

**FINDING OF NO SIGNIFICANT IMPACT
FOR
THE IMPROVEMENTS TO CHEROKEE ORCHARD ROAD AND ROARING FORK
MOTOR NATURE TRAIL
- ENVIRONMENTAL ASSESSMENT -**

GREAT SMOKY MOUNTAINS NATIONAL PARK

The Preferred Alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS) in accordance with regulations issued by the Council on Environmental Quality (CEQ). The Preferred Alternative will not have a significant effect on the human environment. Environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places (NRHP), or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended: _____
Dale A. Ditmanson
Superintendent, Great Smoky Mountains National Park
Date

Recommended: _____
Kevin S. Rose
Environmental Compliance Engineer,
Eastern Federal Lands Highway Division
Date

Approved: _____
Paul T. Nishimoto
Planning and Programming Engineer,
Eastern Federal Lands Highway Division
Date

Approved: _____
Art Frederick
Acting Regional Director, National Park Service, Southeast Region
Date

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BACKGROUND

This project is located in the Gatlinburg area of Great Smoky Mountains National Park (Park), Sevier County, Tennessee. The National Park Service (NPS) plans to rehabilitate Cherokee Orchard Road and Roaring Fork Motor Nature Trail. Cherokee Orchard Road is a 3.7-mile paved road that includes both a one-way roadway section and two-way roadway section. It is open year-round, as permitted by weather, and accommodates approximately 122,000 vehicles per year. Roaring Fork Motor Nature Trail is a 5.3-mile one-way roadway, with eight bridges, that carries approximately 83,000 vehicles per year. It is open from mid-March through October.

Both Cherokee Orchard Road and Roaring Fork Motor Nature Trail exhibit rutting, raveling of pavement edges, potholes, alligator cracking, and pavement settling due to water runoff, weather conditions, and poor drainage. Drainage ditches, culverts and other storm water management devices have been installed to direct storm water, but many of these structures are failing due to damage, size, and sediment deposits. Most of them are in need of replacement, repair, or reconstruction. The narrow grass shoulders along Cherokee Orchard Road are typically not wide enough to safely accommodate a parked vehicle. Roaring Fork Motor Nature trail has sections of very steep grade, sharp and narrow curves, and no shoulder in many locations. One 1,500-foot section of Roaring Fork Motor Nature Trail, which is less than 9 feet in width and adjacent to a very steep grade, is in need of widening.

The bridges along Roaring Fork Motor Nature Trail are deteriorating. The bridge substructures date to about 1963, when the upgrading of Cherokee Orchard Road and the construction of the current Roaring Fork Motor Nature Trail alignment took place. The bridge superstructures were replaced in 1979. After 25 years of being subjected to a continuously moist environment, the bridges are again in need of repair and replacement. The NPS proposes to save the bridge substructures and replace the bridge superstructures with more durable materials. Two of the eight bridges have awkward approaches that are in need of realignment. Another of the bridges is in need of widening in order to accommodate both pedestrians on the bridge and vehicle traffic. Only one bridge currently has pedestrian guard rail.

The purpose of this action is to improve safety, repair the deteriorating infrastructure, and protect resources along Cherokee Orchard Road and Roaring Fork Motor Nature Trail. These improvements are needed to better accommodate Park visitors and protect existing resources within the Park. It is anticipated that this project can be implemented, and accomplish these goals, while preserving the Park's natural and cultural resources by minimizing impacts to the environment.

The Federal Highway Administration (FHWA), in partnership with the NPS, prepared the Environmental Assessment (EA) for the improvements to Cherokee Orchard Road and Roaring

Fork Motor Nature Trail for the Park. The document was available for public review from December 19, 2006 through August 6, 2007. The EA analyzed a No-Action, a Partial-Build and a Full-Build Alternative. The Preferred Alternative is the Full-Build Alternative.

The purpose of this document is to record the decision to implement an alternative from the EA and to record a Finding of No Significant Impact (FONSI) pursuant to the CEQ's regulations (40 CFR 1500 and 42 USC 4332(2)(c)) for implementing the National Environmental Policy Act (NEPA).

