natural-Appearing environment. Concentration of users is low, but there is often evidence of other users. Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skill in an environment that offers a high

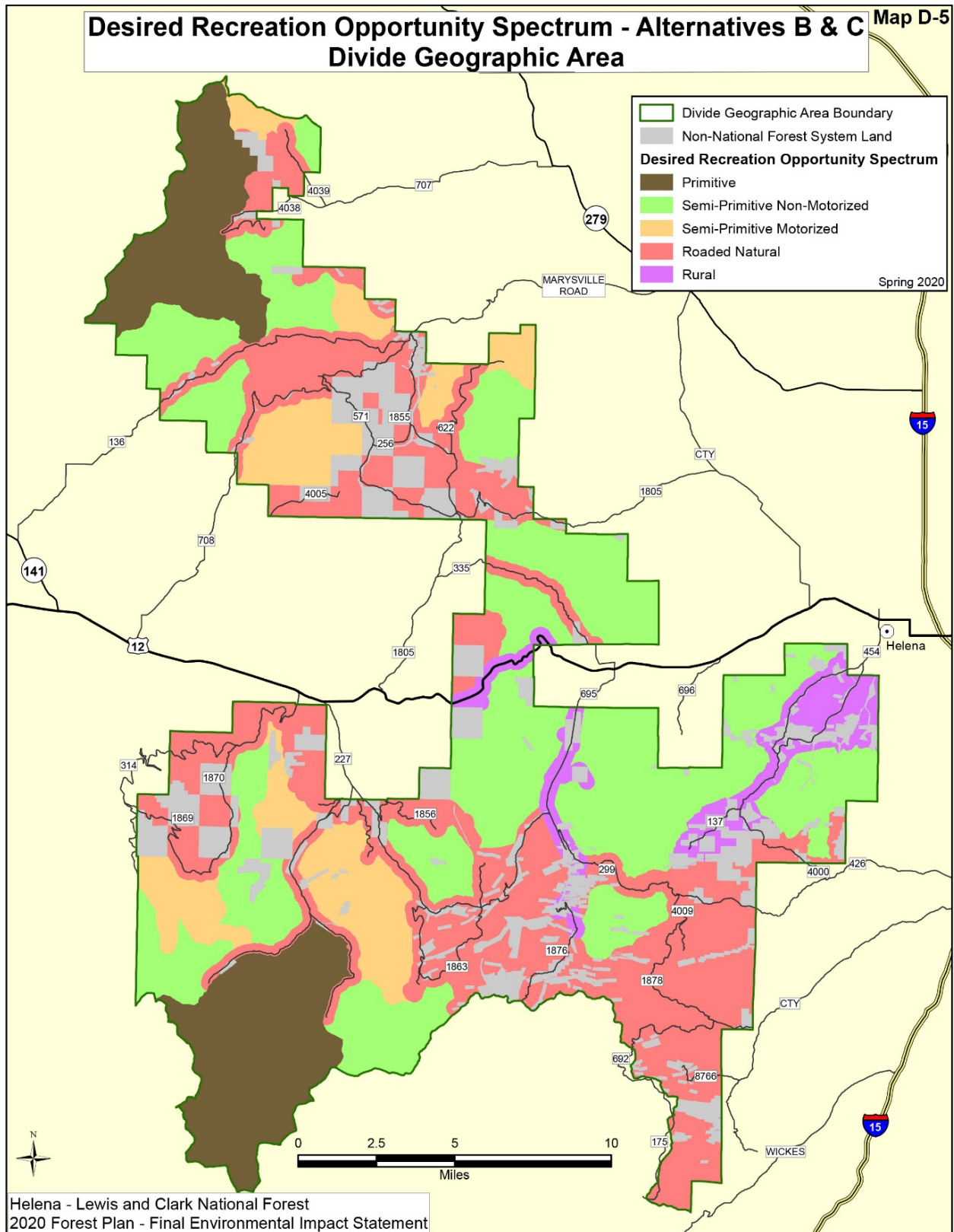
- degree of challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment. Natural setting may have moderately alterations, but would not draw the attention of motorized observers on trails and primitive roads within the area. The area provides for motorized recreation opportunities in backcountry settings. Vegetation management does not dominate the landscape or detract from the experience of visitors. Visitors challenge themselves as they explore rugged landscapes.