PREFERRED ALTERNATIVE

The decision is to select the Preferred Alternative identified in the EA, referred to as the Full-Build Alternative. Implementing the Preferred Alternative will include milling and resurfacing Cherokee Orchard Road and Roaring Fork Motor Nature Trail, as well as other improvements. The other improvements are included in "Special Areas" identified during the design scoping of the project. The "Special Areas" defined in the Preferred Alternative are specific areas along Cherokee Orchard Road and Roaring Fork Motor Nature Trail that will undergo additional improvements. These improvements include:

- Paving select gravel pullouts
- Elimination of select gravel pullouts
- Potential installation of railing on the bridges
- Roadway widening (increase roadway width 1 to 2 feet along a 1,500-foot section of the road)
- Masonry wall repair/replacement
- Bridge approach realignment at two bridges [Bridge B (Structure No. 161P) and Bridge E (Structure No. 054P)]
- Bridge widening [Bridge C (Structure No. 052P)]

The Preferred Alternative includes the replacement of the superstructure and repair of the substructure of each bridge along Roaring Fork Motor Nature Trail. All eight bridges have been rated by FHWA Bridge Inspections as needing minor and moderate repairs. They all have weathering steel beams that are deteriorating in the moist environment of the area. The Preferred Alternative includes the option of adding a pedestrian rail to the bridges to address safety concerns while maintaining passive recreation opportunities. If implemented, the height of the pedestrian rail will not exceed 2.5 to 3 feet to allow automobile passengers unobstructed views and photographic opportunities from the bridges.

The bridge improvements include the following structures:

- Bridge A (Structure No. 051P) at mile 1.6 - replace bridge superstructure.
- Bridge B (Structure No. 161P) at mile 2.3 - The superstructure will be replaced and the roadway approach will be realigned approximately 50 feet in advance of the bridge. This will widen the approach curve to the bridge in order to improve safety and prevent impact damage to the bridge superstructure and timber curb.
- Bridge C (Structure No. 052P) at mile 2.9 - replace bridge superstructure. The bridge deck will be widened to accommodate pedestrian activity and decrease the potential for vehicle-pedestrian conflicts.
- Bridge D (Structure No. 053P) at mile 3.3 - replace bridge superstructure.

- Bridge E (Structure No. 054P) at mile 3.9 - The roadway approach will be realigned to the left beginning approximately 150 feet from the bridge. This will remove reverse curves and broaden the approach curve to the bridge in order to improve safety and prevent impact damage to the bridge superstructure and timber curb.
- Bridge F (Structure No. 055P) at mile 4.1 - replace bridge superstructure.
- Bridge G (Structure No. 056P) at mile 4.2 - replace bridge superstructure.
- Bridge H (Structure No. 057P) at mile 4.5 - replace bridge superstructure.

Construction associated with the Preferred Alternative will cause negligible to minor, temporary impacts to traffic operations and visitor use, respectively. Appropriate erosion control and Best Management Practices (BMPs) will be used during construction to minimize impacts to Park operations, Park resources, and to the public. Construction will begin in March and extend through the end of May the following year. The one-way loop section of Cherokee Orchard Road will be closed to public traffic while construction activities are taking place. However, a portion of Rainbow Falls Parking Area will be kept open to use at all times for emergency staging for search and rescue activities. The two-way, two-lane section will be kept open to traffic, with flaggers, during construction to maintain access to the Twin Creeks Natural Resources Center. Barring unforeseen events, construction on Cherokee Orchard Road will be completed by the end of September in time for peak leaf season visitors. Because of the extent of construction activities along Roaring Fork Motor Nature Trail and the fact that it is a very narrow, one-way, one-lane road, the entire length of the road will be closed while construction is taking place. On both Cherokee Orchard Road and Roaring Fork Motor Nature Trail the majority of construction activities will be limited to the spring, summer, and fall due to the extreme temperatures during the winter months.

OTHER ALTERNATIVES CONSIDERED

No-Action Alternative

Under the No-Action Alternative no substantial improvements or rehabilitation efforts for Cherokee Orchard Road and Roaring Fork Motor Nature Trail would be made other than those in accordance with routine maintenance operations. The routine maintenance operations would consist of temporary pavement rehabilitation such as chip seal, crack seal, or slurry seal. The existing safety concerns would not be addressed. None of the existing roads, bridges, or parking areas would be realigned, replaced, or reconfigured. Visitor safety concerns would not be addressed and the conditions of the road would continue to deteriorate.