- Roaded Natural – The area is predominantly Natural-Appearing environments with moderate evidences of the sights and sounds of human activities. Such evidences usually harmonize with the natural environment Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. About equal probability to experience affiliation with other user groups and for isolation from sights and sound of humans. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with a more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible. Natural settings may have modifications, which range from being easily noticed to strongly dominant to observers within the area. However, from sensitive travel routes and use areas these alternations would remain unnoticed or visually subordinate. The landscape is generally natural with modifications moderately evident. Concentration of users is low to moderate, but facilities for group activities may be present. Challenge and risk opportunities are generally not important in this class. Opportunities for both motorized and non-motorized activities are present. Construction standards and facility design incorporate conventional motorized uses.
 - Rural – Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available. Probability for experiencing affiliation with individuals and groups is prevalent as is the convenience of sites and opportunities. These factors are generally more important than the setting of the physical environment. Opportunities for wildland challenges, risk-taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important elements. Natural setting is culturally modified to the point that it is dominant to the sensitive travel route observer. May include intensively managed wildland resource landscapes. Pedestrian or other slow-moving observers are constantly within view of the culturally changed landscape.

- Recreation Setting (Forest Service). The social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity spectrum to define recreation settings and categorize them into six distinct classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban.
- Scenic Attractiveness (Forest Service). The scenic importance of a landscape based on human perceptions of the intrinsic beauty of landform, rockform, waterform, and vegetation pattern. Reflects varying visual perception attributes of variety, unity, vividness, intactness, coherence, mystery, uniqueness, harmony, balance, and pattern. It is classified as: A-Distinctive. B-Typical or Common. C-Undistinguished.
- Scenic Character (Forest Service). A combination of the physical, biological, and cultural images that gives an area its scenic identity and contributes to its sense of place. Scenic character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity (36 CFR § 219.19). The scenery management system is the framework for developing plan components related to scenic character. This framework for scenery management is described in Landscape Aesthetics - A Handbook for Scenery Management (Agriculture Handbook 701). Note that the term "scenic character" replaces the term "landscape character" in the FSH 1909.12 Planning Handbook.
- Scenic Integrity Levels (Forest Service). Scenic integrity is defined as the degree of direct human-caused deviation in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as a landscape created by human suppression of the natural role of fire, are not included. Scenic Integrity indicates the degree of intactness and wholeness of the Landscape Character; conversely, Scenic Integrity is a measure of the degree of visible disruption of the Landscape Character. A landscape with very minimal visual disruption is considered to have very high Scenic Integrity. Those landscapes having increasingly discordant relationships among scenic attributes are viewed as having diminished Scenic Integrity. Scenic Integrity is expressed and mapped in terms of Scenic Integrity levels: Very High, High, Moderate, Low, Very Low, and Unacceptably Low. Scenic Integrity is used to describe an existing landscape condition, a standard for management, or a desired future condition.
 - VERY HIGH. (Unaltered) preservation. VERY HIGH scenic integrity refers to landscapes where the valued landscape character "is" intact with only minute if any deviations. The existing landscape character and sense of place is expressed at the highest possible level.
 - HIGH (Appears Unaltered) retention. HIGH scenic integrity refers to landscapes where the valued landscape character "appears" intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.