Partial-Build Alternative (Milling and Resurfacing)

Under the Partial-Build Alternative, Cherokee Orchard Road and Roaring Fork Motor Nature Trail would be rehabilitated. The rehabilitation would include milling and resurfacing both Cherokee Orchard Road and Roaring Fork Motor Nature Trail. The primary focus of this alternative would be to preserve and maintain the existing roadway and structures, and is not intended to improve or upgrade the facility.

No structural or safety enhancements would be included as part of this alternative. The milling work would be done to remove deteriorated sections of existing pavement and to avoid unnecessarily raising the grade of the pavement. No additional land would be utilized by the roads for this alternative. The resurfacing would be conducted to provide a stable driving surface

and to extend the serviceability of the roadway. The new surface would be placed in the footprint of the existing road with no improvement in capacity or geometrics by this alternative.

No roadway widening would occur and the bridges would not be replaced. Other minor improvements such as resurfacing of existing paved pullouts, drainage to control runoff, installation of wheel stops, ditching, shoulder work, striping, and turf establishment would be conducted; however, overall driver safety concerns would remain unresolved. Temporary traffic control along with appropriate erosion control and BMPs would be used during construction to minimize impacts to Park operations, Park resources, and to the public.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

As defined by the CEQ, “the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources” (CEQ 2006).

Section 101(b) of NEPA establishes goals for carrying out the policy set forth in the Act. The section states “it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may:

1. “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
5. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources” (CEQ 2006).

The Partial-Build Alternative is the Environmentally Preferred Alternative because it provides a smooth and safe riding surface for vehicles on Cherokee Orchard Road and Roaring Fork Motor Nature Trail while staying within the road’s existing footprint, thereby limiting damage to the environment. There is the possibility of impacts occurring as a result of the construction process, however, through the use of sedimentation and erosion control measures and BMPs, the possibilities of environmental damage can be minimized. The Partial-Build Alternative is consistent with goals 1, 2, 3 and 4 of Section 101(b) of NEPA.

THE PREFERRED ALTERNATIVE AND SIGNIFICANCE CRITERIA

The Preferred Alternative (Full-Build Alternative) will have negligible to minor, temporary to long-term impacts to some of the Park's resources; however, they will be minimized and mitigated as described in the EA. A summary of environmental consequences and mitigation measures is provided below.

As defined in 40 CFR § 1508.27 from the CEQ regulations that implement the provisions of NEPA, "significance" is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The following activities and resources will be affected as a result of implementation of the Preferred Alternative:

Traffic Roadway/Bridge Conditions

- Negligible, temporary impacts to traffic patterns and roadway/bridge conditions during construction.
- Traffic operations, traffic flow, and roadway and bridge conditions would improve. The Preferred Alternative would provide a long-term solution and extend the life of the infrastructure along Cherokee Orchard Road and Roaring Fork Motor Nature Trail.

Archaeological Resources

- Paving of existing gravel pull-outs could result in minor, long-term impacts to two archeological sites (sites 40SV179 and 40SV180).

Historic Resources

- During construction, negligible, short-term impacts to the Junglebrook historic district and minor, short-term impacts to the Roaring Fork historic district will occur. After construction, these districts would appear as they did before.
- No impact to the Voorheis Estate Cultural Landscape or the potentially eligible stone features outside the historic districts will occur.

Natural Resources

- Negligible, long-term impacts to topography would occur with the proposed retaining wall and modifications to existing rock-cut slope. Minor, temporary impacts to soils would occur during construction from ground disturbing activities.
- Minor, short-term to long-term impacts to surface waters, and minor, temporary impacts to water quality would occur from sedimentation, culvert replacement, and bank stabilization.
- No impacts to wetlands will occur.
- Minor, short-term and long-term impacts to vegetation would occur during construction. Removal of trees would occur for road widening and realignment. These areas would be re-established with native vegetation during the final phase of construction.
- Minor, temporary impacts to habitat for aquatic species would occur during construction from sedimentation. Terrestrial wildlife may avoid the area during construction. Indiana

bat habitat impacts would be minimized by only removing trees between April 15 and October 5.