 - MODERATE (Slightly Altered) partial retention. MODERATE scenic integrity refers to landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character

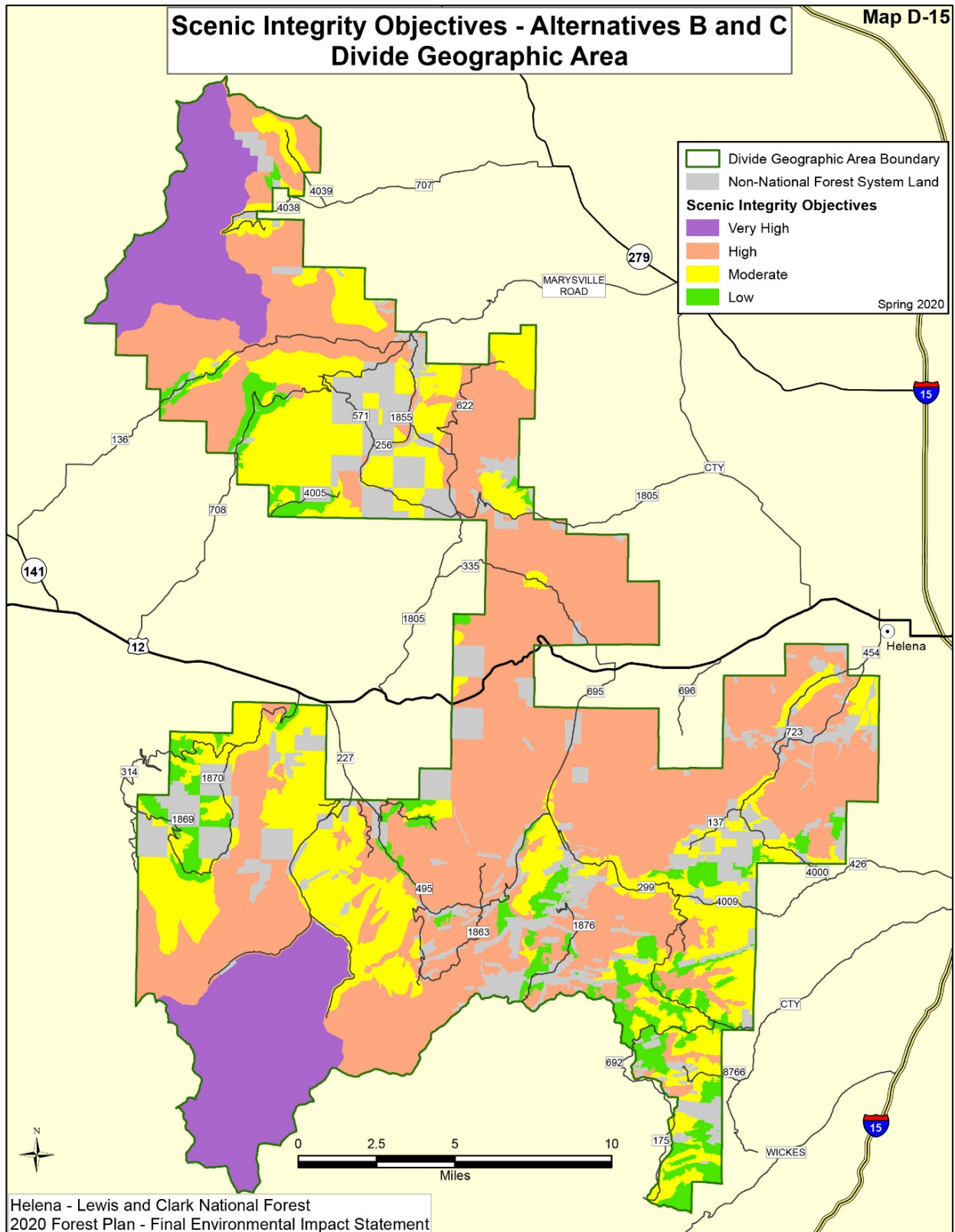
- being viewed.
- LOW (Moderately Altered) modification. LOW scenic integrity refers to landscapes where the valued landscape character "appears moderately altered." Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed but compatible or complimentary to the character within.
 - VERY LOW (Heavily Altered) maximum modification. VERY LOW scenic integrity refers to landscapes where the valued landscape character "appears heavily altered." Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.
 - UNACCEPTABLY LOW scenic integrity refers to landscapes where the valued landscape character being viewed appears extremely altered. Deviations are extremely dominant and borrow little if any form, line, color, texture, pattern or scale from the landscape character. Landscapes at this level of integrity need rehabilitation. This level should only be used to inventory existing integrity. It must not be used as a management objective.
 - Scenic Integrity Objectives (Forest Service). Scenic integrity objectives in the context of the forest plan are equivalent to desired conditions. Scenic integrity describes the state of naturalness or a measure of the degree to which a landscape is visually perceived to be "complete." The highest scenic integrity ratings are given to those landscapes that have little or no deviation from the landscape character valued by constituents for its aesthetic quality. Scenic integrity is the state of naturalness or, conversely, the state of disturbance created by human activities or alteration. Scenic integrity is measured in five levels:
 - VERY HIGH: landscapes where the valued landscape character "is" intact with only minute, if any deviations. The existing landscape character and sense of place is expressed at the highest possible level.