- Minor, temporary impacts to the capacity of the floodplain would occur during construction. Replacement culverts would have same or greater hydraulic capacity.

Air Quality

- Negligible, temporary impacts associated with construction equipment that would generate exhaust during construction.

Noise

- Negligible, temporary impacts during construction from heavy equipment.

Socioeconomic

- Minor, temporary impacts from closure of the motor nature trail during construction.

Visitor Use and Experience

- Minor, temporary impacts to visitor use from road closure during construction (March through May of the following year).

Indirect and Cumulative Impacts

- Negligible, temporary indirect impacts to water quality could occur. However, appropriate BMPs would be used to ensure no runoff, sedimentation, or erosion of soils.
- Water quality monitoring would take place before, during, and after construction.

The degree to which the action affects public health and safety.

The Preferred Alternative is intended to enhance public health and safety by repairing deteriorating infrastructure. These repairs and improvements are needed to better and more safely accommodate projected increases of visitors to the Park.

Construction activities associated with the Preferred Alternative will pose no threat to visitors, adjacent residents, or staff. The long-term effects of the Preferred Alternative will be beneficial by providing a wider riding surface in areas where the road prism has decreased over time, new bridge superstructures to replace the deteriorating infrastructure and repair of the bridge substructures, as well as the repair or replacement of the masonry guardwall along the project.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains.

As described in the EA, negligible to minor adverse effects to cultural resources were identified for the Preferred Alternative. The possibility of disturbing currently unmapped and unsurveyed sites exists based on background archaeological research. Measures to protect cultural resources will be employed during project implementation and are described in the EA.

No wetlands will be affected by the Preferred Alternative. The possibility exists that the Preferred Alternative could result in removal of roosting trees for the Indiana Bat; however, tree removal will only occur between October 15 and April 15, avoiding the roosting season. Construction activities associated with the Preferred Alternative could affect water quality along Roaring Fork Creek. Appropriate BMPs will be used to minimize effects resulting from runoff,

sedimentation, or erosion of soils. Furthermore, water quality monitoring will take place before, during, and after construction.

There are no farmlands, wild and scenic rivers, or ecologically critical areas within the footprint of the Preferred Alternative, and these resources will not be affected by the project.

The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The Preferred Alternative's overall effect on the quality of the human environment will be beneficial as it will provide a safer facility, accommodate an increased number of visitors to the Park, and provide a benefit to overall traffic operations along Cherokee Orchard Road and Roaring Fork Motor Nature Trail.

Public meetings for the proposed action drew few participants and few public comments. The low rate of public participation on this project could be attributed to the minor nature of the improvements and the limited potential for harmful effects on the human and natural environments. Furthermore, the proposed project will not have a significant adverse effect on key resources or values at the Park.

The degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The risks to the quality of the human environment associated with the Preferred Alternative are limited to minor, temporary effects on the socioeconomic conditions of the gateway community and visitor use and experience during construction; and negligible, temporary effects on air quality and noise during construction. No highly uncertain, unique, or unknown risks on the quality of the human environment associated with the implementation of the Preferred Alternative have been identified.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Preferred Alternative neither establishes an NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration. The purpose of this action is to address safety and environmental concerns associated with the condition of Cherokee Orchard Road and Roaring Fork Motor Nature Trail. These safety improvements and betterments are needed to retain the current functionality of the road and to safely accommodate projected increased visitation. These actions are site specific and are independent of other actions within the Park.

Whether the action is related to other actions which may have insignificant effects individually, but significant effects cumulatively.

The negligible to minor adverse effects expected as a result of the Preferred Alternative, in conjunction with the adverse effects of other past, present, or reasonably foreseeable future actions will result in negligible effects on water quality. However, implementation of the Preferred Alternative will not have a significant cumulative effect on the resources or values of the Park.

The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural, or historic resources.

No known district, site, structure, or object listed on the NRHP will be adversely affected, as defined in 36 CFR 800, by the Preferred Alternative. As described in the EA, negligible to minor, adverse effects will occur to the Junglebrook historic district, two archaeological sites, and the Roaring Fork historic district, respectively. There will be no effect on the Voorheis Estate Cultural Landscape or on the potentially eligible stone features outside the historic districts.