 - HIGH: landscapes where the valued landscape character appears unaltered. Deviations may be present but must repeat the form, line, color, texture and pattern common to the landscape character so completely and at such scale that they are not evident.
 - MODERATE: landscapes where the valued landscape character appears slightly altered. Noticeable deviations must remain visually subordinate to the landscape character being viewed.
 - LOW: landscapes where the valued landscape character appears moderately altered. Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect, pattern of natural

- openings, vegetative type changes or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed, but compatible or complimentary to the character within.
- VERY LOW: landscapes where the valued landscape character appears heavily altered. Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect, pattern of natural openings, vegetative type changes or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain so that elements such as unnatural edges, roads, landings and structures do not dominate the composition.
 - Scenic Quality (Forest Service). The essential attributes of landscape that when viewed by people, elicit psychological and physiological benefits to individuals and, therefore, to society in general.
 - Substantial Interference. “Determination that an activity or use affects (hinders or obstructs) the nature and purposes of a designated National Trail (see nature and purposes)” (BLM MS-6280). Black's law dictionary defines substantial evidence as the amount of evidence which a reasoning mind would accept as sufficient to support a particular conclusion and consists of more than a mere scintilla.

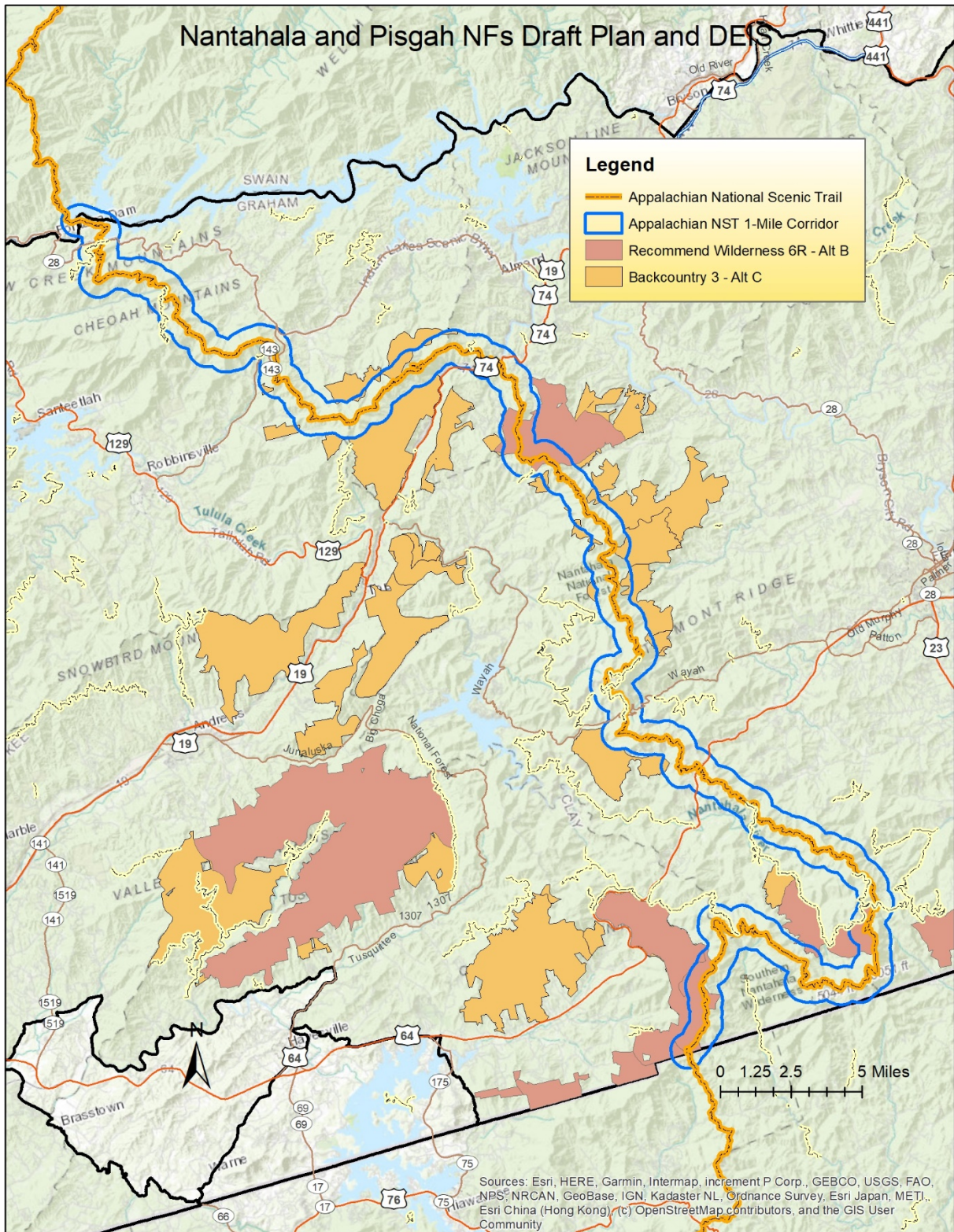
Appendix A. Example of mapping ROS setting allocations—Helena National Forest.



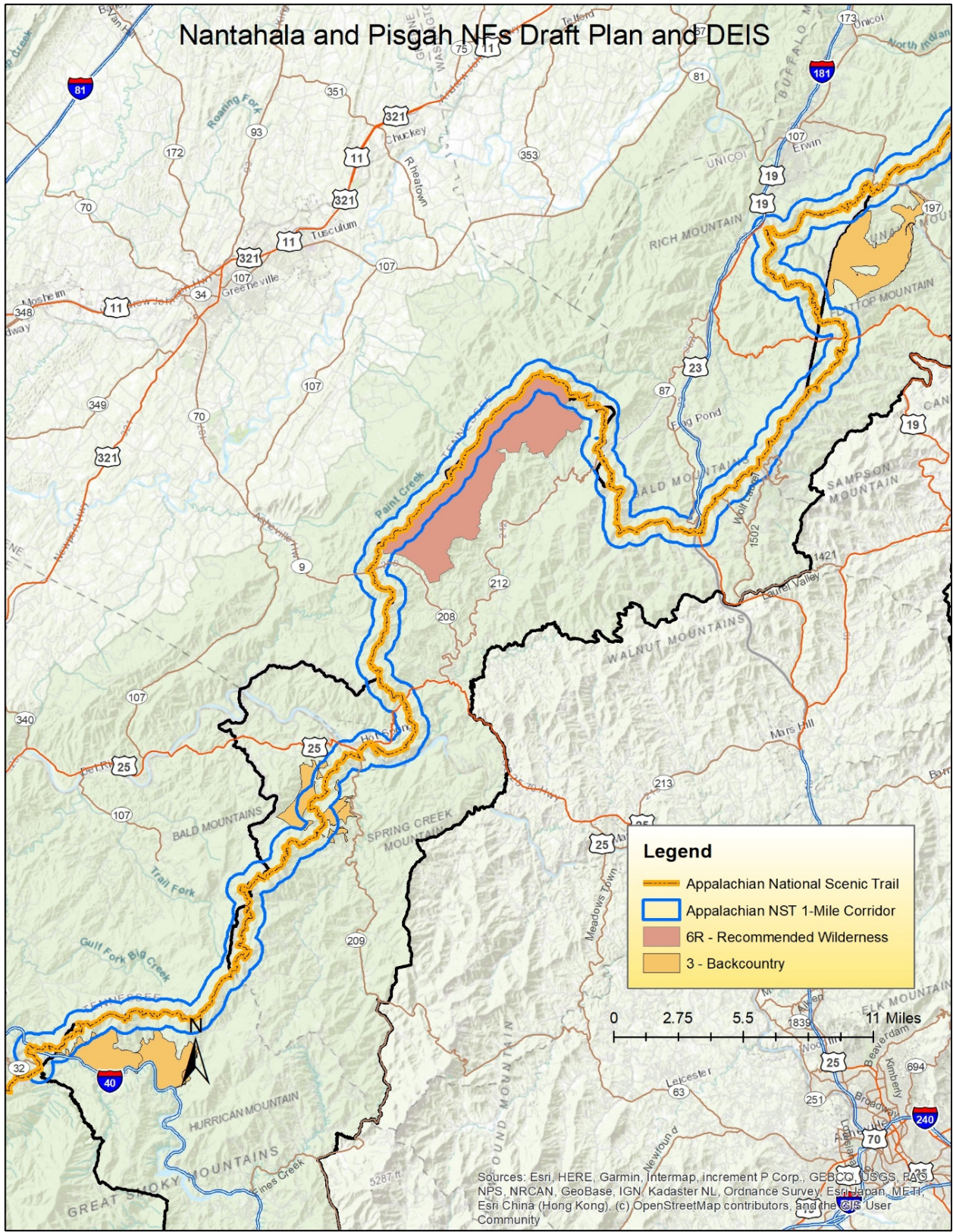
Appendix B. Example of mapping Scenic Integrity Objectives—Helena National Forest.