The EA documented compliance with Section 106 of the National Historic Preservation Act (NHPA). For purposes of Section 106, the determination of effect is “no effect” and “no adverse effect” for impacts to cultural resources. Determinations of effect on cultural resources have been developed in consultation with the SHPO and THPO. The Tennessee Historical Commission (THC) SHPO concurred with these findings in a letter dated November 13, 2006, and reaffirmed concurrence in a letter dated July 13, 2007. The Eastern Band of the Cherokee Indians THPO provided concurrence for the proposed action in a letter dated October 11, 2006 (see Appendix B).

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The proposed action “may affect, but is not likely to adversely affect” Federal or State-listed endangered, threatened, proposed, or candidate species, or any State species of special concern, or any designated critical habitats. The EA includes the biological assessment associated with this project. In a letter dated August 20, 2007, the U.S. Fish and Wildlife Service concurred that the Preferred Alternative will not affect the following federally-listed species (See Appendix B):

Northern flying squirrel- *Glaucomys sabrinus coloradus* (E)
Rock gnome lichen- *Gymnoderma lineare* (E)
Spreading avens- *Geum radiatum* (E)
Spruce/fir moss spider- *Microhexura montivaga* (E)

The U.S. Fish and Wildlife Service also concurred in the same letter that the Preferred Alternative is not likely to adversely affect the following species:

Indiana bat- *Myotis sodalis* (E)
Red-cockaded woodpecker- *Picoides borealis* (E)
Snail darter- *Percina tanasi* (T)
Oyster mussel- *Epioblasma capsaeformis* (E)
Orangefoot pimpleback- *Plethobasus cooperianus* (E)
Rough pigtoe- *Pleurobema plenum* (E)

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Preferred Alternative will not violate Federal, State, or local environmental protection laws.

MITIGATION

Since the anticipated impacts to the natural and human environment are relatively small and the intensity is expected to be negligible or minor, no compensatory mitigation is planned for this project. The need for compensatory mitigation will be reviewed once the design has been completed. Construction contract specifications will be developed incorporating BMPs. Table 1 details project plans to minimize and mitigate impacts associated with the Preferred Alternative.

Table 1. Project Mitigation, Critical Milestones, and Responsible Party

Potential Impact	Mitigation	Critical Milestone	Responsible Party
Impacts to Soils During Construction	Appropriate BMPs will be included in construction specifications and used to minimize potential impacts caused by runoff, sedimentation, or erosion of soils.	BMPs will be established prior to construction. Water quality monitoring will take place at established intervals, before, during, and after construction.	Contractor responsible for following established BMPs. NPS/FHWA responsible for determining BMPs and water quality monitoring.
Impacts to Surface Waters and Water Quality During Construction from Sedimentation, Culvert Replacement, and Bank Stabilization	Appropriate BMPs will be included in construction specifications and used to minimize potential impacts caused by runoff, sedimentation, or erosion of soils. An erosion and sedimentation control plan will be developed, as well as an emergency spill response plan, providing storage and disposal of waste materials away from surface waters, and implementation of stormwater management procedures. The erosion and sedimentation control plan may include the following items: (1) using berms, dikes, silt barriers, and catch basins; (2) vegetating or covering disturbed areas; (3) and conforming to proper clean-up practices.	Plans and BMPs will be established prior to construction. Water quality monitoring will take place at established intervals, before, during, and after construction.	Contractor responsible for following established BMPs and Plans. NPS/FHWA responsible for determining BMPs, administering plans, and water quality monitoring.
Impacts to Vegetation	Impacted areas will be re-established with native vegetation. Appropriate BMPs will be established for re-vegetation procedures and to ensure land quality.	During construction, soil stabilization will take place using soil and erosion control BMPs. Native vegetation will then be planted during the appropriate season.	Contractor responsible for following established BMPs. NPS/FHWA responsible for determining BMPs and oversight of contractor.
Impacts to Habitat for Sensitive Aquatic Species	Appropriate BMPs will be included in construction specifications and used to minimize potential impacts caused by runoff, sedimentation, or erosion of soils.	A work moratorium from October 15 to April 15 will be observed in areas with runoff to streams to minimize potential impacts on trout populations. Water quality monitoring will take place at established intervals, before, during, and after construction.	Contractor responsible for following established BMPs. NPS/FHWA responsible for determining BMPs and water quality monitoring.