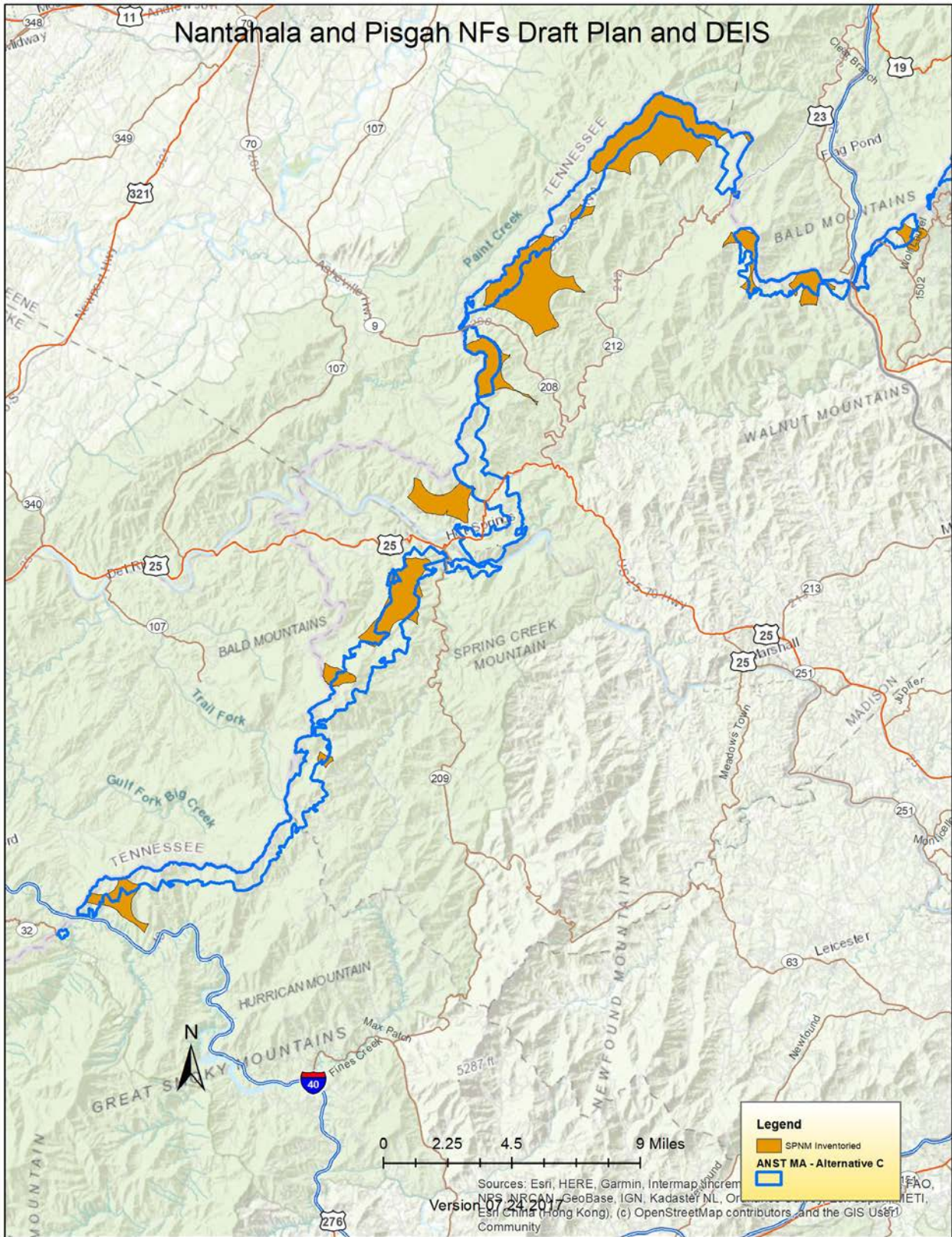
Appendix C. Proposed ANST Corridor, Recommended Wilderness, and Backcountry Areas for the selected revised plan alternative.