Potential Impact	Mitigation	Critical Milestone	Responsible Party
Impacts to Habitat for Protected Terrestrial Species	Indiana bat habitat impacts will be minimized by only removing trees between April 15 and October 5.	Tree removal will not occur between April 16 and October 14.	Contractor responsible for refraining from tree removal activity during the specified dates. NPS/FHWA responsible for oversight of contractor.
Impacts to the Capacity of the Floodplain	Replacement culverts will have same or greater hydraulic capacity.	Culvert design will take place during final design.	FHWA responsible for design of culverts. Contractor responsible for installation of culverts. NPS/FHWA responsible for contractor oversight.
Impacts to Resources from Construction Equipment	Language will be included in the construction contract to ensure that construction vehicles, equipment and materials are parked/stockpiled in pre-determined parking areas.	Contract language will be finalized prior to construction.	Contractor responsible for the location/storage of equipment. NPS/FHWA responsible for contractor oversight.
Potential for Introduction of Exotic Species	Utilize BMPs during and after construction including, but not limited to, re-vegetation with native seed mixes and inspection of contractor's equipment and materials before entering the construction site.	BMPs will be established prior to construction. Equipment inspection will occur prior to entering NPS property.	Contractor responsible for following established BMPs. NPS/FHWA responsible for equipment inspection, as well as specification of native seed mixes and other BMPs.
Impacts to Air Quality During Construction	Dust control measures will be implemented during construction to minimize potential impacts to air quality.	Dust control measures will be established during final design.	Contractor responsible for adherence to established dust control measures. NPS/FHWA responsible for determining dust control measures and contractor oversight.

IMPAIRMENT STATEMENT

After a thorough review, it has been determined that the alternative selected for implementation will not impair Park resources or values and will not violate the NPS Organic Act. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public comments, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in National Park Service *Management Policies 2006*. The plan under the Preferred Alternative will not result in significant adverse impacts to Park resources and will not result in their impairment.

PUBLIC INVOLVEMENT

Public meetings were held in September 2004 in Gatlinburg, Tennessee, and Cherokee, North Carolina, to solicit the public's input on the proposed project. The meetings were advertised in three local papers (the *Cherokee One Feather*, the *Knoxville News Sentinel*, and the *Asheville Citizen Times*) the week of September 6 through September 10, 2004. Public turn-out at the meetings was minimal with only two people attending each meeting. Of those attending, none provided written comments. The comment period expired on October 22, 2004, for these public meetings and no comments were submitted after the meetings.

A possible explanation for the low public participation rate for this project is the limited nature of improvements to Cherokee Orchard Road and Roaring Fork Motor Nature Trail. Improvements to the motor nature trail will not alter the integrity or context of the viewer's experience along the trail. The majority of the improvements are intended to improve safety for the visitors in areas where the road and bridges are in need of minor repair, rehabilitation, and resurfacing.

In addition to public meetings, a project mailing list, comprised of approximately 120 individuals and organizations, was initially developed by NPS and FHWA by compiling a list of elected officials; Federal, State, and local government agencies; nonprofit organizations and other interested parties. Those on the list, including public officials, received the first issue of the project newsletter in July 2004. The project mailing list was revised in 2006, prior to distribution of the second project newsletter, to reflect updated addresses and changes in elected officials. The revised mailing list included 161 individuals and organizations. A second issue of the newsletter was mailed in December 2006 announcing the Preferred Alternative, the completion of the EA, and the duration of the public comment period. Copies of the project newsletters are included as Appendix A.

A project website was established which describes the project in general and provides a link to the project newsletters (<http://www.efl.fhwa.dot.gov/planning/nepa/>). In addition, an electronic copy of the EA was available for viewing online at www.nps.gov/grsm/parkmgmt/index.htm.

The public and agency review and comment period extended from December 19, 2006 through August 6, 2007. Copies of the EA were available for public viewing at the Sugarlands Visitor Center and the Oconoluftee Visitor Center in the Park, and also at the Anna Porter Public Library in Gatlinburg. In addition, copies of the EA were mailed to selected agencies and a list of approximately 43 elected officials. The FONSI will be sent to the same agencies and elected officials on the distribution list for the EA.

A legal notice announcing the availability of the EA and the start of the public comment period was published in two local papers (the *Asheville Citizen Times* and the *Mountain Press*) on December 18, 2006. The public was asked to send their comments to the Superintendent of the Park, and was given a 45-day period, expiring February 5, 2007, to do so. One comment was received during this period expressing support for the Preferred Alternative, provided funding for the project comes from the roads program and not through Park operating funds. Comments continued to be accepted through August 6, 2007, although no additional comments were received.

ERRATA SHEETS

THE IMPROVEMENTS TO CHEROKEE ORCHARD ROAD AND ROARING FORK MOTOR NATURE TRAIL - ENVIRONMENTAL ASSESSMENT -

GREAT SMOKY MOUNTAINS NATIONAL PARK

The *Improvements to Cherokee Orchard Road and Roaring Fork Motor Nature Trail Environmental Assessment (EA)* was available for public review from December 19, 2006 through August 6, 2007.

Substantive comments were analyzed consistent with the guidance provided in the National Park Service's *Director's Order 12*, the NPS guideline for environmental compliance. Substantive comments require a response or corresponding revision in the EA text. Comments that state a preference for one alternative (or component of an alternative), state opinions, or are outside the scope of the project are not considered substantive and do not require a formal response. Comments are considered substantive when they:

- a) question, with reasonable basis, the accuracy of information in the draft EA;
- b) question, with reasonable basis, the adequacy of the environmental analysis;
- c) present reasonable alternatives other than those presented in the draft EA; or
- d) cause changes or revisions in the proposal.

One organization and four agencies submitted comments on the EA. Changes or additions to the EA are summarized in the **Clarifications to the Environmental Assessment** section below. A summary of all comments along with responses can be found in the **Response to Comments** section of these errata sheets. The combination of the EA and the errata sheets form the complete and final record on which the Finding of No Significant Impact is based.

CLARIFICATIONS TO THE ENVIRONMENTAL ASSESSMENT

The following clarifications were made in the final EA in response to comments received:

- While the status of the Alex Cole Cabin, part of the Roaring Fork National Register Historic District, as a “contributing” structure to the district is questionable because it was moved after its 1976 listing, it is managed as a contributing resource by the Park.
- Although there has been no formal determination of eligibility for the National Register for the Voorheis Estate, it is treated/managed as eligible based on an understanding between the THC and the Park.
- Mission 66 Resources are addressed in the final EA. The following text was added:

Both the Cherokee Orchard Road and Roaring Fork Road are considered ineligible for listing in the National Register of Historic Places (NRHP). Neither of these properties is considered as contributing resources to the NRHP-listed Roaring Fork Historic District or Junglebrook Historic District.

In January 2006, the NPS prepared draft guidelines for the assessment of Mission 66 resources (Carr et al. 2006). The Mission 66 Draft nomination addresses properties such as visitor centers, administration buildings, and public access areas in parks that "...were entirely developed, or significantly redeveloped, under Mission 66. In a park such as Great Smoky Mountains, Mission 66 "...may have provided the means for constructing certain facilities or utilities, but did not represent as significant a redevelopment of the frontcountry, overall."(Ibid: 127).

In addition, these properties were designed and constructed in the 1960's and do not meet the 50 year threshold for consideration. Exceptions to the 50 year rule must show the property is of 'exceptional importance' through scholarly research and evaluation. In consideration of the scholarly research and evaluation of Mission 66 properties, the National Park Service is considering Cherokee Orchard Road and Roaring Fork as ineligible for listing in the NRHP.

RESPONSE TO COMMENTS

Comment letters from public agencies and organizations are included as Appendix B.

**Tennessee Historical Commission (THC)
Department of Environment and Conservation
Herbert L. Harper, Executive Director and Deputy State Historic Preservation Officer
August 24, 2006**

Mr. Harper requested additional information necessary for his review of the EA. The Park responded in a letter dated October 27, 2006, with the requested information and clarifications to the EA (as explained in the Clarifications to the EA section, above). By letter dated November 13, 2006, THC determined that the proposed project will not adversely impact any property eligible for listing on the NRHP.