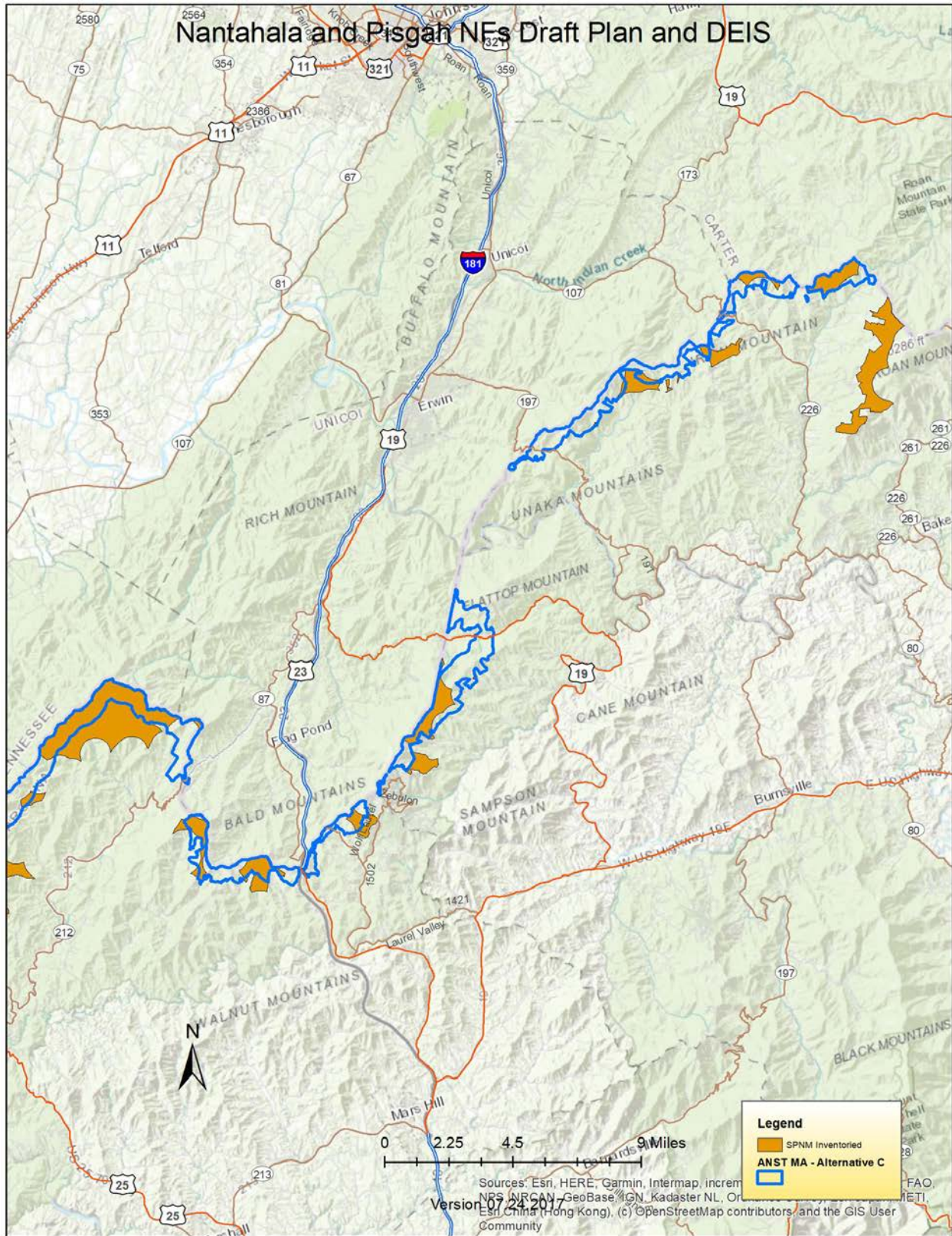
Nantahala and Pisgah NFs Draft Plan and DEIS



Nantahala and Pisgah NFs Draft Plan and DEIS



Nantahala and Pisgah NFs Draft Plan and DEIS



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, CNES/Airbus DS, USDA, FAO, AeroGRID, IGN, Esri, China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Version: 07/24/2017