Mr. Harper also commented on the Park's reference to an earlier study on park development by Robert Blythe, cited in the Mission 66 text in the draft EA. He questioned reliance on the Blythe report given its draft status and concerns held by both North Carolina and Tennessee cultural resource agencies that surfaced during the 1999 review of the study.

Response:

The Park made clarifications in the final EA, as requested by the THC. Regarding THC's comment on Robert Blythe's park development project, the Section 106 report does not reference that document (i.e., the Park Development Historic District draft nomination). The only Blythe report noted in the 106 report (and the EA) is the draft update to the Roaring Fork Historic District draft nomination.

Tennessee Historical Commission (THC)
Department of Environment and Conservation
Richard G. Tune, Deputy State Historic Preservation Officer
November 13, 2006

In response to the Park's letter of October 27, 2006, Mr. Tune indicated he had reviewed the Park's response to comments. Based on this information, the THC determined that the proposed project would not adversely affect any property that is eligible for listing in the NRHP. Thus, THC has no objection to the implementation of the proposed project.

Response:

No response is required.

Tennessee Historical Commission (THC)
Department of Environment and Conservation
Richard G. Tune, Deputy State Historic Preservation Officer
July 13, 2006

Mr. Tune indicated he had reviewed the final EA for the proposed project. In keeping with THC's letter to the Park dated November 13, 2006, THC concurred that the project as proposed will not adversely affect any property that is eligible for listing in the NRHP. Mr. Tune confirmed that THC has no objection to the implementation of the proposed project.

Response:

No response is required.

Eastern Band of Cherokee Indians (EBCI)
Tribal Historic Preservation Office (THPO)
Tyler B. Howe, Tribal Historic Preservation Specialist
October 11, 2006

Mr. Howe agreed with the archeologist's determination and recommendations for site 40SV180 and 40SV179, as explained in the final EA. Based on this information, the EBCI THPO feels the project may proceed as planned. However, in the event human remains are inadvertently discovered, all work should cease and immediate Section 106 consultation between the Federal government and the sovereign government of the EBCI should begin.

Response:

The Park will immediately begin formal Section 106 consultation should human remains be encountered during implementation of this project.

Department of the Army
Nashville District, Corps of Engineers (Corps)

Kim Franklin, Project Manager Operations Division

Ms. Franklin offered the following clarifications for the EA:

- Both a 404 permit from the Corps and 401 certification from the State would be necessary prior to discharge of fill material into waters of the United States. These permits can be requested concurrently; neither is a prerequisite to the other.
- There are instances where the Corps might not have Federal jurisdiction and a 404 permit is not required, but the State would have jurisdiction, thereby requiring 401 certification.
- Final permit requirements would be determined during final design. Therefore, a Department of the Army permit application will need to be submitted when designs are finalized.

Response:

The Park acknowledges these clarifications. During the final design phase of the project, the Park will apply for the necessary permits with the State and the Corps.

**U.S. Fish and Wildlife Service
Cookeville, TN
Lee A. Barclay, Ph.D., Field Supervisor**

Dr. Barclay acknowledged receipt of the EA and Existing Conditions Report and provided concurrence for the Park's effect determinations on listed species per requirements under Section 7 of the Endangered Species Act. Dr. Barclay further explained "obligations under Section 7 must be reconsidered if: (1) new information reveals that the proposed project may affect listed species in a manner or to an extent not previously considered, (2) the proposed project is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed project."

Response:

The Park will reconsider obligations under Section 7 of the Endangered Species Act in the event one of the three criteria stipulated by the U.S. Fish and Wildlife Service occurs.

**Tennessee Chapter of the Sierra Club
Harvey Broome Group**

Ray Payne, Smokies Committee Chair
January 12, 2007

Mr. Payne sent an email to the Park on behalf of the Harvey Broome Group of the Tennessee Chapter of the Sierra Club indicating their support of the Preferred Alternative as long as project funding is not diverted from Park appropriations.

Response:

No response is required.

REFERENCES

Council on Environment Quality. 2006. <https://ceq/eh.doe.gov/nepa/regs/40/1-10.htm>.
Accessed January.

Carr, Ethan, Elaine Jackson-Retondo and Lee Warner. 2006. Draft National Register of Historic Places Nomination: the Mission 66 Era of National Park Development, 1945-1972. National Park Service. Oakland, CA.